

# **Gispa panel-Affordability**

17 October 2019

It's a pleasure to say a few words...

Am glad to see more community coming together in the spirit of the Internet...

As you know I am a computer scientist...

I am a humble programmer...

Teach at ucc, chairman Ghana Dot Com and lead many regional Internet technical institutions in Africa

In our days...in 1993 we fought to have Internet so don't take for granted...

Internet has 3 layers...

Practice multi stakeholder approach to policy and standards ...

We paid for a lease line \$7,500/m (half circuit) for 9.6kbps...and £5000/m in UK

For us it was techno liberation of Africa and we need to keep that spirit to build our information society

Overall

- Inter-networks mean build a network to join another so if our network is only connectivity it value is lower than others hence more expensive

Infrastructure

- how truly IP are our networks? How reducing IP layered over voice links. If stay in your network it costs you and miss efficiencies of IP; packets move out of your network ASAP

- Did not build local network

- Work on exchanges

- Know where traffic going and peer.

Peer with those who have traffic for you.

If group can attract them

- Giving this to those not IP engineers help

- If get together can attract

- Proprietary network does not work well with internet; model rethink half circuits don't working; OTT;

- Don't see at Af\*, how many know about ietf standards

- Doing over has costs

## Content

- Adding local services reduce costs by keeping traffic within local domains; offer services locally that local wants to use; there's a psychological aspect
  - Advanced services, high value services increase value and can be used to offset connectivity costs

## Environment

- Change regulation from compliance enforcement to enabling industry
  - Avoid direct tax on connectivity; tax benefits
    - Turn subs to community of users
    - If network is considered of low value users don't rely on it...hence disruptions, shutdowns, poor security and privacy all reduce confidence in network and value

- If a developed country were to bar imports would Ghana's operators survive

- The edge should be heavy and active to be affordable

- Workforce, developers, integrators increase value

- Ms missing

## Closing

- ipv6 coming how technology evolving building networks for future

- Have to think outside normal realm.

Buy solutions costs not under your control

- lx