

Republic of South Africa
Department of Communications
Public Hearings – KZN
National Integrated ICT Policy

24 March 2014

Good day ,

I would like to thank the DOC and ICASA for the opportunity in engaging in a dialogue in shaping South Africa's ICT future. Providing provincial engagement allows for the ordinary people to offer their input. Sometimes its better late than never to submit our views so I found it in my heart to send through my thoughts and hope that the powers that be will act on them.

SMS has always been a basic medium of communication for the poorest. South African Operators MTN & Vodacom saw fit to price this basic service out of reach from many South Africans. The cost associated with providing a successful sms with a delivery receipt is less than 5c. Listed below is and Excerpt from a mybroadband article on cost of providing an sms.

Industry experts estimate that the true cost for an SMS to mobile operators is between 2c and 5c, raising questions as to why the retail cost is up to 80c per SMS.

There are currently discussions around the potential introduction of an SMS termination rate, raising concerns that it may increase the price of SMSs to consumers (there is currently no interconnect – termination – fee on SMS messages).

However, [BulkSMS](#) CEO [Pieter Streicher](#) argues that prices may actually decline if a cost-based SMS termination rate is introduced.

"The introduction of an SMS termination rate will actually have the opposite effect [to an increase in the price of an SMS], as it would make it clear to the public and the regulator what the actual (very low) cost of SMS messages are for the networks," said Streicher.

"It would be more difficult charging consumers up to 80c per message (the current scenario), when the termination rate is only 5 cents."

[Srinivasan Keshav](#), a professor at the University of Waterloo in Ontario, [showed through detailed analysis](#) that the true cost of an SMS message to an operator is less than 0.3 US cents (2.6 cents).

Professor Srinivasan Keshav

Assuming that Keshav's analysis is correct, an SMS rate of 80c per text message translates into a profit margin of around 3,000% (three thousand percent).

This highly inflated retail price for SMSs in South Africa, Streicher argues, is quite possibly the reason why the operators have dealt with this issue without involving [ICASA](#).

Operator	Peak rate for an SMS
Vodacom	80c
MTN	75c
Virgin Mobile	60c
Cell C	50c
8ta	50c

Then we have to ask ourselves why did Vodacom + MTN + Cell-C overcharge customers all these years.

The answer is simple - not enough competition to drive prices down and Nobody policed their pricing.

If Vodacom or MTN declared it cost X amount then it was taken as a given neither the DOC or ICASA took the time to commission costs and pricing structures and remedies to ensure lower Tariffs.

Summation : A Termination rate of 3c per SMS be set for all Operators and a CAP price of 10c per SMS be set with immediate effect NO more than 10c per SMS can be charged in RSA excluding VAS sms.

Mobile Voice calls in South Africa were largely reserved for the rich and those that could afford it even paid the lowest Tariff.

Sounds strange but True , the facts speaks for themselves when prepaid users were paying R2-85 per minute for Voice Calls Contract users on VodaCom were paying R1-40 per minute.

Mobile & Fixed Termination rates have largely been held to the highest possible Tariff to thwart competition and protect revenue from this source.

Fixed Termination Rates as described below from Romania should be as low as 3c per minute whereas Mobile Termination Rates should be as low as 10c per minute from an Efficient Operator.

Vodacom and MTN held these rates as high as possible until recent when ICASA under pressure enforced a Glide Path and cut these rates however our Termination Rates remain one of the highest in the world.

DOC together with ICASA needs to drop these rates to what European Operators are subjected to. Mobile Operators are licenced to provide a service and derive Profits from originating calls and not derive their bulk revenue from calls being completed on the network.

Summation : Fixed Termination Rates be set at 5c per minute anytime and Mobile Termination Rates be set at 10c per minute anytime.

Mobile Data is the primary source of access for ordinary Black people to the Internet. Yet Operators have chosen to charge as much as R2 a megabyte which works out to R2000 per gigabyte.

Yet those that can afford a bundle pay the lowest Rates. Bundled internet can be as low as R30 per Gigabyte of Internet Data.

This clearly shows that the poorest pay the highest Tariffs and the wealthy pay the lowest Tariff. This is a serious area of concern and needs Strong regulation.

Whilst Internet access has dropped due to many undersea cables landing in SA mobile Internet Access is still out of reach to the ordinary Black Man.

Due to poor or patchy Fixed line Internet access the Poor Black People in townships have no choice but to use mobile Internet via USB 3G dongles.

If we are to ensure every black person in rural areas get access to the internet then yes we have to ensure its affordability.

Rural people are poor and provision must be made for them to interact into the modern world.

The vast amount of information available on the internet can change peoples lives. Telkom Mobile launched 50 Gigabytes of Data at R999 which works out to R20 per Gigabyte.

Summation : Mobile Broadband costs be capped at 10c per megabyte for adhoc access. No more than this Tariff may be charged by any Operator.

Spectrum Usage : Vodacom + MTN + Cell-c have been given too much spectrum in high demand bands.

As Mobile operators they have hogged the high demand bands 900mhz - 1800mhz - 2100mhz

Refarming needs to provide Telkom Mobile with 6mhz of 900mhz frequency to allow for a more level playing field and to drive their efficiency.

The current Operators are not utilizing their spectrum efficiently and this warrants serious attention.

Less spectrum requires more towers and more towers mean more capacity and efficient planning which in turn provides for a better service.

Most countries award around 6mhz of 900 band 12mhz of 1800 band and 10mhz in the 2100 band which is International Best practice.

When the Operators licences were renewed they was no conditions attached to it.

Given the fact the networks have established themselves and are receiving net returns and returning less than 50% of their profits into network investment to improve service and quality.

On expiry of GSM Mobile Licences companies are prepared to negotiate at any lengths to avoid losing the right to provide the service for more years to come.

We have failed to even place Obligations on the Mobile Operators of 30 Free SMS and 30 Free megabytes of data with a minimum of 30 Free Voice minutes to any network as a basic right to our citizens every month.

The DOC and ICASA have failed once again. This could have been an Obligation attached to Operators renewing of their Mobile Operating Licences.

Less than 2mhz of the 900mhz spectrum is used in rural areas to provide GSM voice. ICASA needs to look at reuse of spectrum held by the current operators. Eg. Telkom Mobile can roll out 900mhz towers on 3G using about 6mhz of spectrum.

LTE - LTE is around the corner and it's the new way of Technology but if the current Operators get their hands on this spectrum we will never see the benefits of this revolution of SPEED on wireless. All they will do is lock up and hoard the spectrum with investment in a few elite urban areas with LTE and the rural areas will have to contend with 2G Edge connections.

The wholesale model needs to be considered here and 3 Operators per province needs to be active with the duplication of Fibre ducts and cables to be avoided at all costs.

9 Provinces

Considering we have a limited number of Mobile Operators in our Country. ICASA seriously needs to look at the issue of introducing further competition into the market.

With that we need more Infrastructure development and foreign investors to bring in the much needed capital to our country to create jobs.

With the likes of Etisalat, Airtel, Tigo , Globacom, Telenor , T-Mobile and many others.

We need to ensure that 2 new mobile Licences are created and issued to well established International Operators with the Capital outlay to setup a national wholesale network. Approximately R10 Billion worth of Gaurantees need to be produced.

This would create many jobs in Various Provinces and improve Broadband Coverage and affordability.

MTN & VodaCom are retrenching staff and continue to threaten the industry on this aspect of staff retrenchments as hey have said publicly with the lowering of termination rates. With their current position we are not creating any new jobs at all. Tough roll-out targets need to be set with Fines imposed for Roll-out targets not met. These mobile Licences must specify that the spectrum only be used for LTE. Approximately 10mhz for Uplink and 10mhz downlink of paired spectrum be issued for each Licence.

Another 10mhz for Uplink and 10mhz downlink of paired spectrum be issued for 2 new Licences for Telecom companies that are currently operational within SA but donot possess any spectrum at all.

The balance of spectrum which may be available be auctioned OFF to any Operator that wishes to Bid.

The importance of this is to distribute the Spectrum to as many companies with Financial muscle as possible.

LTE - The Future of ICT within South Africa

I agree with the wholesale idea of LTE and its a great one too.

However having a single wholesale network will simply mean price competition will be eroded and SLA will not be high.

Having 3 Wholesale LTE networks will force competition and High SLA's.

Now the 3 Wholesale operators can Pool their resources and erect masts and Lay fibre.

The cost saving will be 66% if calculated mathematically.

If it costs R10 Billion to Build this network outside of the CBD then it would cost each operator R3.3 Billion each. CBD areas will be for each wholesaler to Build their own.

10mhz of 800mhz spectrum Per Wholesale Operator

25mhz of 2600mhz Spectrum Per Wholesale Operator

Strict Population coverage requirements.

40% Within 1 Year

60% Within 2 Years

80% Within 3 Years

100% Within 4 Years

Any Licenced operator can choose any wholesaler for their service.

VodaCom - MTN - Cell-c already own the 900mhz Spectrum Band and as such no other Operator can obtain spectrum in this Band.

They also have large chunks of 1800mhz spectrum and 2100mhz spectrum.

ICASA messed up the system first time around when they allocated all the spectrum in the 900mhz band to the current mobile Operators.

Thereby limiting competition in the mobile space of new entrants.

We must never go down that path again.

South Africans pay R2-50 a minute for mobile Voice Calls with Operators owning almost 30mhz of spectrum in the 900mhz band.

Indians pay R0.20 a minute for mobile Voice Calls with Operators owning 5mhz of spectrum in the 900mhz band.

South Africans are paying through their nostrils for communication.

It is the Governments responsibility to ensure people communicate at a low price.

MTN & VodaCom decided that with lower Interconnect Rates they wont be reducing tariffs.

They are holding the country to ransom.

Yet if we had proper competition they will not have that choice.

The digital dividend spectrum needs to be able to create as many New Operators as feasibly possible.

We as country need to move forward.

How much of the Current Spectrum allocated is being used efficiently ? Dropped calls everywhere.....

ICASA should reclaim some of this spectrum at least 5mhz and hand it over to Telkom for 900mhz Umts.

A minimum of 1500 towers need to utilize a block of spectrum countrywide for it to be used efficiently.

The process of the Digital Dividend spectrum needs to start now.

So Operators can start building out networks in time for the digital switchover and they can switch on their networks.

Operators who possess spectrum in the lower Bands need to be excluded from this process.

In September the DoC released its draft South African Broadband Policy aimed at increasing the accessibility and affordability of broadband throughout South Africa.

Affordability & Accesibility will never happen in SA with Telkom , MTN & Vodacom. They are the established operators without debt and rake in Billions each year for their investors. They will only invest in infrastructure in areas that will make them money and not cover the rural and outlying areas. Neotel Charges 8c per megabyte for Data and the mobile Operators charge R2 a megabyte. This is a serious problem. Which shows our market is dominated by incumbents who can charge as they PLEASE. This must be stopped.

"facilitate the provisioning of affordable access to Broadband infrastructure to citizens, business and government.

More Operators providing this service will encourage affordable access.

However the market is being allowed to be saturated by Telkom, MTN & Vodacom.

However since Basic broadband will only be achieved through wireless devices and since the UMTS system is established and all vendors are manufacturing USB

modems capable of high speeds, the prices for these devices are starting to come down rapidly. One can get a USB HSDPA modem for something like R300. This

price will plummet when other Vendors start realizing the value in it. Neotel

Charges 8c per megabyte for Data and the mobile Operators charge R2 a megabyte.

This is a serious problem.

"stimulate the usage of Broadband services at national, provincial and municipal levels."

If it's affordable everyone will use it. Right now it's too dam expensive and it is a luxury. Black people must not be kept out of the Internet age. If we don't use this suggestion we most likely will keep the poor blacks out of reach of the internet for a very long time.

The DoC added that its key objectives are: 'to build the information society', 'to increase affordability'and 'to increase uptake and usage'.

Major International Telecom Operators will not consider investing in South Africa due to the stranglehold the dominant Operators have in the Country.

Large Capital investment to the tune of R10 Billion or more will be needed. Not many companies will invest that much and wait for returns. However a small investment with big returns will entice them.

However there is an answer if we were to divide our Country up into 3 Zones and embrace Regional Licencing. We might have the answer. Companies like Infraco , Dark Fibre & Neotel can Prosper by leasing National Fibre to these new Operators.

	Zone-1	Zone-2	Zone-3
	Gauteng	KZN	West Cape
	North west	Free state	NorthCape
	Limpopo	Mpumalanga	East Cape
Wholesale	Cell-C	MTN	Vodacom
	New	New	
Wholesale	Operator	Operator	New Operator
	New	New	
Wholesale	Operator	Operator	New Operator

Going Forward ,

An efficient Operator will need the following to succeed :

1. All Passive infrastructure must be shared on a cost basis with LRIC and it needs to be legislated.
2. Termination Rates need to be reduced to 10c per minute across networks with Asymmetry for new operators of 100% until they reach 10% of total gross profits of the industry.
3. Quality of Service needs to be measured annually.
4. The Appropriate fines issued for contravention of the legislation.
5. Rural coverage needs to be followed up on and checked to see the status of the operators plans.

6. A TAX break for new LTE Operators for 3 years provided the profit is re-invested into network infrastructure and NO dividends are paid out.
7. NO device LOCKING to be allowed by any operator – USB modems – Mobile Phones – tablets – Smart Devices must work with any network giving customers choice by switching of a sim card.
8. Porting of Mobile Numbers need to be speeded up and done more smoothly for customers. This process must not be onerous and a bother.
9. All telephone calls be billed per second NO per minute billing.
10. Net Neutrality to be legislated across the Board for all operators.
11. No Blocking of internet content to be allowed by any operator within the country.
12. All roaming be charged strictly on a COST basis of an efficient Operator.

We need to look into Regional Licencing.

LTE is becoming the Standard of Tomorrow , GSM has less than 5 years of life before it becomes obsolete. 3G may be around for another 10 Years.

It is of this view that we as a country take decisions that brighten up tomorrow and not shine for the day.

With Digital Broadcasting coming into effect towards the end of 2014. Spectrum will be freed up in the 800mhz band. Many Networks overseas are rolling out dual Band LTE networks in the 800mhz, with 2600mhz allocation for the high traffic areas.

My proposal to you is that we issue an ITA for regional LTE wholesale networks within South Africa.

Regional as we will know it in South Africa will mean Provincial networks.

Eg a Licence be issued for the Operations in a particular province grouping only.

Roll-out will be faster and quicker as each bidding company will seek their own infrastructure supplier.

Coverage will be mandated to 100% per province within 4 Years failing which hefty fines will be issued.

Rural coverage will be boosted by these new networks. Every single rural town in the country will have high speed wireless Coverage. Schools , Libraries and Clinics will have a set allocation of Free data per month for social upliftment of rural people. Meaning ordinary poor people can access the internet from the schools and libraries for free or a very low cost.

Just to elaborate a little of the way it is to be done.

Lets say for arguments sake we make available

20mhz (10mhz Uplink + 10mhz Downlink) in 800mhz band - This Spectrum must be guaranteed in the LICENCE

60mhz (30mhz Uplink + 30mhz Downlink) in 2600mhz Band.

With the Above allocation 3 Wholesale Provincial Licence's can be issued.

To run a successful LTE Network .

However this process needs to be handled properly because companies can tender for multiple groups and should only be given 1 provincial group.
Must only be able to win a Tender for one provincial group.

We will have the potential to create 9 regional companies providing much needed employment.

The ideal scenario would be :

	Zone-1	Zone-2	Zone-3
	Gauteng	KZN	West Cape
	North west	Free state	NorthCape
	Limpopo	Mpumalanga	East Cape
Wholesale	Cell-C	MTN	Vodacom
	New	New	
Wholesale	Operator	Operator	New Operator
	New	New	
Wholesale	Operator	Operator	New Operator

The mobile operators have been reluctant to provide wholesale access to their data networks to Internet service providers. Icasa should force them to do so and make it compulsory in exchange for LTE spectrum. It's a known fact they have the financial resources to roll out LTE networks quite quickly.

Access to spectrum is a more complex issue. The agency would be wrong not to provide additional access to the big incumbents (after all, they have the resources to invest in new networks), but it must also find innovative ways of giving new players access.

The high-level inquiry should give Icasa a much clearer view how it should tackle these and the myriad other roadblocks standing in the way of an efficient, dynamic and competitive market.

As a stronger Icasa begins asserting itself, baring its teeth to the industry's dominant players, one hopes government is prepared to back it up by provide additional funding to what has historically been a chronically underfunded and under-resourced agency.

The above groupings are as per equal Balanced GDP Order.

Regional Operators must be mandated to roam on others networks when not in the region.

Fibre Ducts and Masts sharing to be mandated at cost.

40% BEE status to be achieved within 3 Years.

What this means is that one operators customers can Roam on another operators network when not in their province and vice Versa.

We need to solicit these Big International companies to South Africa like what was done in Nigeria, Uganda, Benin, Tanzania & Kenya. It will take a Capital Injection of R2 Billion to get their Network Up and running Quickly.

This is a small sum for them to Invest. They will compete aggressively on price and Value for Voice & Data to attract Customers. This will force the incumbent Operators to roll out infrastructure in the remotest parts of SA.

The draft policy is clear that all citizens have a right to basic broadband while Government and Non-Government Organizations must have access to broadband.

Basic broadband will only come from wireless 4G networks. If we ensure sufficient competition in the market. Prices will be low and affordable.

Average Black people will be able to afford to have the internet at home.

Government and Non-Government Organizations in rural areas will be able to have access to these high speed networks. We need to create a good set of infrastructure for the Information Technology services in this country. We are lacking infrastructure in this Country. Nigeria, Uganda, Benin, Tanzania & Kenya have surpassed South Africa in Terms of Infrastructure Development.

These countries were miles behind us and now they are ahead of us. They have competitive pricing as well. The South African Government through the DOC and ICASA needs to . They have allowed MTN & Vodacom to prosper at the people's expense. We need to encourage Zain, Etisalat and Orange to come invest in SA with TAX holiday benefits for 3 years. This will force the operators to Roll-out quicker.

If the Doc issues the Directive to ICASA to get this off the ground quickly.

We might see some results by the end of 2014. Everything has to have a tight timeline. It can be done. Lets get some action going and let the poor reap the benefits.

Governments in Africa have invited these companies to come set up shop in their countries to benefit their Citizens. These companies have the financial muscle to invest.

A guaranteed tax holiday for 3 years will mean Operators will have to get their network up and running quickly.

We must do the same.

This is a working model and we must adopt it with minor changes.

Policy questions:

1. Is the distinction between reserved and unreserved services a clear one in practice? Should this distinction be maintained into the future? If so, is the scope of the monopoly broad enough to fund universal service obligations?
2. How can SAPO's infrastructure be leveraged to rollout government services?
3. Should the Postbank continue to be a subsidiary of SAPO or should it be a stand-alone fully-fledged independent banking institution?
4. How do we ensure the right of every citizen to an address? Should government continue subsidising SAPO in order to fund universal service?
5. What role should operators in the unreserved segment of the market play insofar as universal service is concerned?
6. What role can SAPO play in the roll-out of broadband?

1. No. Yes
2. a) ID documents can be collected at the nearest Post office.
b) Pensions are currently paid out at the Post Office and must continue to help rural people.
c) Tax Filings need to be accommodated at Post Offices countrywide with staff trained to assist the small businessman.
d) Government websites need to be accessible from Post offices with a charge of R5 per hour.
e)
3. Postbank should be a subsidiary of the the Post Office.
4. Where possible every citizen should have a residential address via the RDP housing system.
5. No comment.
6. Internet access via PC's (Internet Café style)

Policy Questions:

1. Should policy promote either a facilities-based or service-based competition environment? Alternatively is there a case for a hybrid competition environment in which both these modes exist?
2. What mechanisms are required to ensure effective co-ordination of broadband infrastructure planning and rollout?
3. Notwithstanding current policy interventions to promote availability and access in the under-served areas, the local loop remains a great challenge. Should LLU policy be advanced, and if so, what are the principles which should underpin LLU policy?
4. What other policy interventions can reduce the Significant Market Power (SMP) of the oligopolies in the South African communication sector?
5. What considerations should inform the new policy and regulatory regime concerning the spectrum management taking into account the anticipated revision of the frequency spectrum regime? Is there a need for a separate agency to regulate spectrum?

1. My view is that both should be supported. Facilities based offer many new products launched in the developed world and service based competition offers good value and service to the end user.

Broadcasting - TV

In the subscription broadcasting market, for instance, Icasa has been too hands-off in using its regulatory powers to tackle the dominance of [MultiChoice](#), which owns [DStv](#). It would be wrong to punish MultiChoice for being a highly successful enterprise (which it is) due to government not legislating and allowing new broadcasters in timeously, Multichoice took advantage of the grey area in which it operated and cemented its position, but some intervention is needed to give new entrants a leg up.

Icasa is right when it says it needs to understand why its efforts to crack open the subscription broadcasting market to competition were not successful.

It's a complex issue. But one remedy seems obvious: addressing the way MultiChoice subsidiary [SuperSport](#) has sewn up broadcasting rights for South Africa's main sporting codes. This is arguably one of the biggest impediments for new market players trying to lure sports-mad South African viewers.

At the very least, Icasa needs to force the Naspers-owned broadcaster to re-sell some of this sports content to rivals at fair market prices. i.e if the rights to the English Premier League games are bought then Multichoice can offer some or all of the games at a fair and reasonable cost to other broadcasters. The [Competition Commission](#) may tackle the issue soon, after ODM complained that MultiChoice management blocked a plan, agreed to by SuperSport, to sell access to two of its channels.

More radical intervention may indeed be necessary, including forcing MultiChoice to spin off SuperSport as a separately managed commercial entity that provides content to DStv and other broadcasters on a fair, equal and non-discriminatory basis.

The possibility also exists for a delayed LIVE broadcast of games of about 15 minutes.

Further to this Multichoice has placed a further restriction on content over the internet that it broadcasts over a satellite platform eg. National Geographic channel cannot be viewed by South Africans over the internet due to IP blocking of South African IP's.

No Blocking of internet content to be allowed by any TV operator within the country.

Multichoice is a satellite provider but they have asked international suppliers of content to block South African IP's from accessing the content over the Internet they provide over Satellite. I believe this is something that Multichoice is taking advantage of due to the lack of regulation. Which means in order to watch certain content we become obligated to Multichoice and pay a huge price for it.

All Multiplexes issued to Digital broadcasting companies must be used within 24 Months or must be re-allocated.

Device Locking – Multichoice have locked down their decoders to their channels only and we are no longer able to receive Free to Air satellite channels from African Broadcasters using the Pas 7/10 or Intelsat Pas 20, This must be outlawed and legislated.

Job Creation

South Africa lost out almost 500 000 call centre positions almost 10 years ago due to the telecoms operators not providing a conducive enabling environment for Call Termination and cheaper voice calls to international markets. Hopefully with convergence and the final termination rate of 10c per minute for fixed and mobile voice we will start to reap some benefits of the International Call Centre business coming our way. Also cheaper international calls will spur the growth for this market. Our operators seem to be holding international call rates artificially high. A proper cost study needs to take place and price caps be introduced.

With every new regional wholesale operator we create, we create a new set of jobs.

Various fields and positions become available. Employees have a choice to choose their employer on Salaries offered. Eg. A base station engineer who currently works for MTN will have only one other choice of employer in that of Vodacom in South Africa to poach his skills but due to the limited number of positions for him he will probably try to solicit a position overseas. We then lose our skilled employees to international markets.

Government cannot create jobs for the people as most positions are already filled within the Government sector. However Government can create through policy the proper framework and regulatory environment for companies to invest in South Africa thereby enabling job creation.

I must confess the ANC government preaches BEE shareholding and not enough Blacks are in the Technology sector and Blacks don't own shares in the Top Technology companies and not enough Blacks are in management positions but have they ever thought of creating an environment for these business's to succeed ?

CELL - C

BEE - STATUS

Staff complement: 89% are historically disadvantaged individuals and 47% are female. 54,5% of senior managers are HDIs and over 28% are female. Average age of employees is 32-34. Investment in skills development exceeds minimum legislative requirement of 3,65% of labour bill 37% spent on BEE suppliers and SMEs.

Cell-C maybe on the brink of a financial crisis unless the Mobile Termination Rates are lowered and the appropriate asymmetry applied. MTN & Vodacom have brought ICASA's progress to a standstill while they reap in Billions of profit.

What message are we sending to Foreign companies wanting to invest in South Africa with Court battles like what we are seeing.

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