Achievements and Plans of the TEIN Programme

David West, DANTE

Xing Li, TEIN NOC

Thailand National Launch event

15 June 2009

TEIN2 Network 2004 – 2008 (network from 2006)

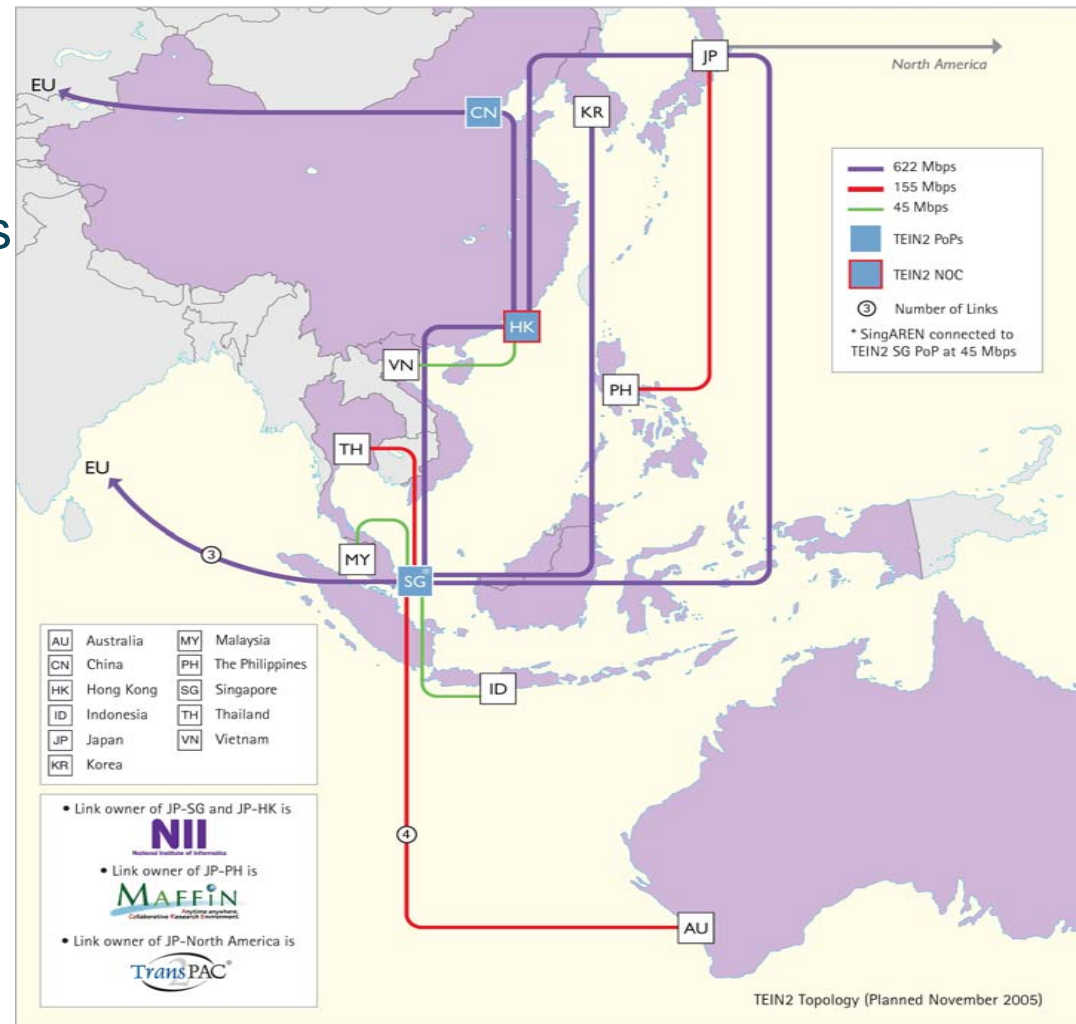10 circuits contracted by DANTE

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

TEIN2 Topology (Planned November 2005)

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

DANTE

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

TEIN3

DANTE

TEIN3 Backbone Topology March 2009
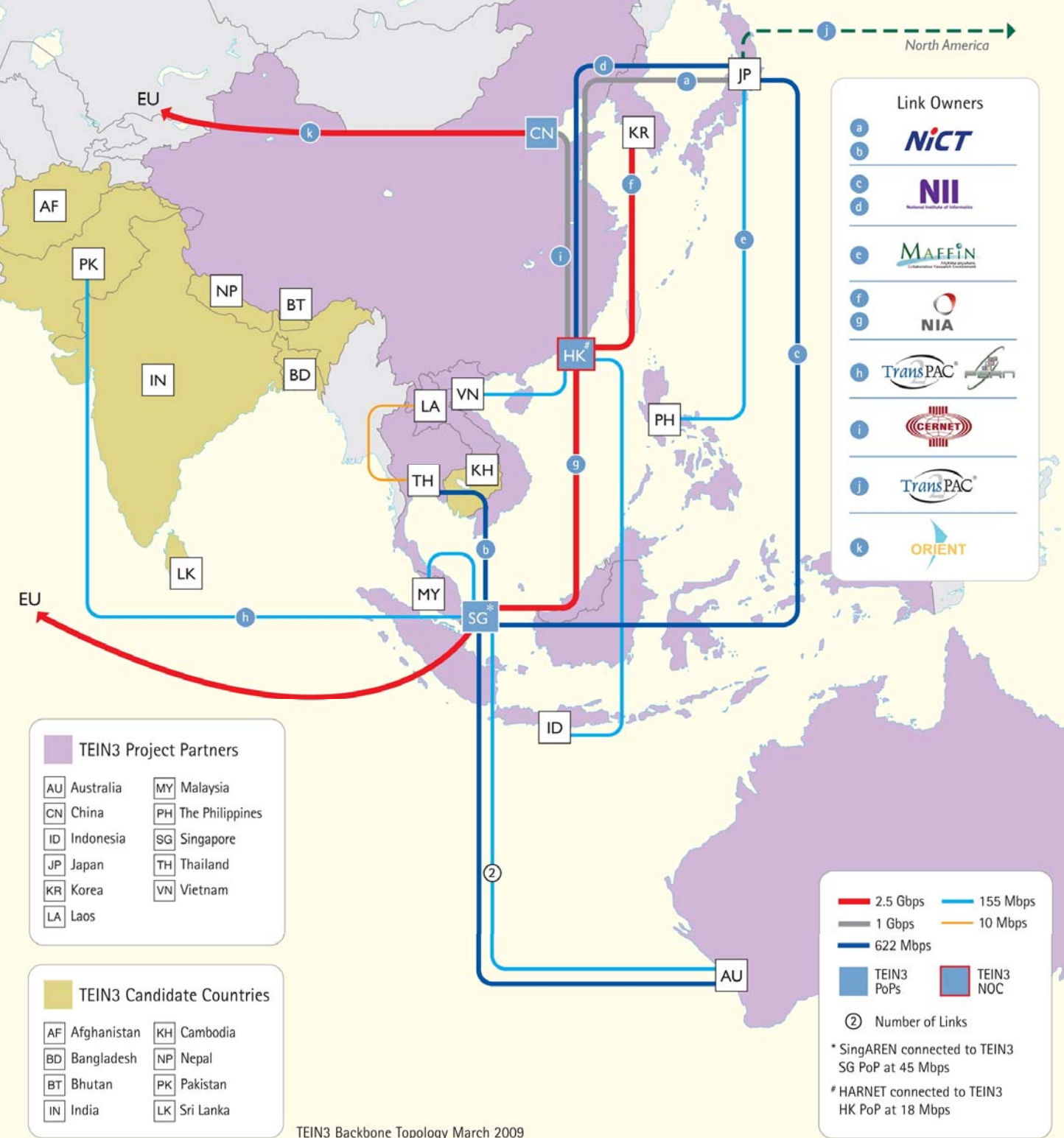
TEIN3

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

- 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

The Research and Education Network for Asia-Pacific

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

- Australia – 622Mbps ➡ 933 Mbps
- 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
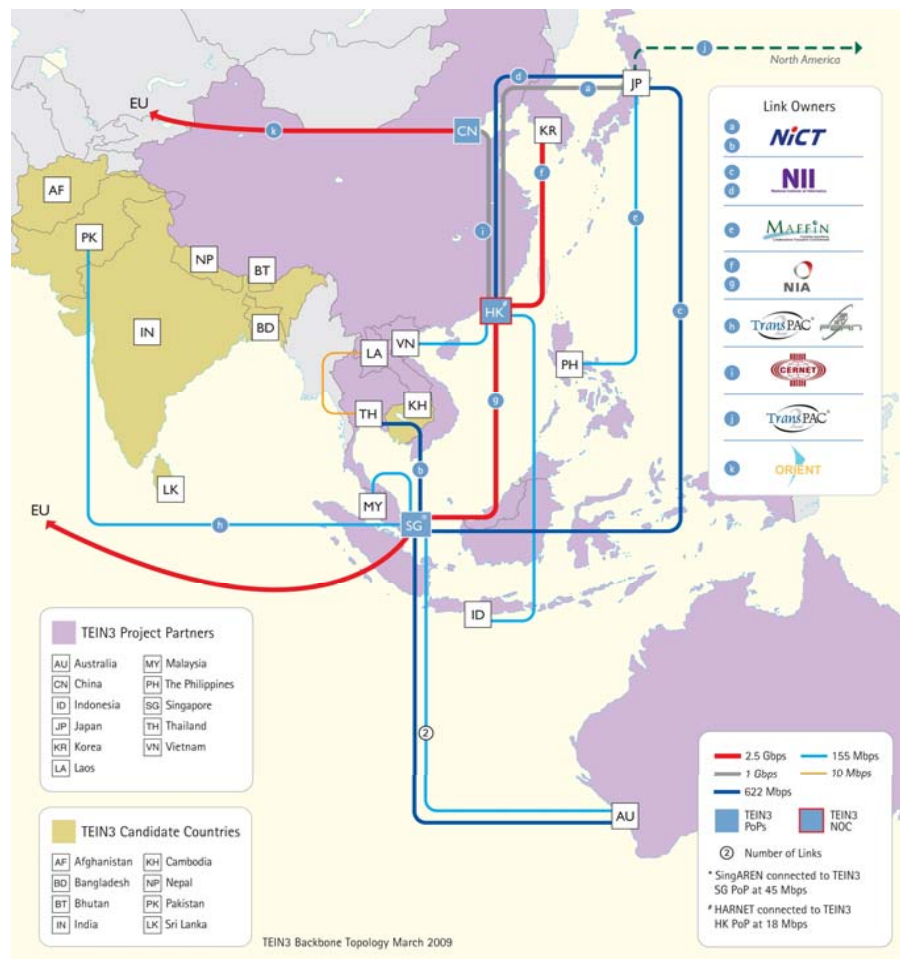
- TransPAC2: Trans-Pacific transit

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)

TEIN3

- New EC funded regional R&E project for Central Asia

- 5 Beneficiary countries:

- Duration 1 Jan 2009 – 31 Dec 2011

- Managing Partner: DANTE

First CAREN Project Meeting
Central Asian Research and Education Network

February 12-14, 2009

Bishkek, Kyrgyz Republic

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

DANTE

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

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