Merits of National and Regional IXPs for Nigeria and Africa

by

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Benefits of National or Regional IXPs

- QoS advantages

- Reduces transit costs

- Lower latency

- Healthy cooperation among competitors

- Scaling bandwidth

- International cooperation

- Enables point of presence activities

- Creates new business models for ISP services

- Increased quantity of local Internet traffic

Obstacles to IXP Deployment

- Current providers of international links present strong resistance. In most cases, a dominant operator would like to leverage its legal exclusivity over international links by charging premium rates.

- Some regulators may be reluctant to sanction activities of erring operators. For a variety of reasons, the operators often weigh in on the decisions by regulatory authorities.

- Competitive ISPs themselves regularly resist the formation of IXPs. Current market leaders fear the effects of making connectivity cheaper for their competitors.

- Small competitors are also very reluctant to synergize their efforts, reflecting an unhealthy competitive environment.

- Other obstacles exist, such as legal barriers, problems with initial peering negotiation, and operational, cost, security, business, settlement issues.

Current IXP Efforts in Africa

- In Nigeria, the Ibadan IXP (http://www.skannet.com/ibix.htm) is operational. The exchange, formed by ISPs based in Ibadan and commissioned on March 25, 2002, facilitates the exchange of local Internet data traffic between networks in Ibadan.

- The Ugandan IXP (http://uixp.co.ug), which is actively supported by (and has received a license from) the Ugandan Communications Commission.

- Other preliminary efforts are going on in Tanzania, Mozambique, and Ghana.

- AfriISPA, a brainchild of some ISPs in South Africans and Kenyans, is an association of some African ISPs to organize non-profit, neutral ISP associations in each African country, and support IXPs deployment. An ambitious goal of AfrISPA is to directly link every African country by fiber optic.

- AfrISPA also plans to create a Pan African Virtual Internet Exchange (PAVIX), which would interconnect all IXPs in Africa.

Policy Suggestions

- Import duty tariff rates for Internet infrastructure and equipment should be minimal, different from the current regime of high tariff rates for almost every equipment.

- There is an urgent need to reduce the current high per-minute charges, and the need to make all calls to each point-of-presence (POP) local by mandating local call charges for Internet, regardless of distance to POP.

- Governments to work towards the total deregulation of international links.

- Regulators should demonstrate high integrity and standards when dealing with ISPs and telecommunications operators.