The Role of Public and Private Sector in Developing National and Regional Interconnection:

Panel Session I: Interconnection Policy Shortfalls

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Fibre Infrastructure in Africa

Fibre links between all of the African capitals are in place or will be complete by next year, with possible exception of Bangui and Asmara. But most of these links have been built to access international submarine fibre or to meet the needs of landlocked countries to get to the coastal submarine landing stations.

==> National backbone & cross-border infrastructure in many countries (not all) is still relatively limited - in coverage or pricing.

E.g In Southern Africa, a recent Internet Society study found that of the total 47 national boundaries between the mainland countries in the region, only two boundaries have two or more links operated by competing providers.

http://manypossibilities.net/african-undersea-cables
http://manypossibilities.net/afterfibre/
http://www.flickr.com/photos/ssong/sets/7215762719513720/

Impact of Limited Telecom Infrastructure on Internet

Except for South Africa and its neighbours, most Internet traffic between African countries is exchanged in Europe, North America or Asia. Even where the traffic passes through the neighbouring country! e.g Landlocked Rwanda and Uganda exchange traffic in the UK even though the Rwandan link runs through Uganda to get to the submarine cables.

This problem extends to exchange of traffic between Internet operators at the national level, where Internet Exchange Points (IXPs) don't exist, or are often not being used effectively because it is cheaper to route traffic outside the country on submarine cables than it is to buy local capacity to exchange traffic.

e.g The ISOC SADC study found that although over 80% of the borders between neighbouring mainland countries have fibre links between them, Internet traffic is only exchanged directly in less than 25% of the 132 potential links between the countries.

Policies Proposed to Improve Interconnection

1. Reduce dominance by incumbents and discrimination against new entrants => create a more competitive environment - issue more operator licenses, including wholesale/carrier licenses, at same time introduce Significant Market Power controls on essential facilities of incumbents

2. Increase access to passive infrastructure ==> mandate dig-once policies and ducts or cable on all new roads/rail/energy links along with infrastructure sharing policies, including on masts

3. Reduce difficulty of obtaining rights of way and permits, esp for crossing borders ==> increase awareness of need?

4. Address deficiencies in national backbones ==> increase private financing by improving regulatory environment and top up with public finance for remote and rural areas where needed

4. Address low demand ==> a) better spectrum management, b) increase government investment in e-services, c) improve energy supply (esp rural electrification), d) e-literacy campaigns

National Broadband Plans in Africa
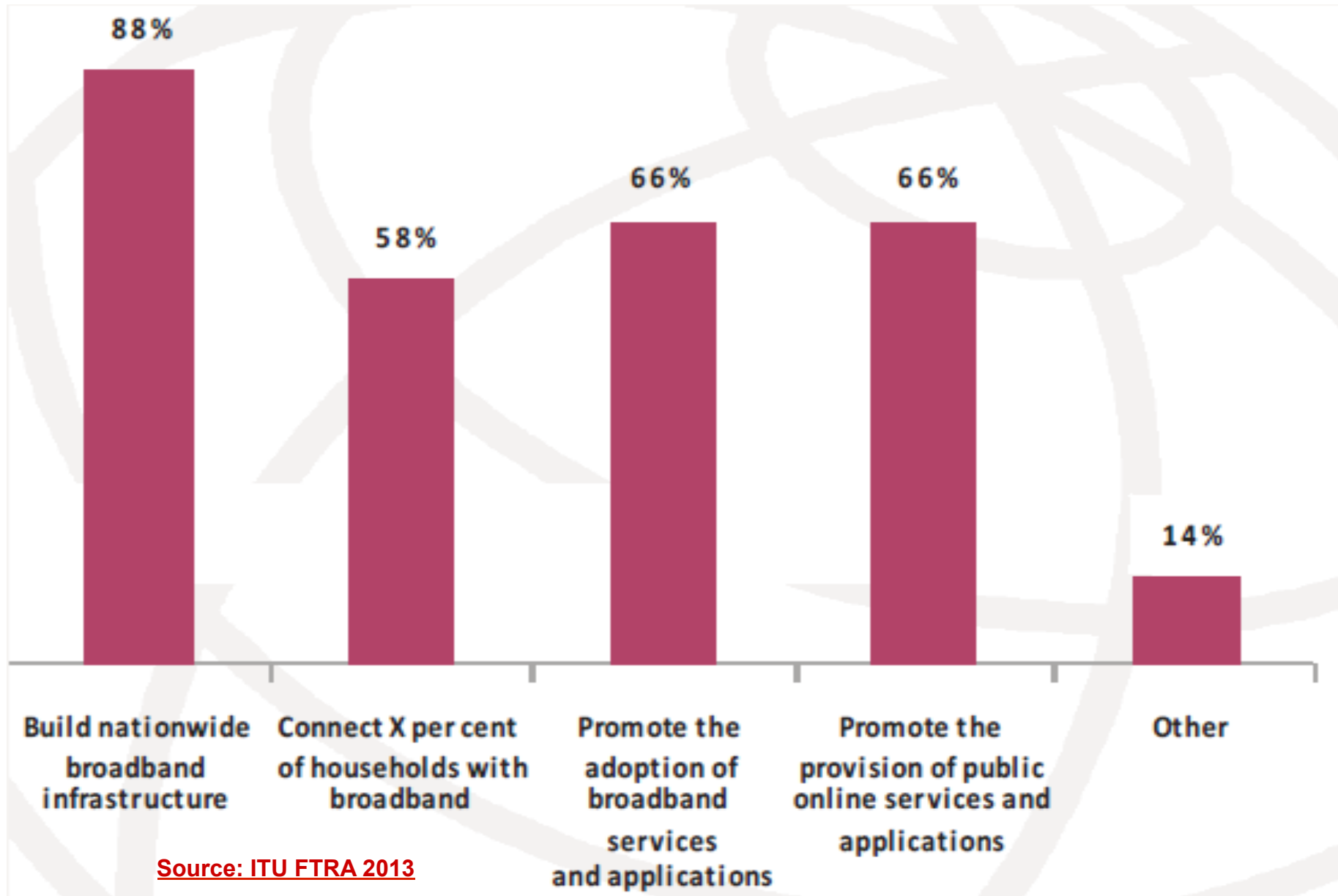
Source: ITU FTRA 2013

Regional Policy Efforts

Policy	AU	COMESA	EAC	ECCAS	ECOWAS	IGAD	SADC	UMA
ICTs as a priority development policy	X	X	X	X	X		X	
Policy on Regional infrastructure development	X	X	X	X	X	X	X	X
Continental/regional association of regulators	X	X	X	X	X	X	X	
Harmonization of ICT policies and regulations	X	X	X	X	X	X	X	X
Market Liberalization & Pricing/Tariffs	X	X	X	X	X		X	
Guidelines & models for National regulators		X	X		X		X	

Regional Policy Shortfalls

Level of coherence between regions (RECs) has accelerated significantly over the last few years, now very similar policies and regulations at both regional and continental levels.

But the level of transposition or implementation at the member state level has been relatively slow and inconsistent.

Causes:

- Much activity is so recent, many policies and regulations have not had sufficient time to be transposed to national level
- Institutional model of the regional body – eg ECOWAS' WATRA has a strong role in that WATRA decisions and directives issued by the Conference of Regulators are also binding on all national regulators. In other cases the RECs themselves publish the policies and guidelines which may or may not be binding, depending on the REC
- Lack of political will at national level - Limited awareness of the importance of policy change, resistance to change by vested interests (dominant operators), conflict of interest of governments deriving major revenue source from the incumbent