

UbuntuNet Alliance

www.ubuntunet.net

<http://renu.ac.ug/ubuntunet-connect>

Creating a Regional REN: Opportunities, Challenges &

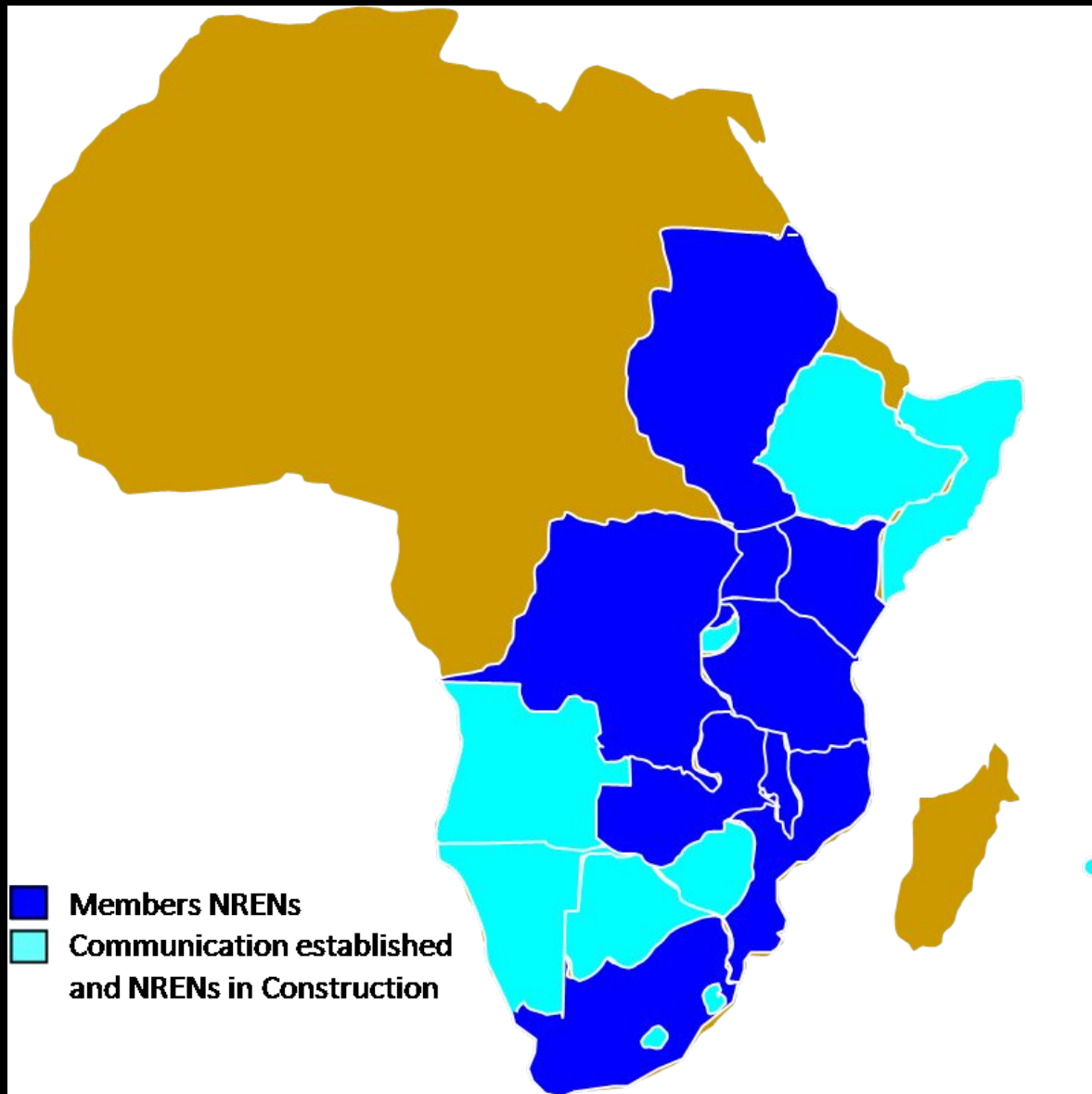
Experiences from the Alliance

F F Tusubira, CEO - ceo@ubuntunet.net



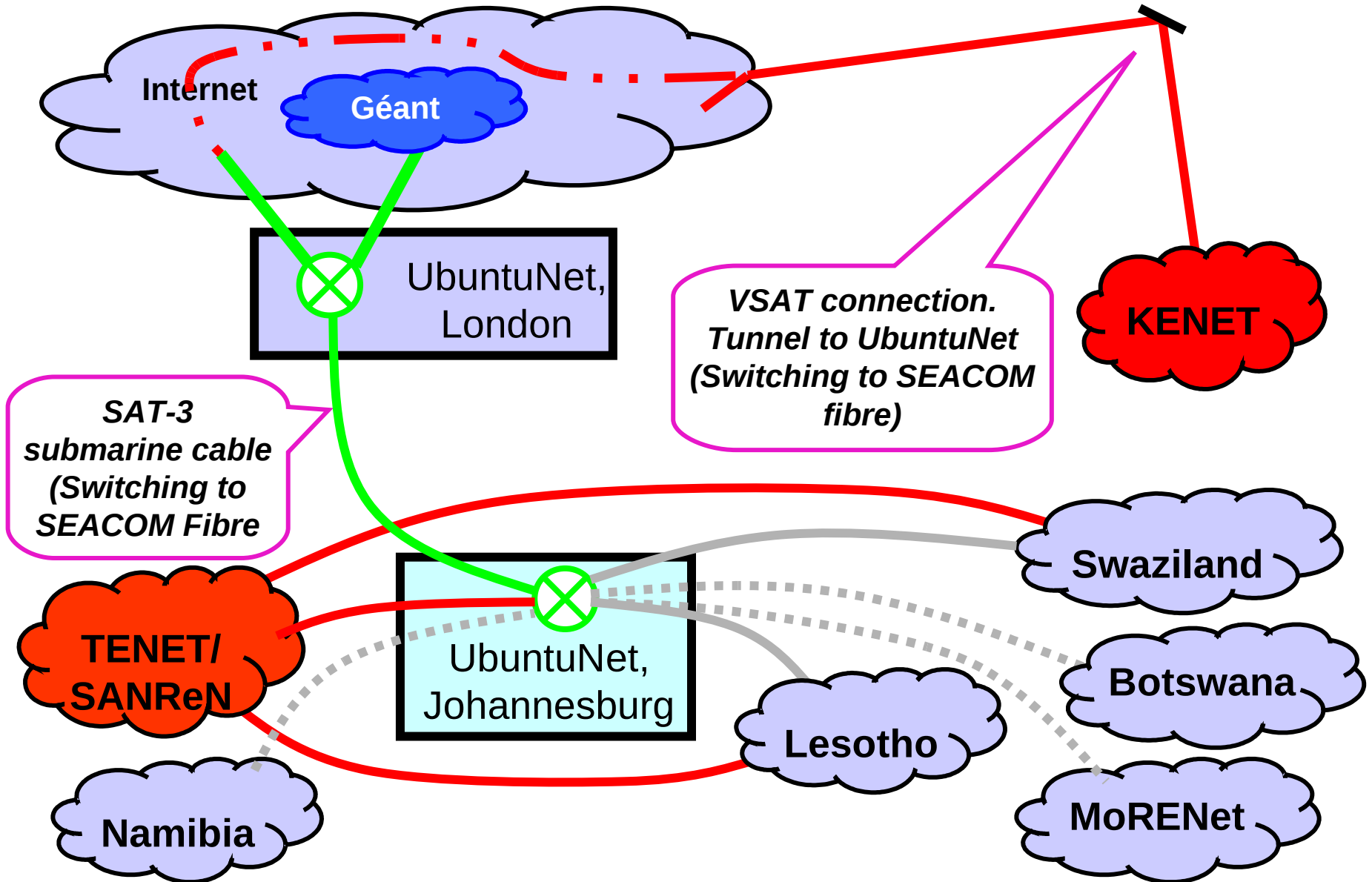
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UbuntuNet Alliance Membership



**Area coverage:
China, Europe,
and India put
together..**

UbuntuNet Current Operations



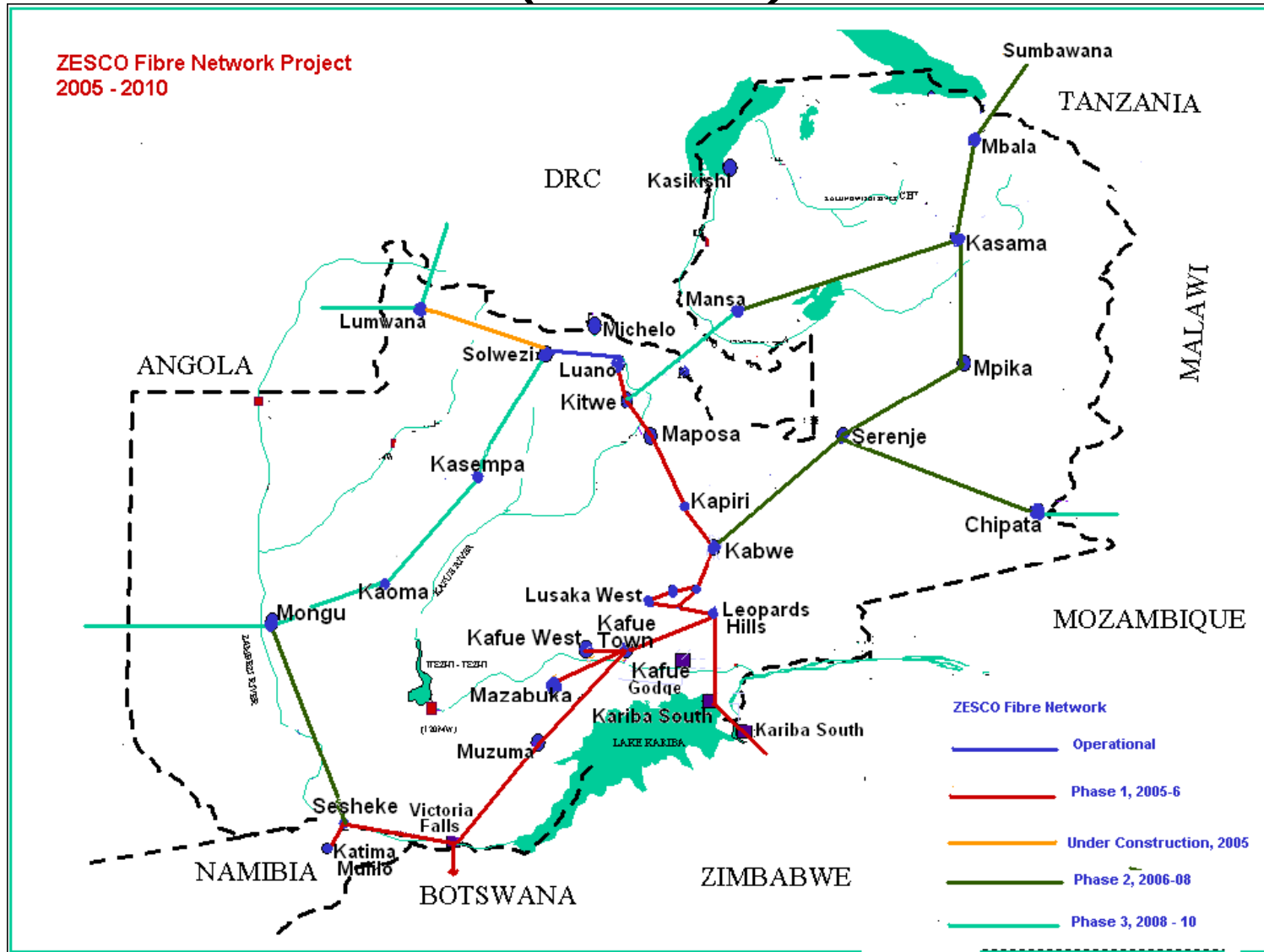
Opportunities (1)

- **Exorbitant cost of bandwidth - a trigger for collaboration: bring the possibilities home**
- **Growing awareness in Africa of the importance of increased investment in higher education networking (eg Kenya, Rwanda, South Africa, Ethiopia, Uganda)**
- **Increasing intra/extra research linkages among African and non-African universities**
- **International interest in NREN activities in Africa (not always altruistic!)**

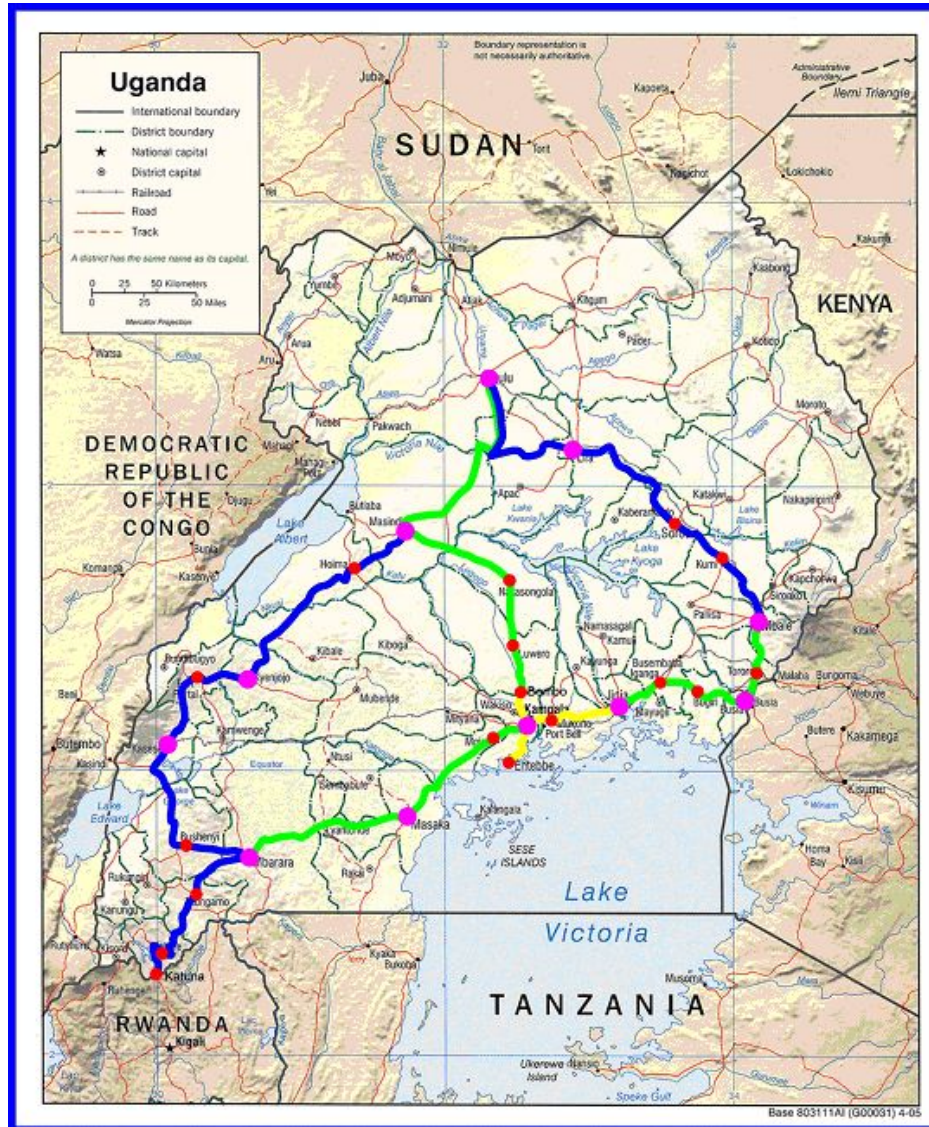
Opportunities (2)

- **The African pioneers with both the dream and the will to do: never accept failure**
- **Reservoir of unutilised optical fibre: power and railway companies; oil pipelines. Plus new investments (private, public, and PPP).**
- **Increasing liberalisation – reducing the power of cartels (eg SAT-3) and monopolies.**
- **The number of real high capacity marine optical fibres landing on the African coast starting 2009; and associated backhauled**

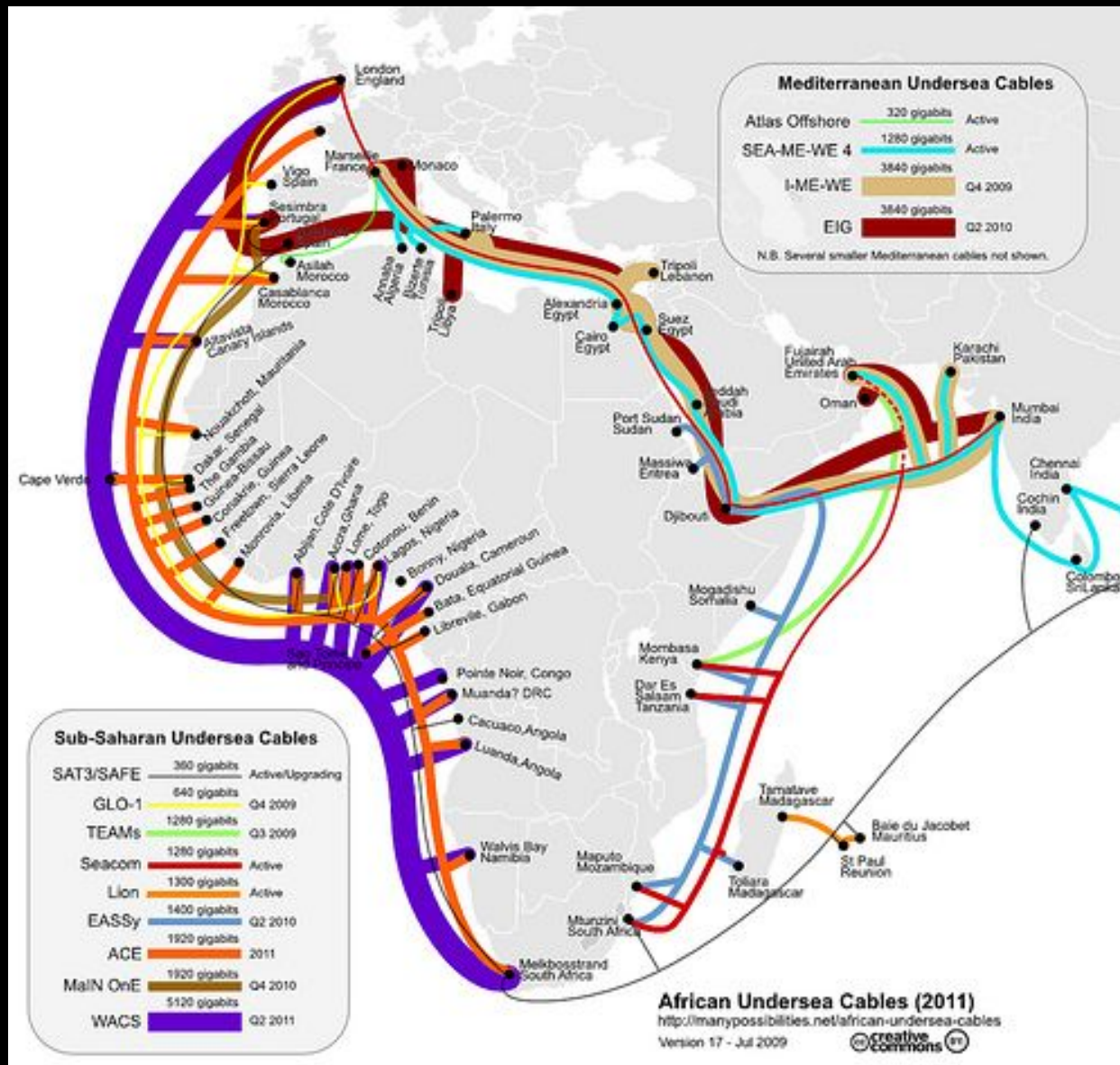
Existing and planned utility company capacity (Zambia)



National Backbone (Uganda) – Phase 1 completed

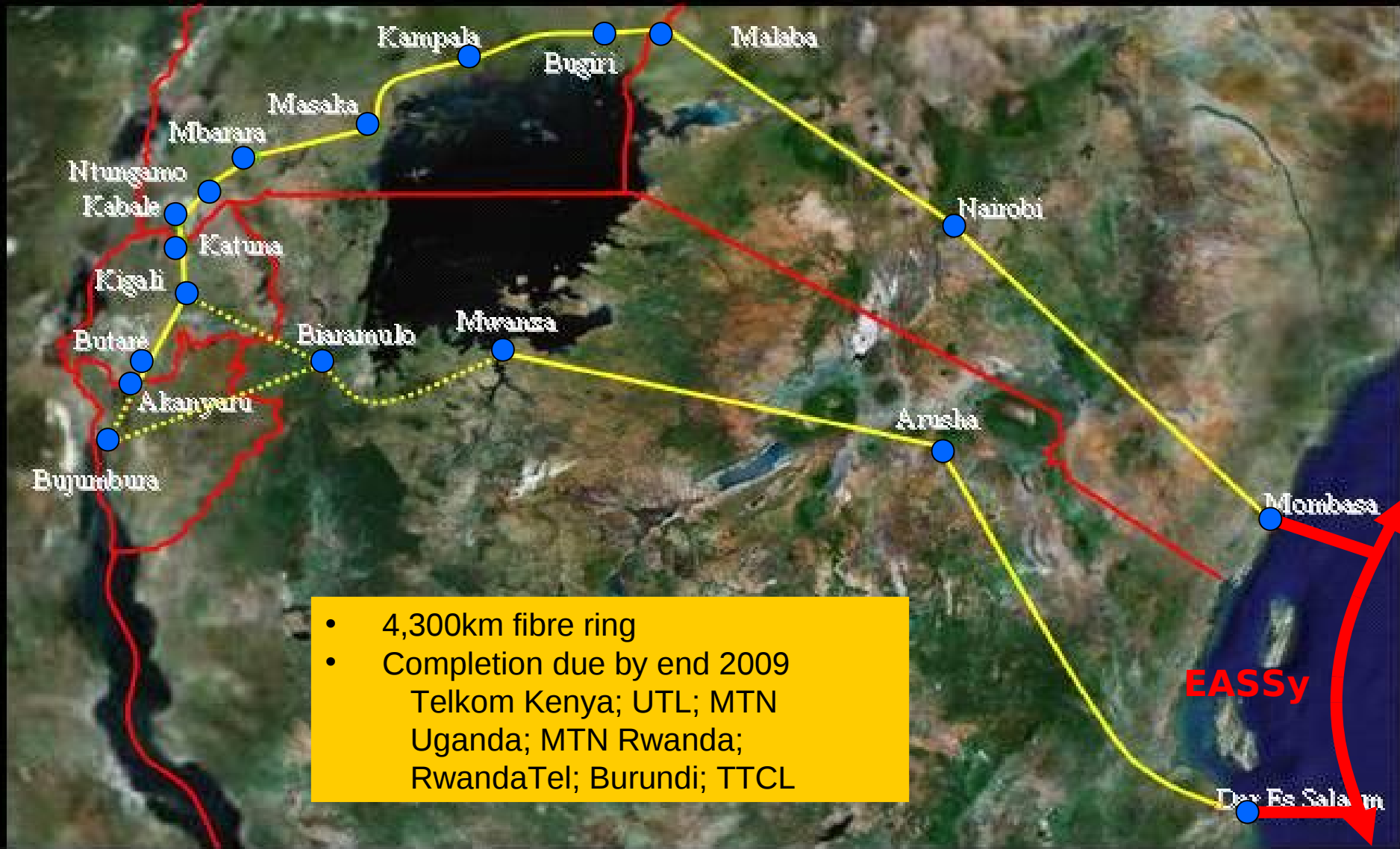


Opportunity: Submarine cable initiatives



Map: Thanks to Steve Song. www.manypossibilities.net

EASSy: East African Backhaul

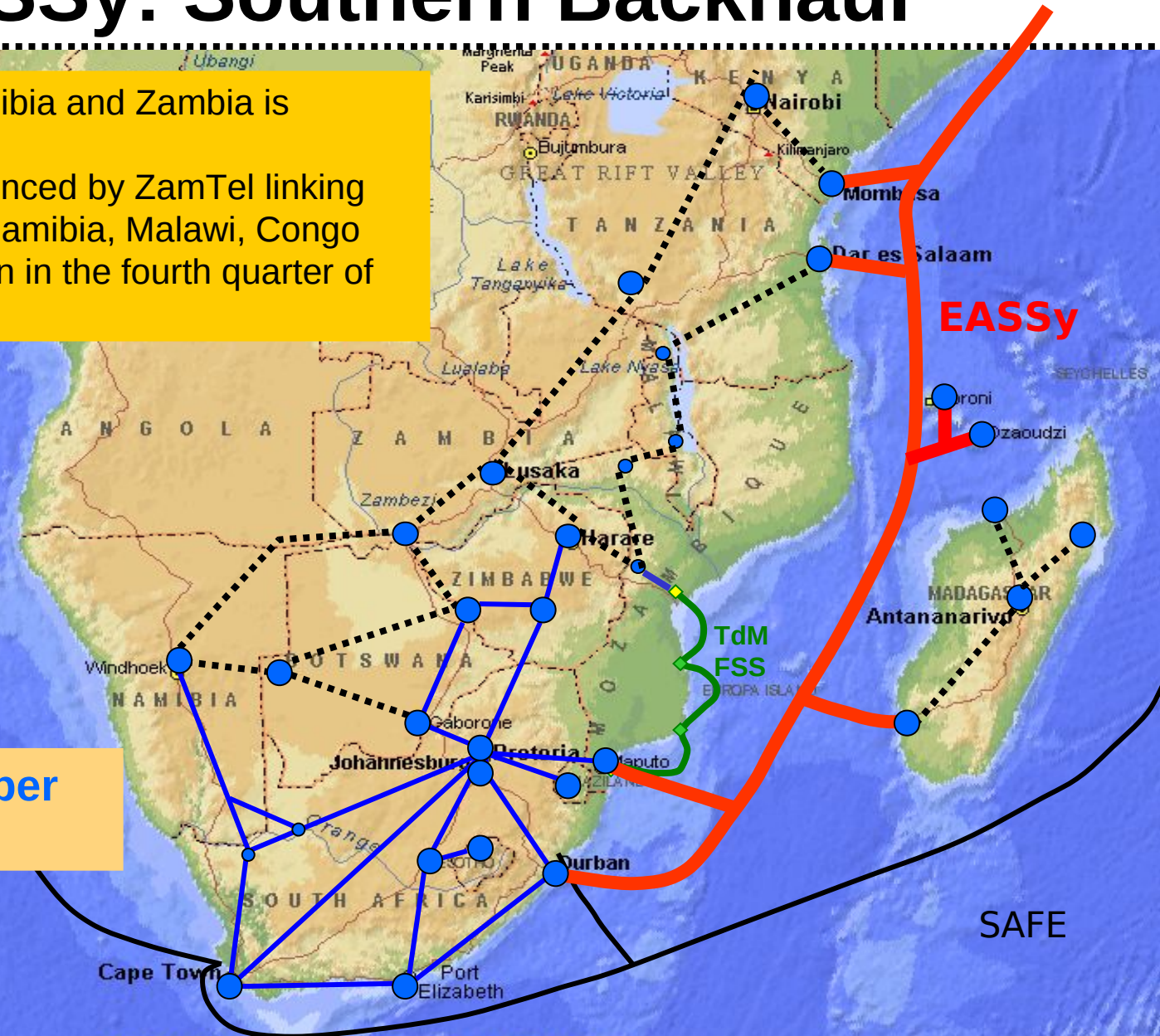


EASSy: Southern Backhaul

- Network linking Namibia and Zambia is complete
- Construction commenced by ZamTel linking Botswana, Zimbabwe, Namibia, Malawi, Congo and Tanzania completion in the fourth quarter of 2009

SAT-3 / WASC

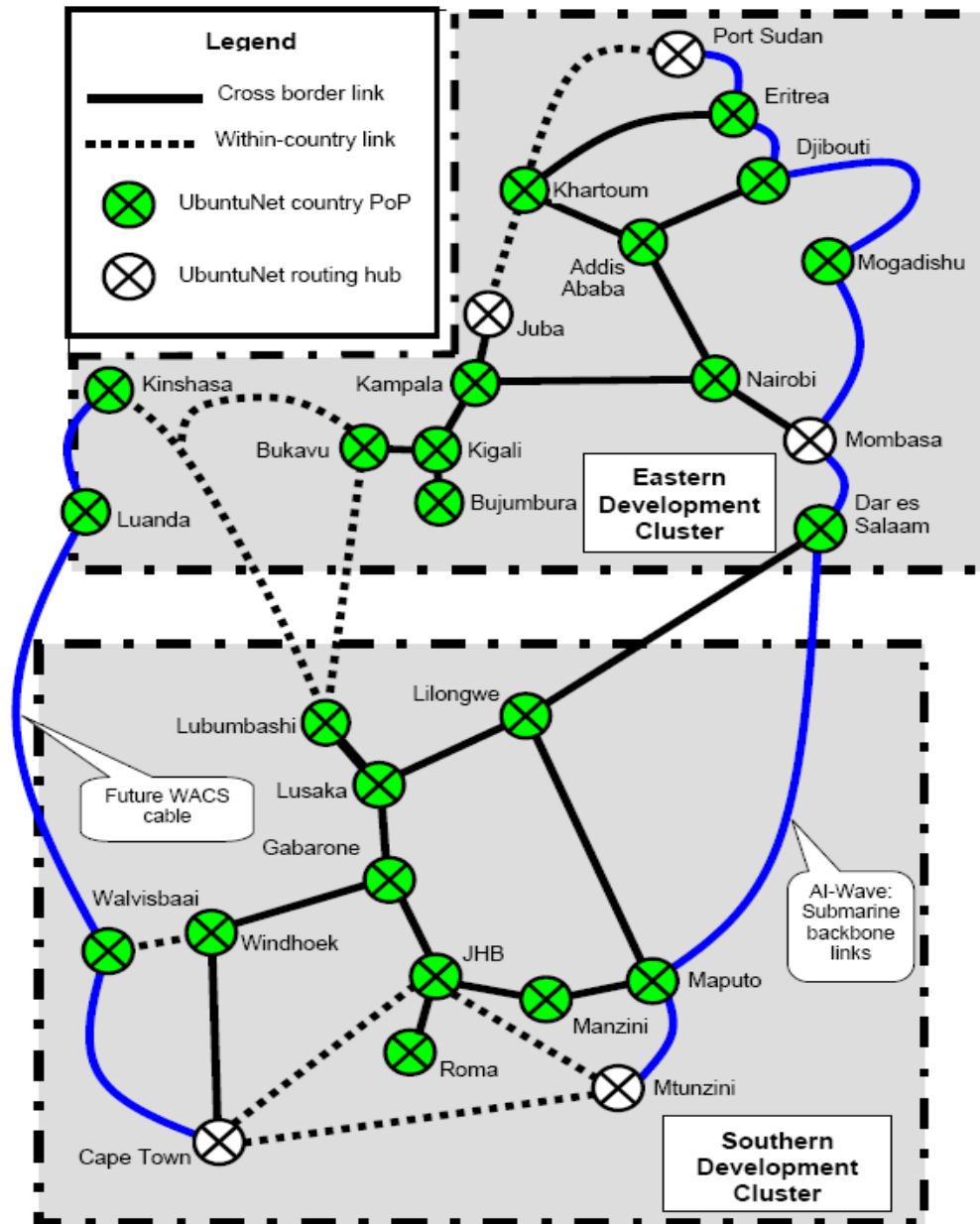
— Existing Fiber
- - - - - New Fiber



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UbuntuNet Backbone Vision

Future UbuntuNet Backbone as envisaged on 1 Nov 2008



Challenges that must be addressed (1)

- **Very low NREN activity**
- **Physically huge regional coverage**
- **Disabling Policy and regulatory environments:**
 - **Slow reforms;**
 - **Inadequate access to backbone infrastructure at affordable prices**
 - **Inadequate policies and regulation with regards to ownership and access to essential infrastructure**
- **Multiplicity of languages**
- **Global financial crisis**

Challenges that must be addressed (2)

- Identifying effective regional leadership – need pioneers, not just managers. What profile?
- Managing tension: the Board and the CEOs of NRENs; the CEO of the RREN and the Board; the RREN and Development Partners; the RREN and other regional/continental players
- Shortage of skilled human resource
- Limited understanding of the multiple roles and benefits of research and education

Challenges that must be addressed (3)

- Limited understanding of the multiple roles and benefits of research and education networks.
- Seeking individual advantage by member NRENs (weakens negotiating position).
- Competition from and cherry picking by service providers (*a growing threat in Eastern and Southern Africa*).
- Weak Financial Base of RRENs
- Poor email culture even among the leaders..
- Inability/fear to move one step at a time..

UbuntuNet Strategic Priorities (2009 – 2013)

(Relate to opportunities and challenges)

- *NRENs development in the region;*
- *Sufficiency and affordability of bandwidth;*
- *Institutional sustainability of UbuntuNet;*
- *Improved national policy and regulatory environments that enable REN activities.*
- *Increased interconnections among NRENs within Africa and to the rest of the world.*
- *Increased and effective support for regional research and other content networks.*

Acknowledgements...

Various kinds of support

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- PHEA; Carnegie Corporation; Sida

Conclusion

- **The challenges are many, but the opportunities are huge;**
- **Develop a positive mind-set: no one will support you if you moan all the time;**
- **There will be setbacks and reversals: smile at these and take a different tack.**
- **Remember: Failure is not an option**
- ***Thank you***