

Schools' Workshop

Research and Education
Networking
Eco System

15th – 18th May, 2023

Presented by: Caroline Namuddu

Outline

- Research and Education Networking EcoSystem

Research and Education Networks

Some Terminology

- Research and Education = R&E
- Research and Education Networks = REN



ational REN = NREN

ally, the REN connectivity is very complex and very difficult to understand.

100 Gbps

collaboration

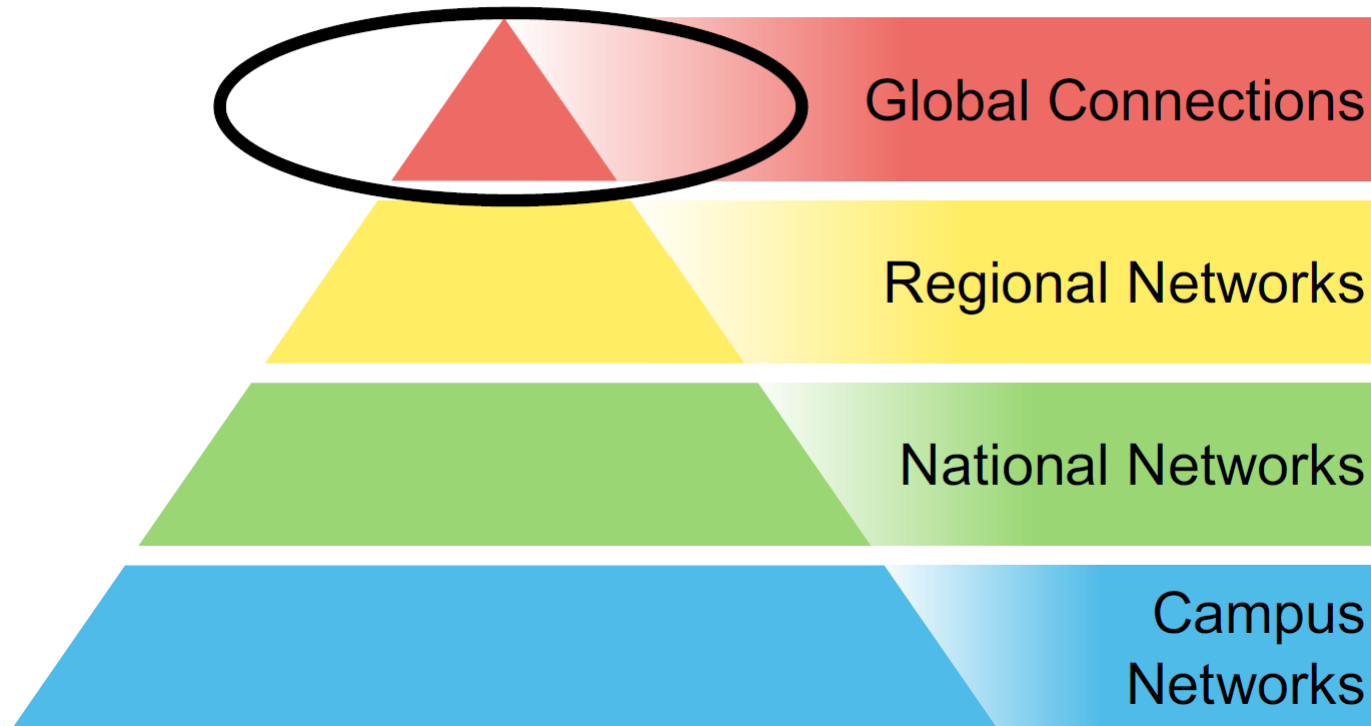


REN Characteristics

- **High bandwidth networks**
 - 10G backbones with more and more 40G and 100G
 - Some R&E networks are doing pilot roll-outs of 400 Gbps
 - Research typically needs uncongested networks
- **Low latency**
 - Terrestrial fiber
- **Open Networks with no filtering**
 - Firewalls can make it hard for ad-hoc activities

NREN EcoSystem

NREN EcoSystem



Global REN Connections

- Connect Regional or National networks together
- Tend to be longer, more expensive circuits
- Not always well coordinated
- Routing policies often inconsistent



END