NRENs/GEANT requirements on AAA
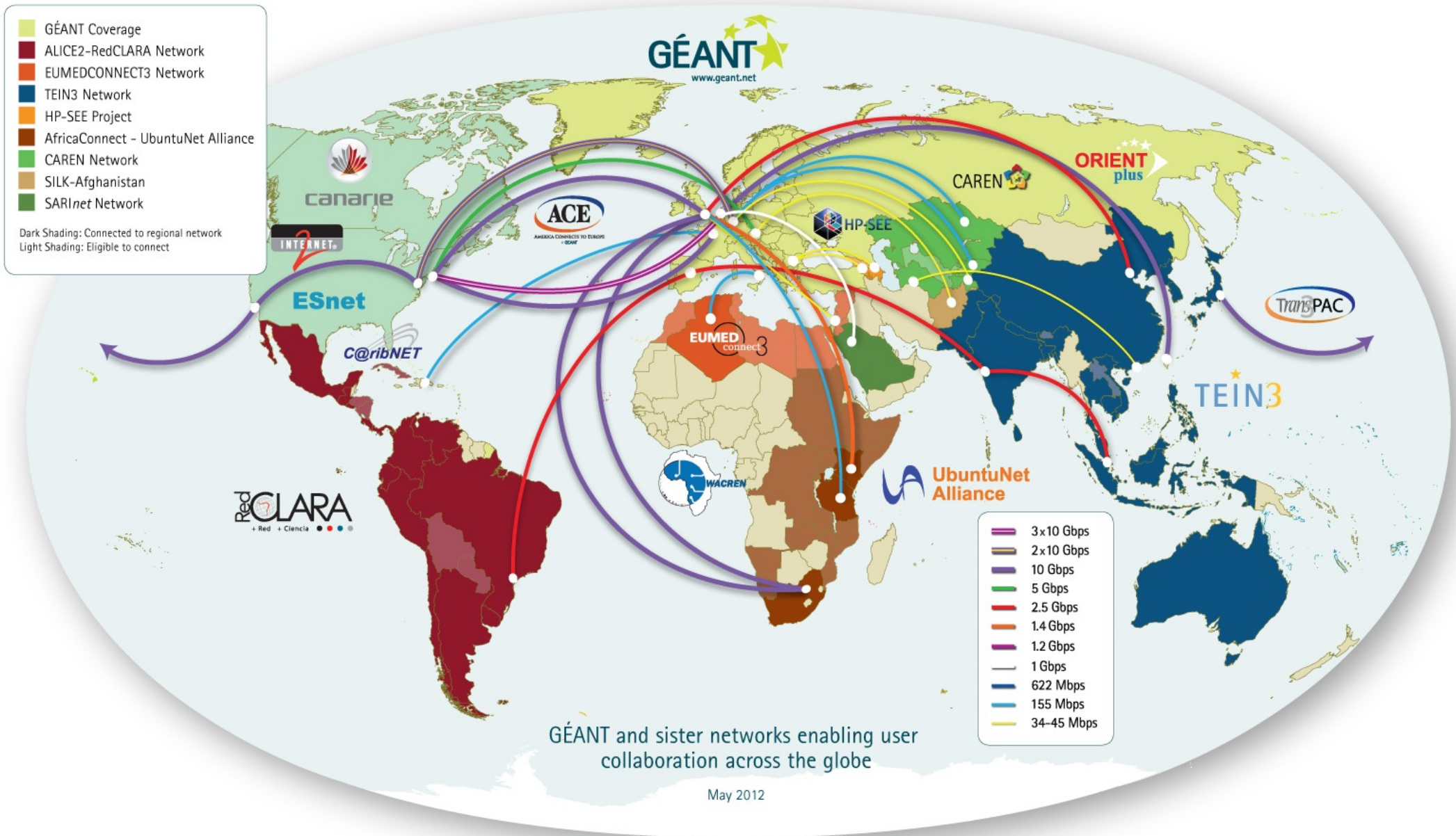
2012-07-12

Valter Nordh, NORDUnet / GU

NRENs/GEANT and AAI

- NRENs – serve the "education" sector in a country.

- Normally through providing excellent internet connectivity as well as other services

- Institutions employee researchers, staff and enrol students

- In the AAI-world the inst are the "last mile", connecting the actual user with the digital identity used

NRENs/GEANT and AAI

- GÉANT is the best connected research network in the world!

- The GÉANT network connect 34 NREN partners.

- GÉANT connect more than 8000 inst and 40 million users

- EC and NRENs fund GÉANT

- GÉANT offers services in the AAI-area to NRENs and others

GÉANT ★ At the Heart of Global Research Networking

Legend:
- GÉANT Coverage
- ALICE2-RedCLARA Network
- EUMEDCONNECT3 Network
- TEIN3 Network
- HP-SEE Project
- AfricaConnect - UbuntuNet Alliance
- CAREN Network
- SILK-Afghanistan
- SARInet Network

Dark Shading: Connected to regional network
Light Shading: Eligible to connect

Bandwidth legend:
- 3 x 10 Gbps
- 2 x 10 Gbps
- 10 Gbps
- 5 Gbps
- 2.5 Gbps
- 1.4 Gbps
- 1.2 Gbps
- 1 Gbps
- 622 Mbps
- 155 Mbps
- 34–45 Mbps

Network labels: GÉANT www.geant.net, canarie, INTERNET2, ESnet, ACE AMERICA CONNECTS TO EUROPE + GÉANT, C@ribNET, RedCLARA +Red +Ciencia, EUMED connect 3, WACREN, UbuntuNet Alliance, HP-SEE, CAREN, ORIENT plus, TransPAC, TEIN3

GÉANT and sister networks enabling user collaboration across the globe

May 2012

DANTE www.dante.net   GÉANT ★ www.geant.net

European Commission
Information Society
and Media

NRENs/GEANT and AAI

- NRENs and GÉANT are evolving into more than providing excellent network connectivity – NRENs and GÉANT offer services as well

- In order to be able to offer services on a large scale NRENs need an identity infrastructure.
  19 GÉANT partners have an identity federation today.

- Why do we have id-federations at all?

- AAI is the underlying infrastructure for most services!

NRENs/GEANT and AAI

- A success story, based on AAI:
  eduroam – "open your laptop and be online"

NRENs/GEANT and AAI

- What do the we need to be able to create future success stories?

- **We need:**
- Interfederation!
- Contracts between many partners doesn't scale!
- Legal issues, data protection both within and outside of EU!
- nonWebSSO

- The technology is in place to solve this today!

NRENs/GEANT and AAI

- What are our challenges?

- The common denominator is the identity of the researcher/student.

- This id is "owned" by the univ – "the last mile"

- How do we create an environment where the univ "offer" identities to large pan European science projects?

- We are different from Google!
  5 big ones (Google/Microsoft/Twitter/LinkedIn/Facebook) versus 8000 inst in EU?? We need low entrance barriers!

- Questions and comments!