



Forum on Telecommunication Regulation in Africa (FTRA-2007)
"Infrastructure sharing: regulatory challenges"

6-7 June 2007, Grand Regency Hotel, Nairobi, Kenya



Final Communiqué

The eighth Forum on Telecommunication Regulation in Africa (FTRA) was held in Nairobi, Kenya from 6-7 June 2007. The Forum was attended by over 140 delegates from 35 countries. Participants included regulators, policy makers, ITU-D sector members as well as regional and international organizations.

The Forum was officially opened by Honorable Mutahi Kagwe, MP, the Minister for Information and Communications of Kenya. In his opening speech, he emphasized the importance the Kenyan government places on ICT in national development. For that reason Kenya, has put in place not only enabling laws, but is also facilitating the building of crucial infrastructure to make ICT uptake by a majority of Kenyans a reality. He explained that infrastructure sharing is of great interest to Kenya as it holds a lot of promise for faster development of ICTs in developing countries. Universal access to ICT is one of the greatest challenges facing regulators and policy makers in Africa. It is important to come up with universal access strategies and business models that ensure that the projects are sustainable. He concluded by emphasizing the importance of the ICT regulatory framework and how it should be used as a catalyst to encourage our people to be part of the ICT world.

Mr. Sami Al Basheer Al Morshid, Director of the Telecommunication Development Bureau (ITU/BDT) in his opening remarks thanked the Government of Kenya and the people of Kenya for their hospitality and in particular he expressed his gratitude to Eng. Waweru, the Director General of CCK for his personal commitment to the event. Mr. Al Basheer noted the correlation between telecommunications teledensity and economic development. He emphasized the catalytic role ICT play in the economic and social development of the countries of this continent as a whole. He further added that to be able to extend the access to ICT to the vast majority of its population, Africa more than any other continent needs to attract investments, public and private, national and foreign, in order to build the necessary infrastructure that will support the provision of ICT for all.

Eng. John Waweru, Director General, Communications Commission of Kenya (CCK); Mr. Samuel Valentin Ndjawa, Telecommunication Regulatory Board of Cameroon (representing the out-going chair of ATRN), and Mr. Akossi Akossi, Secretary General, African Telecommunication Union (ATU) also delivered brief introductory remarks to the meeting.

The Chief Executive of the Botswana Telecommunications Authority, Mr. Thari Pheko, delivered the vote of thanks.

Eng. John Waweru was appointed Chairman of the Forum. The Secretariat was assumed by the ITU. The agenda was approved without modification.

The theme of the FTRA-2007 was "infrastructure sharing: regulatory challenges. Three discussion papers were prepared "by the ITU/BDT for the meeting on:

- Infrastructure sharing between Mobile and Fixed Line Operators and ISP
- Sharing of satellite facilities (gateways, joint purchasing and negotiation of bandwidth)
- Sharing of fiber optics infrastructure (sub marine cable landing rights, joint purchasing/negotiation of bandwidth)

The discussion papers can be found on <http://www.itu.int/ITU-D/afr>; comments are requested on these papers by the end of June 2007 and should be sent to FTRA07@itu.int

Session highlights and recommendations

1. The first session was designed to frame the debate beginning with a presentation by the ITU on Trends in the ICT sector: challenges for African regulators. The presentation highlighted the tremendous progress made particularly in the mobile sector but noted that major gaps remain, and that there was a need to focus on further liberalization and ways to reduce prices in order to bring access to the unconnected. Infrastructure sharing could be a means to achieve this.

The second presentation by the ITU focused on the challenges of building ICT infrastructure in Africa, highlighting the advantages of infrastructure sharing and serving as an introduction to the discussion papers that will be presented in the other sessions.

The presenter noted the advantages for ministries, regulators, foreign investors, equipment vendors, national operators and consumers. He emphasized the need to shift from a vicious circle to the virtuous spiral up that will enhance the enabling environment to create a sustainable "triple-win".

2. In the second session, the first discussion paper was presented on Infrastructure sharing between Mobile and Fixed. The presenter outlined the kinds of infrastructure that could be shared. He noted the roaming arrangements in place for Kenya, Uganda and Tanzania and that this could be considered a form of infrastructure sharing. In West Africa, there is a similar arrangement in place for five countries. He highlighted the rationale for sharing as being: economic, avoiding duplication, and better for the environment. He recommended that essential infrastructure had to be defined and noted that there were different forms of separation: separation of accounts, legal, functional, operational, etc.

The representative from Ericsson explained that Communications is a basic human need and that there is a need to share risks: operators take the market risks; financial institutions and investors take the financial risks; and the network operator takes the operational risks. She explained the Ericsson rural business model to create wealth and opportunities for people in developing economies by providing affordable high quality telecom services.

In the course of the discussions questions were raised on how to implement infrastructure sharing. Is consolidation the answer? Should the infrastructure be a public utility? What are the competition implications of sharing and the cost implications?

3. In the 3rd session, the second discussion paper on "Sharing of satellite facilities (gateways, joint purchasing/negotiation of bandwidth)" was presented. The presenter explained that within most of the African countries, in particular in sub-Saharan Africa, broadband data is developing at a much slower rate than for voice. Data service providers rely on domestic and international backbone network (satellite or terrestrial infrastructure purchased from incumbent and /or mobile operator's networks). The backbone infrastructure and last mile connectivity for rural and remote access still need to be built and strengthened to develop IP access and connectivity in order to bring rural areas

into the regional, national and global economies. A high-capacity domestic/regional backbone network which could be made available to operators and data service providers would take advantage of the economies of scale and bring down the cost of both voice and broadband data services. The sharing of backbone infrastructure could be the norm even between competing operators, through equal access granted to operators on mutually agreed terms.

Ambassador Russell from the United States explained how high speed internet access connections that broadband provides can stimulate economic productivity and competitiveness. He noted programmes such as the US Digital Freedom Initiative where the US is partnering with Africa. He emphasized that despite the success of mobile, more work has still to be done. Providing connectivity, both through policies, as well as by providing enabling technologies is a goal all nations share. He focussed on 3 ways that we can work together to meet this goal:

- through international cooperation and partnerships
 - through the upcoming World Radiocommunications Conference. (He explained specifically the innovative approach that the US's FCC had adopted to share spectrum infrastructure by permitting mobile satellite service providers in three frequency bands to integrate an ancillary terrestrial component into their networks.
 - and through the continued and open sharing of ideas in a common pursuit of technological advancement.
4. In session four, the third discussion paper on "sharing international access: fiber optic" was presented. The presenter outlined the reasons for sharing. The single biggest reason for sharing infrastructure is cost, especially for operators extending the reach of their networks, particularly in rural areas. In terms of development funding, it makes considerable sense to combine the building of things like roads, railways and water pipelines with the roll-out of fibre infrastructure. Again the digging of a ditch alongside the construction of a road or railway is a relatively modest additional cost once the construction crews are in place.

The final practical reason for sharing infrastructure is to minimize the environmental impact of network equipment. He emphasized that a commitment to the sharing of infrastructure does not

mean a lessening of competition at the service level. In discussing the broad set of principles for infrastructure sharing, there is a need for a policy and regulatory framework that offers: a technology-neutral framework, competition at all layers in the IP network, transparency (particularly on pricing) to ensure a fair cost of access to all those sharing the infrastructure, and access to infrastructure networks by all providers.

The involvement of the public sector raises two questions: firstly, what is the level of provision required for sharing? And secondly, what are the governance structures that will ensure fair sharing of a single infrastructure? There are three recurring issues: the impact of the monopoly on landing stations; the monopoly on the sale of capacity; and the fact that shares in the consortium are not tradeable. Therefore the following issues need to be tackled: investment and access, Monopoly supply and pricing issues, countries without landing station, landlocked countries and Transparency.

Policy-makers and regulators have a variety of levers that they can use to ensure that there is fair sharing of international infrastructure. These might include:

- Insisting that carriers can co-locate at landing stations with cost-based charges. This will allow both international and African operators to be able to offer international capacity at competitive prices in a range of countries.
- Allowing alternative operators – like power utilities and railways – to offer connecting fibre between different countries.
- Encouraging mobile operators to connect their networks between countries and under agreed terms, allowing other operators to share the use of that infrastructure.
- Encouraging investors to create inter-country links that compete with existing links, enabling all countries to have two or more shared international infrastructure links.

The representative of NEPAD e-Africa Commission presented the efforts underway in the NEPAD e-Africa Commission to connect all African countries by broadband and link them to the rest of the world. He noted the 2004 meeting where the broadband fibre network was first discussed. The network was adopted by the heads of states and is viewed as a flagship project. He listed the principles for the network:

- open non-discriminatory access to networks
- terrestrial and submarine cable to be developed and owned by special purpose vehicles
- principles of private/public partnerships.

He noted the recent meeting in Kigali where 12 countries signed a protocol. Participants requested clarification on the NEPAD project and its relation with other projects underway in the region, as well as on how special purpose vehicles were arranged and ownership of the landing stations. The NEPAD e-Africa Commission representative explained that NEPAD is a framework bringing together existing initiatives. The SPV are owned by entities from the countries in the region. In regards to the Kigali protocol, participants were interested to know the reasons why all countries did not sign the Protocol.

During the discussions, participants raised concerns on how to safeguard against abuse of dominance and market distortion in the case of infrastructure sharing.

Recommendation 1. While there appear to be many advantages to infrastructure sharing, it was recommended that discussions continue on infrastructure sharing after this meeting in order for countries to have a better understanding of all of their options as well as all of the related advantages and disadvantages of sharing.

5. In Session 5, the experiences of India and France were presented. The representative from the French regulator, ARCEP, shared the French experience in building infrastructure and local loop unbundling. He explained the ladder of investment concept and how it applies to the broadband market. He outlined the objectives of ARCEP to extend broadband coverage and extend infrastructure-based competition. He explained how regulation has focused on local loop unbundling as a cornerstone of competition and how bitstream is a complement to local loop unbundling. The role of the regulator is to set the right incentives for investments.

The representative from India's TRAI presented the Indian experience in sharing. He explained the regulations in force for active and passive sharing. He further elaborated on the process and study undertaken in India on infrastructure sharing and the recommendations that have been published by TRAI. The

government has set ambitious targets for 2010 which will require the number of mobile towers to triple. It was deemed that the only way to accomplish such a task is to share. He presented specifically the 'MOST' project of tower sharing.

Recommendation 2. Participants recommended that the experience of TRAI be taken into account by African regulators.

6. In session 6, regional and international cooperation was discussed. The ITU presented the regional initiatives that were approved by the World Telecommunication Development Conference in 2006, and the steps ITU is taking to launch these initiatives. A second ITU presentation focused on a unified database that will enable the ITU to track countries efforts to bridge the digital divide. Other ITU products and services such as the Global Symposium for Regulators, the Trends in Telecom Reform Report, the Global Regulators Exchange, the ICT Decisions Clearing House, and the new initiative on Global Capacity Building for Regulators were also presented as means to assist regulators on an on-going basis. The representative from the Arab Regulators Network (ARNET) explained the experience of their network, how they are structured, their priorities and projects underway.

The BDT Director informed the participants of preparations for the **Connect Africa** meeting which is an initiative of the ITU Secretary General, Dr. Hamadoun Touré. The meeting will take place in Kigali, Rwanda from 29-30 October 2007. Connect Africa is a global multi-stakeholder partnership to mobilize the human, financial and technical resources required to bridge major gaps in information and communication technology (ICT) infrastructure across the region, with the aim of supporting affordable connectivity and applications and services to stimulate economic growth, employment and development across Africa.

Recommendation 3

- **It was proposed that the FTRA meetings can be used a build-up/preparation for the Global Symposium for Regulators (GSR).**
- **It was recommended that ITU launch a call to members asking them to keep their data as up-to-date as possible.**

- **It was recommended that ITU move ahead with the regional initiatives as soon as possible.**

7. In Session 7, the way forward was addressed and is covered below.
8. In Session 8, the report of the Ad hoc Working Group on the creation of an African Telecommunication and ICT Regulators Assembly (recommended by FTRA-2006) was presented after a brief introduction on the process from 2000 to now. All sub-regional associations (ARICEA, ARTAC, CRASA, EARPTO, WATRA) presented their views. It was decided that there was a need for the Working Group to continue its work with a revised Terms of reference (appended) reflecting the concerns or open issues raised during the discussions by the various regional associations and regulators. The membership of the Working Group will include the members of the previous group as well as all sub-regional associations from the African region and the Arab Regulators' Network. The interim report should be ready by end of 2008 and forwarded to the African Regulators for comments and the Report of the Working Group will be tabled during the FTRA 2008.
9. Session 9: At the kind invitation of ARTP Senegal, **the ninth FTRA (FTRA-2008) will take place in Dakar, Senegal in 2008.** The dates will be communicated after consultation with the coordination committee of ATRN and ARTP. The topics proposed for future discussion for the theme of FTRA-2008 included:
 - International roaming
 - Content
 - Convergence between telecommunication and broadcasting

The ITU/BDT will undertake further consultations and submit proposals to the Coordination Committee (out-going, current and upcoming Chairs) for decision on the theme of FTRA-2008.
10. The FTRA Chairman and the BDT Director closed the meeting and thanked participants for their active participation.