Benefits of reduced termination rates finally kick in with lower mobile prices

Mobile termination rate (MTR) reductions by the regulator have finally begun to impact positively on prepaid mobile prices in South Africa. The third termination rate reduction, which came into force in March 2013, has for the first time enabled smaller mobile operators to drive down the prices of dominant operators MTN and Vodacom. Despite these gains the MTR is still far from cost, and the cheapest mobile prices in South Africa lag behind countries where the regulator has enabled competitive pricing pressure by enforcing a cost-based MTR.

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Price pressure on dominant operators

Following the third mobile termination rate (MTR) reduction in March 2013 and the subsequent pressure from smaller operators, MTN and Vodacom were forced to reduce their tariffs to 2 cents (ZAR) per second and to maintain these reductions.

SA ranks poorly on the RIA African Mobile Prepaid Price Index

Although South Africa's ranking has improved with mobile price reductions, it still has the 23rd highest prices in Africa according to the RIA Africa Prepaid Mobile Price Index with, for example, MTN Ghana's prices remaining a fraction of those of MTN South Africa's.

MTR not yet cost-based

While the new MTR set at 40 cents, which came into force in March 2013, has had positive effects, it is still above what is considered the cost of an efficient operator and is still considerably higher than in many other African countries which, as a result of cost-based MTRs, have considerably lower retail prices.

Dominant operators continue to thrive with reduced MTR

Both MTN and Vodacom, the two dominant operators, are showing improved financial performance with subscriber numbers, EBITDAs and operating profits all up. Cell C and Telkom Mobile seem unable to significantly dent the market share of MTN and Vodacom.

Telkom Mobile still struggling to gain a foothold in most profitable contract segment of the mobile market.

With only 1,5 million active subscribers, and declining postpaid subscriber numbers and ARPUs, can Telkom Mobile's recently announced prices (29 cents on-net and 75 cents off-net) attract new subscribers?

Introduction

Research ICT Africa (RIA) monitors prepaid mobile prices across Africa quarterly. It does so by establishing the cost for a communication basket for all products and for all prepaid operators in a country, and it has done so since the fourth quarter of 2010. The basket is based on the OECD 40 call/60 SMS basket (2010). The prepaid mobile price results for the second quarter of 2013 in South Africa show an improvement from 30th in 2012 to 23rd in South Africa's ranking in the RIA Africa Prepaid Mobile Price Index.

This improvement is due to termination rate reductions finally enabling smaller operators to lower off-net prices (prices for calls to other operators). Smaller operators have to offer similar off-net prices to the on-net prices of larger networks in order to be sufficiently attractive for users to switch.

The mobile termination rates (MTR) dropped to 40 cents (ZAR) per minute in March 2013. Previous reductions in March 2011 and 2012 had little effect on retail prices, as they did not reduce the rate by a margin sufficient to allow smaller operators to significantly undercut the prices of the dominant operators. The latest drop to 40 cents finally allowed the smaller operators, with their reduced off-net rates, to challenge the on-net prices of Vodacom and MTN. For each off-net minute, an operator has to pay the termination rate to the terminating network. The possible amount by which off-net prices can be reduced is limited by the MTR. The prescribed MTR is still far from being cost-based (as required by the law and international best practice). Further reductions would increase this competitive pressure further and lead to lower prices.

Financially, dominant mobile operators Vodacom and MTN are doing better than ever before, despite lower termination rates and lower retail prices, as Vodacom indicated in its latest interim results. Further reductions of termination rates and retail prices will expand the market, improve consumer welfare and improve the profitability of mobile operators – a win-win for all.

South Africa prepaid mobile prices

Figure 1 displays the cost of the cheapest prepaid mobile product available in South Africa, and in all of Africa, for the OECD[1] 40 call/60 SMS basket between the fourth quarter of 2010 and the second quarter of 2013.

1 OECD (2010), Revision of the Methodology for Constructing Telecommunication Price Baskets, OECD Working Party on Communication Infrastructures and Services Policy.

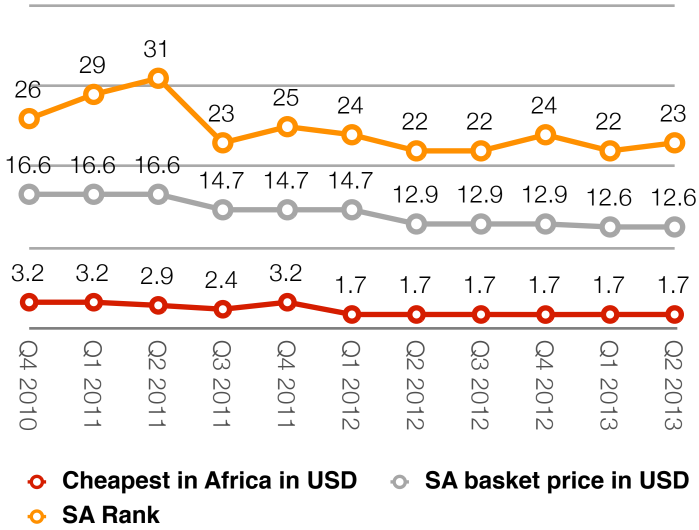

Figure 1: Ranking and cost of cheapest prepaid mobile product available in South Africa and Africa for OECD 40 calls and 60 SMS basket

The South African basket price dropped during that period from USD16.6 to USD12.6, but was still nearly 7.5 times more expensive than the cheapest product in Africa and still three times more expensive than the cheapest product available from a dominant operator in Africa (MTN Ghana had a basket price of USD3.9; see Table 1 or Figure 2).

South Africa's ranking for the cheapest product in the country hovered between 30th and 22nd most expensive during this period. The detailed ranking for all countries for the second quarter of 2013 is displayed in Table 1.

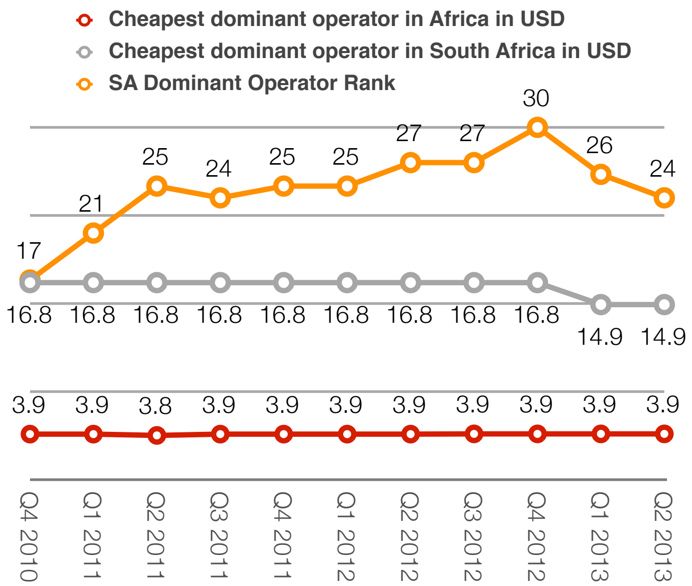

Figure 2: Ranking and cost of cheapest prepaid mobile product available from dominant operators for OECD 40 calls and 60 SMS basket

In South Africa, in the second quarter of 2013, only MVO Virgin Mobile seems not to be engaged in the price battle, with no adjustment to any of its prices since March 2011. All other operators have either lowered prices or introduced cheaper products. MTN and Vodacom introduced a 2 cent per-second billing product, reducing their OECD basket to ZAR122.26 (the first time that MTN prices have come down in the period measured),

Table 1: Cost of cheapest products for OECD-40calls-60SMS basket in USD

Country name	Cheapest product				% cheaper than dominant
	dominant operator		cheapest in country		
	USD	Rank	USD	Rank	
Ghana	3.90	1	3.90	5	Dominant is cheaper
Egypt	4.01	2	4.01	4	Dominant is cheaper
Mauritius	4.13	3	4.13	6	Dominant is cheaper
Ethiopia	4.30	4	4.30	7	Dominant is cheaper
Kenya	4.37	5	2.91	2	33.4%
Sudan	4.56	6	1.72	1	62.3%
Rwanda	5.48	7	5.48	8	Dominant is cheaper
Tunisia	6.36	8	6.17	10	3.0%
Algeria	6.48	9	6.48	13	Dominant is cheaper
Libya	6.88	10	6.88	15	Dominant is cheaper
Congo Brazza-ville	7.82	11	7.82	16	Dominant is cheaper
Sierra Leone	8.24	12	6.28	11	23.8%
Nigeria	8.41	13	5.77	9	31.4%
Uganda	9.17	14	6.32	12	31.1%
Tanzania	10.35	15	3.20	3	69.1%
Benin	10.97	16	10.97	17	Dominant is cheaper
Mozambique	11.35	17	11.35	18	Dominant is cheaper
Namibia	12.20	18	12.20	20	Dominant is cheaper
Mauritania	12.33	19	12.33	21	Dominant is cheaper
Liberia	12.40	20	12.40	22	Dominant is cheaper
Cote d'Ivoire	12.75	21	12.75	24	Dominant is cheaper
Botswana	12.93	22	11.75	19	9.1%
Central African Republic	13.16	23	13.16	25	Dominant is cheaper
South Africa	14.91	24	12.57	23	15.7%
Burkina Faso	14.95	25	14.72	27	1.5%
Mali	14.97	26	14.97	28	Dominant is cheaper
Togo	15.52	27	15.52	29	Dominant is cheaper
Chad	16.80	28	16.80	33	Dominant is cheaper
D.R. Congo	17.10	29	17.10	35	Dominant is cheaper
Cameroon	17.32	30	17.13	36	1.1%
Seychelles	18.13	31	18.13	37	Dominant is cheaper
Senegal	18.89	32	16.24	30	14.0%
Zambia	19.07	33	18.76	39	1.6%
Niger	19.35	34	16.34	31	15.6%
Angola	22.55	35	19.97	41	11.4%
Zimbabwe	22.70	36	21.83	42	3.8%
Madagascar	23.06	37	22.32	43	3.2%
Lesotho	23.76	38	19.28	40	18.9%
Malawi	23.78	39	18.39	38	22.7%
Swaziland	27.20	40	27.20	44	Dominant is cheaper
Cape Verde	29.82	41	29.82	45	Dominant is cheaper
Morocco	39.11	42	17.00	34	56.5%
Cape Verde	29.82	43	29.82	46	Dominant is cheaper

but this is still higher than the cheapest product from Cell C and Telkom Mobile (2 cents per second is equivalent to ZAR1.2 per minute, compared to Cell C's 99 cents and Telkom Mobile's 95 cents).

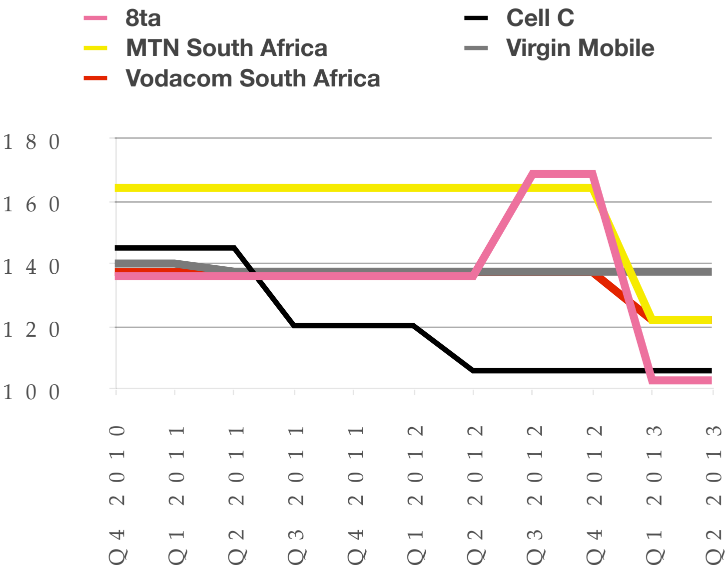

Figure 3: Cost of cheapest prepaid mobile product for OECD-40calls-60SMS basket by operators in ZAR[2]

Financial performance of mobile operators

It is significant that none of the dire warnings from South Africa's dominant operators, about the negative impact of proposed reductions in MTRs, has materialised. MTN's and Vodacom's key performance indicators look better than those for previous years. In line with their pioneering role and market leadership in the industry, they have found new productive revenue streams through growing their data businesses and their value-added services. For both companies, revenues and subscriber numbers increased in their most recent financial reports.

MTN

MTN's prepaid and postpaid subscriber numbers have increased over the past eight quarters. Postpaid ARPUs[3] declined while prepaid ARPU's were constant over the last eight quarters – a bit unexpected given the increased demand for data. Internationally, MTN's APRU levels are still on a very high level. MTN's implied per-minute price (ARPU/MOU[4]) decreased by 20 cents for the second year in a row. This estimate for MTN is based, however, on blended ARPUs because prepaid and postpaid MOU are not reported separately by MTN.

MTN revenues increased by 7% and EBITDA by 6.5% for the FY2012 compared to 2011, while the EBITDA margin remained constant at a high 35.2%. Data and SMS revenues increased 38% and 58% respectively. With evidence[5] of significant free message data service substitution for SMS, one would have thought that revenues from SMS would be on the decline. A possible explanation for the SMS revenue increase could be increased use for machine-to-machine communication and bulk SMSing. MTN reported 13.4 million data users for the 2012 financial year.

MTN also increased its CAPEX[6] in the 2012 financial year to 15.5% of revenues, up from 10.6% in the previous year. The CAPEX per subscriber increased from ZAR186 to ZAR253, indicating MTN's confidence in the South Africa telecommunications market and its expected returns from the market. The higher CAPEX is mostly attributable to network extension and upgrading to 4G.

Interestingly, MTN did not report on interconnection revenues and expenses in its last annual report, something it had done for the past seven financial years. MTN's last reported interconnection net revenues were positive.

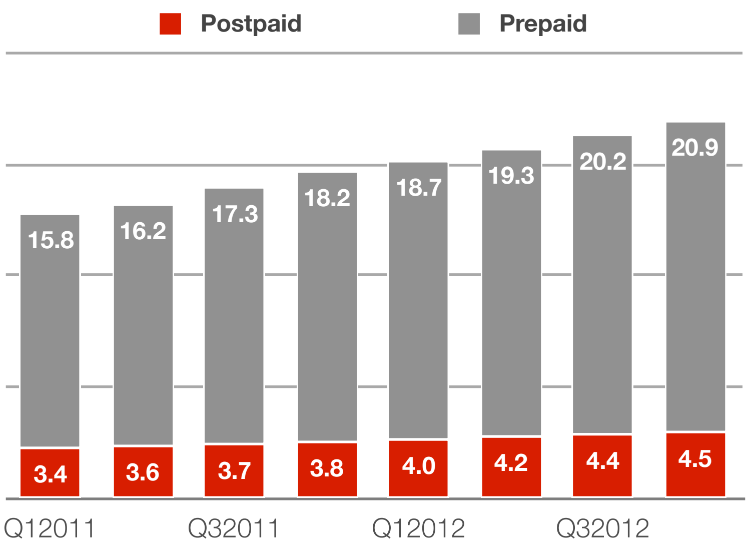

Figure 3: MTC South Africa subscriber numbers in million

Vodacom South Africa

Vodacom South Africa's performance has been solid for the financial years ending in March 2010, 2011, 2012 and 2013. Revenues have consistently grown, to ZAR58.6 billion in 2013, and its EBITDA margin slightly improved by nearly one percentage point, while operating profits increased from ZAR16.7 billion to ZAR17.4 billion in the financial year ending in 2013.

Prepaid and postpaid subscriber numbers increased, as did the traffic in terms of outgoing minutes. Active[7] SIM cards numbers increased from 19.7 to 30.3 million between 2010 and 2013.

Vodacom's voice traffic increased while SMS traffic decreased, a trend that was to be expected given the availability of alternative forms of texting via data services such as Whatsapp, Viber,

[2] Telkom Mobile announced a lower on-net price of 29 cents per minute and a 75 cent off-net price, pricing considerably lower than any other offering. This offer, however, fell outside the period under review and thus is not incorporated in the analysis above and will only be reflected in the next quarterly report. It does, however, suggest that late entrants now have significant room to go head-to-head with the dominant operators on price.

[3] ARPU = average revenue per user per month

[4] MOU= minutes of use, which is the average number of minutes called during a month.

[5] RIA 2012 Household and Individual ICT Access and Usage Survey

6 CAPEX = capital expenditure

[7] These are customers that have used services in past three months.

Facebook and Skype.Vodacom's decreased prepaid and post-paid MOU, lower voice revenues and higher data revenues also indicate a clear trend for South Africa's telecommunications sector.

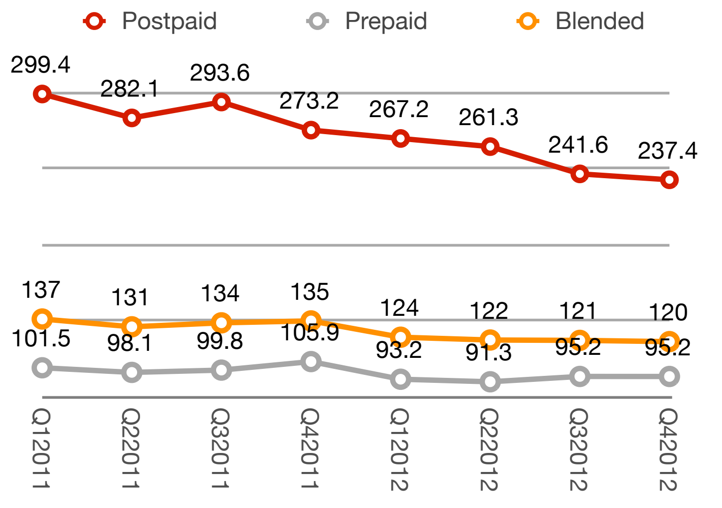

Figure 4: MTN South Africa ARPU (ZAR)

Table 2: MTN South Africa for FY ending December

		2009	2010	2011	2012
Subscribers (SIMS) in million	Prepaid	13.0	15.5	18.20	20.90
	Postpaid	3.0	3.4	3.8	4.50
	Total	16.1	18.8	22	25.4
ARPU (ZAR)	Prepaid	100	112	106	95
	Postpaid	365	329	273	237
	Blended	145	152	134	122
MOU	Outgoing	64	71	69	70
Implied minute prices ARPU/MOU (ZAR)		2.27	2.14	1.94	1.74
Capital Expenditure	Total (ZARm)	6,034	3,908	4,105	6416
	% of revenue	18.2%	10.9%	10.6%	15.5%
	per subscriber (ZAR)	376	208	186	253
Revenues (Rm)	Total	33,149	35,822	38,597	41,349
	Data	2,475	3,638	4,646	6,409
	SMS	2,021	2,490	2,641	4,176
	Data incl SMS	4,496	6,128	7,287	10,585
EBITDA	(ZARm)	10,410	12,188	13,591	14,476
	Margin	31.4%	34.1%	35.2%	35.2%
	EBITDA / Subscribers (ZAR)	647.9	648.3	616.8	569.9
Interconnection (Rm)	Interconnection Revenue	7,271	6,568	5,924	
	Interconnection and roaming expenses	6,400	5,483	5,183	
	Net Cash flow from Interconnection incl. roaming	871	1,085	741	
	Net Interconnect		1,481	1,182	
Source:		MTN annual reports			

Vodacom has seen its profit increase while prices decreased in the more competitive environment created by the reductions in MTRs over the last few years (as reflected in the price benchmarks of the previous sections of this Policy Brief and also in Vodacom's audited financial statements. Voice revenue divided by outgoing minutes declined from ZAR1.46 in 2010 to ZAR1.03 in 2013. Also, the implied price (ARPU divided by MOU) decreased overall despite an increase for postpaid subscribers. (ARPU takes all revenue together, including interconnection and data revenue, and divides it by subscribers.) Vodacom's postpaid subscriber increase is due to high data use.

Table 3: Vodacom South Africa Financials and key performance Indicators fy ending in march

		2010	2011	2012	2013
Revenue ZARm	Mobile voice	27,422	28,584	29,395	29,151
	Mobile interconnect	8,075	6,755	6,062	4,916
	Mobile messaging	2,716	2,962	3,143	3,027
	Mobile data	4,614	6,180	7,639	8,882
	Revenue	50,431	53,371	56,932	58,607
Interconnect Revenue as % of total revenue		16.0%	12.7%	10.6%	8.4%
Interconnect Expenses ZARm		6,324	5,682	4,923	
Net Interconnect ZARm		1,751	1,073	1,139	
Operating profit ZARm		14,763	15,522	16,671	17,640
EBITDA margin		36.8%	36.8%	37.3%	38.2%
Subscribers (million)	Total -	19.7	22.9	28.9	30.3
	Prepaid	15.2	17.8	23.3	24.4
	Contract	4.5	5.1	5.6	5.9
Outgoing minutes (millions)		18,792	22,160	26,341	28,349
Messaging (million)		5,949	6,509	6,650	6,071
Mobile voice revenue / outgoing traffic		1.46	1.29	1.12	1.03
Monthly MOU	All	111	119	114	102
	Prepaid	82	95	97	90
	Contract	220	202	177	154
Monthly ARPU	All	184	183	157	129
	Prepaid	105	106	91	76
	Contract	447	404	362	328
Implied minute prices	All	1.66	1.54	1.38	1.26
	Prepaid	1.28	1.12	0.94	0.84
	Contract	2.03	2.00	2.05	2.13
Source:		Vodacom Annual reports			

Interconnect expenses for the financial year 2013 were not published by Vodacom, with only the interconnect revenues made public. The net impact of MTR reductions can thus not be assessed, as is the case for MTN.

Telkom Mobile

While Vodacom and MTN are improving their performances from year to year, and Cell C seems to finally be making some gains in the lucrative mobile segment of the market, Telkom Mobile is still struggling to get its business up and running.

Telkom Mobile has gained active prepaid subscribers but lost postpaid subscribers. At the same time, postpaid ARPU dropped by 20%. These are clear signs that Telkom Mobile is struggling to gain a foothold in SA's most profitable mobile segment.

Table 4: Telkom Mobile financial performance extracted from Telkom SA financial reports

		FY2012	FY2013
Active subscribers	All	1.53	1.48
	Prepaid	1.04	1.16
	Postpaid	0.44	0.38
Infrastructure	BTS	1,782	2,299
	Sites	1,348	1,958
	LTE sites		651
ARPU	Blended (R)	74.16	61.47
	Prepaid (R)	20.89	23.96
	Postpaid (R)	206.83	166.13
Revenue (Rm)	Mobile voice and subscription	524	484
	Data	163	364
	Mobile handset sales	319	435
	Total	1,200	1,283
Source: Telkom Annual report 2013			

Telkom Mobile managed to expand its number of base stations by 29%, and sites by 45.3%. Of its sites, 651 were upgraded to carry LTE equipment. Currently Telkom Mobile offers amongst the lowest data prices for the highest throughput in the areas where it is available. [8]

It remains to be seen whether Telkom's bundling efforts, through offering fixed voice together with fixed and mobile data services, will bear fruit. Fixed-line and fixed broadband access may become more attractive when combined with mobile broadband at double or more the speed of ADSL (20 mbps compared to 1-10 mbps) and combined with the convenience of mobility. At the same time, however, Telkom's 3.8 million fixed-line subscribers, most of whom are business subscribers, and its 870,000 ADSL subscribers, may not provide Telkom Mobile with the leverage necessary to compete with the dominant mobile players to whom many of its fixed-line and corporate customers are already tied. Only time will tell whether Telkom Mobile will be able to attract a new customer base through Telkom bundled services and on which Telkom Mobile can piggy-back, but the history of fixed services in South Africa does not bode well.

Cell C

Cell C have in the past made a strong appeal for the retention of asymmetrical termination rates in their, and Telkom Mobile's, favour. Without any transparency on Cell C's financial situation, any assessment of the dangers of them exiting the market (or simply their viability within the current competitive environment) is impossible. This is something that the regulator will have to assess as it enters into its termination rate review this year.

Cell C's aggressive price reductions have certainly pressured the dominant operators into reducing their prices, and the significant investment fillip it has received in recent months suggests it remain serious about growing the mobile market and eroding some of the market share of the dominant players. Currently, Cell C says it has 11.5 million customers, which constitutes about 17% of the market, and it has publicly targeted 25% of the market as the share necessary for it to become a viable competitor. With Vodacom's share of the market standing at 44% (with more than 30 million SIMs sold), and MTN at 37% market share (25 million SIMs sold), Cell C will require a supportive regulatory environment and considerable inventiveness.

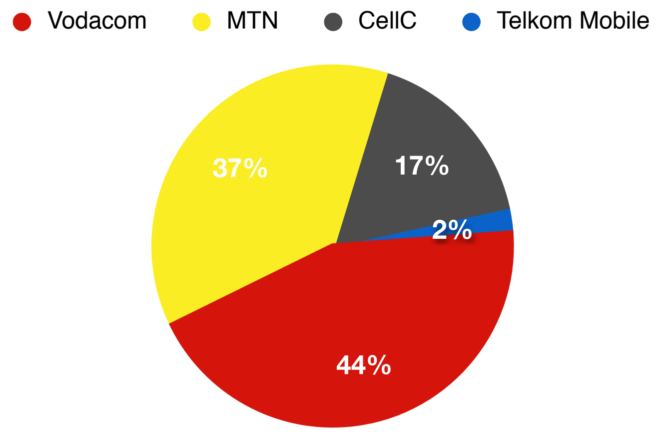

Figure 5: Estimated market share based on annual reports and statement of CellC

Conclusions

The MTR has finally been lowered sufficiently to result in pricing pressure on the dominant operators MTN and Vodacom. While previously these two dominant players were able to ignore newer entrants' efforts (by Cell C in particular) to undercut them, Cell C and Telkom Mobile have more recently been able to attract price-sensitive consumers and force down the prices of the dominant operators.

However, the current mobile termination rate and therefore prices remain high in comparison with other African countries. South Africa prepaid mobile price is almost four times more expensive than the cheapest in terms of dominant operator prices of the 46 African countries monitored the RIA Africa Prepaid Mobile Price Index, and magnitudes of scale more expensive in terms of the cheapest product (where South Africa ranks only 23rd out of 46 countries in the Index). Amongst the best performing African countries are those which have introduced cost-based MTRs. South Africa's prepaid prices thus continue to be very expensive in comparison to many other African countries, and prices are unlikely to come down until the MTRs are reduced to the cost of an efficient operator. Global and African benchmarking suggests that this cost is in the region of 1 or 2

[8] RIA (2013) Broadband Quality of Services Policy Brief 2 (forthcoming) see *www.researchICTafrica.net* and for database *http://researchictafrica.net/prices/Fair_Mobile.php*

US cents, around 10 to 20 South African cents at the current exchange rate. This is less than half of the current rate (40 ZAR cents) in South Africa.

The decline of voice services and the growth of data are having a significant impact on the development of the mobile market. Voice and data subscribers are becoming increasingly difficult to distinguish between, as airtime is purchased and converted for data use and, at the same time, data services are used to make voice calls. It will be increasingly necessary to understand and assess the competitiveness of markets, the market shares and the success of players in this converged environment. With data becoming the dominant revenue stream, this is where much of the pricing pressure is occurring, as operators try to attract and retain broadband customers.

With the growing demand for data services, the South African regulator ICASA needs to enable operators to respond to the changing nature of the business and to innovate and grow new services in response to declining voice revenue streams. This interplay between mobile and broadband pricing will be the focus of the next RIA Policy Brief, together with consideration of the important issue of broadband quality of service which includes an assessment of whether broadband customers getting what they pay for?

Recommendations

Within the context of the need for a wider overhaul of policy and development on a national e-strategy as proposed by the National Development Plan there are a number of specific actions that will improve the current negative policy outcomes in the area of mobile voice pricing.

- For South Africa's termination rates and associated retail rates to move up the African ladder of affordability, or even to be amongst the top 10 in Africa, ICASA should reduce the MTR to the cost of an efficient operator.
- ICASA also urgently needs to competitively allocate high-demand spectrum to enable operators to respond to the changing demand for mobile services, to build new revenue streams, and to grow new value-added services and applications which can further drive demand.
- ICASA needs to weigh the need for late entrants to continue to enjoy asymmetrical termination rates in a market that demonstrates many of the characteristics of a duopoly, and makes gaining a foothold by new entrants difficult. The dangers of small players exiting the market needs to be considered against the potentially negative consequences of asymmetry justifying high off net prices by dominant operators and inhibiting the expansion of the the small operators subscriber bases. The only way to prevent this would be for ICASA to regulate a flat on and off net rate for all operators, which would only be feasible once the MTR is set at the cost of an efficient operator. Cost based termination rates may thus be the first most urgent step.

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For more information, contact:

Dr. Alison Gillwald or Dr. Christoph Stork

Phone: +27214476332

Fax: +27214479529

Email: agillwald@researchictafrica.net

cstork@researchICTafrica.net

Prepared with the assistance of Enrico Calandro
ecalandro@resarchICTafrica.net

http://www.researchictafrica.net

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