



Hi Costs Of IP Bandwidth in Africa

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Pre-amble

• The single biggest inhibitor of the growth of the Internet in Africa is the cost of International Transit IP.





AIM

- Why?
- What can be done about it?





Connectivity Cost Dynamics

	European ISP Financial Dynamics		African ISP Financial Dynamics	
	Unit Costs	Ratio	Unit Costs	Ratio
Cost Of IP	5	1	500	5
Cost Of Local Loop	50	10	100	1



Halfway Proposition

- Email from Kenya to Europe
 - Kenyan ISP Pays
- Email from Europe to Kenya
 - Kenyan ISP Pays
- Its not fair

 Voice carriers have ITU settlement rate scheme, why not data & IP as well



Counter Argument

- ITU Settlement Rate system didn't work.
- ITU Aghhhhhhh.....
- European ISPs carry transit traffic, and there is a cost to that.
- Africa doesn't have any content so what to we care?

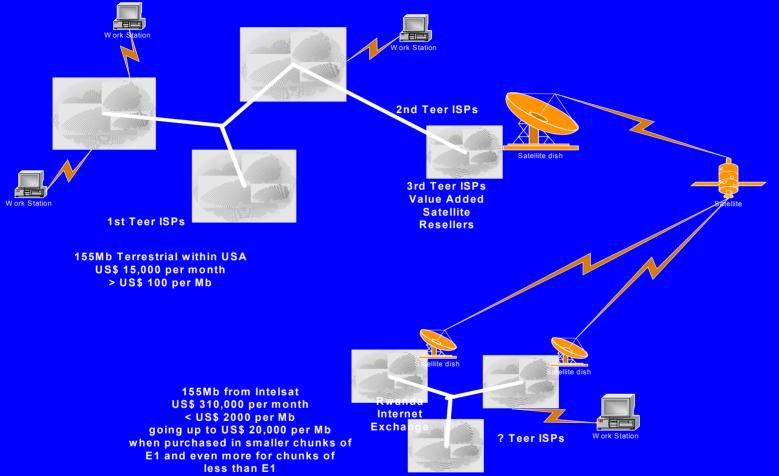


How do we move forward?

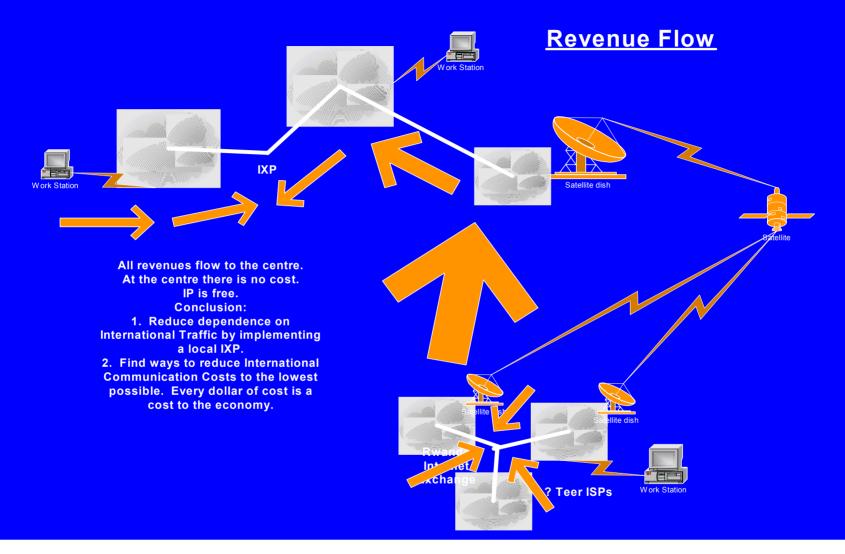




Internet Services to Africa









Work In Progress

- Creation of Exchanges
- But, watch out;
 - Speeds
 - Policies
 - KIXP Policy on non ISP Access JINX – MTN & big player monopolies



Next Steps

- Regulatory Perception of International vs Local Traffic.
 - Fully Liberalize
 - Abandon concept of cross subsidies
 - Encourage cross border connectivity
- Collective Bargaining with European ISPs
 - Peering Agreements
 - Maybe even an element of cost share (to secure service quality)
- Bring The Content Home
 - Webmail
 - Websites



Intervention

- International Fibber THE PRIVATE SECTOR MODEL FOR BUILDING IT WILL NOT ACHIEVE THE AIM.
 - SAT 3
 - East Africa Maritime
- Intervention is required
- Who pays?



Terrestrial Fibber

The patchwork approach:

- Sudan has made a great start NEXT?
- Egypt Sudan Uganda Rwanda Zambia RSA
- RSA Mozambique Malawi Tanzania Kenya – Ethiopia – Djibouti
- Cross connect through Kenya and Uganda
- Maybe even cross connect: Chad Cameroon Sat 3!







