



An African Regional Carrier

ITU 2005



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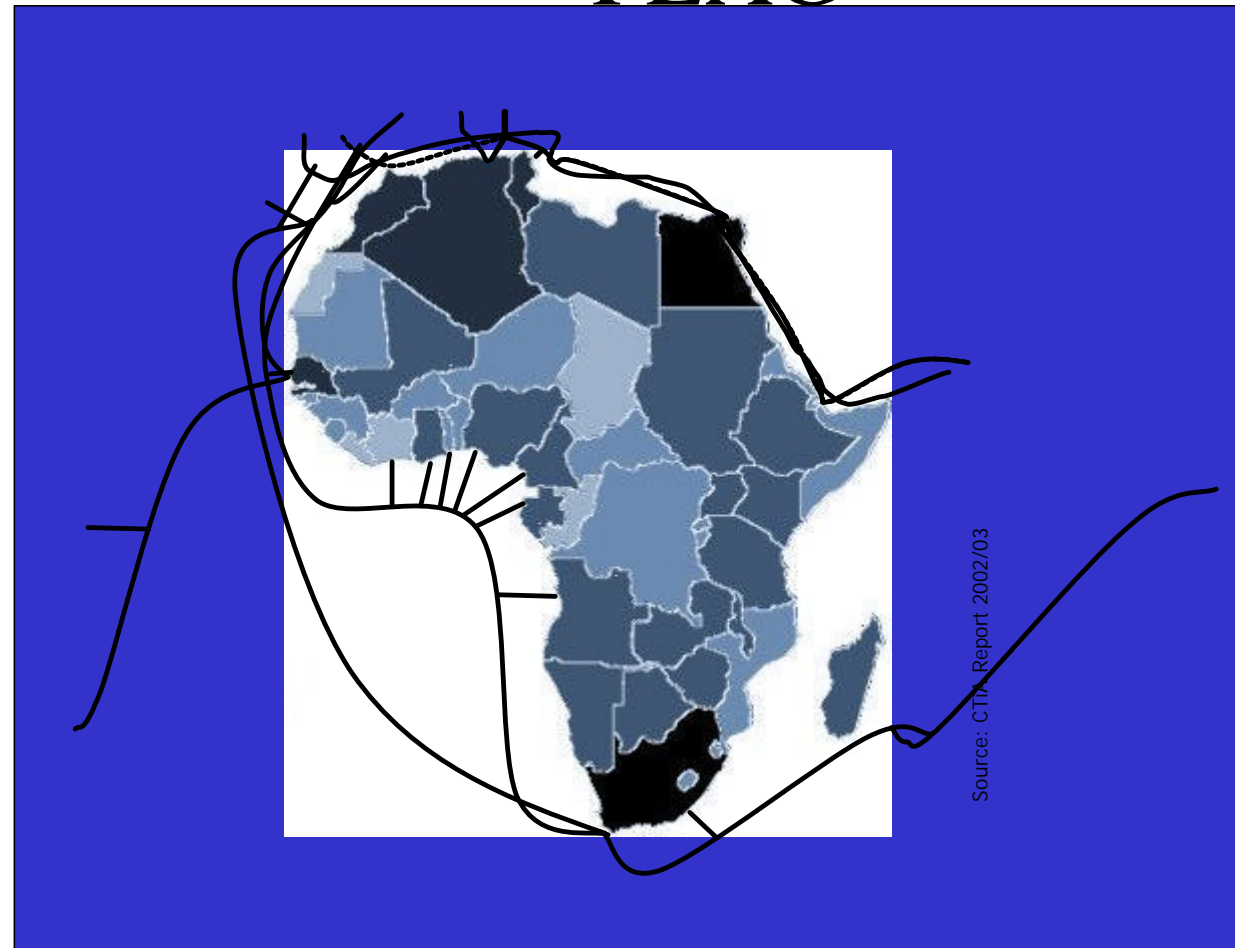


African Regional Internet Peering

- **Vision:** African Internet Backbone
- **Strategy:** Establish connectivity between African IXPs
- **Tactical:** Create opportunities for the establishment of Regional Carriers



SAT-2, SAT-3/WASC/SAFE, SEA-ME-WE, ATLANTIS 2, FLAG



Current African Submarine Fibre Connectivity: Mostly “Perimeter”



Route from SA to Kenya

- 20 Hops
- Via: -
 - London
 - Amsterdam
 - Hamburg
 - Oslo



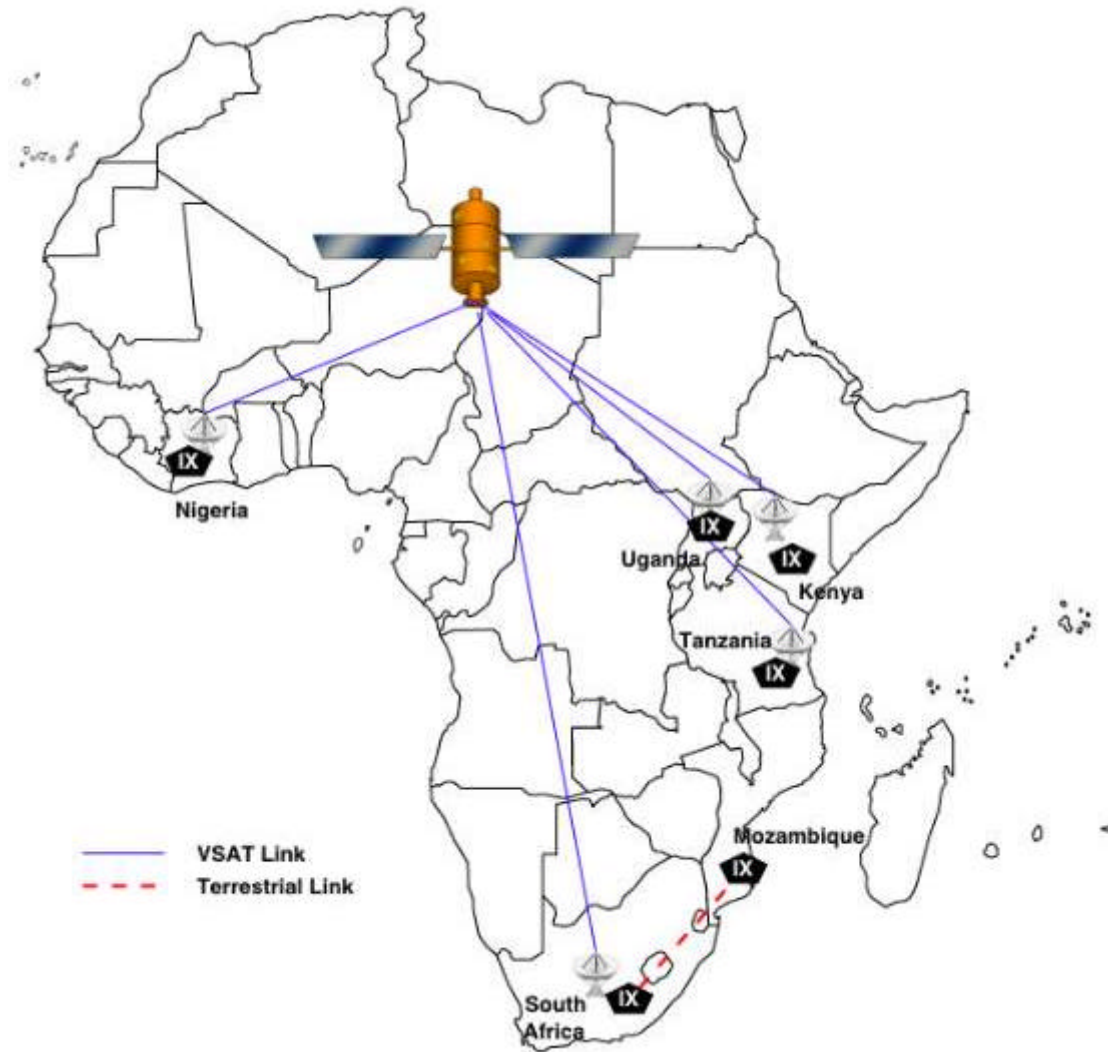
Route from SA to Kenya

1	<1 ms	<1 ms	<1 ms	mt1.zanet.co.za [209.203.9.9]
2	4 ms	2 ms	2 ms	cisco.jinx.supp-gw.zanet.co.za [196.15.180.158]
3	59 ms	31 ms	127 ms	196.41.214.33
4	24 ms	35 ms	14 ms	196.41.30.33
5	80 ms	95 ms	49 ms	Jinx.datapro.co.za [196.41.9.9]
6	324 ms	275 ms	306 ms	jhb-wav-t3--ldn-tho-t3.net.datapro.co.za [196.27.245]
7	333 ms	*	454 ms	ldn-tho--ldn-tei.net.datapro.co.za [196.41.27.0]
8	442 ms	455 ms	398 ms	ldn-b2-geth10-0-206.telia.net [213.248.100.145]
9	427 ms	535 ms	446 ms	ldn-bb2-pos0-3-0.telia.net [213.248.74.9]
10	290 ms	313 ms	368 ms	adm-bb2-pos6-0-0.telia.net [213.248.65.158]
11	321 ms	454 ms	383 ms	hbg-bb2-pos7-0-0.telia.net [213.248.65.162]
12	359 ms	366 ms	388 ms	kbn-bb2-pos1-2-0.telia.net [213.248.65.126]
13	622 ms	470 ms	746 ms	oso-b2-pos1-0.telia.net [213.248.64.14]
14	781 ms	1569 ms	1472 ms	oso-b1-pos4-0.telia.net [213.248.67.177]
15	281 ms	451 ms	319 ms	taide-01270-oso-okr-i1.c.telia.net [213.248.780]
16	372 ms	346 ms	314 ms	NO-NIT-TN-4.taide.net [193.219.193.134]
17	963 ms	867 ms	893 ms	80-240-192-230.swiftkenya.com [80.240.192.230]
18	1562 ms	1700 ms	1701 ms	80.240.192.229
19	944 ms	817 ms	883 ms	80.240.202.54.swiftkenya.com [80.240.202.54]
20	1018 ms	926 ms	1058 ms	198.32.67.250





Conceptual Model



Regional Carriers



- Required to offer connectivity between 6 initial IXPs: MozIX, JINX, TIXP, KIXP, UIXP, Nigeria
- Expand to include more IXPs
- Service provided to ISPs to connect to ISPs
- Common infrastructure, lower costs
- Direct connection – no hops via Europe / USA / Asia – better quality
- Market open to additional entrants

Process



- AfrISPA Request For Service: Inviting Regional Carriers
- Successful engagement with regional regulatory bodies
 - EARPTO: East African RXP Task Force
 - TRASA
 - WATRA
- Policy level “Buy-In”
 - WSIS Plan of Action
 - NEPAD E-African Commission
 - National Development Plans



Milestones

- 2003: IXPs and ISPs discussed the best model for regional Internet traffic exchange
- 2003: AfrISPA sent out a call for proposals based on model
- 2004: Two strong proposals received
- 2005: AfrISPA announces Regional Carriers





Welcome new Regional Carriers

Transtel / ViaSat



Africa Online/SkyVision

Future Steps

- Collaboration with regulatory authorities to develop to develop pro-IXP policies
- Development of an “IXP Toolkit” as a resource for regulators interested in promoting IXPs
- Encourage licensing for Cross-Border networks
- Encourage investment in long haul optical fiber



