

Achievements and Plans of the TEIN Programme

David West, DANTE
KOREN Workshop 2009 Spring and TEIN3 Launching
Ceremony
21/22 May 2009





TEIN2 Network 2004 – 2008 (network from 2006)



10 circuits contracted by DANTE

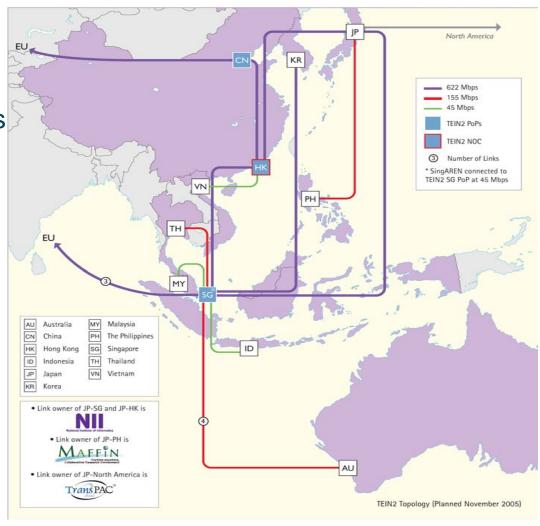
3 circuits provided by TEIN2 partners

Pops in Hong Kong, Singapore, Beijing + Tokyo (via APAN-JP)

TEIN2 NOC in Hong Kong

Coordinated by DANTE

10M Euro Co-funding from the European Commission







Was TEIN2 Successful?



"We regard TEIN2 as a huge success: it has connected Asian and European research and education communities for the first time, thereby promoting scientific co-operation among ASEM countries"

Geoffrey Barrett, ASEM Coordinator, European Commission June 2006





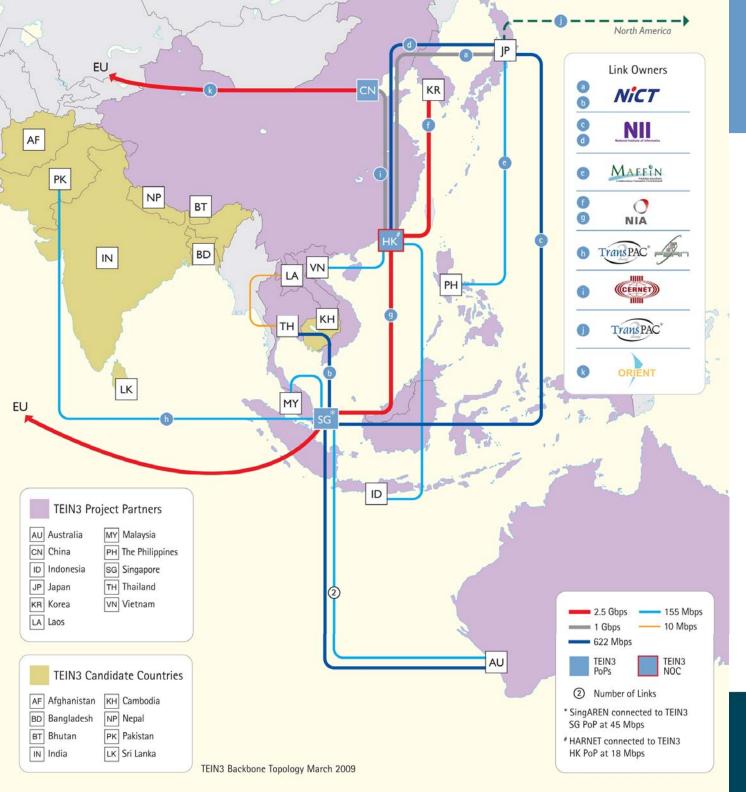
Why did the EC say that?



- 30M+ users, 4000 sites, 10 partner countries
- Applications in tele-medicine, radio astronomy, typhoon forecasting, e-learning, cultural heritage etc
- 200 technical trainings for beneficiaries, high satisfaction ratings
- National networks developed fast in all beneficiary countries
- All partners demonstrated great commitment to the TEIN2 programme
- ASEM governments also recognise the success







TEÎN3

Project term 2008-2011

6 circuits contracted by DANTE, 9 circuits by TEIN3 partners

Migration to TEIN3 completed

11.4M Euro co-funding from the European Commission

TEIN3 topology – March 2009

The Research and Education
Network for Asia-Pacific

TEIN3 Network Highlights

TEIN3

- New Singapore PoP at Global Switch
- New Juniper M120 routers in Singapore and Hong Kong
- Singapore EU upgraded to 2.5 Gbps
- Singapore HK upgraded to 2.5 Gbps,
- Beijing EU 2.5 Gbps provided by CERNET
- Transit to North America via TransPAC2 continues







TEIN3 Partner Access Capacities



- Indonesia 45 → 155 Mbps
- Laos 10 Mbps (via ThaiREN, being provided)
- Malaysia 45 → 155 Mbps
- Philippines 10 Mbps (via MAFFIN)
- Thailand 155 Mbps (migrated to NICT Singapore/Bangkok link)
- Vietnam 45 155 Mbps
- Open Stration Open Strategie Ope
- China 2.5Gbps
- Hong Kong 18 Mbps
- Japan NII 2 x 622Mbps,
- Japan NICT 2 x 1Gbps,
- Korea 622 Mbps → 2.5 Gbps
- Singapore 45 Mbps





TEIN3 Core network donations



- CERNET BJ EU 2.5 Gbps, BJ HK 1Gbps
- MAFFIN: Tokyo Manila 155 Mbps
- NIA: SG HK 2.5 Gbps
- NICT: Tokyo HK 1 Gbps, Tokyo Singapore 1 Gbps, Singapore Bangkok 622 Mbps
- NII: Tokyo- SG 622 Mbps, Tokyo HK 622 Mbps
- ThaiREN Transit for Laos
- TransPAC2: Trans-Pacific transit





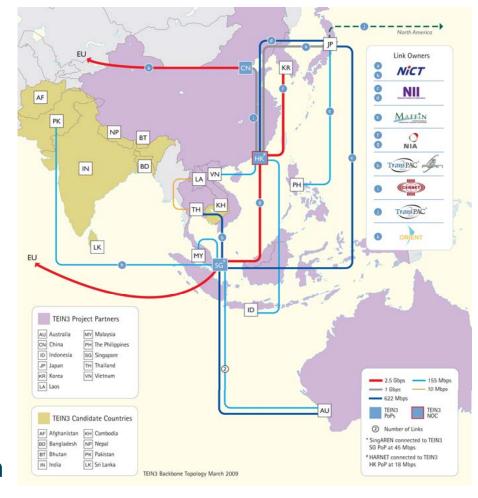
TEIN3 South Asia Extension



Tendering underway:

- Bangla Desh BdREN
- Bhutan RUB
- India ERNET
- Nepal NREN
- Pakistan PERN
- Sri Lanka LEARN

Due to connect to TEIN3 from Q4 2009







Emerging TEIN3 applications



- EuAsiaGrid
- THEOS Thai Earth
 Observation Satellite
- GEOSS, Singapore Earth
 Observatory
- Crop Research/IRRI
- Firewatch Indonesia

- Bio-informatics initiatives
- Federated IP-USN Testbed on TEIN3
- CanalAVIST
- Linking country nodes SAARC
 Disaster Management System
- South Asia Tele-health roadmap

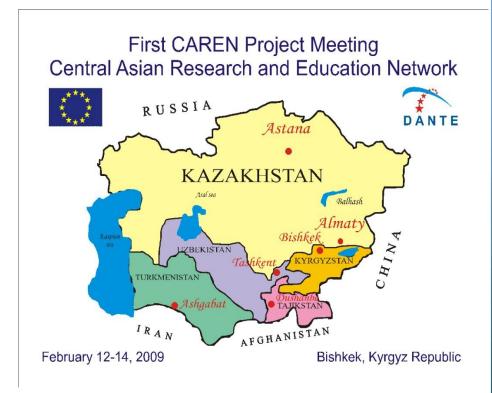




Central Asia Research and Education Network (CAREN)



- New EC funded regional R&E project for Central Asia
- 5 Beneficiary countries:
- Duration 1 Jan 2009 31 Dec 2011
- Managing Partner: DANTE







And after 2011.... TEIN4?



Needed:

- Users continuing to produce innovative international collaborations
- Asian partners increase their funding shares
- Asian partners take ownership of the programme

The European view:

- Europe wants to continue to work with the Asian R&E community and a TEIN4 programme
- Further European funding support should not be ruled out but TEIN4 needs the Asian partners/users commitment







Thanks for your attention, and congratulations on Korea's TEIN3 launch programme!

David West david.west@dante.net www.tein3.net



