EACO WORKSHOP 23rd MAY 2011, KIGALI – RWANDA

1. **PANELIST:** Eng. James M. Kilaba,
   Deputy Director ICTs Development, **TCRA**

2. **SUBJECT:** ***'National backbones and regional broadband networks and services and the regional connectivity issues, challenges and way forward for East African Governments, Regulators and Operators'***

3. BACKGROUND INFORMATION – TANZANIA:

Tanzania has a vision with relation to the development of ICT, that's *"Tanzania to have a universally accessible broadband infrastructure and ICT solutions that enhance sustainable socio-economic development and accelerated poverty reduction nationally; become a hub of ICT Infrastructure regionally and be a full participant in the global Information Society."*

We all acknowledge that communication is an important component of social fertility and that; information industry is basic for sound and strong national economy. ICT is the key part of communication as well as basis for industry development and realization of sound rural economy. For developing country like Tanzania, ICT backbone infrastructure has been at the cross-roads, the impaired developments of national communication system has also caused unbalanced developments between urban and rural economies.

Therefore, for the long term benefits, the government positioned herself to pioneer investments flow to support the economy developments of balanced economies of scale. With this avail, the government decided to construct the nationwide OFC backbone transmission network, to increase the long distance circuit capacity. In her endeavours to take the ICT services further, the

Government has listed all potential remote and rural areas to be considered for ICT services provision. The national ICT backbone infrastructure aims at achieving this endeavor for facilitation of rapid economic development.

Strategically, the construction of Tanzania National Backbone Network shall make Tanzania one of the transmission centers in the region. Realizing resources sharing of the National Backbone Infrastructure and promoting the concept of a converged and interconnected network that would allow stakeholders to 'invest' their networks to a grid of interconnectivity are very important. Thus, the returns of their investments are sought from a broader perspective than that of a point to point connection.

The available submarine cables (Seacom and EASy) aim at providing high quality capacity optic fibre international connectivity from Tanzania, to within Africa and the rest of the world and reducing out payments to satellite telecommunications facility providers.

In broad perspectives, the combination of the landed submarine cables and Tanzanian national OFC Backbone shall achieve the following objectives:

i. improve high capacity optic fibre connectivity within East Africa and provide a gateway for the region to the rest of the world;

ii. bring the power of high speed and bandwidth connectivity to African countries and the rest of the world;

iii. reduce unit costs (capital & operational) for global connectivity leading to increased profits, lower tariffs and charges for end users;

iv. provide direct routes through own infrastructure, obviating the need for transits through third parties hence, reduced out payments;

v. meet growing demand for Broadband (high bandwidth) Connectivity by users such as Internet Service Providers, Data service providers, Broadcasters and voice Service Providers; and

vi. facilitate the expansion of inter-Africa trade through provision of better and affordable communications in the region.

4. THE NATIONAL ICT FOC BACKBONE PROJECT – PROGRESS:

4.1 *Implementation status*

Implementation of the project is done in two Phases:

- ***Phase I – 7,000 kms***
  - Was completed in September 2010 and is now operational
- ***Phase II – 3,674 kms***
  - Construction in progress - Completion is expected by end of March, 2012

4.2 Border points where connectivity shall be made

The Tanzania's National ICT FOC backbone is now capable of proving services at the following cross-border points:

- Namanga (Kenya)
- Rusumo (Rwanda)
- Kabanga (Burundi)
- *Kasumulo (Malawi)*
- *Tunduma (Zambia)*
- and very soon at Mtukula (Uganda)

- Cross boarder connectivity is provided through Tanzania's Licensed operators; the connected cross-boarders are the following:
  - MTN - Rwanda at Rusumo
  - *MTL – Malawi at Kasumulo*
  - *MTN – Zambia at Tunduma*

4.3 NOTED CHALLENGES:

- Unilateral efforts – each country doing it at its own pace
- Last mile connectivity
- Co-location
- Fiber cuts
    - *Vandalism*
    - *Ignorance*

5 WAY FORWARD:

As Way forward;

- **Government:** should continue to support implementation of fibre project as that is the only feasible way of implementing such projects to provide equal opportunity to all key players in the ICT sector;
- **Regulators:** should continue harmonizing regulatory frameworks around backbone infrastructure; and
- **Operators:** should
    - Build access (last mile) network to fully utilise the FOC capacity made available and also should reduce prices to match with lower costs of infrastructure;
    - Strengthen the efforts done by each Partner State through constructing counter FOC up to boarder points; and
    - Conduct Public awareness programs through local Authorities