IXP Growth challenges in West Africa

The Ghana Experience
The GIX was launched on 18th October 2005
- Started with 7 peers and now has 20 peers and 2 CDNs
- Membership - MNO, ISPs. Educational institutions, Government
- Managed by the Ghana Internet Exchange Association
- Currently have 2 PoPs in two commercial data centers
  - These PoPs are connected with a 10G DF connection
- Recently established a test link between GIX and IXPN
IXP Growth challenges in West Africa

- The way some of the exchanges are setup
  - Industry association - the association does not allow the IX to evolve. With too many ISP interest,
  - As new peers from education, government, banks come in - who controls it?
- Lack of content
  - Very small locally produced content
  - In the case of locally generated local content, most of it are stored outside
  - Some cache providers need a lot justification for them to peer or sometimes oven host at small exchanges
- Problem of transport cost to the exchange point
- Payment modules for peers - membership fees vs port fees
- Transit costs for content provision - shared cost vs ISP hosted
Growth Challenges - Continued

- Low traffic levels at individual exchange points
  - Not a compelling reason for major players to peer
  - Looking into linking some of the exchange points
- Regulator support ????
  - Regulator not sure of what to do with the exchange point as it does not issue license or spectrum to it
  - Hence may not give much support
  - Sometimes might delay certain shipments from getting to the IX because they do not have inside visibility on what goes on at the exchange
- Cross boarder issues
  - Unavailability of terrestrial fiber across boarders
  - Legal and licensing challenges at certain boarders
- Not enough funds to pay Technical and commercial part time team members to drive the IX agenda
How are we trying to resolve this

- The IXP is changing its governance structure to become a private non-for-profit
- Have more engagements with the regulator
  - Invite them to our programs
- Work together to have a professional hosting platform
  - Then encouraging the few content producers to start hosting locally.
- Engaging infrastructure companies on shared fiber modules to drive down the cost of terrestrial fiber
  - Working with the regulator on this
- Encourage shared fiber across the boarders. Swaps
- Currently connected the GIX to the IXPN - to increase traffic at both ends
Thank you