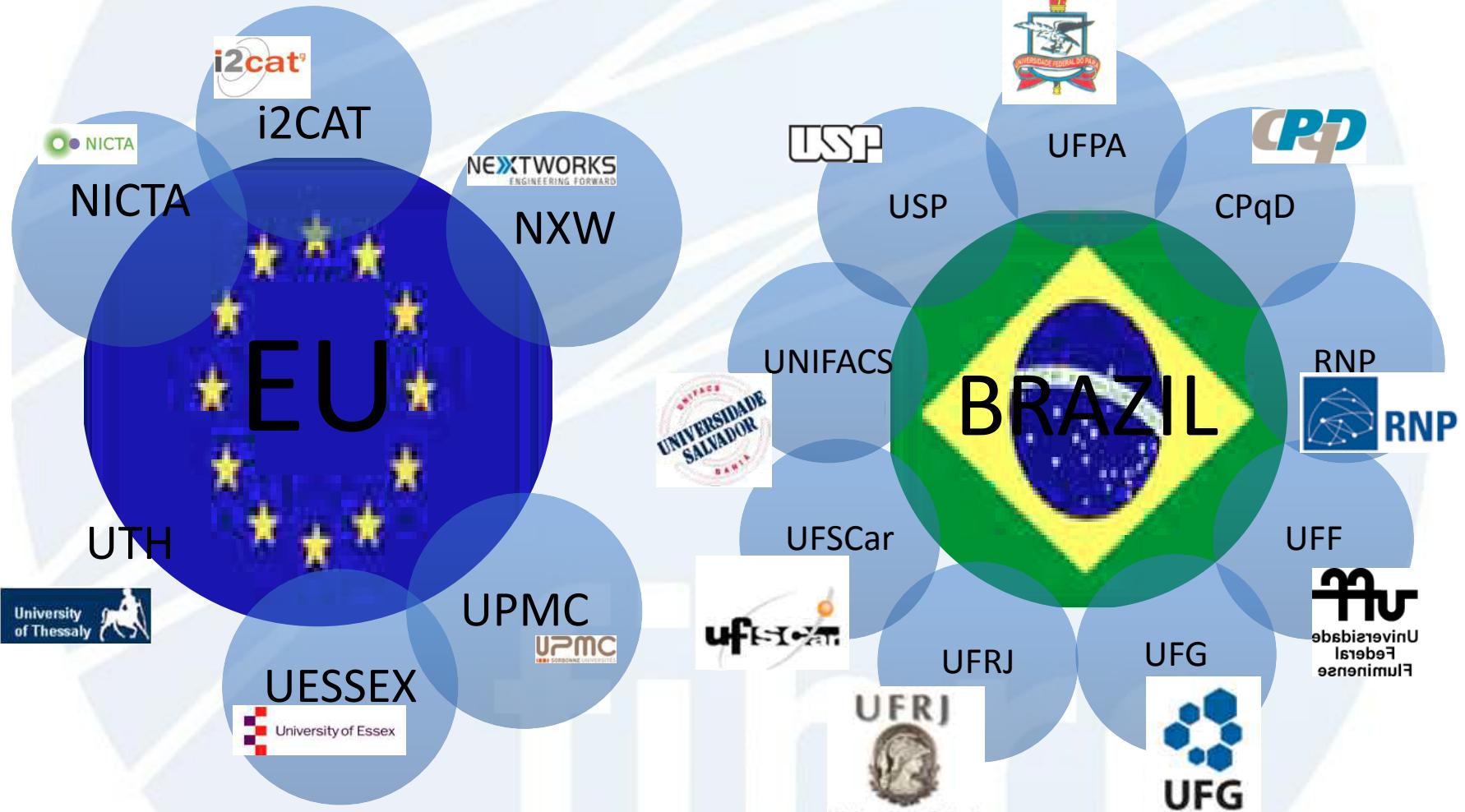


# **FIBRE-BR – People, Resources , Roadmap CNPq / FP7**

Presenter: Cesar Marcondes  
Federal University of Sao Carlos (UFSCar)

GENI GEC 14 International Federation

# Partners





# Brazilian Infrastructure



- Goal: Create FIBRE-BR testbed



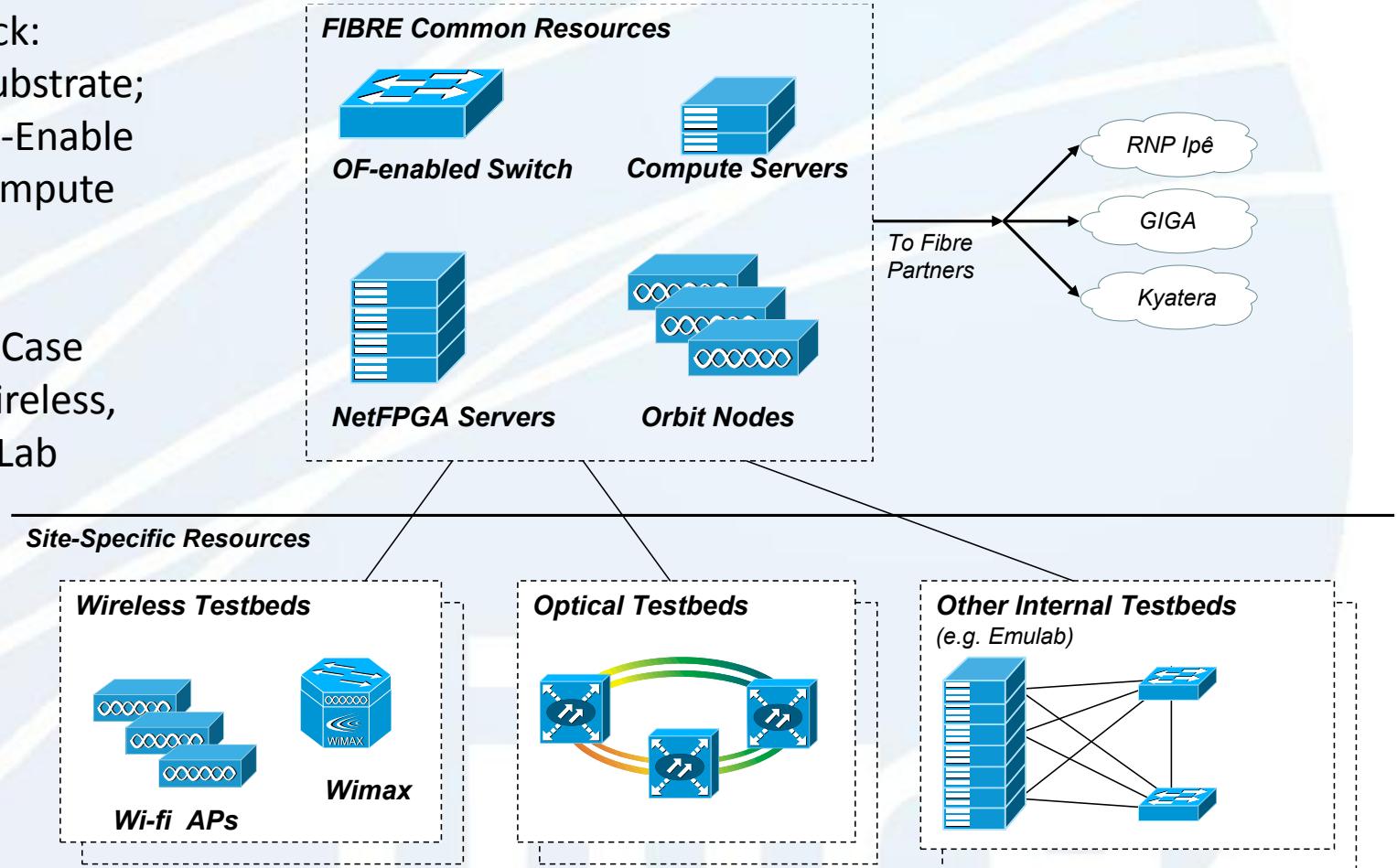
## Research networks and site locations

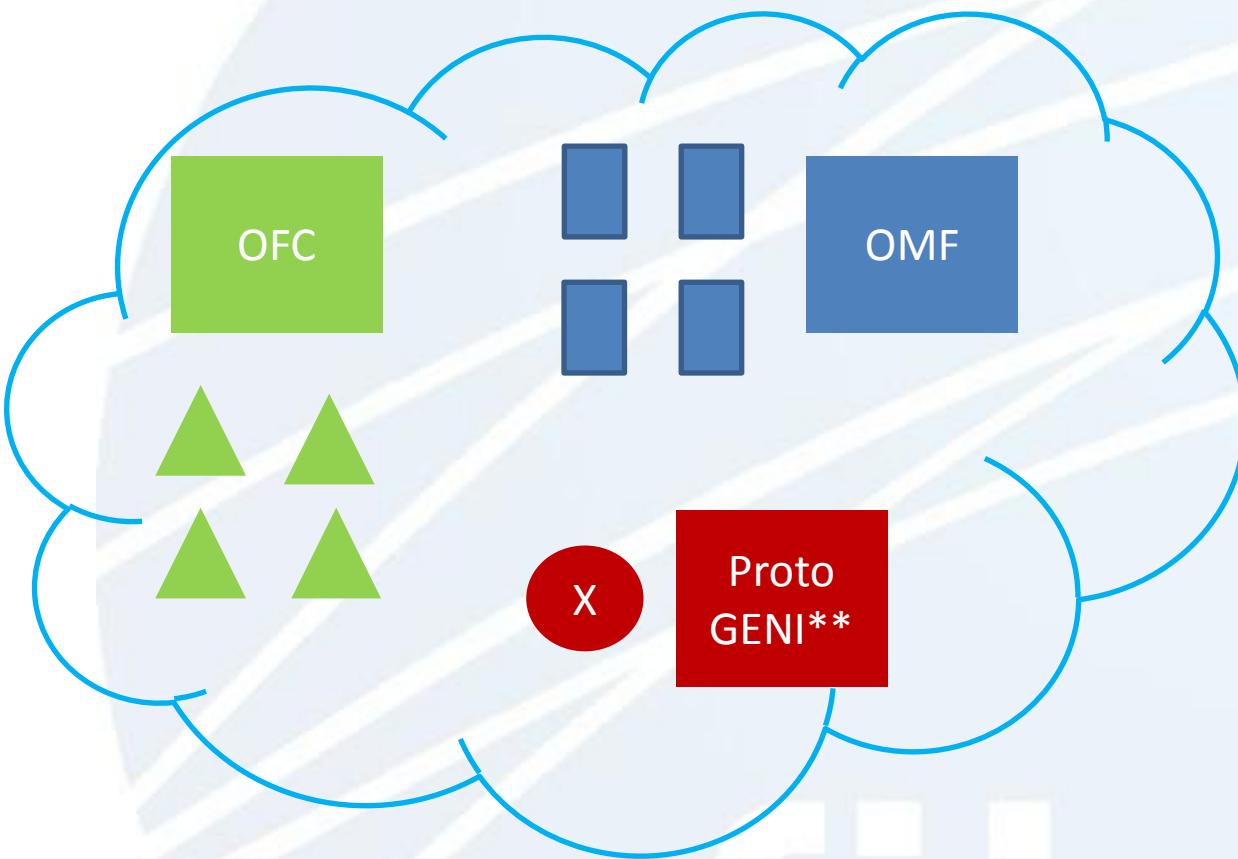


## Expected topology of interconnecting private L2 network and alternatives for BR-EU link

FIBRE-BR Rack:  
OpenFlow Substrate;  
netFPGA, OF-Enable  
Switches, Compute  
Resources

Specific Use-Case  
Resources: wireless,  
optical, EmuLab  
(USP), ...





Institution X  
(\*\*) USP

OFC = OFELIA CONTROL FRAMEWORK

Brazilian Testbed overall:

- 78 ORBITS nodes
- **10 servers**
- **27 OF NetFPGA**
- 10 OF sw commercial
- 1 Emulab cluster

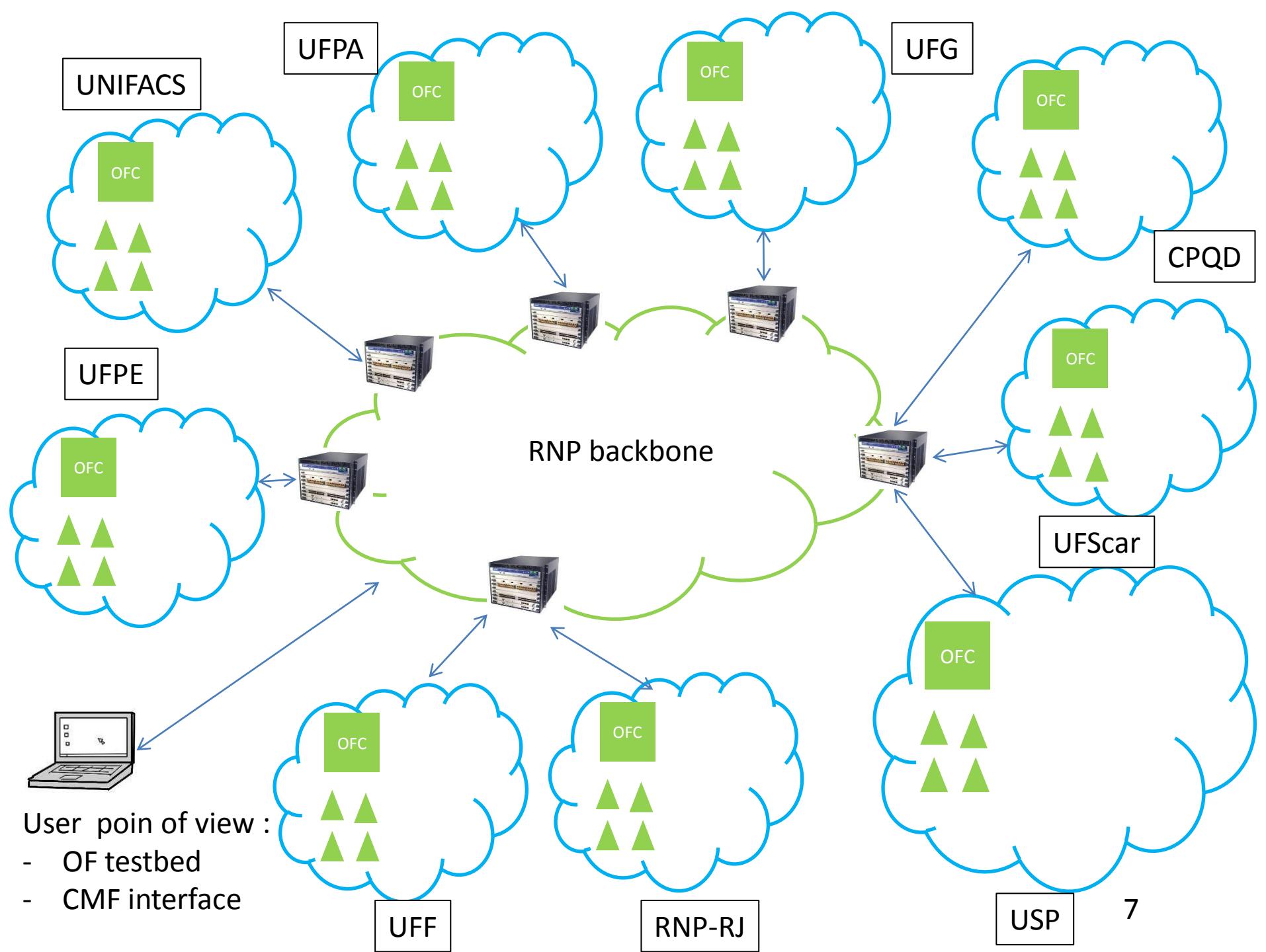
Each Institution

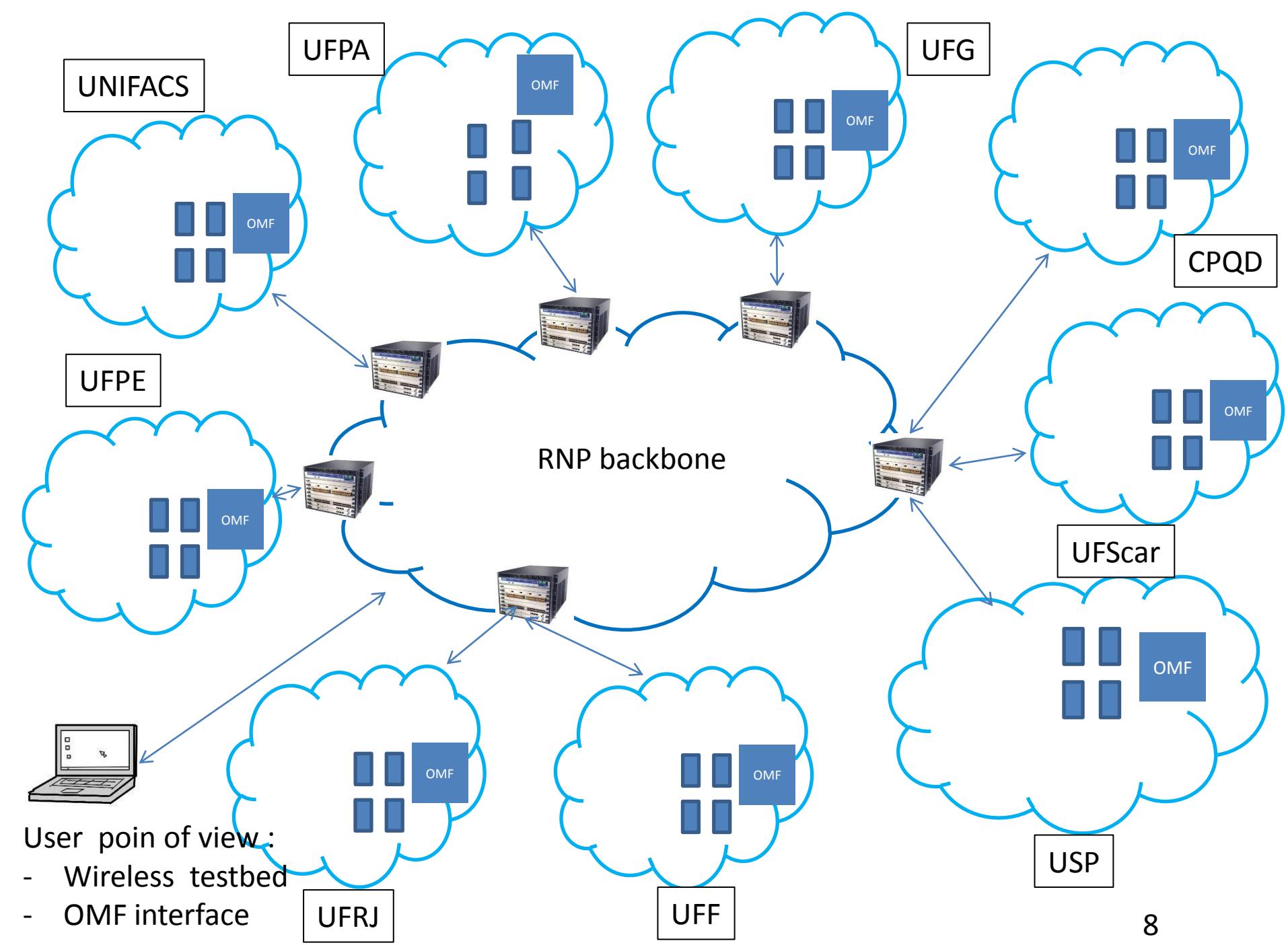
- 8 to 18 ORBITS nodes
- **3 NetFPGA**
- 1 OF SW commercial
- **1 server**

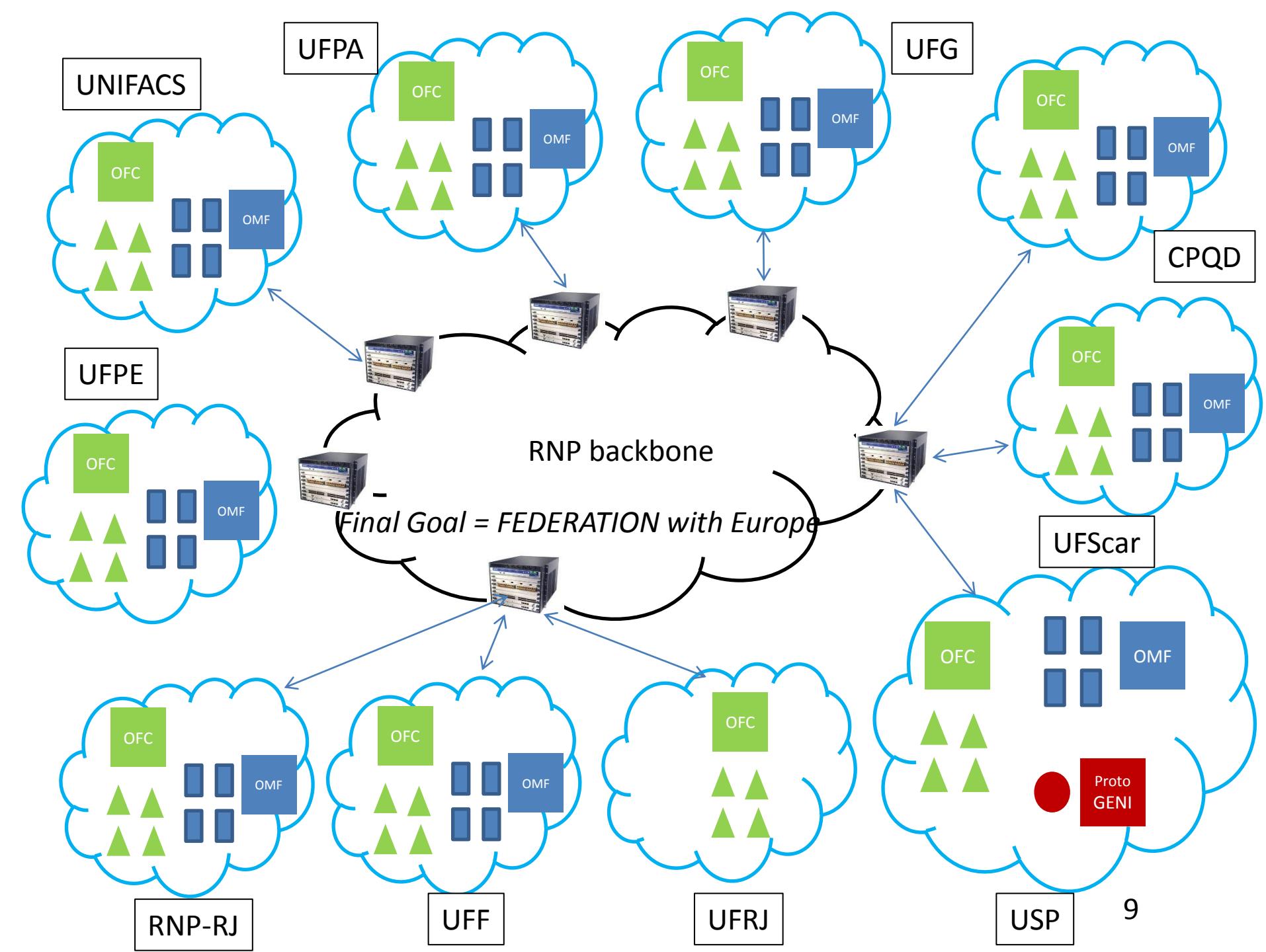


## Roadmap - 2012

fibre

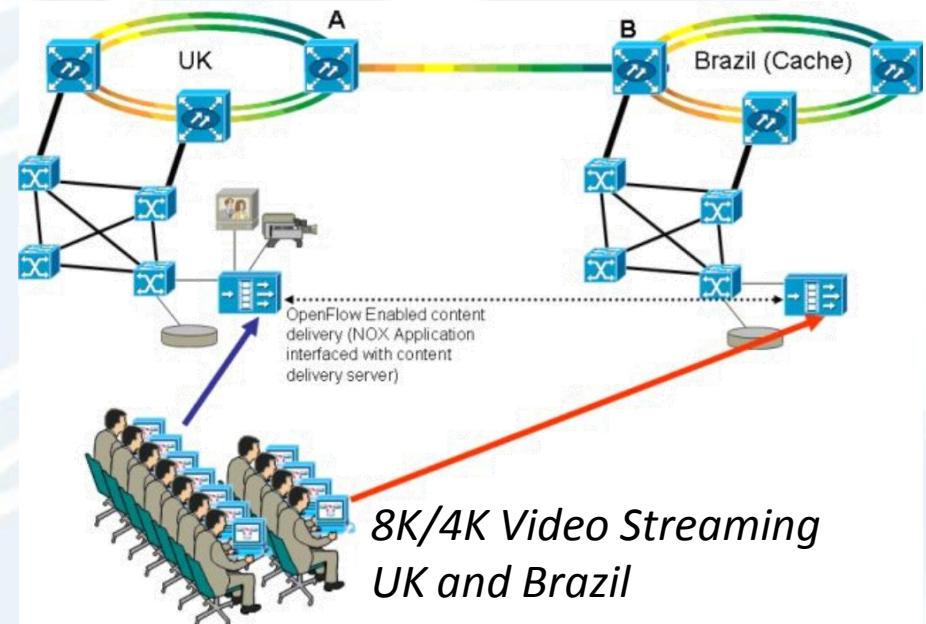
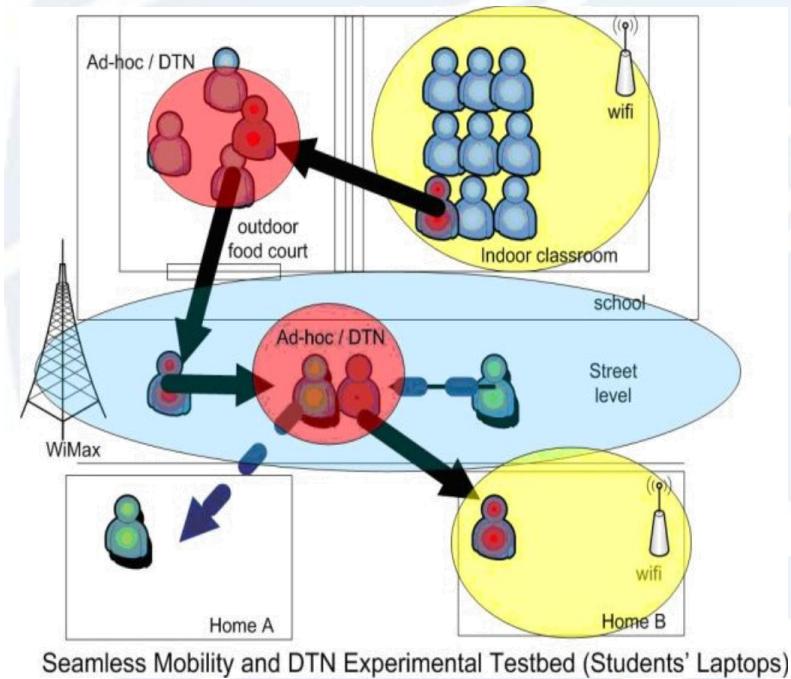






# Use Cases

## Seamless Mobility for Educational Laptops



- High definition content delivery across different sites
- Bandwidth on Demand through OpenFlow GMPLS in the FIBRE facility

# Discussion

- FIBRE-BR starting federation from beginning, engage in different CMFs and integration
  - Large Distances in Brazil
  - Key role from research partners in OpenFlow and Wireless Technologies (RouteFlow, etc.)
- Federation is not only about technology?
- How to discuss the policies in a common language? Slice Policy API?

Obrigado

Future Internet Testbeds Experimentation  
Between Brazil and Europe

<http://www.fibre-ict.eu>

fibre