

#### **BELLA**

Connecting Europe and Latin America for the next 25 Years

Tom Fryer (GÉANT) / Luis Cadenas (RedCLARA) | 13-06-18 | TNC18; Trondheim, Norway



### South America at the heart of astronomy





ESO Very Large Telescope (VLT). Credit: ESO/B. Tafreshi (twanight.org)



ESO. Credit: ESO/S. Brunier



ALMA. Credit: ESO/C. Malin



<u>Pierre Auger Observatory</u>. Credit: © Guillermo Sierra 2007

## It's not just astronomy...









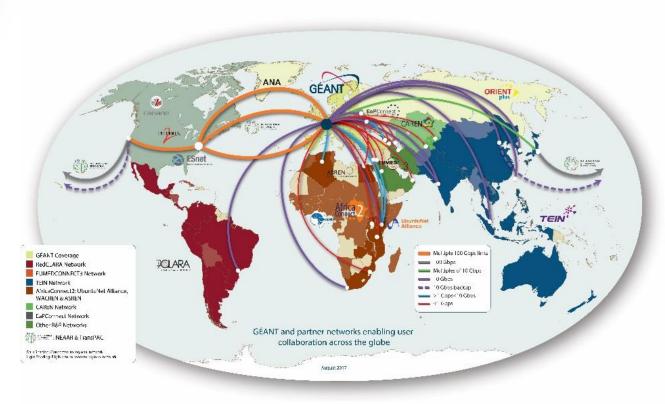




Images from <u>www.inthefieldstories.net</u>

## GÉANT-RedCLARA Interconnectivity Today

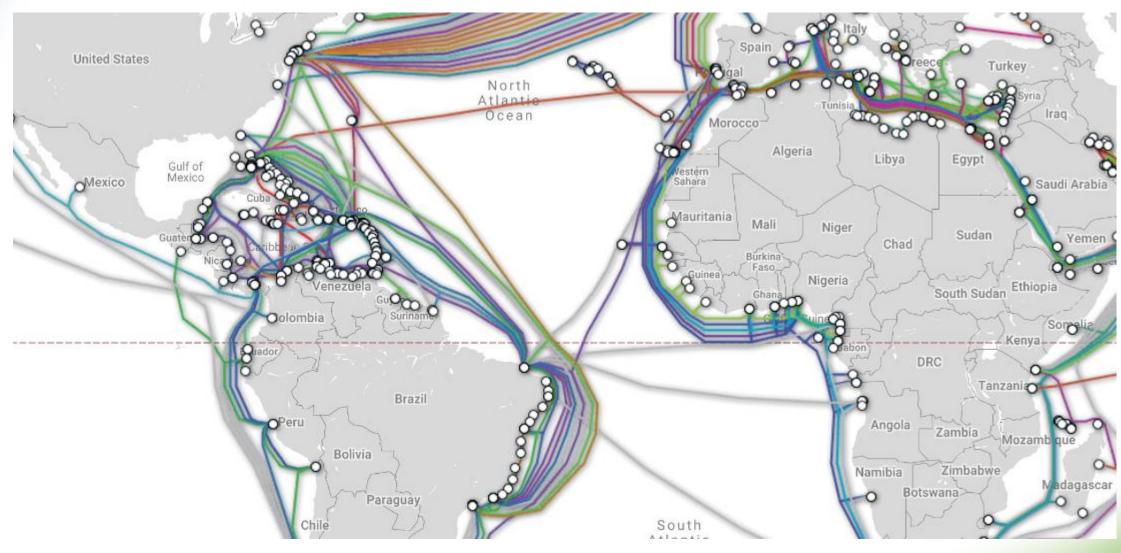






# Europe-Latin America Where are the Direct Cables?





# BELLA Addressing the Challenge



- Spectrum on the direct Europe-Latin America submarine cable :
  - 2x100Gbps links for GÉANT-RedCLARA & Copernicus to start, both upgradeable
  - Additional links to be lit required
- Completing the RedCLARA dark fibre network and deploying a 100Gbps upgradeable network from Brazil to Colombia

### **Building BELLA**

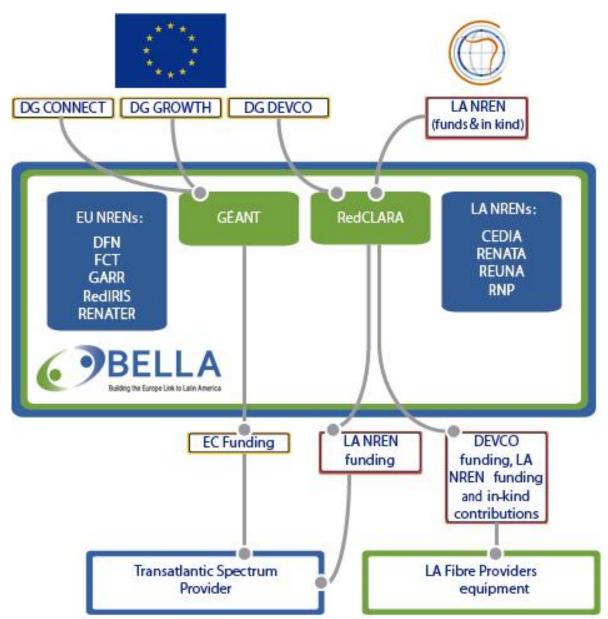














### Towards Deployment:



- Transatlantic Cable:
  - Procurement completed. Contract Signature in preparation.
  - Cable Construction to be completed in 2020; before then:
    - Marine survey
    - Build landing stations
    - Manufacture cable
    - Lay cable
    - Bring cable online



### Towards Deployment:



- RedCLARA Backbone:
  - Some segments already in service or about to launch (e.g. Colombia, Chile)
  - Other segments under procurement
  - All to be completed and deployed by 2020

#### BELLA – For the Scientists of Tomorrow





