# Sustaining R&E networks – lessons from around the world

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13 December 2012

e-AGE 2012 Dubai

# Europe:GEANT

"Without GÉANT a significant bulk of pan-European research cooperation would simply not function. GÉANT is a critical infrastructure for many projects*."

* Source: European Commission (2010): The Role of e-Infrastructures in the Creation of Global Virtual Research Communities. Final Study Report.

# Critical European Infrastructure

- European regional R&E network since 1993
- Critical mass has been achieved, connecting:
  - 40 countries
  - 4,000 universities and institutes of further education
  - 1,600 research institutes
  - 2,500 'other' institutions including libraries, government departments, hospitals and museums are connected
  - 20,000 schools
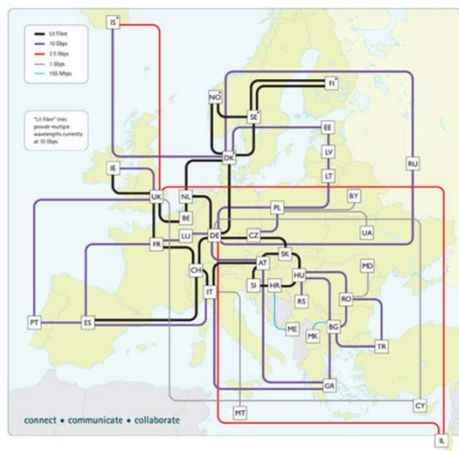
# A few success factors for sustainability

- Funded by national governments of NREN partners and the European Commission
- Single regional network providing scale economies
- Pan-European governance by the NREN partners
- Single implementing organisation (DANTE)
- Focus on meeting user needs (including emerging ones)
- Vision, commitment (and a little luck)

# Global R&E connectivity



GÉANT and sister networks enabling user collaboration across the globe

May 2012
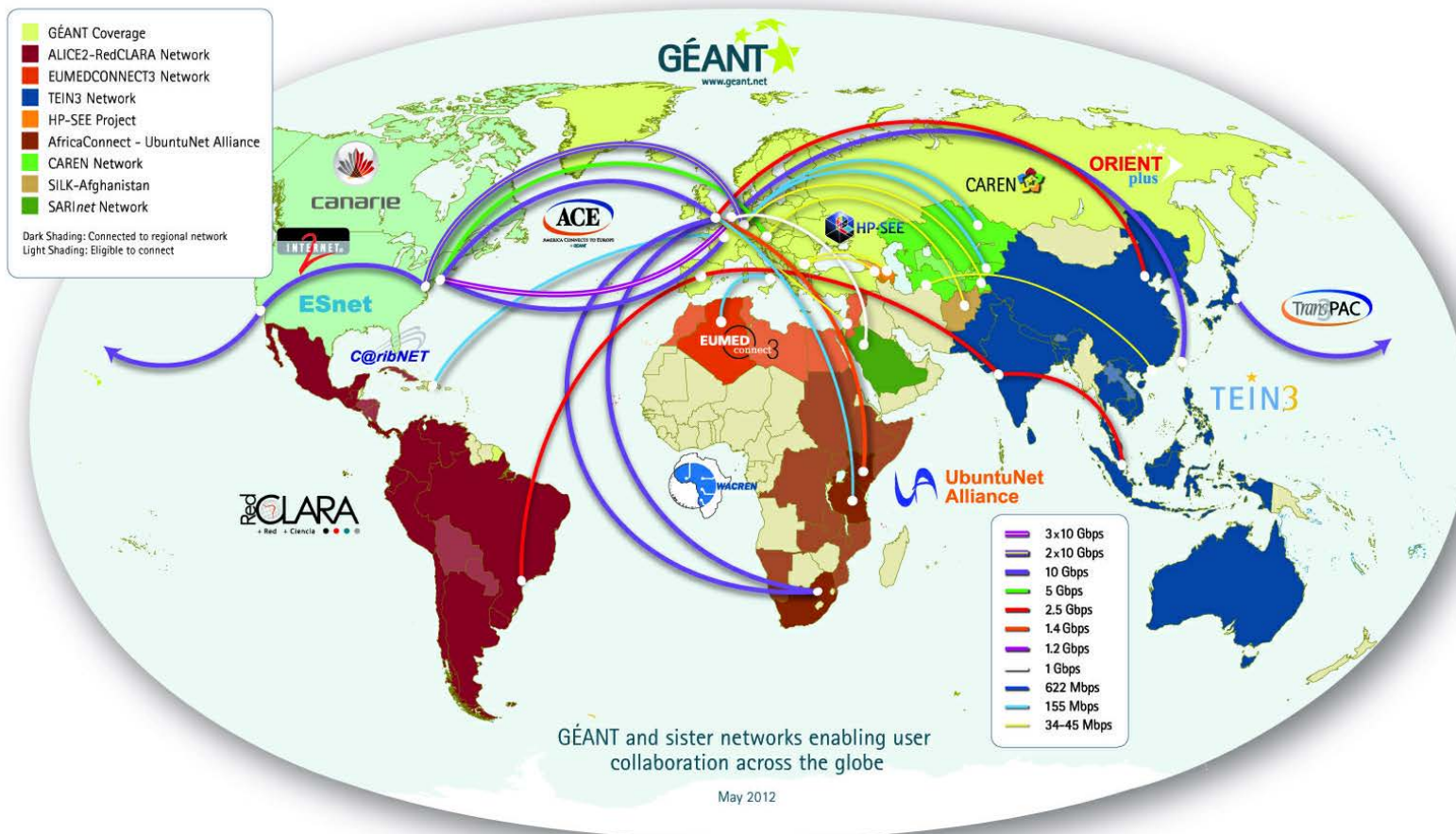
# Central Asia: CAREN

- DANTE-led project for Central Asia Research and Education Network

- Regional network since 2010

    - Connecting Kazakhstan, Kyrgyzstan, Turkmenistan and Tajikistan at 34 and 155 Mbps speeds

    - Half a million users at over 500 institutions

    - 80% (€5m) of its €6.25m budget from the EC. Second phase foreseen for 2014 – 2020

    - Supports region relevant applications:

        - Seismology, e-learning

    - History of co-operation between the

NRENs since 2002

# Asia-Pacific:
# TEIN project



TEIN3 Backbone Topology June 2010
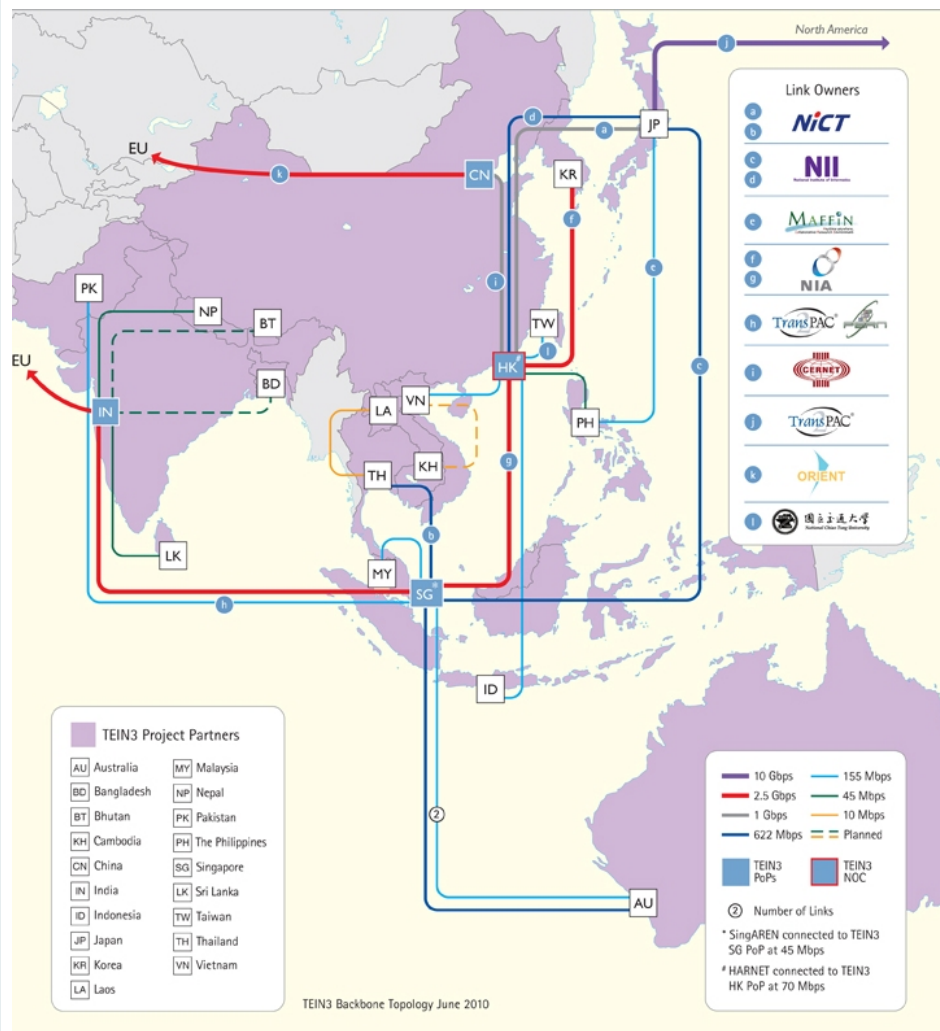
- Pan-Asian regional network since 2006
- 18 Asia Pacific countries connected
- 50M+ connected users
- Managed by DANTE from outset to 2012
- New Phase TEIN4 2012 – 2016
  - Managed by TEIN* Cooperation Center (Not for profit supported by Korean government)
  - Governance model includes NREN partners
  - Supported by DANTE
  - 3rd tranche of EC funding

# Sub-Saharan Africa: AfricaConnect

- 4-year project divided in Planning/Procurement Phase and Operational Phase started May 2011
- Total Budget of 15 M Euro (80% EC, 20% partners)
- Partners:
  - UbuntuNet Alliance
  - UbuntuNet Alliance member NRENs
  - WACREN and Association of African Universities
  - DFN, GARR, FCCN, HEANET, JANET, SURFnet
  - DANTE as the Coordinating Partner
- Strong commitment and competence of Ubuntunet and other partners
- Second phase being prepared

Members NRENs
Communication established and NRENs in Construction

# Latin America: ALICE Creates CLARA

- Regional Network in South America

- ALICE (Latin America Interconnected with Europe)                                  B:

  - EC-funded project coordinated by DANTE

    - 19 Latin American partners

    - 4 European NREN partners

  - Established CLARA, the Latin American R&E Networking Organisation

  - Created the Latin American RedCLARA network

    - Established interconnection with Europe

    - 12 LA nations now connected

  - Project management for ALICE2 (2008-2012) handed over to CLARA, which is now self governing

  - DANTE remains a Project Partner.

# Users are the raison d'etre for R&E networking

# MED/GCC participation in FP7 projects

247 = ~ 1.6%

15567
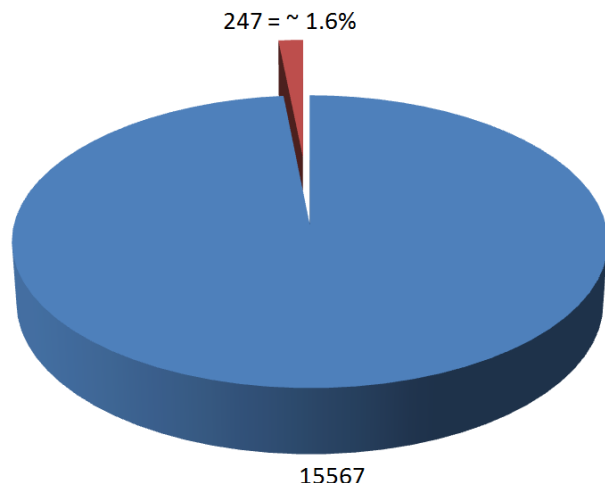
■ FP7 projects total
■ Projects with MED/GCC participation

Source: Cordis database
Projects still in excecution phase as of
15/09/12

## Distribution of FP7 projects across MED and GCC countries

| Country | Projects |
|---|---|
| Algeria | 19 |
| Egypt | 69 |
| Jordan | 19 |
| Lebanon | 18 |
| Libya | 1 |
| Morocco | 55 |
| Palestine | 13 |
| Syria | 10 |
| Tunisia | 56 |
| Bahrain | 1 |
| Kuwait | 1 |
| Oman | 2 |
| Qatar | 1 |
| Saudi Arabia | 2 |
| UAE | 3 |

Source: Cordis
database as of

EUMED connect 3

The Research and Education
Network for the Mediterranean

DANTE
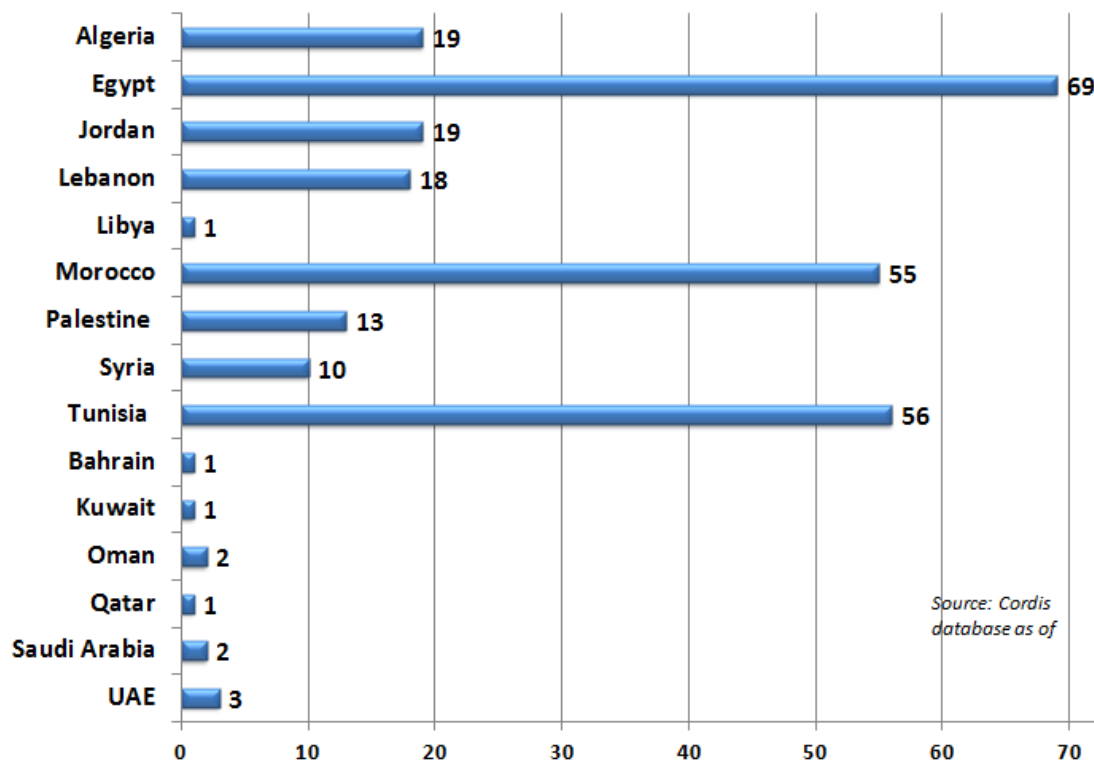
# MED participation in TEMPUS projects



MED participation in TEMPUS projects

| Country | Value |
|---|---|
| Algeria | 27 |
| Egypt | 62 |
| Jordan | 26 |
| Libya | 6 |
| Lebanon | 30 |
| Morocco | 67 |
| Palestine | 30 |
| Syria | 4 |
| Tunisia | 36 |
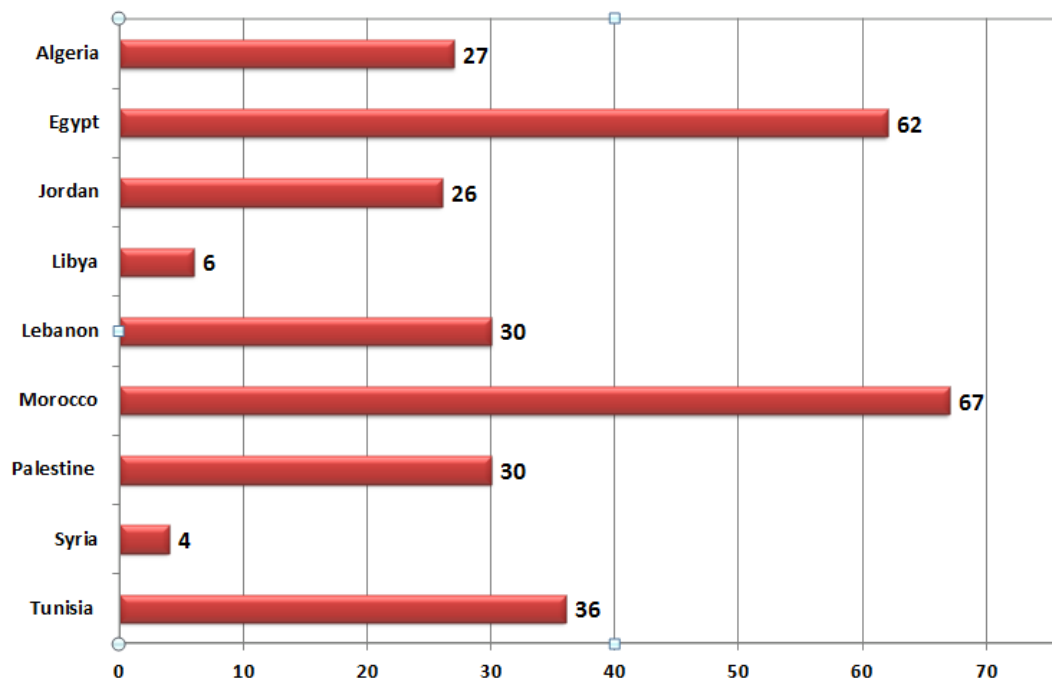
TEMPUS IV Applications submitted by partner region

- Western Balkans, 123, 16%
- Central Asia, 106, 13%
- MED countries, 177, 23%
- Eastern Europe, 374, 48%

Source: TEMPUS website
TEMPUS IV - Fifth call results
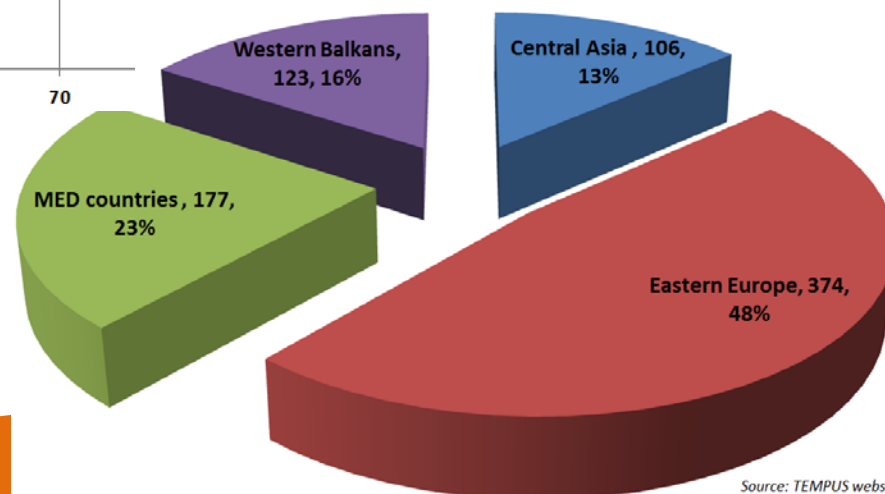
# EUMEDCONNECT3

- Phase started 1 Sept 2011 with 36 – 42 month term

- Up to 3.3M Euro EC funding, up to 36% EC funding contribution

- Co-ordinating Partner: DANTE

- Beneficiary Countries: Algeria, Egypt, Jordan, Lebanon, Libya, Morocco, Palestine, Syria, Tunisia

- Other Arab countries welcome to join at own cost

- ASREN is key for long term sustainability, needs support of all regional NRENs to be successful.

- [www.eumedconnect3.net/](www.eumedconnect3.net/)

# Thanks!
# Q/A?

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