

University and Cyberspace

African Universities as Knowledge Centers:
Challenges and Opportunities

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Some key data on Africa

- Population: H1,000M (15% of world Pop.)
- Telephone penetration: about 5% (mobile: 38%)
 - Sub-Saharan Africa: <2%
 - World average: H25%
- About 9% Internet penetration
 - World average: 27%; North America: nearly 80%
- Only 0.2% of world's total Internet capacity
- 900+ higher ed. institutions
- 5% HE gross enrollment rate (world average: 24%)
 - Huge demand, but lack of resources
 - Massification (student/faculty ratio of 40:1 and more)
 - Brain drain

Why is IT infrastructure crucial for African HE & Research?



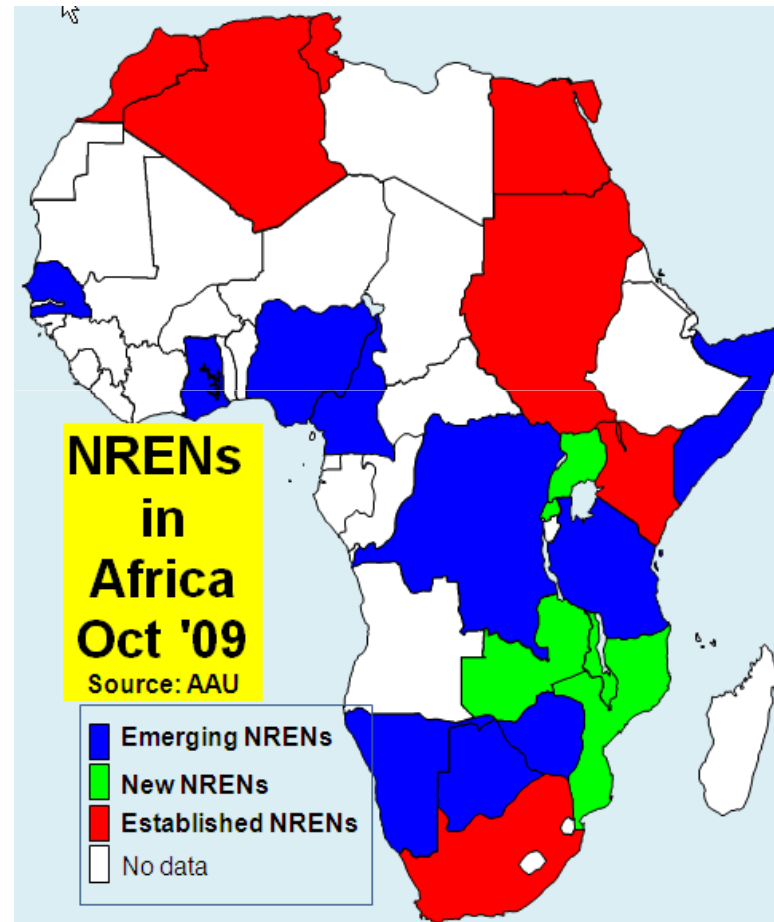
- African scientists and researchers are isolated - generally no critical mass for successful research activities
 - Need to network and collaborate (at national, regional, continental and international levels)
- Lack of text books for students: cyberspace is full of opportunities to access to knowledge sources
 - Importance of open access
- Dissemination of knowledge created in African HEIs
 - African HEIs not only consumers, but also producers of knowledge at global level
 - DATAD (Database of African Thesis and Dissertations)
 - Open Access Conference series
 - FOSSFA/IDLELO

Why is IT infrastructure crucial for African HE & Research? (2)

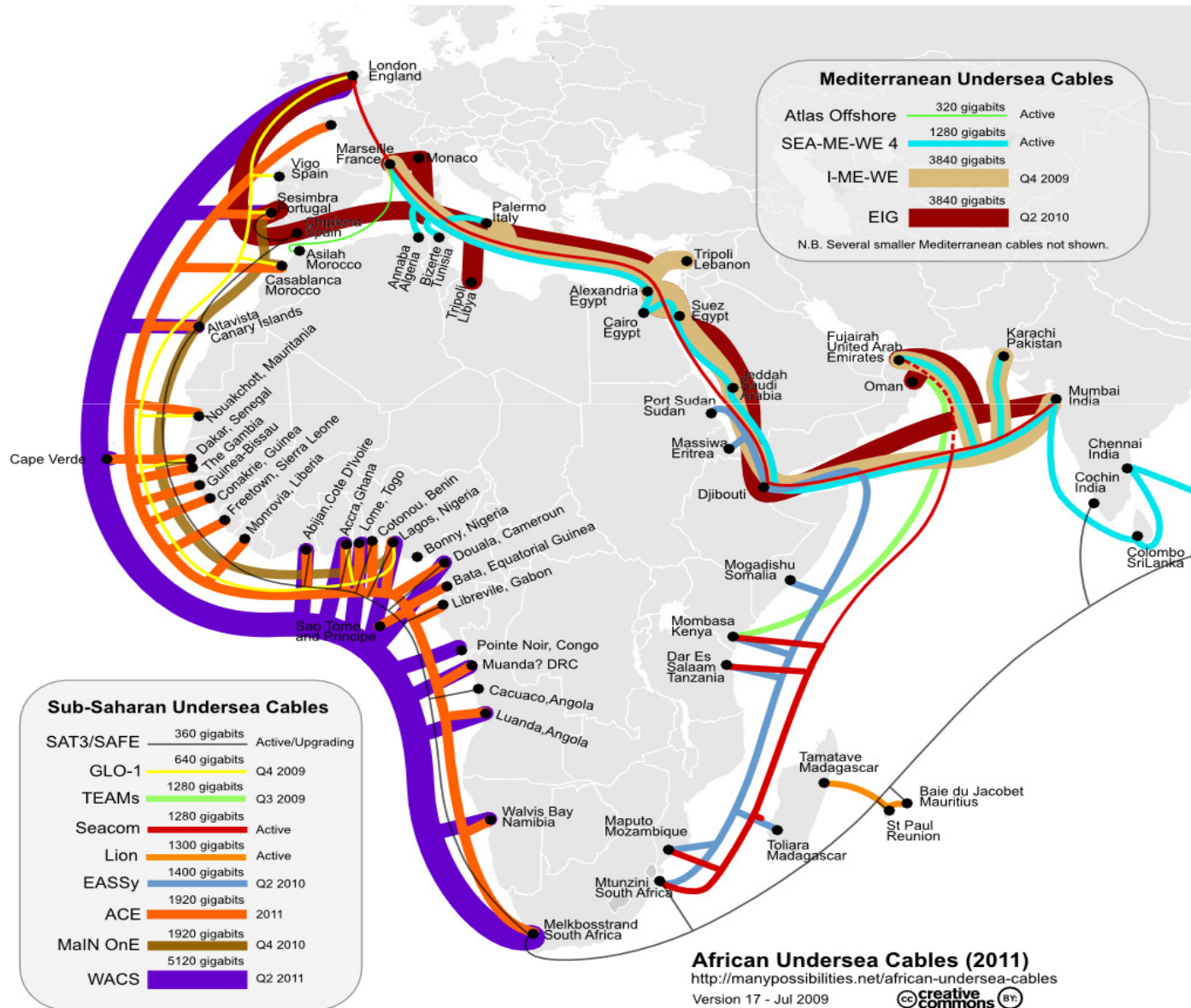


- Access to adequate infrastructure crucial to be part of the cyberspace
- However: bandwidth in Africa is most expensive in the world (average of US\$3,000 per Mbps/month!)
 - In 2008, 37 HEIs in West and Central Africa spent US\$1.7M for a total of less than 100 Mbps
 - Main reasons: lack of competition (8 operators control 90% of traffic), costly technologies, inadequate regulatory environments, etc.
 - Need to build bargain power (bandwidth consortia, RENs)
 - Need to sensitize policy and decision makers
- Role of IT infrastructure, especially RENs, in African context:
 - Sharing of scarce resources
 - Improvement of access through blended learning
 - Reduction of researchers isolation and creation of critical masses
 - Participation in global research projects
 - Promotion of participation of Diaspora

The way gone so far: African RENs



Opportunities





THANK YOU !

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