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Optimising the Impact of NRENs  
on Africa's Research

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# When is it an African NREN: Building a Vibrant and Sustainable National Research and Education Network in Africa

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the NREN



# A Community of Researchers, Academics, Librarians, ICT Professionals and other stakeholders



# the Community...

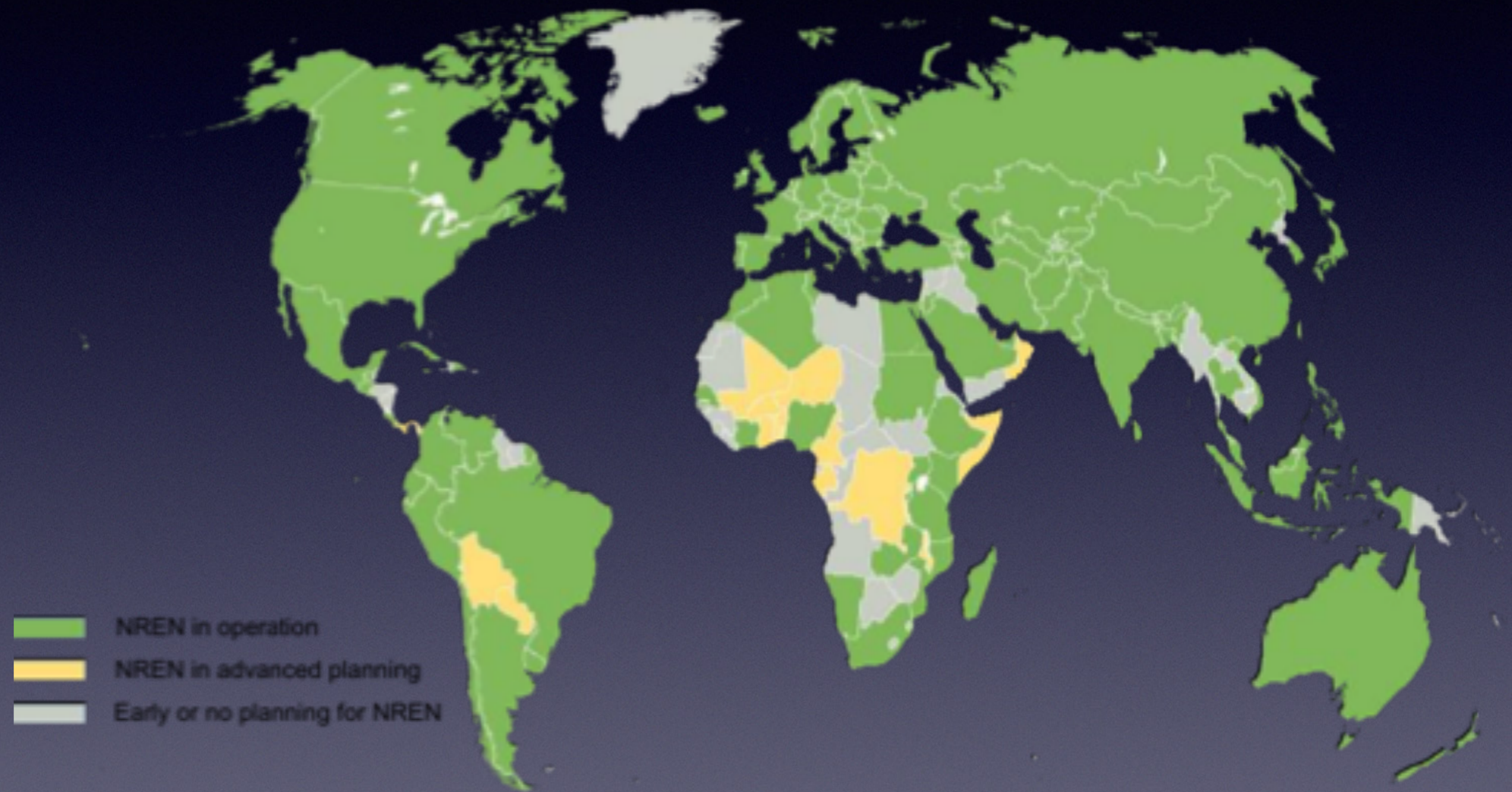
Using high-speed  
national networks to  
connect Academic and  
research institutions  
together



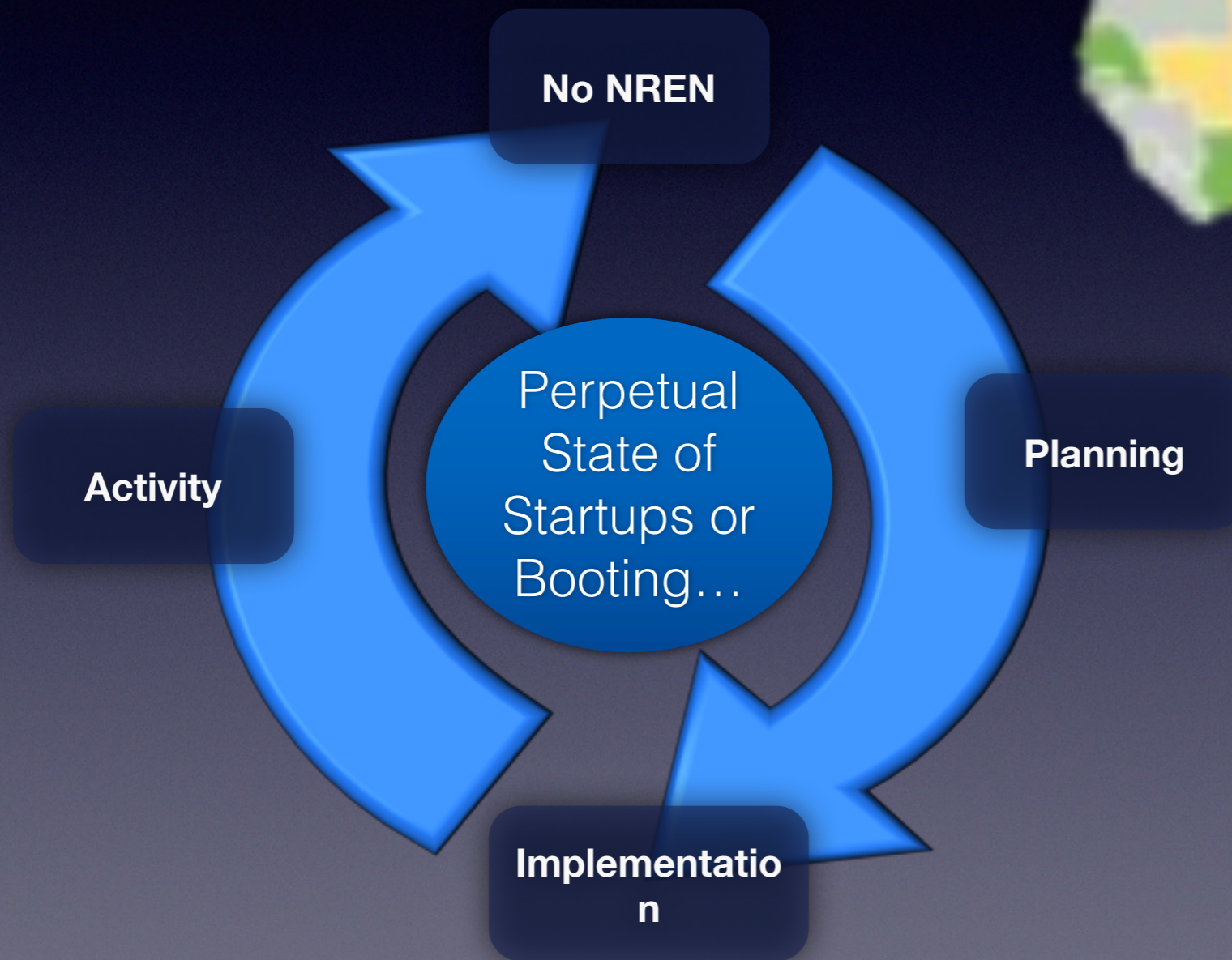
# Building Blocks of Research & Education Networks



About 110 countries have now established NREN



# NRENS in Africa





About NRENs

# NREN Myths or Truths

Common Statements and Impressions	Myth or Truth
NREN issues are <b>technical</b> in nature and require Technical Interventions for them to be <b>resolved</b> .	Myth
There are various <b>models</b> and ownership <b>structures</b> for establishing NRENs and making them vibrant	Myth
NRENs are best formed by <b>Champions</b> from the most predominant University(s) in the country.	Myth
NRENs Boards must be <b>representative</b> in order to cater and protect the needs and interest of all stakeholders	Myth

# African NREN Issues

**Governance Structures** that lacks the needed **dynamism** and **strategy** to resolve ***sustainability*** issues.

Change is *Natural*

- Administrative
- Environmental
- Financial
- Technological



# African NREN Issues

Lack of independent full-time staff to implement and oversee operations who will also be responsible for the management of the services provided by an NREN.



# African NREN Issues

**Lack of willingness to give up power/privileges** and become more transparent.

New Systems like NREN implementation may require a new order which can cause opposition, particularly when trying to achieve a more transparent process.



# African NREN Issues

**Competing interests** — misalignments between personal or membership interests and the interest of the NREN, which would make an actor to behave in a manner detrimental to the NREN community



# Hallmarks of Successful NRENs



# Governance

Constitution

Autonomous

Not-for-profit

**NOT** Representational but  
rather Expert Based



# Full-Time Staff



# Membership



# Funding Sources

A Combination of membership fees, service charges, and Government subvention and/or Development Partners on a sustainable basis.

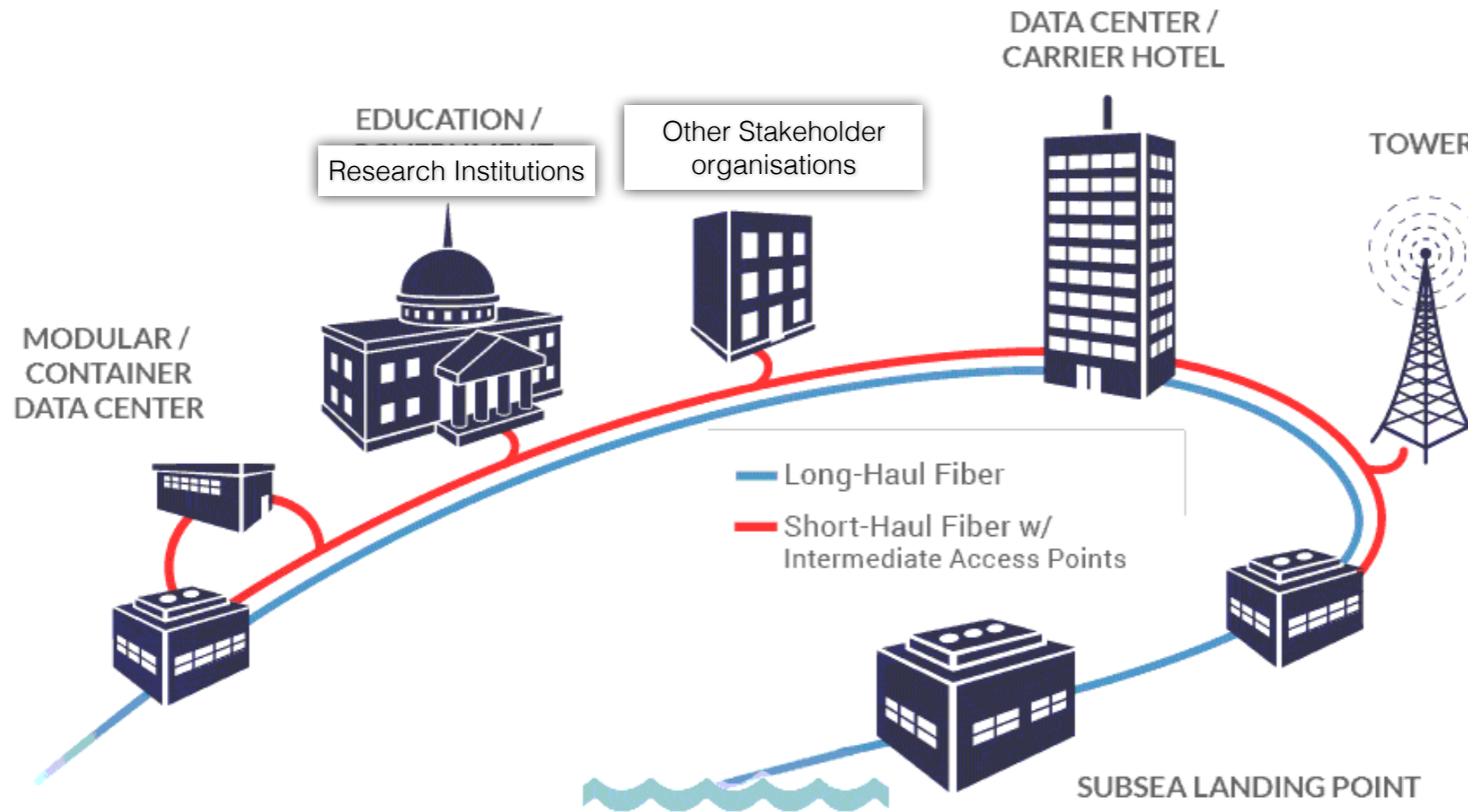


# Funding Model

## **Capital Expenditure (CAPEX)**

Seek Government and Development partner support for funding the CAPEX to grow membership.





1. Leasing Bandwidth from a Local operator  
 Lease and Operate its own Backbone links from dark-fibre or IRU in order unlimited access to local national resources

# Funding Model

## Operational **Ex**penses (OPEX)

Ensure that membership subscriptions and revenue accrued from products and services can support the OPEX



# Products & Services



for the Community...

# Broker for Procuring R&E and Commodity Services



# Training Programs



# Acceptable Use Policies

Basis of Network  
Agreements for  
Membership



# Interventions for Optimising NRENs

Governance

Organisational Structure

Products and Services

Requires a concerted effort by all  
relevant entities

Actionable items for Governments,  
Development Partners, AAU, RRENs  
and Other Stakeholders



“Africa does not need strong Leaders but  
rather strong Institutions”

**–President Barrak Obama**

# Questions?

Thank You...

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