

Public Hearing on termination rates
Portfolio Committee on
Communication

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Institutional and process considerations considerations...

- In line with global sector reforms, policy and institutional arrangements have been established in acknowledgement of the difficulty of creating competitive markets in infrastructure industries such as telecommunications and to deal with any market failure
- Specialised agencies have been set up specifically to deal with the complex and dynamic nature of the industry and their critical role of creating an environment conducive to investment, supporting macro economic objectives and serving the consumer welfare which are often in tension with each other.
- In alignment with the reform process they have been given carefully determined powers to constrain the pursuits of excessive profit resulting from the market structure but in ways that would be accountable to ensure fairness & avoid capricious behaviour by regulator
- In this particular area under review the law requires that the rates be regulated through a process that seeks to make transparent to the regulator prices of the operator to ensure that they are cost based and in line with the prices of other operators international benchmarking
- In terms of the law Parliament has responsibility for the appointment of decision- makers and oversight of the regulators responsible for implementation of the law in the sector
- Parliament's highlighting of this regulatory bottleneck should be welcomed not least of all for bringing some historically opaque regulatory issues into the public domain. But what this has also done is confirmed the complexity of the process and historical difficulties of information asymmetries that plague regulation of infrastructure industries.

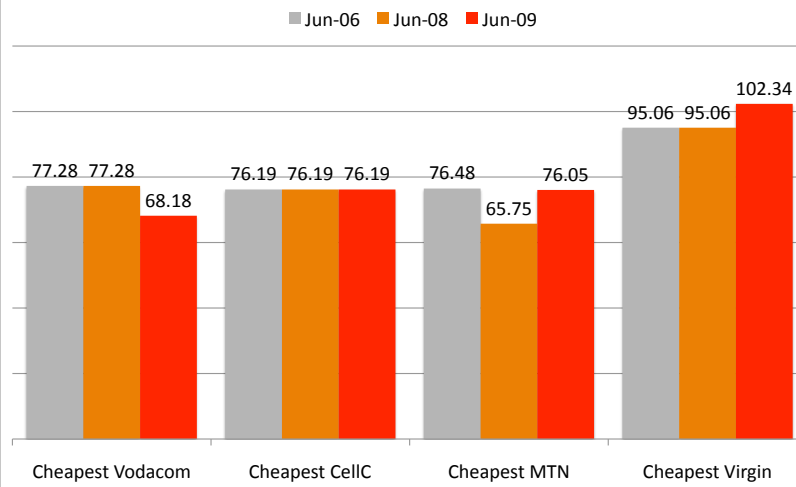
Institutional and process considerations considerations...

- Parliament has oversight of the institutions responsible for implementation of the law in the sector and is required to intervene in cases of regulatory failure but it cannot have been intended that the technical regulatory processes to determine costs of services be substituted with a parliamentary process
- But it is critical that the the institutional and or legal and indeed policy problems that have produced this it be addressed. Prices are some of the best indicators of policy outcomes. They directly reflect the policy, market structures and regulatory effectiveness of infrastructure industries.
- Interconnection termination rates are high by international standards. But they are just one symptom of a highly inefficient market which combined with ineffectual regulation have produced exorbitant prices across a range of services - whether it be leased lines a critical input for other business or broadband services and which has not optimally served an emerging economy nor the consumer welfare.
- That being said, intervention in the public interest is long overdue, all our evidence suggests that interconnection prices are very high by international and even African standards. The development of the sector is too critical to the country hence the complex institutional arrangements that exist in law for the sector to be regulated through political pressure and moral suasion alone. It is imperative that the factors that that have contributed to this regulatory impasse, legal bottlenecks, regulatory capacity, institutional arrangements, will need to be addressed, otherwise you will need to be here next week to deal to ensure that the benefits of the reduction in mobile termination rates and the following week leased lines and the week after that on broadband....

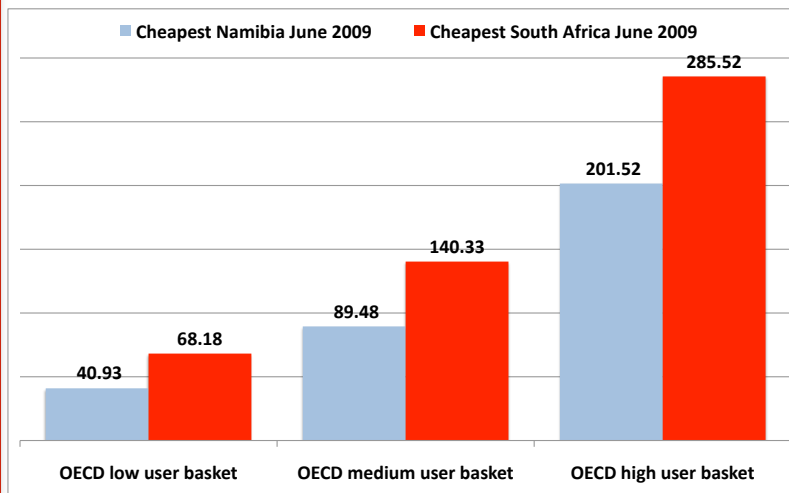
Situation in South Africa

- ICASA should have regulated termination rates according to the law
- Regulatory bottlenecks: chapter 10, institutional capacity, no implementation yet.
- Within this framework there are a number of options
 - Complete market study
 - Regulate without study (ECN opinion)
 - Amend Chapter 10
- Alternative to determine a price and glide path based outside the formal process
 - International benchmarking
 - Allows operators to demonstrate their cost of termination based on LRIC

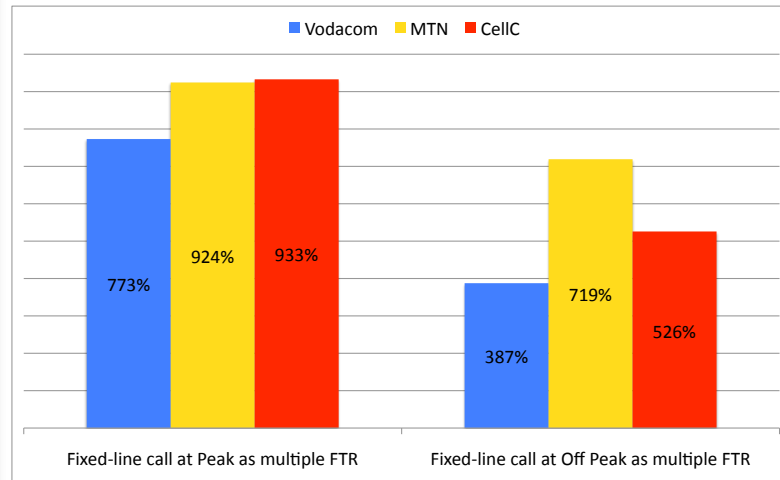
Cheapest Prepaid available Low User

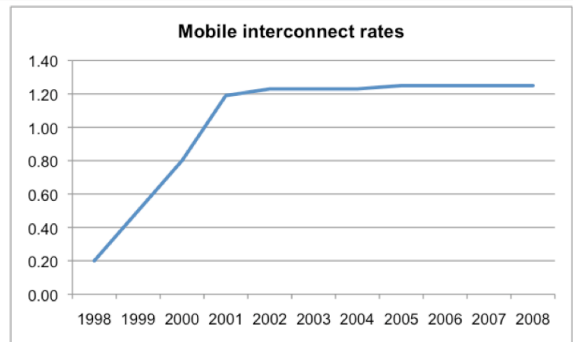


All Operators

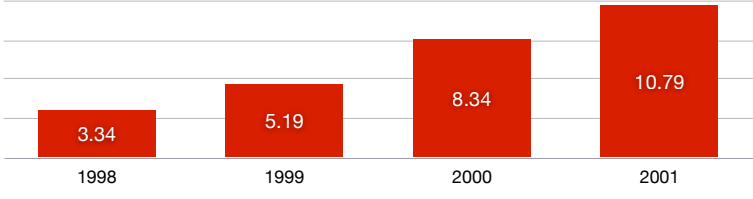


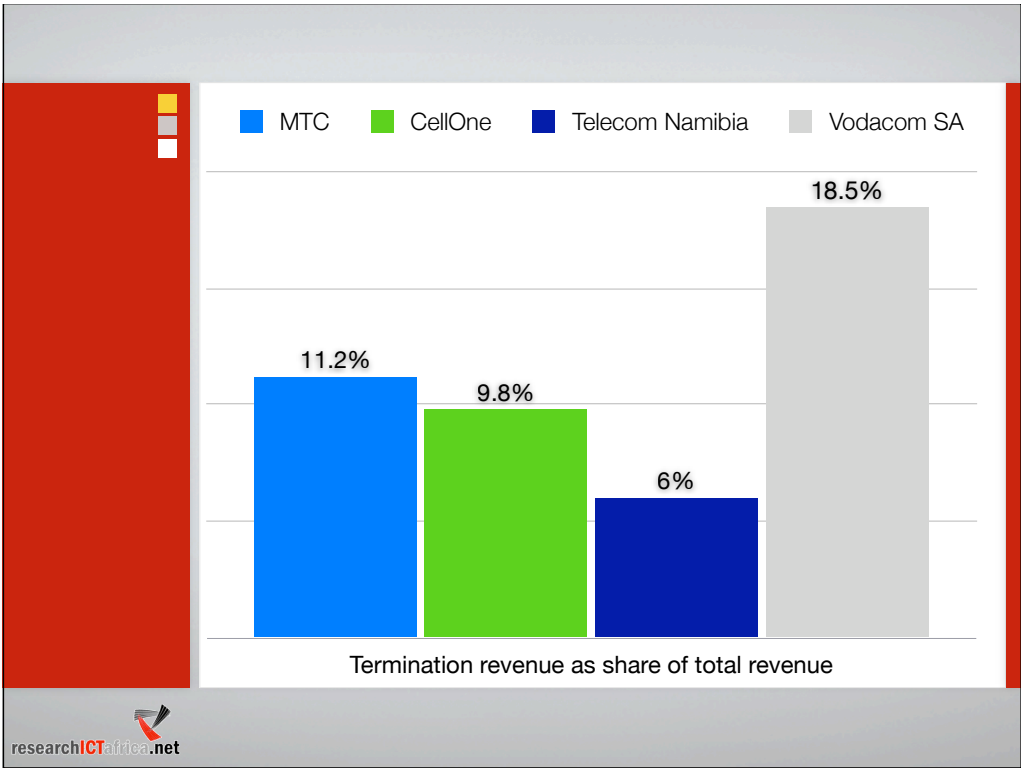
Calls to fixed-line are outrageously expensive (average across all products)





■ Million Mobile cellular telephone subscribers (ITU)





Interconnection Background

Interconnection Price

- Consensus: cost based interconnection prices
 - Monopolies requires cost-based pricing
 - Cost of efficient operator = incentive to invest in efficient technologies
- In general, interconnection prices should
 - Promote economic efficiency
 - Provide incentives to invest in new technologies, reduce costs and expand product offerings
 - Promote competition
 - Promote universal service by encouraging rapid uptake through low retail prices

Interconnection Price - Too High

- Higher mobile termination rates make it harder for fixed and small mobile operators to compete with large mobile operators (EU press release 7 May 2009)
- Customers will be paying more than they need to
- Incumbent can prevent new entrants from gaining market share
- High MTR = high off-net price... high off-net prices of dominant mobile operator makes it expensive to be called for people changing to new entrant or smaller operators
 - Causing traffic imbalance
 - Net termination payment outflow of new entrants
 - Starve fixed line network

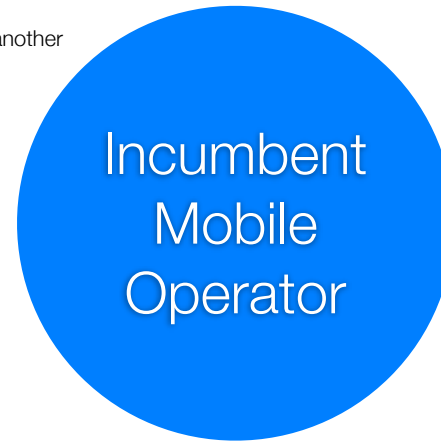


Benefit of size:

Off-net Price > On-net price = expensive to switch
(Initially mostly on-net calls, after switching mostly off-net calls)

On-net = calls within network

Off-net = calls from one network to another



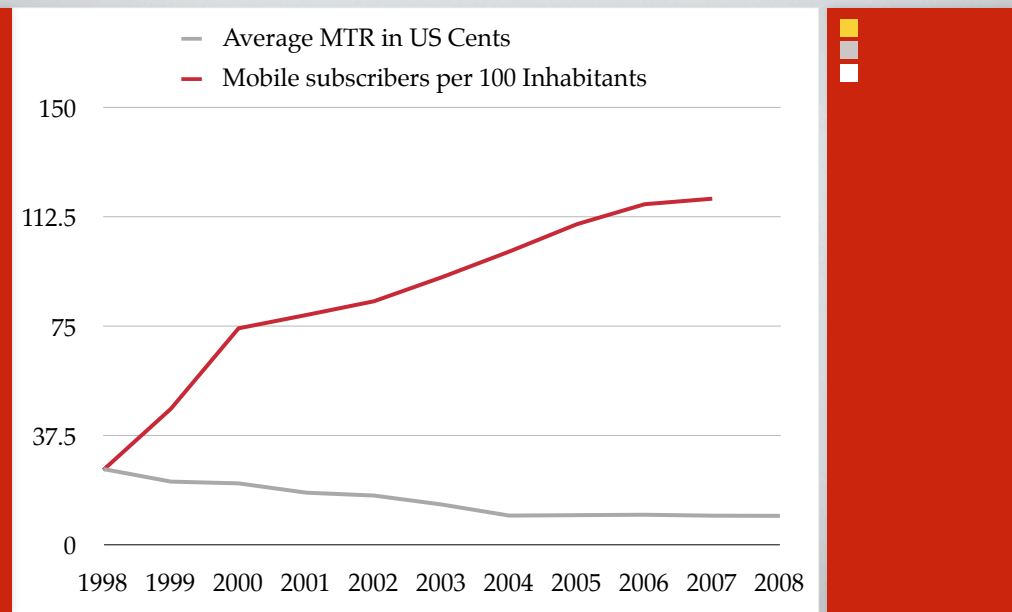
Interconnection Price - Too Low

- ❑ Below cost recovery of terminating network
- ❑ Arbitrage traffic routing may result in undesirable economic outcomes (France: Bill and Keep)
- ❑ Often sited: Incumbent operators may not invest in the network or maintain its quality. However...
 - ❑ Operators build their networks to make money off their subscribers
 - ❑ Termination revenue makes up around 10-20% of total revenue
 - ❑ Arguing that low termination rates could lead to low network investment is far fetched
 - ❑ Receiving party benefits from the call too, therefore the terminating network provides a service for own subscribers

Dominant Operators will argue

- They use termination revenue to subsidise access and usage (Two sided market or waterbed effect argument), If MTRs are lowered:
 - Retail prices will increase
 - There will be less subscribers
 - Operators will invest less
- However, the opposite is the case
 - Increased competition leads to lower retail prices and more subscribers
 - Operators have to invest more to stay competitive

Example UK



MTR and Mobile Usage cost came down in 21 EU countries

	OECD low mobile user basket price in 2008 compared to 2006	MTR 2008 compared to 2006
Austria	77%	54%
Belgium	84%	62%
Denmark	73%	75%
Finland	60%	67%
France	90%	70%
Germany	85%	72%
Greece	67%	80%
Hungary	94%	80%
Iceland	82%	65%
Ireland	74%	94%
Italy	84%	88%
Luxembourg	95%	64%
Netherlands	88%	82%
Norway	78%	95%
Poland	71%	79%
Portugal	86%	94%
Slovak Republic	95%	65%
Spain	97%	63%
Sweden	88%	58%
Switzerland	77%	75%
UK	94%	89%

Two sided markets

■ Two Principles:

- Interdependent prices: Price are being determined interdependently, ie changing the price for the one side will change the price of the other side
- No Cost causation: No direct link between incremental cost for a good or service and the price

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- ❑ Newspaper - lower price per newspaper = more subscribers and higher advertising revenue per page
- ❑ However, few high income subscriber could be better than many low income subscribers for advertising revenue
- ❑ Advertisers have a choice where to place an add (competition), while call termination is a monopoly



No Waterbed effect

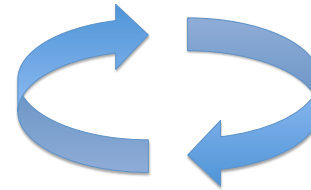
- The waterbed effect describes a situation where if mobile termination rates go down, some other prices **need** to go up, usually usage and access prices
- A Waterbed is dumb, has no options, is not profit maximising
- Businesses are smart, have options, are profit maximising
- Sell little dearly or a lot cheaply holds, MTR reduction:
 - Off-net price drop: more outgoing (other networks) minutes
 - Off-net price drop of other network: more incoming termination minutes
 - Off-net constant, make more money for each outgoing minute

No waterbed effect, setting prices is a matter of choice for operators

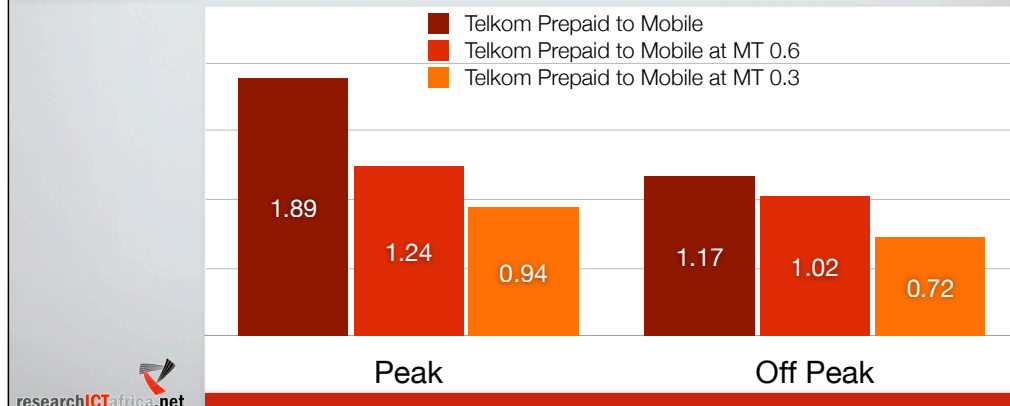
			Operator A								
		On-net	up	up	up	constant	constant	constant	down	down	down
	On-net	Off-net	up	constant	down	up	constant	down	up	constant	down
Operator B	up	up									
	up	constant									
	up	down									
	constant	up									
	constant	constant									
	constant	down									
	down	up									
	down	constant									
	down	down									

High MTR = subsidisation within the sector

- Why should subscribers of one network subsidise subscribers from other networks?
- Why should one operator be given a subsidy to role out network infrastructure at the expense of another operators?

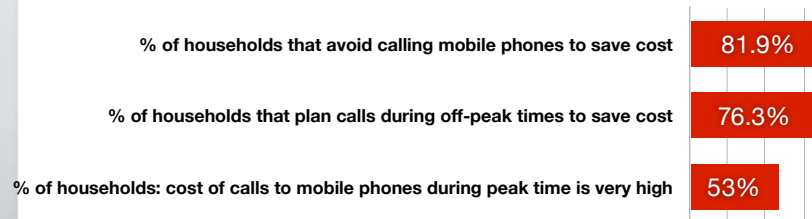


Price change of Telkom if MTR saving is passed on to consumer



2007/8 Nationally representative household survey

- 30 million US\$ untapped fixed-line market in SA
- 2.35 million households that would be willing and able to spend at least 5 US\$ a month





Cross country comparisons as smoke screens

- USA and India both are or were RPNP (India changed recently to CPNP).
 - There is no doubt that CPNP is superior to RPNP for penetration, but that is not the point of discussion here
- CEG / Ofcom Study: Facts or fiction?
 - CPNP or B&K, not mutually exclusive
 - "The 3% B&K observations are accounted for by the United States."
 - OECD basket methodology (Teligen database) only captures prices of dominant operators, not new entrants and small operator
- A country penetration level is influenced by many factor
- Comparing apples with apples? Reality is reflected in cost

Benchmarking



EU Recommendation

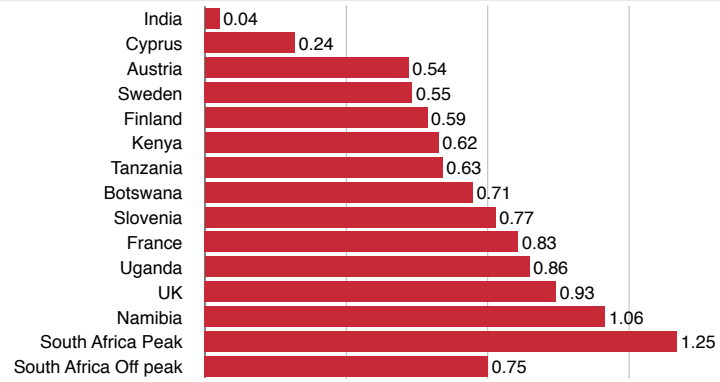
7 May 2009

- Objectives of regulation:
 - Technological neutrality
 - Preventing distortions and promoting competition
 - Deliver maximum benefit for consumers (choice, price and quality of service)
- Termination rates should be brought down to the cost of an efficient operator - Cost Model:
 - Bottom-up LRIC, only taking into account cost that are caused by the provision of wholesale call termination (the increment)
 - Mobile and fixed core network based on NGN
 - Mobile access network based on a combination of 2G and 3G
 - Asymmetric termination rate for max 4 years: if incremental unit costs higher

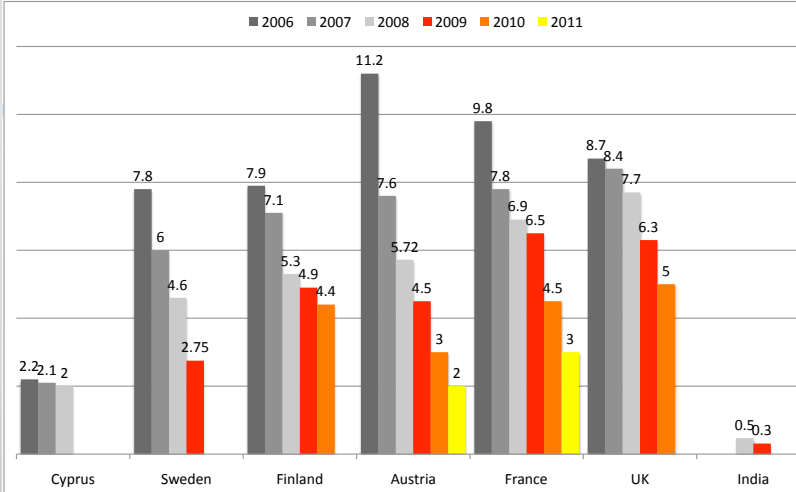
Asymmetric Termination rates

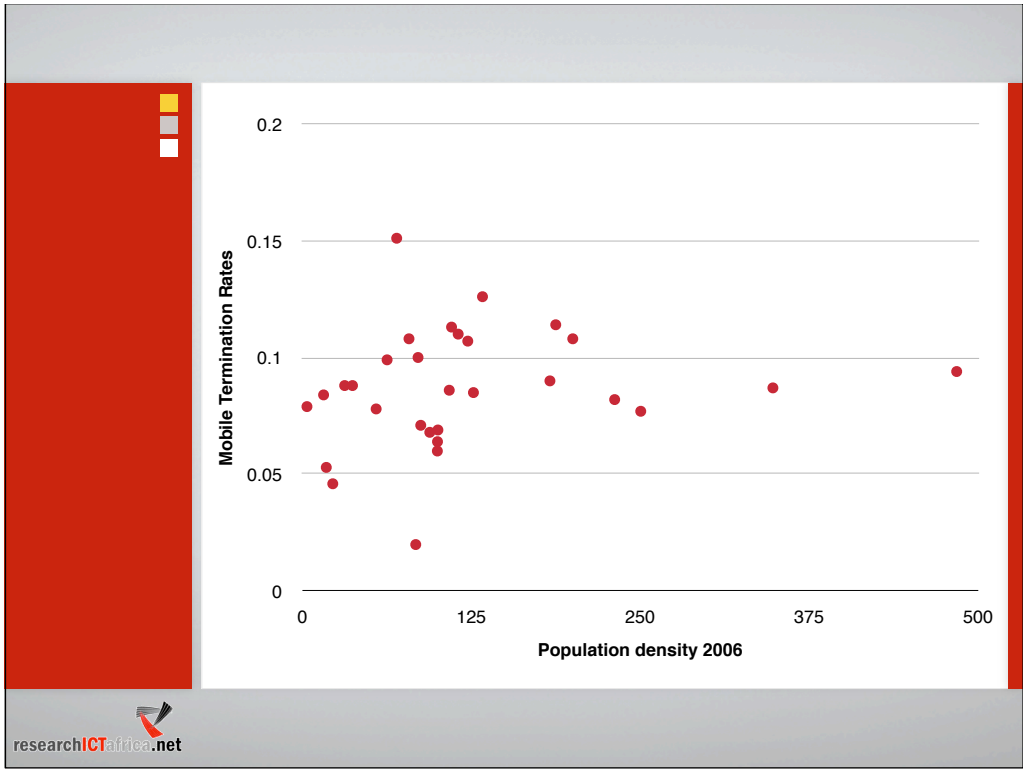
- ERG: for transitional period if cost based:
 - Lower economy of scale (low call volume and subscriber numbers)
 - Operators have different network coverage (Metro networks)
 - Objective cost differences through technology (1800 Mhz compared to 900 Mhz eg)
- Keeps off-net prices of dominant operators high: enforces traffic imbalance

Termination Rates April 2009 MTR N\$



Termination Rate Trends in Euro cents





WIK 2007 study for Australia:TSLRIC

Market Share	17%		25%		31%		44%	
Coverage	96%		96%		96%		96%	
WACC	11.68%		11.68%		11.68%		11.68%	
	A\$ Cents	ZAR	A\$ Cents	ZAR	A\$ Cents	ZAR	A\$ Cents	ZAR
Voice On-Net	13.4	0.93	10.7	0.74	9.6	0.66	8.9	0.62
Voice Termination	7.3	0.51	5.9	0.41	5.3	0.37	5	0.35
Voice Origination	6.4	0.44	5.2	0.36	4.6	0.32	4.2	0.29
Termination share of on-net	54.48%		55.14%		55.21%		56.18%	

Analysys 2007 study for PTS in Sweden based on LRIC

Sweden		2008-09	2009-10	2010-11	2011-12	2012-13
Based on costs of highest operator	SEK	0.358	0.275	0.227	0.201	0.183
	ZAR	0.449	0.345	0.285	0.252	0.230
Based on costs of lowest operator	SEK	0.213	0.204	0.175	0.144	0.125
	ZAR	0.267	0.256	0.219	0.181	0.157



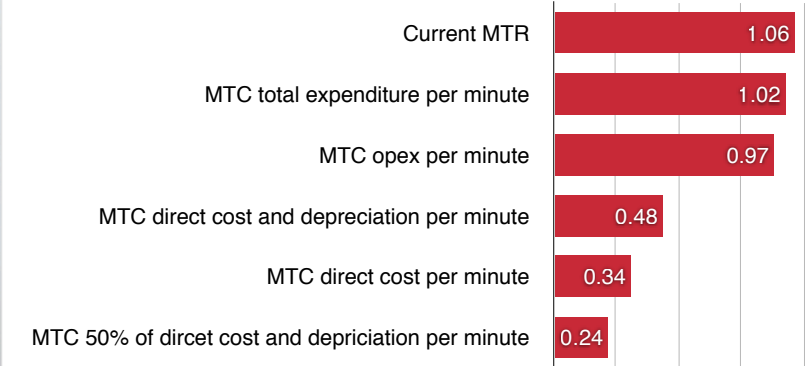
Austria		2005	2006	2007	2008	2009
Operator 1	Euro Cents	6.67	5.69	4.40	3.40	3.08
	ZAR	0.80	0.69	0.53	0.41	0.37
Operator 2	Euro Cents	12.83	6.41	6.49	3.39	2.70
	ZAR	1.55	0.77	0.78	0.41	0.33
Operator 3	Euro Cents	12.88	10.21	4.03	2.42	1.87
	ZAR	1.55	1.23	0.49	0.29	0.23
Operator 4	Euro Cents	16.06	12.45	8.32	4.52	2.71
	ZAR	1.94	1.50	1.00	0.55	0.33
Operator 5	Euro Cents		11.64	8.41	8.74	
	ZAR		1.40	1.01	1.05	



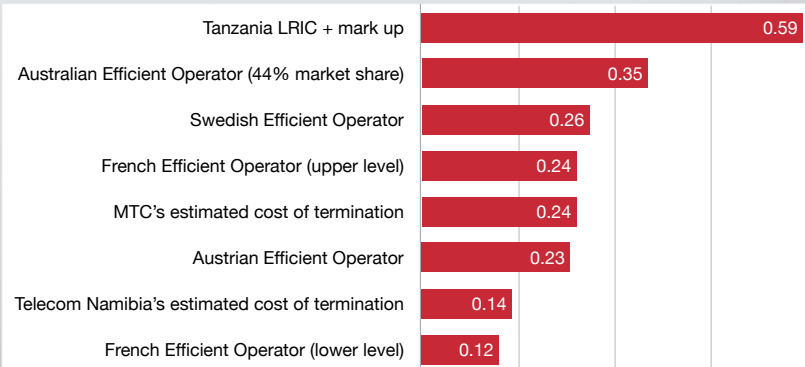
Tanzania

		01- Jan-08	01- Jan-09	01- Jan-10	01- Jan-11	01- Jan-12
LRIC+ equi - proportionate Mark-Up (EPMU)	Real 2007 US cents	7.15	6.88	6.63	6.51	6.39
	Nominal US cents	7.30	7.18	7.08	7.12	7.16
	N\$	0.60	0.59	0.58	0.58	0.59
Glide Path for MTR &FTR & international incoming	Nominal US cents	7.83	7.65	7.49	7.32	7.16
	N\$	0.64	0.63	0.61	0.60	0.59

Mobile termination costs Namibia (N\$/ZAR): MTC being the most efficient operator



Mobile termination cost per minute in ZAR



Conclusion

- SA cost of efficient termination unlikely to be more than 25 cents
- Cost based MTR: will increase competition, lower prices, more subscribers, wider choice of services, additional economic growth and employment
- Other regulatory interventions will be required