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**REGULATORY IMPACT ON THE
DEVELOPMENT OF THE
TELECOMMUNICATIONS
SECTOR IN EAST AFRICA: A
CASE STUDY OF KENYA**

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REGULATORY IMPACT ON THE DEVELOPMENT OF THE TELECOMMUNICATIONS SECTOR IN EAST AFRICA: A CASE STUDY OF KENYA

Mike Nxele¹ and Thankom Arun²

INTRODUCTION

Growth in competition and regulation has been most successful in the telecommunications sector than in any other sector. It has also been spurred by the accession of the many countries to the WTO Basic Telecommunications Agreement of 1987 committing market access. Today competition characterizes the telecommunications market structure with few and dwindling exceptions of monopolies in the fixed telephony. By end of 2002, more than a third of all countries in the world had three or more competing mobile operators. More than 80 countries allow competition in the provision of VSAT terminals; 81 per cent in cable television; 68 per cent in wireless local loop services and 78 per cent in mobile services. The total number of regulatory authorities has increased from 12 in 1990 to 123 by mid 2003. In Africa, by end of 2003 mobile subscribers were close to 52 million, constituting 70 per cent of the total subscriber base. Although the penetration rate is the lowest in the world at 6.2 per 100 inhabitants, the rate of growth has been the highest.³ With regard to competition, in 2004 there were 41 countries with competition in mobile (2 in 1994), and none with no network.⁴ Africa had a high figure of 33 independent regulators by the beginning of 2001, and by the middle of 2003, there were 79 per cent independent regulators in the region.⁵

In this paper, the growth of telecommunications and the role of the regulator in that growth are discussed against defined parameters of accessibility, affordability and quality of service in the case of Kenya. The analysis also extends to the nature and patterns of regulation in other East African Countries such as Tanzania and Uganda. The two main research question posed in this study are (1) examining the effectiveness of agreed parameters for assessing regulatory impact in the telecommunications sector and (2) independence of regulators from institutions that established them in the first place, and its impact on their effectiveness? The study also intends

to examine how interventionist should regulators be in sector policy formulations such as driving a development agenda in telecommunications. The paper also explores the link between regulatory effectiveness and the national policy framework within which regulation has to operate.

This paper discusses the impact of Regulation on the growth and development of the telecommunications sector in Kenya since the establishment of an independent regulator in 1999. Most of the data are collected through a primary survey and based on comparisons made with experiences of other East African countries such as Uganda and Tanzania. Assessments will be guided by the ground rules that regulation must *GROW*, the market, make the services *AVAILABLE* to as wide a cross section of the population as possible, and be *AFFORDABLE*.

Followed by introduction, section 1 discusses the theoretical underpinnings of reform and regulation in the telecommunications sector. Section 2 of this paper reviews the macro economic experiences of Kenya in general and telecom sector reform in specific in a comparative framework with Uganda and Tanzania. Section 3 provides an impact assessment on regulatory performance in the telecommunications sector. Section 4 discusses issues related to growth and competition followed by a conclusion.

1. REGULATION IN THE TELECOMMUNICATIONS SECTOR

The positive co-relationship between economic growth and telecommunications penetration was established way back in the 1960's through the economic theory of the Gipps Curve. The ITU Maitland Commission Report of 1984 confirmed that access to telephony was the "Missing Link" to development for many developing countries, hence the declaration of access to telephony as one of the basic rights. It was therefore a matter beyond dispute that the goal of increasing telephony, and in particular, access (universal access) was linked to the goal of development. Indeed, as access to telephony increased in Africa in the 1990s and teledensity rose from 0.5 per 100 in 1995 to 1 per 100 by the year 2000 (thanks to mobile), economic growth in Africa as a whole rose to an average of 4 per cent per annum.⁶

The telecommunications reform experiences in various countries indicate the need for effective regulatory strategies. It was realized that competition does not, on its own, guarantee efficiency, and, left to their own devices, markets can behave in a manner that may be deemed uncompetitive. Dominant market players for example, may block market entrance through uncompetitive conduct such as predatory pricing. In telecommunication, rights of interconnection and fair terms, based on non-discrimination, are important ingredients for fair competition and these can only be established and enforced through regulation. Furthermore, the goal of profit maximization that drives the private sector is not necessarily distributional and may be in conflict with socio-economic or developmental goals. In order to ensure and guarantee fair competition, plug the holes of market failure and balance private sector profit goals with public interests and national development goals, it was necessary to have effective regulation.

Hypothetically, effective regulation depends on the independence of the regulatory authority. The meaning of independence has been elusive and relative. In theory, it is defined in terms of the ability to implement policy without undue interference from politicians or industry lobbyists.⁷ It must be independent of the parties it regulates to avoid regulatory capture. The ITU defines independence through financing, structural and decision making setups that are separate from the operators and the Government. The Federal Communications Commission (FCC) in the USA describes regulatory effectiveness as measured *"from a regulators' independence from those it regulates, protected from political pressure, and given the full ability to regulate the market by making policy and enforcement decisions"*.⁸ The World Trade Organisation (WTO), in article 5 of its reference paper, describes an effective regulatory body as one that *"is separate from and not accountable to any supplier of telecommunications services. The decisions of and procedures by regulators shall be impartial with respect to all market participants."*⁹

In practice, independence is a matter of perception. A regulator has to pass the test of legitimacy by being seen to be independent by its stakeholders and those it regulates. By and large, legitimacy is not conferred by law, but earned by the regulators themselves through the manner it executes its regulatory functions. It needs to be transparent in its decisions and ethical in its practices. It must consult stakeholders in formulating policies and be prepared to communicate the rationale for its decisions. It must have authority that is respected by the

sector, and must ensure that regulatory gaming, i.e. the practice of lawsuits and regulatory fill busting, is minimized. Ultimately regulation must result in the promotion and protection of public interest in pursuit of socioeconomic goals.

Clearly therefore, judging regulatory effectiveness and assessing their impact will depend on the policy frameworks within which the regulators operate as well as their conduct and performance in the execution of their mandates. Politically and legally, regulators must be allowed space to regulate, which assumes the political will to do so. But, as observed by the ITU, it is one thing to make a policy decision to create an independent regulatory agency, and quite another to empower the agency to act independently and effectively.¹⁰

The roles defined for these regulatory agencies have differed depending on the political decision making processes of each country and environment. There are different regulatory motivations between the developed countries and the developing world, and even within the developing countries themselves depending on political/ideological orientations towards reforms in general, and private sector participation in the economy in particular. These differences depend on the perceptions of the role of the state in economic affairs, and the balance between focus on economic growth and focus on development and distributive issues. These factors determine the pace and urgency with which regulatory bodies are established, as well as the policy and institutional frameworks within which they operate. In Africa, the countries that fully support sector reforms and encourage competition (Uganda, Zambia, Tanzania), and those with a track record for allowing democratic space in their conduct of national affairs (Botswana) tend to have more independent (and by extension, more effective) regulators. The inverse is true of less democratic and less reform-oriented political regimes.

2. REGIONAL EXPERIENCES

Besides the geographical proximity and common language (Swahili), Kenya, Tanzania and Uganda have similarities and commonalities that make a comparative study very compelling. They have a common currency denominator (the shilling) and a common colonial history, with independence coming to them more or less at the same time (1961 for Tanzania, 1962 for Uganda and 1963 for Kenya). From their independence time,

the three countries were joined together by the East African Commission, which, unfortunately, collapsed in 1977 amid acrimony and bitter disagreements over how modern African states should develop. In 1997, the three countries revived the commission by launching the East African Community, a regional intergovernmental organization aimed at deepening and widening co-operation in the political, economic and social arena. The Union brings together an integrated market of close to 90 million people with a combined Gross Domestic Product (GDP) of US\$ 25 Billion. In line with this objective, the three countries have maintained the tradition of synchronizing the announcement of their annual budgets. When it comes to economic performance and approach to economic reform, Kenya seemed to write its own story and follow its own script, different from its neighbors. Compared to its neighbours and East African Community partners, Kenya has a more sophisticated and diversified economy and is considered the regional hub for trade and finance in East Africa. Consistent with this, Kenya's GDP, and GDP per capita is larger than that of Tanzania and Uganda. Its economy, like that of its neighbours, relies heavily on agriculture, which accounts for 30 per cent of GDP (Uganda is 44 per cent, Tanzania 45 per cent), and employs an estimated 75 per cent (2003) of the labour force (Uganda and Tanzania are over 80 per cent).

Demographic, Economic and Telecommunications Comparisons for East Africa: Kenya, Uganda & Tanzania

	Kenya	Uganda	Tanzania
Population	31.5m	24.7m	34.4m
GDP – US\$	12,309bn	6,010bn	9,669bn
Gross Fixed Capital Formation	1,614	238	256
Per Capita GDP – US\$	393	192	190
No. Fixed Operators	1	2	1
No. Mobile Operators	2	3	4
Cumulative No. Subscribers	3m	940,000	1.5m
Internet Service Providers	75 (17 active)	18	14
Internet Subscribers	45,000	7,024	50,000

International Data Gateways	1	8	2
Telecomms Investment	44.6	55.2	9.4
Telecomms Investment as % of GFCF	2.8	4.7	0.6
Telecomms Investment as % of Revenue	7.2	63.4	4.3
% Digitalisation of Exchange	85	80	96

However, unlike Uganda and Tanzania, Kenya's economic performance can be regarded as having been in reverse gear for over two decades, dipping into the negatives during the 90's. During the first decade of independence (1964 – 1973), growth was "relatively well", averaging 6 per cent, declining slightly to 5.2 per cent for the period 1974 – 1979. During the first half of the 80's, growth fell again to an average of 3.2 per cent, before recovering in the second half to an average of 5 per cent, due largely to a mini Coffee Boom during that time. The 1990s was Kenya's economic nightmare when a combination of factors such as political instability due to tribal clashes and suspension of external aid and support by the IMF and World Bank brought the economy down to a mere 2.5 per cent average growth for the first half of the decade, , and a 1.9 per cent for the period 1997 – 2000 in the second half.¹¹

As a result of the negative perceptions of how the economy has been managed, its assessment on the business climate index kept falling continuously since 1986. From a comparison of 29 countries in Africa, Kenya fell from a ranking of 17 in 1986 – 90, to 21 in 1991 – 94 and to 25 in between 1995 – 97. In comparison to the other EAC countries, Kenya is the only country whose rankings have been falling as shown in the table below.

Business Climate Ranking for FDI

Country	PERIOD		
	1986 - 90	1991 - 94	1995 - 97
Tanzania	29	15	11
Uganda	22	10	12
Kenya	17	21	25

NB: The business climate index is defined as the net FDI inflows normalized by GDP and the total value of natural resources by each host country.

Source: Foreign Direct Investment in Africa. Policies Also Matter, Jacques Morisset

Kenya's poor and weakening economic performance has been attributed to the failure to sustain prudent macro economic policies, the slow pace of structural reform and the persistence of governance problems. The above is worsened by the high cost of doing business in the country, because of corruption, a deteriorating infrastructure and an inefficient parastatal sector.¹² In 2000, the IMF assessed Kenya's economic and financial performance to have "deteriorated significantly in 1990's because of stop-go macro-economic policies, slow structural reform and pervasive governance problems that resulted in bouts of financial instability, a rapid build-up of short-term debt, and high real interest rates".¹³ Much as the new government in Kenya that came into power in 2002 is sworn to changing all that, the perception to date, particularly on the crippling corruption allegation front, is not particularly encouraging.

Kenya has not had the kind of past economic disasters as those that be fell both Tanzania and Uganda have had in terms of political unrest (in the case of Uganda) or the socialist experiments in Tanzania. If anything, it has had a peaceful political system that has been unique in the region. This lends credence to the thinking that countries coming out of conflict and unrest, such as Mozambique, Angola, Congo, have tended to take commitments to reform much more seriously due to a catch-up effect, and have tended to be more committed and successful in their endeavors.

2.1 Reform in the Telecommunications Sector in Kenya

When the Government of Kenya issued its Telecommunications Policy statement to liberalise the sector, it was in recognition of the fact that telecommunications was pivotal in the promotion and development of all other sectors, as well as lifting the standards of living of the people. Telecoms had the potential to attract needed investment and the current situation of economic underperformance, a negative international public image, and falling investor perception of the country, was untenable. The state of telecommunications in the country could not support this growth objective.

2.1.1 The Policy and Regulatory Framework

The Government of Kenya enacted the Kenya Communications Act in December 1998, which formed the legal basis for the reform of the sector. The purpose of the Act was clear and unambiguous, i.e. to contribute to the "development of the Kenyan economy as a whole by

ensuring availability of efficient, reliable and affordable communications services throughout Kenya". Key to this Act is the establishment of an independent regulatory authority, the Communications Commission of Kenya (CCK), the split of posts and telecoms from the corporation (Kenya Posts and Telecommunications Corporation) and their establishment into licensed limited companies of Telkom Kenya (TKL) and Postal Corporation of Kenya. The key roles and functions of the CCK are (1) Licensing (2) Price Regulation (3) Frequency Management (Allocation & Monitoring) (4) Type Approval of Equipment and (5) Establishment of Interconnection principles. A subsidiary Telecommunications Legislation passed in 2001 provided guidelines on how the Regulations would operate, by setting guidelines on issues such as Interconnection, Pricing and Dispute Resolution, among others.

2.1.2 Regulatory Independence

Financially, the CCK is an independent institution. It is wholly funded from Annual License fees and Spectrum fees and does not rely in any way on Government appropriations. Structurally, CCK is managed by 7 Commissioners who are appointed by the Minister. The Act prescribes that one must be appointed from the private sector, one from the Telecommunications sector, one from Consumer bodies and three each from the Ministries of Finance, communications and Defence. The Minister also appoints the Director General for a 4-year term, renewable for one other term. Critics point to the role of the Minister in the appointment of Commissioners and the Director General as a potential source of compromise to the independence of the Regulator.

2.1.3 Exclusivity of the Incumbent Operator

A key feature of the policy framework in Kenya, which had a bearing on the performance of the telecommunications sector is the exclusivity over voice telephony granted to the incumbent fixed operator, Telkom Kenya (TKL) for a five-year period from 1999 to June 2004. Furthermore, TKL had exclusivity over the International gateway. Competition could only be limited to the mobile market. Kenya was not alone in protecting by law, the monopoly of the incumbent on fixed. In Tanzania, the privatized Tanzania Telecommunications Company Ltd obtained exclusivity on the fixed line with its license in 2000. This exclusivity expires in January 2005. Uganda was Africa's exception as it granted MTN a mobile and fixed line in 1999, effectively introducing competition for Uganda Telecoms Limited. The two were however granted a duopoly, which expires in July 2005.

This legal constraint (of exclusivity) limits the ability to measure regulatory effectiveness over growth and performance of the fixed telephony market, to the assessment of how the Regulator managed the conduct and behavior of the incumbent operator within the framework of the agreed license conditions. Where law and the protected grant protection is seen as a national asset, regulatory effectiveness is usually a function of balance of power between external political interests on both sides. Although the exclusivity has turned out to be a wrong policy for both the incumbent, the Government and the sector as a whole, the intentions were always noble, i.e. to give an incumbent space to make investments and be strong enough to face competition and/or attractive enough to fetch a good price on sale. It had been done in the UK with British Telecom, in Argentina and South Africa.

3. IMPACT ASSESSMENT: REGULATORY PERFORMANCE REVIEW IN KENYA

Regulatory impact assessment has taken the form of sector review from the time that the independent regulator came into place in Kenya. The conditions of exclusivity that applies to the Fixed Network Operator and the peculiarities of managing /regulating a state owned monopoly have forced analysis to be split into two sections between the fixed and the mobile. The distinction is based on the fact that the former is without competition while the latter is with competition, and this creates two separate markets for all intents and purposes. A snapshot of the state of the telecommunications sector in Kenya since the introduction of regulatory act is captured on the table below.

Telecommunications Sector in Kenya since Regulation

	2000	2004
Fixed Operators	1	1
Mobile Operator	2	2
Gateways	1	1
Internet Service Providers (Licensed)	44	75 (2003)
Fixed Line Capacity	420,370	508,230
Fixed Line Connection	309,379 ('99)	328,358
Fixed Line Waiting List (average)	134,103	110,000
Fixed Line Teledensity	0.95	1.2

Mobile Line Subscribers	20,000	2,300,000 (Apr04)
Mobile Teledensity	0.42	6.8
Annual Telecommunication investment as % of GFCF	3.40	2.76 (2002)
Total Telecom Investments	\$52m	\$45m (2002)
Cellular mobile telephone subscribers per 100 inhabitants	0.4154	4.2
Number of Public Telephones	8,684	9,964

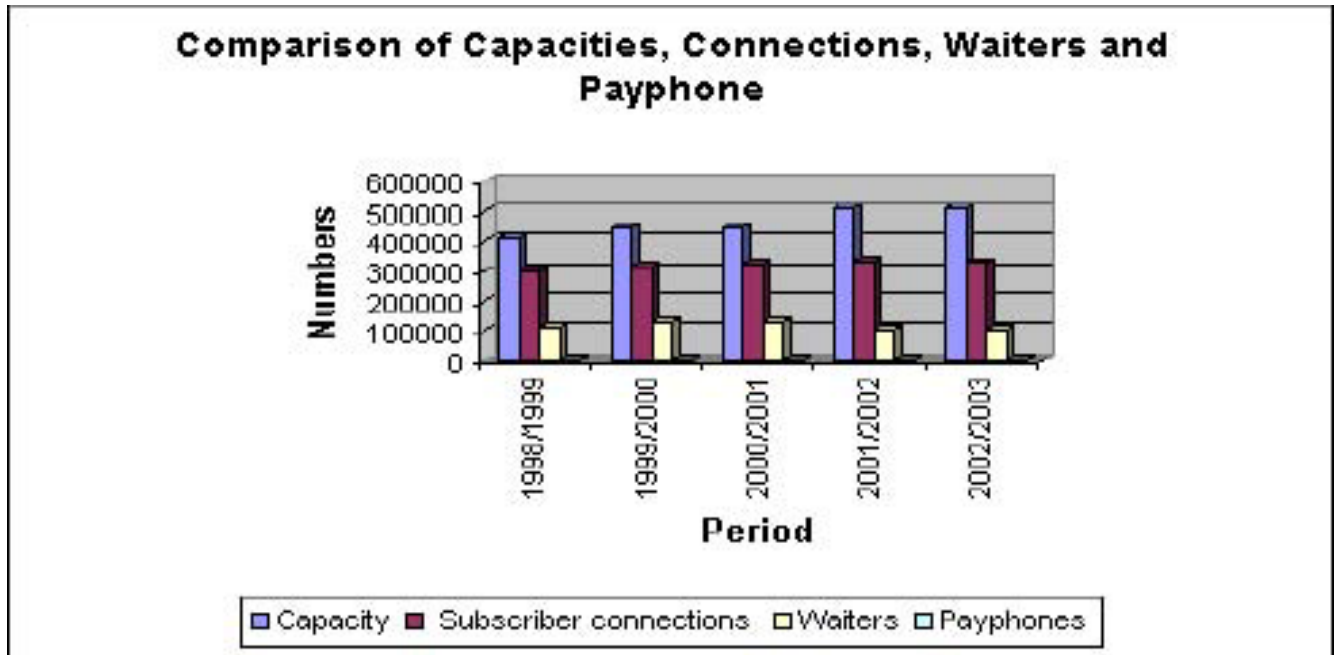
Note: Figures on the state of the telecommunications sector differ depending on the source of the information. For example, figures held by the ITU and other researches, those from the operators and from the regulator all differ, even though secondary sources quote the operators and the regulators. We have therefore relied primarily on the figures obtained through the regulator.

The regulatory act provides guidance for classification of indicators for analysis. Regulation must ensure that there is "efficient, reliable and affordable communications service" throughout Kenya. Given the inadequacy of the services that existed, it means the policy must result in EXPANSION & DISPERSION, BETTER QUALITY and LOWER PRICES. Three indicators to be looked at are (1) Network Expansion and Customer Connections (2) Network Service Quality and (3) Service Pricing. For purposes of this study, measurements used against these indicators are those established in the license conditions.

3.1 Performance of the Fixed Network (TKL)

3.1.1 Network Expansion and Capacity

At the time of introduction of regulation in 1999, Telkom Kenya had exchange capacity of 420,370 lines with a total of 296,400 connections. By June 2003, switching capacity had grown to 508,230 and the connections to 328,358. What that means is that capacity grew by an additional 87,860 over the four years, with the additional capacity in the last year increasing by 578, according to information provided by the CCK. On average, capacity grew by 7 – 8 per cent, while service uptake grew by about half that much per year. Ironically, most of this increased capacity went unused with as much as 60 per cent lying idle. The table on Capacity, Connections and Waiters over the review period is show below:



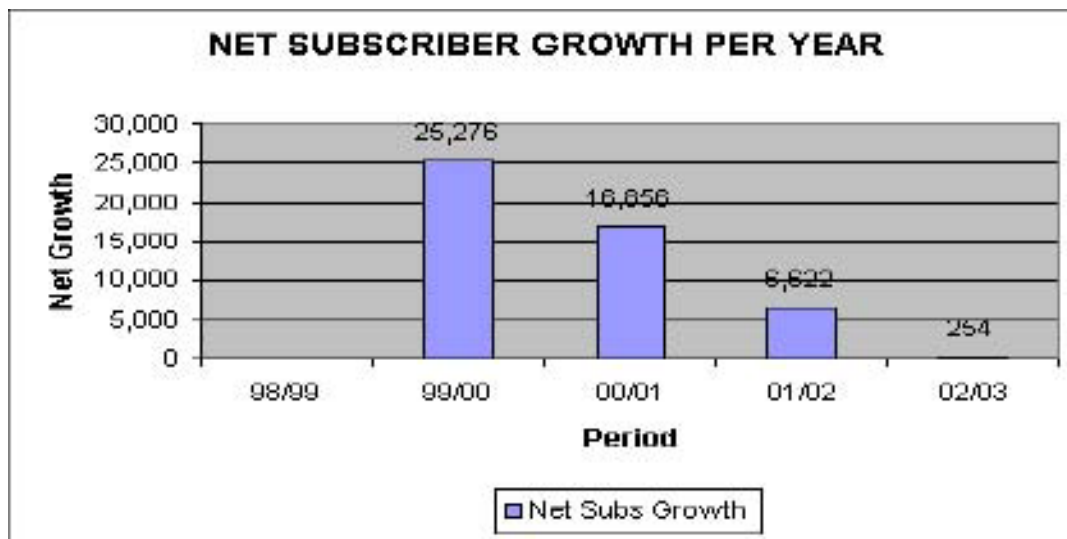
Source: CCK

Two significant features emerge from these figures:

Firstly, while switching capacity increased during the period by as much as 90,000 lines, the waiting list remained within the 100,000 figure it has hovered over the past four years. Had the waiters taken up this additional capacity, the waiting list would have been eliminated, or at least reduced to the numbers that reflect suppressed demand.

Secondly, while the number of Network Subscribers has increased, real, *NET* subscriber growth has been declining over the years, meaning a larger number of people are surrendering their fixed lines. The decline in net subscriber growth took its greatest tumble with mere 254 net subscribers recorded on the entire TKL network for the period 2002/2003. With new connections of 27,973 that year, it means there were disconnections of 27,719. Whether these disconnections are forced or voluntary is a matter still unclear at the moment. Suffice to say, it amounts to loss of potential revenue and an investment with no return for TKL.

Overall Annual Subscriber Increase



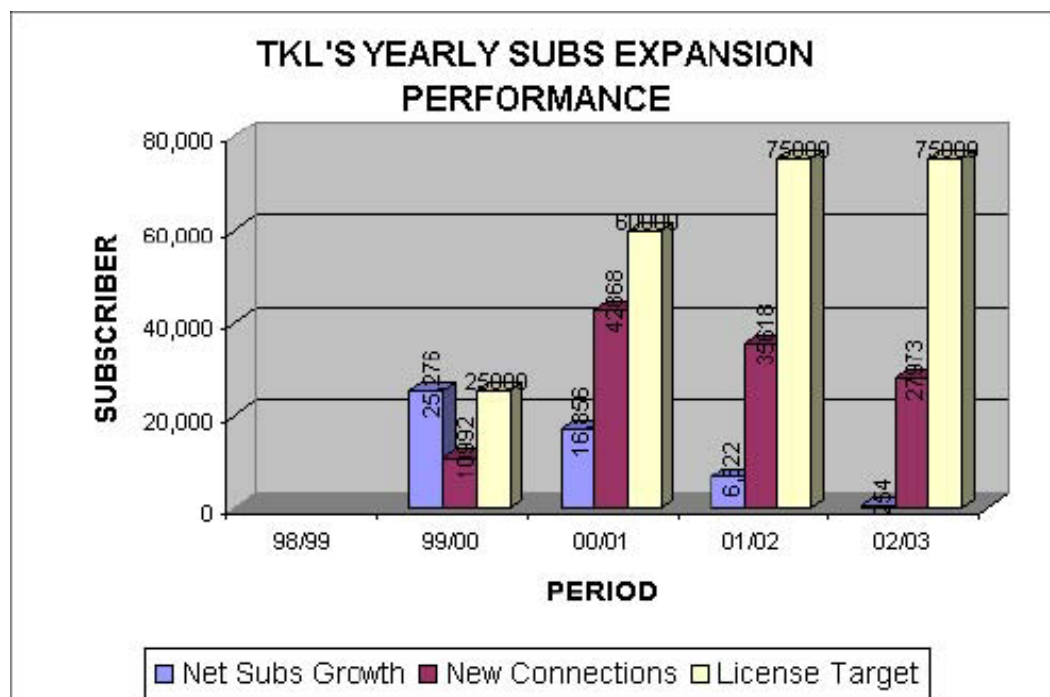
The rapid growth of mobile at this same time suggests that people were finding the mobile market a perfect substitute service. Exclusivity as a law is not of much use in environments where technology has created near substitute products and services.

3.1.2 Performance Against License Rollout Targets

The license issued to TKL had network rollout targets. The License target for year 2000/01 was 60,000 lines and 75,000 each year for the years 2001/02 and 2002/03 respectively. The actual number of connections achieved was far lower each year as show below:

Year	1999/00	2000/01	2001/02	2002/03
Line Connection Target	25,000	60,000	75,000	75,000
New Connections	10,992	42,863	35,618	27,973
Net subscriber Growth	25,276	16,856	6,622	254

The graphical presentation of the subscription expansion and connections is shown below.

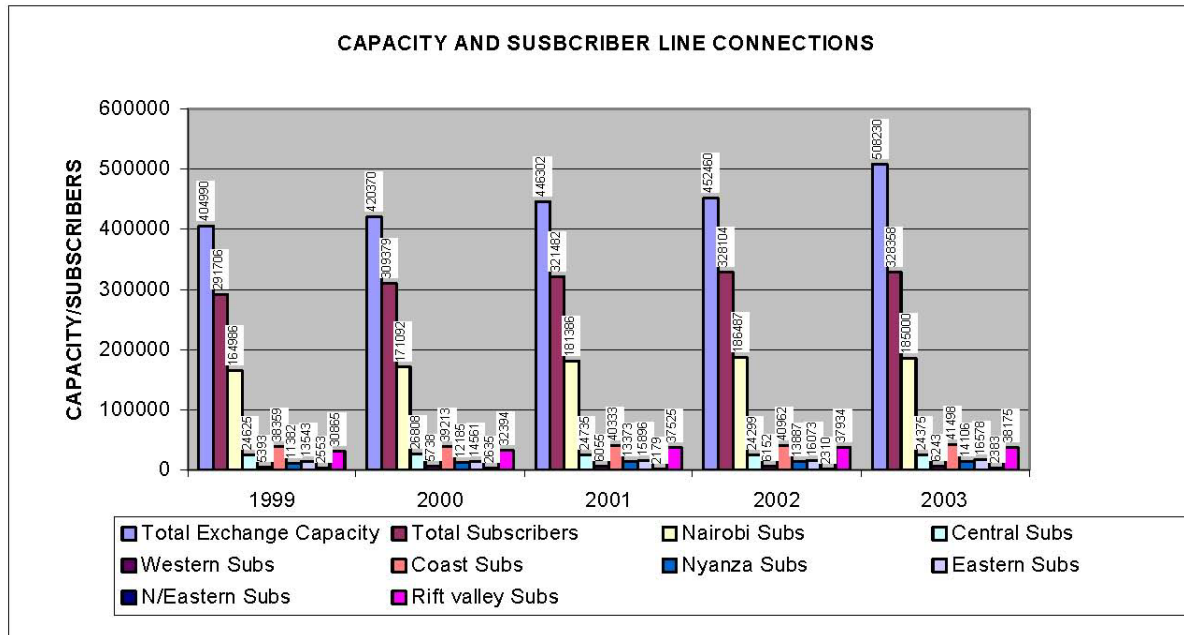


The above targets were also set regionally as a way of ensuring that telephone connectivity is distributed countrywide and correct the skewed picture where Nairobi has 56 per cent of the network's subscribers, and the Coast and Rift Valley provinces have 12 per cent and 11 per cent respectively. On the basis of urban/rural comparison, 94 per cent of fixed lines are in the urban areas, with only 6 per cent in rural areas. Yet 75 per cent of the country's population is rural. This underlies the importance of a regional distribution of targets in the license.

Targets were not met in any of the 8 provinces, including in Nairobi where demand would have been expected to be high. In the 2001/02 year for example, TKL connected 19,282 lines.

The graph below shows the regional distribution of connections against license targets.

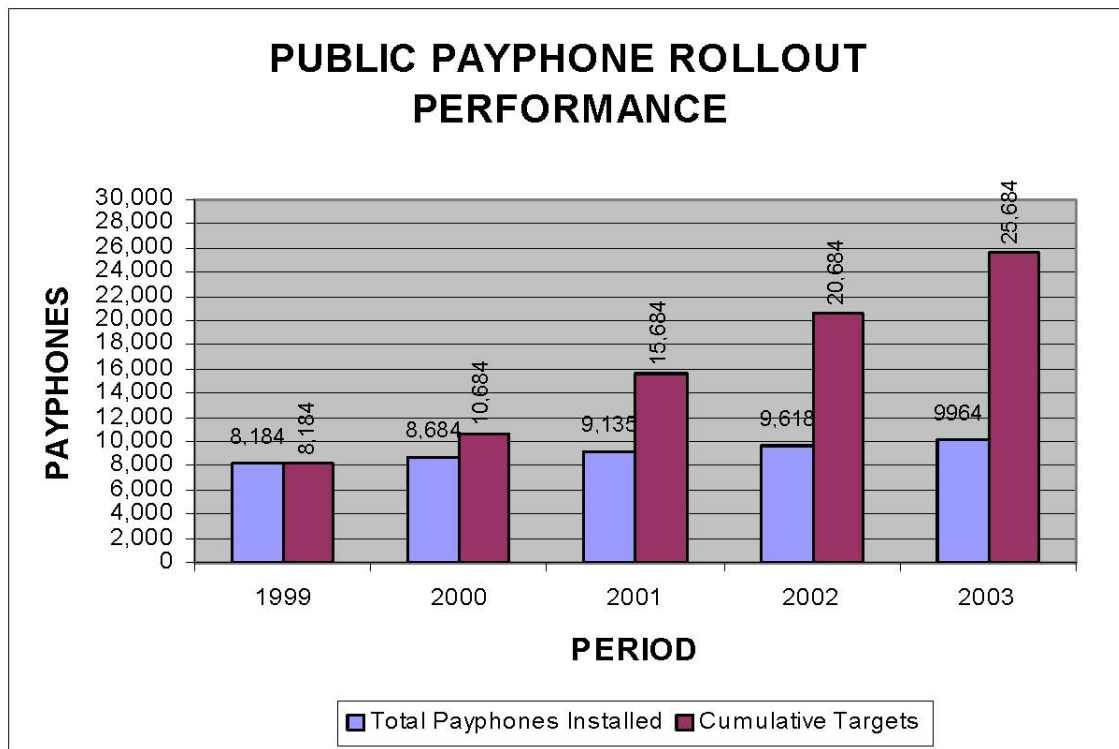
Regional Distribution of Fixed Line Subscriber Connections



3.1.3 Public Payphone Rollout

Public payphones are an acknowledged front line means of achieving Universal access. Their presence, and more importantly, their positioning, is critical in achieving that goal. TKL met targets for Public payphones in 1999/2000, but failed thereafter, with the gap getting wider every year as shown below:

Payphone Rollout Against the License Target



Between 2002 and 2003, only an additional 346 payphones were installed against an expected additional 5,000 payphone, a 6.92 per cent performance rate. Even if the target number of public phones had been installed, the number is far from adequate against the size of the population and the targets by the Government to achieve a rural tele-density of rural areas and 20 per cent in urban areas by 2015.

3.1.4 Quality of Service

Compared against the poor showing on rollout, the performance of TKL on Quality of service needs to be commended. Even where targets were not met, the attempts to strive for the targets can be felt from the result achieved, but more commendable is the fact that, in a majority of the cases, License targets were actually surpassed, as is shown in the table below:

Quality of Service Indicators

	MEASURE	License Target	Actual	Remarks
1.	% Faults cleared within 24 hours	37	34.99	Below Target
2.	Call Completion Rate (Local)	75	78.06	Above Target
3.	Call Completion Rate (Long distance)	60	79.04	Above Target
4.	Call Completion Rate (International Incoming)	40	87.15	Above Target
5.	Call Completion Rate (International Outgoing)	70	86.19	Above Target
6.	% Of Payphone Faults Repaired	92.5	80.1	Below Target
7.	Faults per 100 Main Lines	112.5	149.1	Above Target

The great improvement in TKL's QoS performance could suggest that, internally, there seems to have been a real concerted effort and focus to improve work processes and management of the resources they already have. Network rollout is a function of other factors such as availability of funds for investment purposes. TKL invested only an average of KSh 2 billion in network expansion and upgrade since 1999/2000.

Plans on the policy drawing board were to achieve, during the exclusivity period, a privatization of TKL through the sale of an initial 49 per cent stake in TKL. This would have injected capital into the company and raised money for the state. The privatization of TKL has dragged on 'soap opera like', for around four years.¹⁴ An editorial in a Kenyan Daily termed the process of finding a second National Operator in Kenya as a "knee-jerk and stop-go modus operandi ..." (Daily Nation, 28th July 2004). A winning bid of US\$ 305m by a South African consortium called Mount Kenya Communications was twice scuttled in 2001, even after the company upped its bid by US\$20m. It appears the Government believes this bid price is too low, as the Communications Minister (2003) believes Government can raise up to US\$ 5.4bn from selling 70

per cent of its stake.¹⁵ Going by global trends on sales of fixed line networks, this looks very unlikely, considering for example, that Telkom Malaysia paid US\$ 38m for a 30 per cent stake in Ghana Telecom in 1997; that MSI paid US\$ 120m for 35 per cent stake in Tanzania Telecom which came tagged with a mobile license and that Mauritania, which has received raving accolades for its reform strategy, fetched US\$ 48m for its privatization in 2000. Whatever the reason for the privatization failure, the result is half measures, unfulfilled promises and lack of consistency and unpredictability which investors are generally averse to.

3.1.5 Regional Telecoms Operators Strategy

A project to roll out network through the granting of licenses to Regional Telecom Operators (RTO's) that would have seen competition introduced on fixed networks outside Nairobi, in competition with Telkom Kenya seems to have failed. Three years after being issued licenses in 2000, none of the three companies (Telair Communications, Bell Western and Sasitel) had rolled out any network and were failing to pay the initial license fees, even by the May 2001 deadline set by the Regulator, Communications Commission of Kenya.

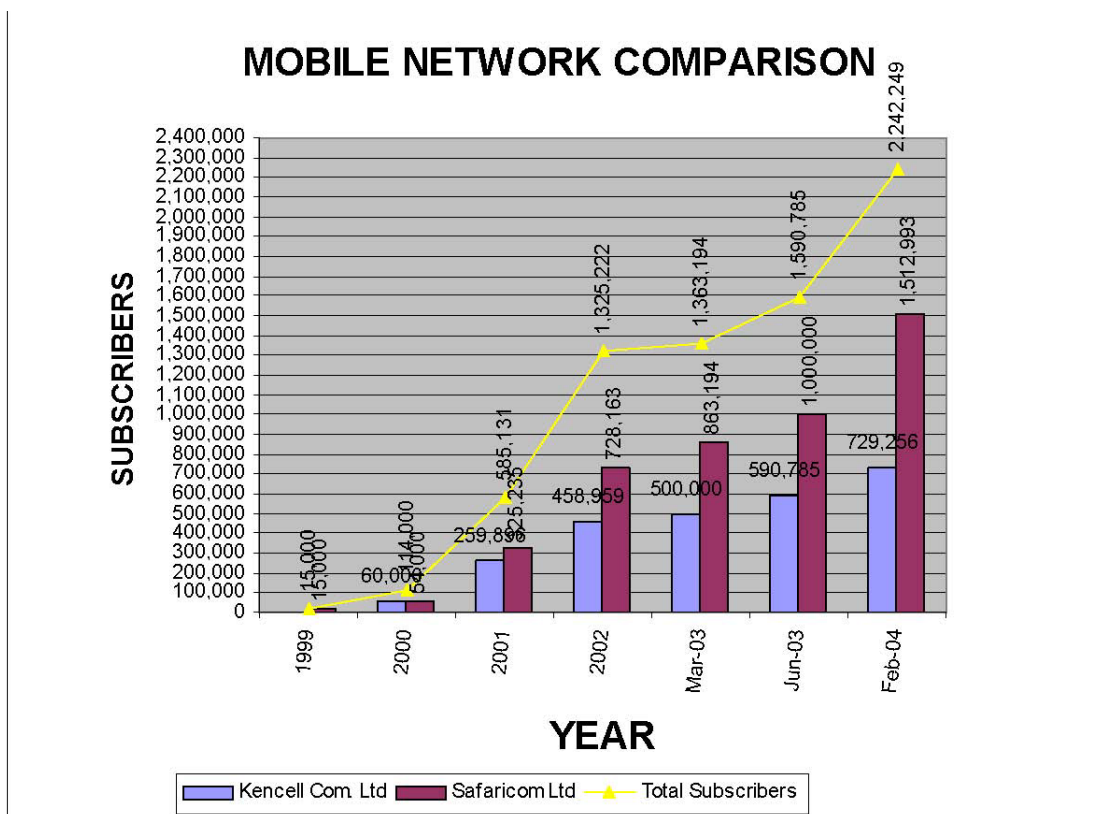
The interest by both government and CCK to issue an SNO license after the expiry of CCK's exclusivity of TKL by June 30th 2004 seems to suggest an acknowledgement of the failure of the RTO strategy for national network roll-out. RTO's were expected to install more than 300,000 lines in rural areas and 2.4 million lines in urban areas, thereby increase rural penetration from 0.1 lines per 100 people to 5 lines per 100 people, and urban penetration from 4 to 20 lines per 100 people by 2015.

The double failure of TKL to meet its own rollout targets and failure of the licensed RTO's to get off the ground, represent a double blow to Kenya's national telecommunications aspirations. The implications of this failure on assessment of regulatory impact will be addressed later.

3.2 Performance of the Mobile Operators

There are two mobile operators in Kenya, Safaricom and Kencell. Safaricom, owned 60 per cent by Vodafone of UK and 40 per cent by Telkom Kenya Ltd, was licensed in 1999. Kencell, owned 60 per cent by Sameer Group of Kenya and 40 per cent by Celtel, started operating in mid 2000.

In contrast to the performance of the fixed operator, Telkom Kenya Ltd (TKL), the two mobile operators have performed very well, apparently, far above the expectations of the operators themselves. From a small base of 20,000 subscribers that Safaricom had in year 2000, the two networks have a combined subscriber base of 2.8 million by June 2004 (of this, 1.6 million is with Safaricom and 1.2 million with Kencell). The rate of increase is not abating, as the combined figure was 2.3 million in April, suggesting a 0.5 million addition in just over 2 months. Hardly a year ago, in July 2003, the combined subscriber base was 1.86m (Safaricom 1.08m and Kencell 810,000). To put this into comparative context with neighbouring countries, when Kenya had 1.6m subscribers in Mach 2003, Tanzania had 647,000 from its four operators and Uganda had 600,00 from its 3 operators. As of March 2004, Uganda mobile subscribers were 872, 709 while Tanzania's were 1,360,000. Small wonder the growth of mobile has been dubbed Kenya's mobile revolution (Sunday Nation, 13th July 2003).



As observed earlier, the fact that mobile growth was so phenomenal at a time fixed line connection was stagnant could mean that customers had switched preferences to mobile, cost

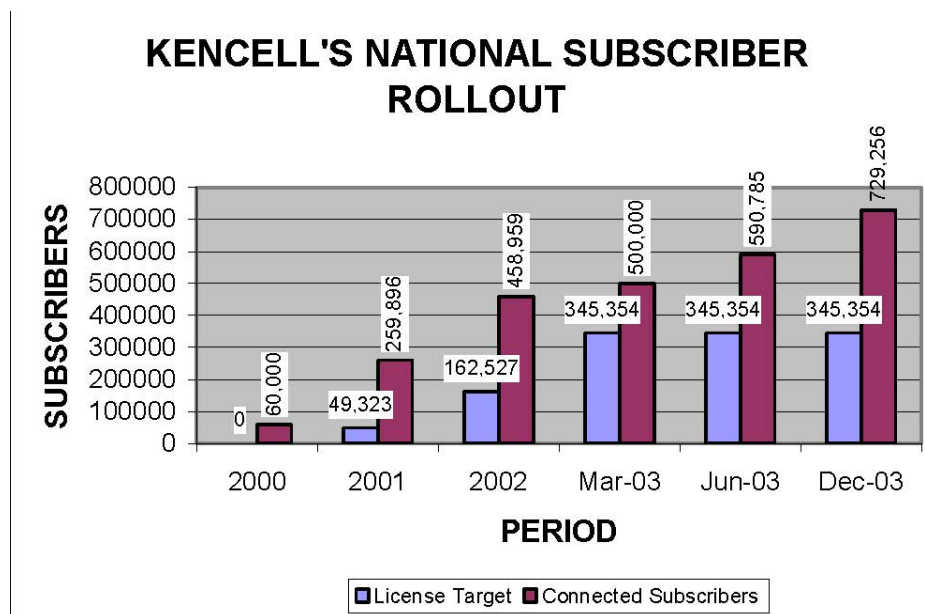
of mobile phones had come down and entry barriers lowered due to availability of prepaid services.

3.2.1 Performance Against Roll-Out Targets

When Safaricom was licensed, it was not given any rollout obligations as part of its license, an omission whose explanation is unclear. Kencell however had both subscriber and Public Pay Phone roll out targets. It can be assumed that the performance of Kencell against its roll out targets can be applied as a generalisation of performance of the mobile sector, given that Safaricom’s performance on subscriber base, geographical network coverage and payphone public payphones was better than that of Kencell.

Performance of Kencell Against Targets

The performance of Kencell’s connections against targets since its licensing in 2000 is shown in the graph below:



In every year, Kencell far outstripped its rollout targets and in December 2003, it had rolled out more than double its target connections. In terms of coverage, Safaricom had also covered all the towns and highways targeted for coverage by December 2002. Kencell still had a few areas to cover.

Public payphone installation has also been good with the performance of Kencell against targets shown below:

Public Pay Phone Deployment

Year	End of 2000	End of 2001	End of 2002	End of 2003	End of 2004
Expected Yearly Deployment	100	200	400	300	200
Cumulative Deployment	100	300	700	1000	1200

3.2.2 Quality of Services Issues

The mobile operators paid a price for their rapid growth due to not-so-good quality, particularly in the years 2001, 2002 and the first half of 2003. The biggest problem, particularly for Safaricom, was network congestion, low call completion rates and frequent call drops. However, they quickly responded to these problems through heavy investment in network expansion and upgrade which resulted in favorable quality of service performance. On average, the performance by Kencell is shown below:

Quality of Service Indicators

QoS Parameter	QoS Parameter	Target	Actual
1.	Call Block Rate	1.8%	0.85%
2.	Call Drop Rate	2%	1.39%
3.	Call Set Up time	Less than 4 seconds	4.79
4.	Network Availability	99.9%	99.5

Safaricom's QoS was equally good overall and its two parameters were network availability and Grade of Service which achieved 99.9 per cent and 0.03 per cent respectively.

3.2.3 Investment in Mobile Networks

The impressive achievements of the mobile networks were due in large part to the foresight of the management and heavy investments they made into network expansion and quality of service improvements. Kencell for example, spent a massive KSh 20 billion (approx US\$ 256 million at rate of KSh 78.00: 1 US\$) in Network Development. Kencell is set to get an additional KSh 23 billion from its new partner, Celtel, who bought 60 per cent of the share sold by Vivendi in June 2004 at a cost of US\$ 250m. Safaricom had, by March 2003 spent KSh 18 billion (US\$ 231m) on infrastructure to cope with the growing call traffic. An additional KSh 8 billion (US\$ 102m) in 2004 will see a network upgrade involving the construction of another 200 Base Transceiver Stations (BTS's) within the Nairobi Central Business District. These huge investments by the two mobile operators in network infrastructure expansion and upgrades is in sharp contrast to the minimal annual average investment of KSh2b (approx US\$ 25m) by Telkom Kenya Ltd over the same period since 2000. Safaricom has also worked hard to introduce innovative Value Added Services such as Mobile Internet, based on the General Package Radion System (GPRS).

Company performance has been excellent with airtime revenues rising by 30 per cent to KSh 30bn (US\$ 385m). It is no wonder that the company lifted the prized 'Company of the Year Award' (COYA) for 2003 from the Kenya Institute of Management and the CEO name Best CEO of the Year, and in its short existence, is among the top 10 mobile operators in Africa.

Clearly, the mobile operators have by far outstripped the fixed operator in Kenya. Subscriber growth of the mobile and the decline in fixed line growth has told its own tale of consumer preference in Kenya. In this choice, price has not seemed to be an issue as mobile has grown despite the fact that it is comparatively more expensive. How much of this mobile growth was due to Regulatory effectiveness will be a major area of analysis.

3.2.4 Tariff Issues

One measure of Regulatory effectiveness in a market not fully competitive is how to protect consumers from high tariffs. In a telecoms market where competitive forces are working, prices of services tend to go down through tariff reductions.

Overall cost of services in Kenya have been coming down ever since competition started with the exception being local calls made from the fixed network which have traditionally been subsidized by international calls. A regulatory decision and rebalancing plan agreed between TKL and the regulator in order to ensure charges for services are cost based is now being implemented. International tariffs, for example, have been reduced from a high rate of US\$ 3.30 in 1999/2000 to US\$ 1.66 for the rest of the world, a reduction of 49.7 per cent. In another move that is likely to position TKL well with its competitors, it has announced further tariff adjustments that take effect from 1st September for almost all classes of calls except local. International call charges will come down as follows.

International Call Charges (Per Minute) US Dollars

Region/Zone	Africa COMESA		Rest of Africa, Europe, N. America, India, UAE, Australia		Rest of World	
	Old	New	Old	New	Old	New
Standard	1.20	0.90	1.25	0.90	1.66	0.90
Economy	1.03	0.64	1.00	0.64	1.36	0.64
Discount	0.90	0.64	0.85	0.64	1.16	0.64

Note:

Period	Weekdays	Weekend & Public Holidays
Standard	0800 hrs – 2200 hrs	
Economy	2200 hrs – 0000 hrs	0800 hrs – 2200 hrs
Discount	0000hrs – 0800 hrs	2200 hrs – 0800 hrs

Local call charges go up by 16 per cent but both national trunk and international call charges come down by as much as 45 per cent and 31 per cent respectively. The effects of this tariff reduction is yet to be seen, but it is safe to assume that give the magnitude of the reductions, there will be an increase in the number of calls originating from its network. Mobile operators too have been innovating with various tariff structures for prepaid and postpaid customers.

Local Call Charges

Type of Call	Current Tariff – KSh	New Tariff – KSh
Local Calls (3 minutes)	7.40	8.60
Local Payphone	7.00	8.00
Trunk (Peak)	17.40	17.40
Trunk (Off Peak)	8.70	8.70
Calls to Mobile	27	27.00
Calls to East Africa (Peak)	45	40
Calls to East Africa (Off Peak)	33	30

3.2.4.1 Comparison of Call Charges: Kenya, Tanzania & Uganda

It is interesting to note that telephone connection charges for Kenya are the lowest of all the 3 countries, and is less than half the charges in Uganda. The same applies to local calls made from the fixed network.

Telephone Tariffs – US\$

Country	Residential Charges		Residential Monthly subscription		Local Call	Subscription as % of GDP per Capita
	Connection	Monthly	Connection	Monthly		
	2002	2002	2002	2002	2002	
Kenya	29	6.3	29	6.3	0.09	19.5
Uganda	61	5.6	61	5.6	0.21	27.4
Tanzania	41	3.6	41	3.6	0.12	15.4

Source: African Telecommunications Indicators 2004, ITU

Mobile Calls

Mobile charges have also continued a downward trend. Connection on prepaid is as low as US\$ 4.00, from a figure of an average US\$ 12 a year ago. Average comparative data compiled by ITU for October 2003 (see table below) shows costs of mobile telephony hovering within the same cost region.

Prepaid Cellular Tariffs – US\$ (October 2003)

Country	Connection Charge	Charge per Minute – Local Call		Cost of local SMS	
		Peak	Off-Peak		
Kenya	12.57	0.20	0.20	0.06	
Uganda	13.91	0.19	0.16	0.06	
Tanzania	13.5	0.25	0.25	0.05	

Source: African Telecommunications Indicators 2004, ITU

This fall in connection charges, airtime and prices of mobile phones (which keep coming down), obviously explains partly, the growth in the number of subscribers.

3.2.5 Digital Access

With the drop of mobile tariffs has been the drop in internet access charges. Internet access charges in Cyber Café has dropped from a high of almost KSh 15.00 per minute in 1999 to about KSh 3.00 per minute in 2002, to only KSh 1.00 per minute in 2003 and KSh 0.08 per minute in many places. Credit needs to go to the Regulator for protecting consumers in this area. In March 2002, CCK suspended a 300 per cent increase proposed by the Cyber Café Operators Association of Kenya (CCOAK) to implement a 300 per cent increase from KSh 3.00 to KSh 15.00.

On a comparison of Digital Access Index, which is the new measure designed by the TU, Kenya fares better than its neighbours, at 0.19 out of an Index of 1, though all are very much in the same category of low DAI economies.

Digital Access Index (DAI)

Country	Infrastructure	Affordability	Knowledge	Quality	Usage	DAI
Kenya	0.03	0.00	0.73	0.19	0.01	0.19
Uganda	0.01	0.00	0.69	0.13	0.00	0.17
Tanzania	0.01	0.00	0.61	0.14	0.00	0.15

Source: African Telecom

The section has looked at the performance of the telecommunications sector in Kenya since regulation in terms of Network Expansion, service Quality and Tariffs charged on users. While the findings were that overall, there was tremendous growth in telephony; it was shown that the fixed operator did not perform very well. That growth also centered itself in urban areas and thus was not distributive enough. The next chapter analyses the role of the regulator in all this with a view to formulating an opinion that will shape regulatory impact assessment.

4. REGULATORY IMPACT ON THE TELECOMMUNICATIONS SECTOR

4.1 Market Growth

The phenomenal growth of telephony in Kenya since regulation is now a matter of record. A total of approximately 3 million subscribers were added into the network during 2000 to 2004. This is the time when competition was introduced for the first time, and therefore very tempting to attribute this growth to competition than to regulatory interventions. But when one considers the fact that competition can be very dysfunctional unless properly managed, it seems fair to give regulatory management credit for this growth.

Further, when one looks at the fact that the growth in Kenya was far faster and greater than that in Uganda and Tanzania where the competitive environment was far greater and more conducive than in Kenya, one would be inclined to ascribe the Kenyan growth to regulatory effectiveness. Uganda had five players in its market, two national fixed operators and three mobile cellular operators and these had a total of 939 943 subscribers (67,234 fixed and 872, 909 mobile) by March 2004. Tanzania also with five operators, one fixed and four mobile (a fifth mobile operator lost its license in 2003 after failing to meet its license obligations) had a cumulative total of 1.5 million subscribers by June 2004. Both operated with privatized fixed operators with the Uganda one operating in a duopolistic competitive environment. When one considers that both Uganda and Tanzania were supported by a much more robust environment, greater political commitment to reform, conspicuous positive investment response. and international goodwill as opposed to the Kenyan situation, (see Section 2), the achievements of the telecommunications sector in Kenya, assume greater significance and the credit to regulatory management is due.

4.2 Market Liberalisation

4.2.1 Is More Necessarily Better?

The Kenyan market growth also challenges one assumption, that more competition is better competition. Kenya achieved its telecoms growth with a monopoly on fixed lines, international gateway for voice and internet, and a duopoly on mobile. Uganda had a duopoly in fixed, and three players on mobile and 8 international data gateways. Although Tanzania, like Kenya, has one partially privatized fixed operator, it at one time had five mobile operators and several international gateways with a liberalized VSAT market. Still, with these handicaps, Kenya has done better in terms of growing the market during the short period of limited/controlled competition. The question in this case is therefore not whether more is better, but whether Kenya could have performed better with more. The fact that it achieved what it did with less should again be credited to regulatory management. Actions and intentions on the part of the regulator over the five year period suggests that the view of the regulator is to open up the market for more competition, and that the market would be better off with more, but has felt constrained by the law to act in a manner it would have wanted to.

4.2.2 Performance of TKL and Regulatory Response

Take the case of the performance of TKL and the exclusivity issue as an example. TKL is seen as having let the telecoms sector down. It has not pulled together with the others. Save for some quality of service indicators, it has failed to meet all its license obligations. It has been under-investing in network expansions and upgrades, and the wide gap between its switch capacity and connected lines has been attributed to poor planning where switch capacity is not complemented by access network.

In the full exercise of its regulatory powers, the regulator has levied penalties on TKL. In 2003, the regulator descended on TKL by slapping the company with a KSh110m (approximately US\$ 1.41m) for failing to comply with conditions for its various trade licenses for 2001/2, in a move widely publicized in the media and hailed as a sign of regulatory enforcement. Although TKL has not paid the money, claiming unaffordability and appealing that the targets were unrealistic in the first place, the intention of the regulator was clear.

Having said that , it remains a fact that TKL has not paid the penalty, and is unlikely to, and if failure by regulator to take any further action can be a sign of regulatory failure, then CCK is likely to fail on this measure. It should be noted however that incumbents who are protected by law have the weight of political support on their side, and this places limits on the extent of regulatory enforcement. It would be unthinkable, perhaps even politically suicidal, for the regulator for example, to contemplate canceling the license of an incumbent operator on account of non compliance.

In both countries of comparison, Uganda and Tanzania the fixed monopoly operators have failed to meet their license obligations. In Tanzania Telecommunications Company Limited (TTCL), the strategic investor had promised to raise the number of lines from 180,000 to 800,000 in five years. The operator has managed to add only 40,000 lines in that period and the five years expire next year in 2005. The regulator has not been able to take any action against TTCL. UTL was granted obligations to fulfil and targets to achieve in the 5 year duopoly period (25th July 2000 – 25th July 2005). These relate to legal obligations, financial obligations and technical obligations. It has done fairly well and evaluated to have achieved 85 per cent of its overall targets, thanks to its ability to provide mobile and fixed services. But even then, the Regulator has not been able to penalize the incumbent for missed targets, and is unlikely to. Whilst it is technically correct to point to the failure to enforce the law on wayward state owned legislated monopolies as part of regulatory failures, it is obvious that the regulators' hands are tied.

4.2.3 Regulatory Intentions: Licensing the Second National Operator (SNO)

If any proof is needed to demonstrate that the regulator in Kenya was far from pleased with the performance of the monopoly fixed operator, it is the alacrity with which CCK applied the law to the letter in moving to try and license a Second National Operator (SNO). By the time TKL's exclusivity ended on 30 June 2004, CCK had already adjudicated on tenders for an SNO.

CCK has been known to have been urging the government to change the law and strip TKL of its monopoly in the provision of long distance fixed line telephony, international internet backbone services, and provision of fixed line services within Nairobi. In March 2003 . the CCK Board is reported to have approved a paper stating that *"in view of non-compliance,(by TKL to*

license conditions), the commission recommends to the government the need to license a second national operator to offer effective competition to Telkom so as to improve service delivery. If competition is not introduced, the firm's dismal performance will considerably delay the government's telecommunications rollout targets as set out in the Sector Policy Statement".¹⁶

The licensing of the SNO which was advertised in November 2003, has run into another quagmire of controversy that have characterized the licensing of operators in Kenya of late. The Minister of Communications stopped the announcement of the winning bidder a day before it was set to be made, the 20th July 2004. The grounds were that there are alleged irregularities in a recommendation by the regulator to lower the minimum bid price from US\$50m to US\$ 25m. The matter is still being contested in court. This pits the regulator against the Government and has the potential to threaten regulatory independence. It also sends signals that are not very positive to the investment community.

4.2.4 Post-Exclusivity Market Liberalisation

Undoubtedly the market appears to have been hurting and suffocated by the monopoly conditions granted to TKL. By the beginning of August 2004, barely a month after the expiry of TKL's exclusivity, CCK had received nine applications for internet gateway licenses, among them from one of the mobile operators, Safaricom, as well as a surprise one from the Postal Corporation of Kenya. These would then compete with TKL's Jambonet for upstream connectivity. Safaricom believes a backbone license will enable it to offer cheaper international call rates, and increase the efficiency of services. It remains to be seen how the regulator handles these applications. In fact, a full assessment of regulatory impact needs to be done after allowing some post exclusivity time when the law can no longer be a safe excuse for certain things being done or not done.

However, the regulator is already under increasing pressure from the market, particularly from ISPs who are emerged by a decision by TKL to increase prices of bandwidth for ISPs by as much as 160 per cent starting 1 September 2004. CCK is accused of bureaucratic delays in licensing new players after June 30, thus maintaining a defacto monopoly by TKL's Jambonet as an international gateway and provider. Evidently, TKL is applying market skimming tactics during this period when its pricing has been decontrolled, but before competition sets in. Lead

time for any competitor between being licensed and being operational is between nine months to one year.

If the new bandwidth prices come into effect, it is obvious that ISPs will pass these over to their customers, and this will have negative ripple effects. Already bandwidth costs in Kenya are high, and higher than in Uganda by about 30 per cent. CCK cannot watch this scenario without taking action. Either it speeds up the licensing of other operators, or restrains TKL from implementing these increases. This is going to be a big test of regulatory impact. Government had staved off pressure to license more internet backbone providers as well as liberalise the VSAT market until an SNO is licensed. It is hope the delay in the licensing of SNO will not now delay liberalization of the market in these other areas

4.2.5 Quest for the Third Mobile Operator

If Kenya has done relatively well with two mobile operators, evidence seems to suggest that this duopoly was a strategy based on the need for caution and to allow for market consolidation rather than a rejection of a 'more is better' hypothesis. This assertion is supported by the fact that the process of licensing a Third Mobile Operator started in late 2002 and the advertising for bidders was floated in February 2003. A consortium led by ECONET won the 15 year license but up to now has not yet been awarded the license due, initially, to some litigations by the other bidders, and later, some disagreements within the winning consortium over shareholding structure.

On the basis of intentions and actions, it is clear that CCK wants to increase competition in the market and believes this to be good for the consumers, will bring tariffs down and enhance service quality. CCK estimates the number on income earners at around 10 million and on this basis, puts current demand for service at between 4.7m and 9.4m subscribers. It would be unfair to hold the Regulator responsible for the delay in having the Third Operator in place given that the causes of the delay are exogenous to the Regulator.

4.3.1 Direct Regulatory Support to Fostering Competition

The Regulator has over the years taken steps within its limits, to support growth of the sector, and these have been celebrated as fostering competition. Some of the more notable moves are (1) Removal of VAT on frequencies (2) Reduction of operating licences for ISP's from 1 per

cent to 0.5 per cent and those of PSP's from US\$ 6,500 to US\$ 1,300 (3) Influencing change in foreign equity from 40 per cent to 70 per cent (4) Establishing cost-based tariff rebalancing program and timetable and (5) Establishing clear interconnection rules.

4.4 Consumer Engagement

Of all the markets' stakeholders, the Regulator appears to be known the least by consumers. This is a view gathered by the authors from ordinary telephone users who view telecommunications as a technical industry whose face is represented by the operators and/or government. The Regulator has done a lot to promote consumer interests and protect consumers from service providers. The action by CCK to stop Cyber Café Operators from slamming a 300 per cent increase in March 2002 would have gone unknown were it not for the press. CCK has been involved in projects on Internet in schools under the KENET Project, the registration of the Kenyan domain name under the KENIC Project and facilitating the establishment of the Kenya Internet Exchange Point (KIXP). But little of this is known to the public. The Regulator needs to reach out more to the consumers and establish an open forum at which the consumers can engage the regulator in two-way discussion. On an assessment continuum ranging from Very Poor, Good to Very Good, we would score this as Poor.

5. REGULATION AND DEVELOPMENT: CONCLUDING OBSERVATIONS

Section 1 of this paper generates a debate on purposes for Regulation and argued that regulation can be growth focused or development/redistributive focused. An ideal regulatory regime is one which balances the two, and this is why most regulations have enshrined growth targets, defined as areas where networks must roll out, and universality targets. Without this, there is a risk of growth not benefiting the majority of the people, or generating greater inequality or not yielding maximum public good. More often than not, there is a tendency to celebrate growth in numbers of connections, improved quality of service and (especially) lowering of price for services. Matters of access are lost in the euphoria, yet design of policy frameworks had these in mind. On this measure, it appears regulatory impact in Kenya registered its biggest failing. This conclusion is arrived at on the basis of the following observations.

First, when the regulator was established, already a very skewed network set-up existed where 94 per cent connected subscribers were in urban areas, with 56 per cent of them in Nairobi alone yet 80 per cent of the population is in the rural areas. This means that the majority of the population remained under or unserved by the time of reform. Focus should have been on ensuring that growth comes with distribution.

If the RTO licenses were meant to plug that hole, as appears to be the case, nothing seems to show that their failure to pay licenses or roll out is up the list of regulator's agenda. The apparent weak regulatory response to failure of the RTO strategy is not matched by the hopes and responsibility levels placed on that strategy by the telecoms policy. As pointed out earlier, the RTO strategy was expected to install 300,000 lines in rural areas and 2.4 million in urban areas and increase rural penetration from 0.1 lines per 100 people to 5 lines per 100 people by 2015, and urban penetration from 4 to 20 lines per 100 within that period. It was, in short, a strategy for the Millennium Development Goals and should have received more attention.

Secondly, the failure by the TRL to meet its targets meant that even the distribution would remain a pipedream. In the absence of the RTO strategy, options should have been pursued with greater vigour than has so far been the case.

Third, in the face of the runaway growth of mobile, and the failure by both RTO's and TKL to roll out as expected, Regulation should have used mobile as an instrument of Universality and adapted the policy to do just that. Universality is technology neutral and increasingly mobile is being accepted as a tool of access. Yet Safaricom had no roll out targets. Mobile rollout covered the major towns, tourist resorts and major highways and within these, it would be confined within 30 kms. This would suggest that market growth, rather than distribution, was a primary consideration in the early years of regulation.

The issue of Community Access to communication has only been taken up now by the Regulator through a multi-sector study designed to come up with an acceptable Universal Access Strategy. The study is being undertaken jointly by CCK with the support of the IDRC. The study commenced in December 2003 and already, two stakeholders report back meetings have been held. The all inclusive approach of the study is commendable and it is hoped the

supply strategies that will emerge will be implemented with gusto. This however does not escape the verdict that this took 'too little too late'. In Uganda, the Universal Access approach has been very successful, with a well functioning Universal Service Fund and USF administration in place.

If one steps back to look at the sector performance in Kenya, as in many other countries, one big shortfall is the absence of a National Development Agenda planted into the sector Policy Formulation. Traditional Developmental Approach is top down, from a holistic national policy, driving sector policy, in turn driving Regulatory policies and strategy, working its way into operators' business plans, actions and targets.

Invariably, our sector development approach has largely been bottom-up, driven by what operators say they can do with their networks and infrastructure rather than what the national priorities dictate. A few examples in Kenya will demonstrate this.

Firstly, Kenya does not have at this stage, an ICT policy. Such a policy would, or should, guide the evolution of the telecommunications industry.

Secondly, by the CCK's own admission, a current demand of up to 10m subscribers exists today, yet the network plans for all the operators (Safaricom, Kencell, TKL) were not built to accommodate that, nor were the targets set for them. Targets were based on the capacities of the network's infrastructures, than the needs of the market. One wonders the basis of the licensing caution when it is evident from the beginning that there is going to be a national demand/development gap.

Thirdly, the success of most mobile operators in achieving their targets may have less to do with their competency than the lack of knowledge on the part of the regulators and the resultant understatement of targets. It is incredible that roll out targets by MTN in Uganda were achieved within 1 month as opposed to the 5 years. Clearly, the targets were just too low. Even in Kenya, it must have been clear from the growth of the two mobile operators in terms of subscriber base, revenues generated and profits made, that there was room for more players and squeeze more out of the operators in the direction of development. Yet the record

shows that Safaricom did not even have roll-out targets in its license, nor was it considered a possibility to incorporate universality into mobile operations. So much of the developmental endeavors by operators are part of social responsibility, or market development strategies, rather than obligations.

There is a strong case for interventionist regulation in the developing world, and this should be the major point of departure with the regulators in the developed world where infrastructure backbones are already in place and networks have reached maturity stage. Regulators need to become advocates of development, and balance effectively, the private sector driven growth agenda with the national, socio-economic agenda. After all, that is one of the reasons they were established and it is one way of protecting their independence from political dictation.

Regulators operate within a policy framework but the policy framework needs to be instructed by a National vision. The only country in the region to have a Telecommunications and ICT policy guided by a National Vision is Tanzania. The ICT Policy of September 2003 is guided by the Nation's Vision 2025, the Tanzania Assistance Strategy, and the Poverty Reduction Strategy. The absence of such a guiding vision in the case of Kenya may limit the scope of definition of the role the sector should play in Development. Kenya is still working on an ICT policy and it is hope that this policy can provide a holistic framework to activities of all sectors including telecoms. Without this national framework, there is a risk of evaluating ourselves on the basis of below average national targets and congratulating ourselves on over-achieving them.

Notes

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The views expressed in this paper are those of the Authors and do not necessarily reflect the opinions of their respective employers.

³ African Telecommunications Indicators 2004, ITU.

⁴ African Telecommunications Indicators 2004, ITU.

⁵ Source: ITU Trends in Telecommunication Reform 2003, Promoting Universal Access to ICT's (page 15).

⁶ African Telecommunications Indicators 2004, ITU.

⁷ Telecom Reform: Principles, Policies & Regulatory Process, William Melody (Pg 19 – 20).

⁸ Quoted from Trends in Telecom Reform 2002, ITU (Pg 28 – 29).

⁹ Quoted from Trends in Telecom Reform 2002, ITU (page 28 – 29).

¹⁰ Effective Regulation Case Study: Botswana 2001 (Pg 1).

¹¹ Explaining African Economic Growth Performance: The Case of Kenya: Francs M Mwega (University of Nairobi) and Njuguna S Ndegwa (IDRC), May 2002.

¹² Kenya's Economic & Financial Performance Indicators, IMF.

¹³ FDI Investment in Africa, Policies Also Matter, (Page 18), Jacques Morisset.

¹⁴ Competition in Africa: The Changing Tides of Regulation and Liberalisation – Clairwyn de Merwe.

¹⁵ Transport & Communications Minister, Mr John Michuki addressing The Commonwealth Business Council's Africa Investment Forum in Johannesburg, S. Africa in April 2003.

¹⁶ Source: The Daily Nation, 18th March 2003.