

# Is the Universal Access Fund in Africa creating an enabling environment for ICT Infrastructure investment in rural and perceived uneconomic areas?

*The emergence of Next-Generation Networks (NGNs) has challenged the tradition view of universal access and service, which suggests that the definition has to be expanded to take into account converged technologies. The perceived failure of markets to serve uneconomic areas is often the result of African governments failure to create favourable policy and regulatory environments to facilitate competition and investment.*

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**Most African countries are in-effective to regulating universal access and service funds**

*According to the Telecommunication Regulatory Environment survey 2009, most of African countries are perceived ineffective in regulating universal access and service funds.*

**Universal Access Funds (UAFs) focus on fixed-line connectivity and telecentres**

*Generally UAFs in Africa focus on the traditional view of expanding fixed-line connectivity and setting up telecentres. However, fixed-line penetration rates are below 2% in most African countries.*

**Weak institutions and regulatory capacity to implement access policies**

*Failures regarding universal access and service in rural and perceived uneconomic areas relate to the weak institutions and regulatory capacity to implement access policies. Further there is a lack of processes, procedures and skills to effectively manage fund monies.*

**Access and connectivity increased through a liberalised and competitive market**

*Countries that managed to liberalise their markets by reducing market restrictions and regulating effectively to enable market entry are reaping benefits of competition in terms of increasing connectivity and access and reducing prices.*

**Regulatory bottlenecks stifle NGN roll-out investment**

*Basic conditions to enable investment and fair competition are absent, resulting in regulatory bottlenecks for NGN roll-out resulting in a private sector under-investment, particularly in marginalised and perceived uneconomic areas.*

**UAS definitions do not make provision for converged technologies**

*Unified licences have been implemented in most African countries allowing operators to provide converged services, but the current UAS definitions do not take into account converged technologies.*

## Introduction

Despite 93% of African countries having established a regulator, a number of bottlenecks exist in establishing a transparent and non-discriminatory telecommunications market.

The main bottlenecks are related to (1) the lack of political autonomy of the regulator and (2) capacity to regulate effectively and independently. In many countries, state-owned incumbent operators continue to dominate the telecommunications market. As a result, there is often a lack of political will to effectively regulate market entry and allow competition through the implementation of open access principles. Therefore what has been deemed a market failure is in actual fact a public sector failure to create an enabling environment for investment in rural and perceived uneconomic areas.

Most African countries have established a universal access fund (UAF) to address issues of limited access and connectivity in rural and perceived uneconomic areas. While fund monies have been disbursed, across some African countries, with some successes achieved in terms of mobile penetration, access figures across most African countries remain sub-optimal, particularly fixed-lines connectivity.

In addition to this, although unified regulatory frameworks have been implemented in many African countries, policies relating to universal access and service did not take into account the converged environment.

**Table 1: Number of fixed lines as a percentage of the population (Source: ITU)**

	2007	2008	2009
Tunisia	12,65	12,18	12,45
South Africa	9,22	8,91	8,62
Botswana	7,24	7,41	7,4
Namibia	6,61	6,57	6,54
Senegal	2,26	1,95	2,22
Kenya	1,23	1,67	1,67
Cameroon	1,01	1,34	1,66
Benin	1,32	1,19	1,42
Cote d'Ivoire	1,23	1,73	1,34
Ghana	1,65	0,62	1,12
Ethiopia	1,12	1,11	1,1
Burkina Faso	0,83	0,95	1,06
Nigeria	1,07	0,86	0,92
Uganda	0,54	0,53	0,71
Zambia	0,75	0,72	0,7
Tanzania	0,4	0,29	0,4
Mozambique	0,36	0,35	0,36
Rwanda	0,24	0,17	0,33

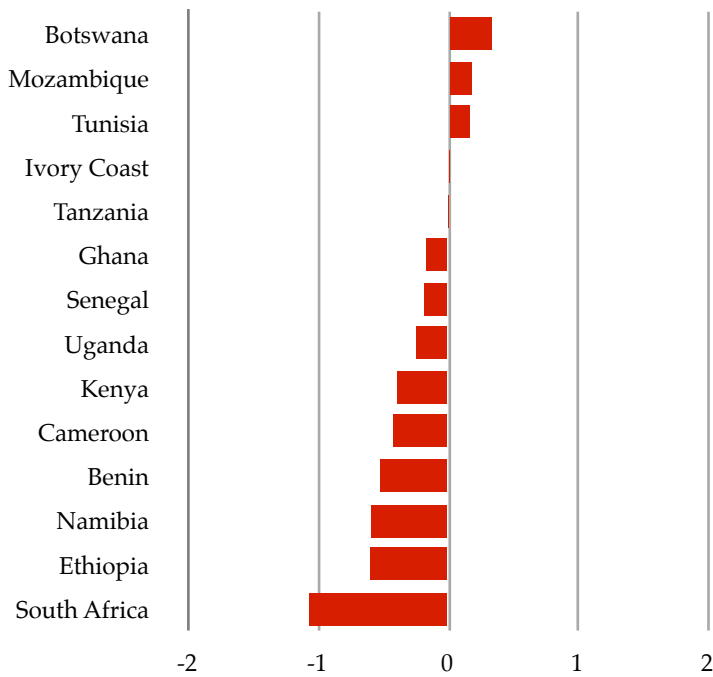


Figure 1: Perception of the Universal Access Strategies across African countries. Source: RIA 2009/2010

Figure 1 shows that according to the Telecommunications Regulatory Environment survey conducted by RIA’s research network, most policy and regulatory frameworks related to universal access and services are perceived as ineffective.

Despite funds have been collected and disbursed in many African countries, strategies and programmes failed to address the main objectives of reducing the access gap. Table 2 depicts that in South Africa and Uganda, for instance, the ratio between the fund collected and the fund disbursed between 2005 and 2008 is higher than 100%.

Table 2: Universal access and service Funds in South Africa and Uganda

Country	Fund Collected/Disbursed (USD)		
	Year	Collected	Disbursed
South Africa	2005	4 019 282	9 496 676
	2006	4 144 149	4 297 872
	2007	4 351 330	7 712 633
	2008	4 598 537	4 728 856
	Ratio collection/disbursement		
	2005	236,28%	
	2006	103,71%	
	2007	177,25%	
	2008	102,83%	

Table 2: Universal access and service Funds in South Africa and Uganda

Country	Fund Collected/Disbursed (USD)		
	Year	Collected	Disbursed
Uganda	2005	16 000 000	//
	2006	2 545 904	9 019 106
	2007	3 789 092	5 069 911
	2008	4 803 074	13 021 667
	Ratio collection/disbursement		
	2005	//	
	2006	367,39%	
	2007	133,80%	
	2008	271,11%	

Although UAFs were designed to subsidise the development of fixed line networks, figures on fixed-line penetration rates across African countries show that in 13 countries out of 18 penetration rates stand below 1% (Table 1). In addition, regulators have often been constrained by the lack of technical and financial capacity to regulate effectively.

One of the main regulatory obstacles to investment in fixed-line network is related to the fact that reform processes with regards to market entry are incomplete. In most African countries, the incumbent operator is still state owned and in most of the countries it holds 100% of market share (Table 3). This involvement of the state over the backbone network might impact on the political autonomy to regulate independently.

Table 3: Ownership of incumbent fixed-line operator

Country	Name	% Government Ownership	Market share
Botswana	BTC	100%	100%
Burkina Faso	Onatel	100%	//
Cameroon	Camtel	100%	100%
Côte d’Ivoire	Côte d’Ivoire Telecom	49%	93%
Ethiopia	ETC	100%	100%
Ghana	Vodafone Ghana (Ghana Telecom)	30%	97%

Table 3: Ownership of incumbent fixed-line operator

Country	Name	% Government Ownership	Market share
Kenya	Telkom Kenya	49%	100%
Mozambique	TDM	100%	100%
Namibia	Telecom Namibia	100%	100%
South Africa	Telkom South Africa	39,80%	//
Tanzania	TTCL	36%	93.9%
Tunisia	Tunisie Télécom	100%	100%
Uganda	Uganda Telecom	31%	86%

Since the basic conditions to enable investment and fair competition over the fixed line network are absent, what has been considered a private sector failure is actually a public sector failure to create a favourable investment environment for network extension in rural and perceived uneconomic areas.

The return of state involvement is evident in Table 5, with governments increasingly playing a lead role in promoting backbone infrastructure investment, either through the deployment of state capital or through public-private initiatives. Table 4 displays that the state has still a strong presence in network roll-out and extension also in relation to fibre-optic network.

Table 4: Public investment in NGN roll out and extension

Country	Investment (USD)	Ownership and management
South Africa	(200 000 000)	Infraco Broadband Limited. It is wholly owned by the state in terms of the broadband Infraco Act.
Uganda	5 000 000* 10 000 000**	The network is operated by the incumbent Uganda Telecom (31% state owned).
Tanzania	150 000 000***	It will be owned by the government under the operational management of Tanzania Telecommunications Company Limited (TTCL)
Kenya	130 000 000	The cable is operated by Telkom Kenya of behalf of the Government.

## Conclusion & Recommendations

*In order to enhance access and connectivity in rural and perceived uneconomic areas, governments should remove all regulatory bottlenecks towards market entry, in particular over the fixed-line segment. The removal of barriers would create a favourable environment for private sector investment in NGN (fibre optic) extension.*

*With the emergence of converged networks, there is a need to expand the definition of Universal access and service beyond the traditional view of enhancing fixed line connectivity to take into account the technological advancements under a converged environment.*

*States should only intervene in cases of market failure and only when the private sector has been allowed to fully reach its potential.*

*However, the public intervention should not create market distortions through levies on operators or cross-subsidies. Rather, universal access fund should be collected from the normal fiscal as this is less likely to lead to market distortions.*

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