

GEANT Update

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DANTE

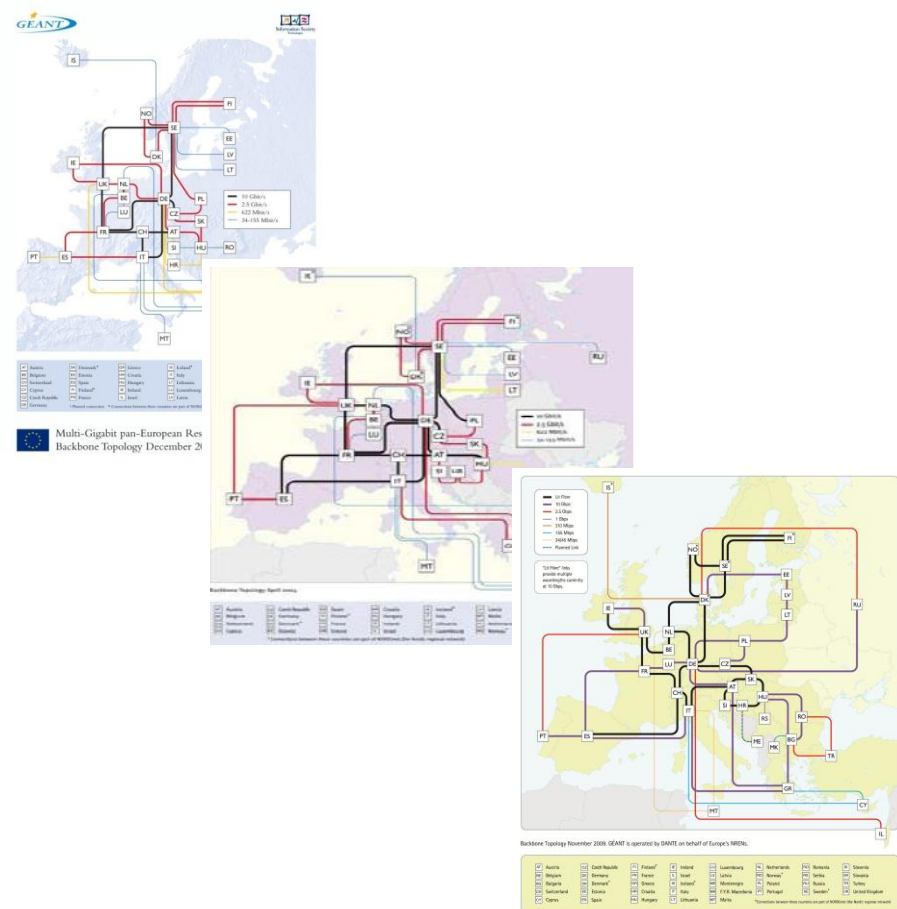
14 Dec 2011

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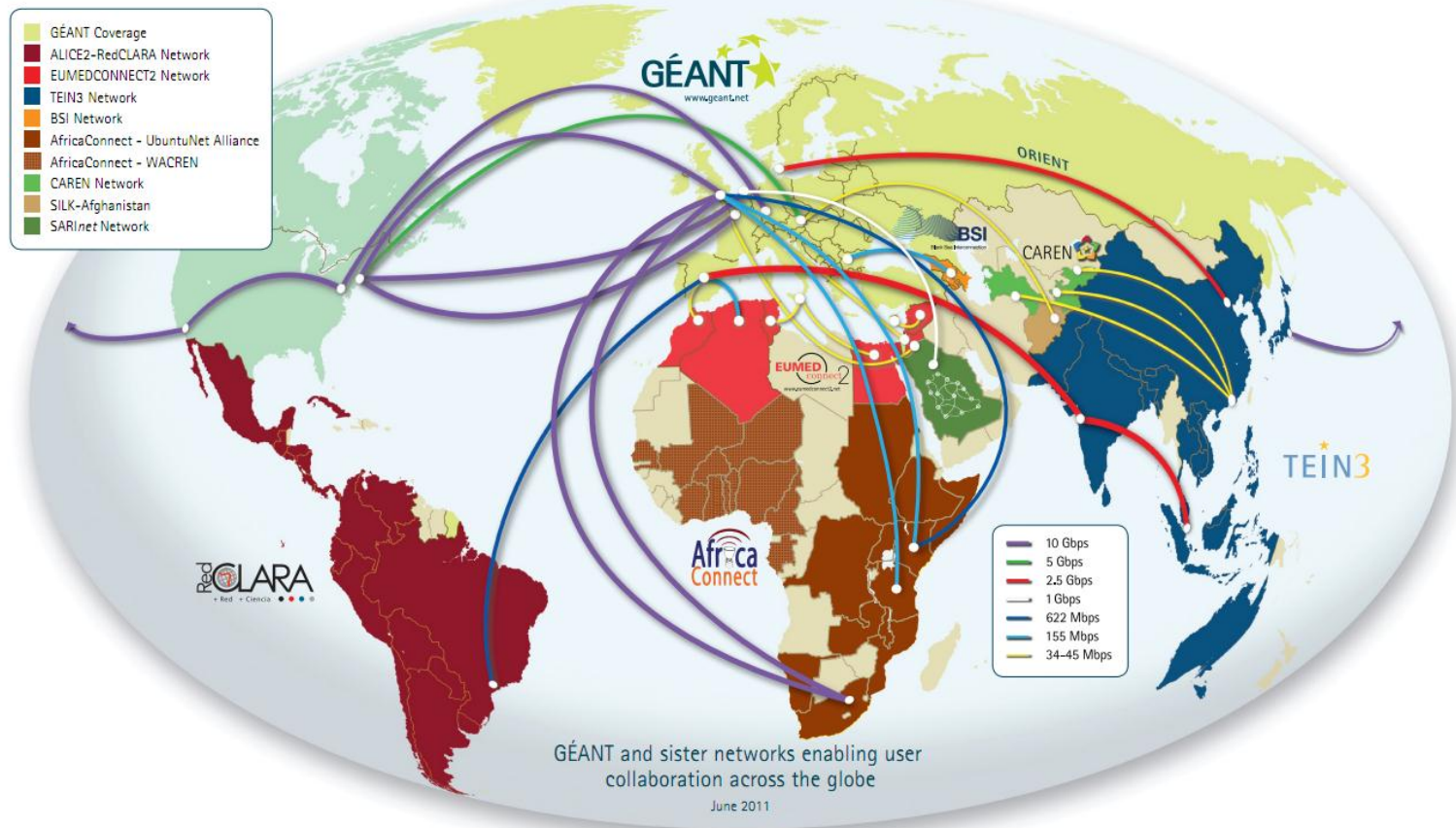


GÉANT: a European Success Story

- 2000-2004: GN1 Project
 - GÉANT Network
- 2004-2009: GN2 Project
 - GÉANT2 Network
 - Services
 - Joint Research Activities
 - Networking Activities
- 2009-2013: GN3 Project
 - GÉANT Network
 - Wider Range of Services
 - Larger Research Programme
 - Wider Networking Activities



Beyond Europe - The Global Research Village



GÉANT connects to international networks enabling researchers and students to collaborate on a global scale.



What sets GÉANT apart from others?

- **Robustness**
- **Service Availability and Quality.**
- **Capacity**
 - Over 1,000 Terabytes of data transferred via the GÉANT IP backbone
 -every day
 - Key routes on 40 Gbps
 - Upgrades to 100 Gbps scheduled for 2012
 - Network remains ahead of user demand for bandwidth
- **Flexibility**
 - Services and infrastructure can be tailored to individual user requirements.



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The GÉANT NOC in Cambridge, UK

- GÉANT Network Operations Centre (NOC)
- Day-to-day management of two parts :
 - GÉANT Service Desk (SD)
 - GÉANT Network Control Centre (NCC).
- The GÉANT SD
 - First point of contact,
 - 24/7, every day of the year
 - Monitors basic network health and creates tickets for network incidents, planned maintenance and new service requests.
- The GÉANT NCC
 - Responsible for
 - Network problems diagnosis
 - Organising and overseeing repairs and maintenance
 - Configuring new services.



GÉANT Product Offering

- GÉANT product offering:
 - GÉANT IP
 - NRENS can subscribe to the GÉANT IP service to gain high-bandwidth international Internet connectivity
 - GÉANT Plus
 - NRENS can subscribe to the GÉANT Plus service to access point-to-point circuits across an existing network of pre-provisioned links
 - GÉANT Lambda
 - The GÉANT Lambda service provides subscribing NRENS with private, transparent wavelengths to any other NREN connected to the GÉANT dark fibre cloud.
 - DANTE World Service
 - IP access



GÉANT Service Area

- Not just the GÉANT backbone – but an **orchestrated delivery** of services by all NRENs and Campuses to their users

