



Connect. Communicate. Collaborate

TEIN2: A Regional Research Network in Asia

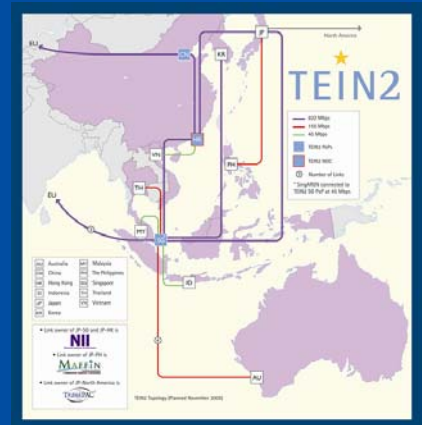
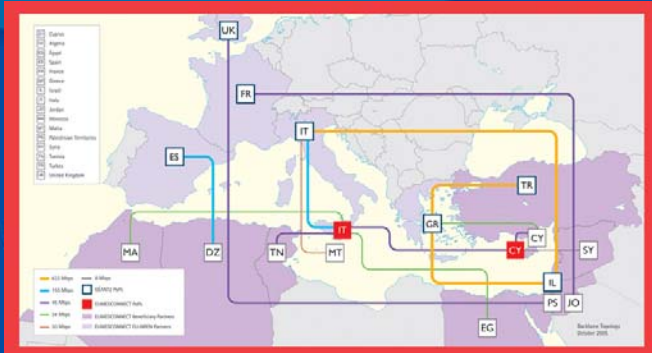
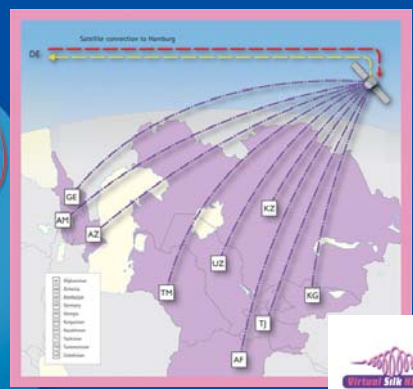
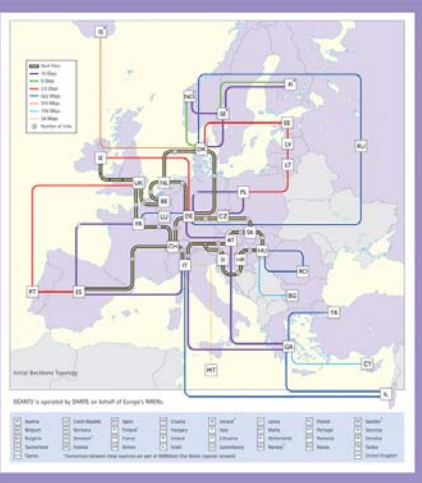
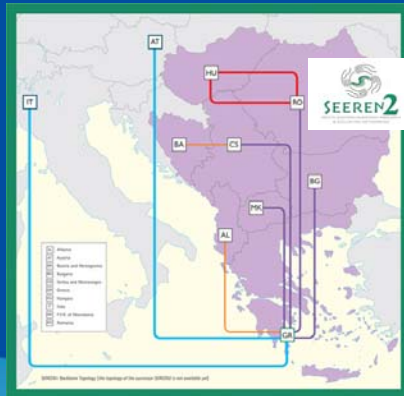
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TF-NGN-20

Cambridge



The Global Reach of European Research Networking



Design and production coordinated by DANTE on behalf of GEANT2
www.dante.net www.geant2.net



TEIN2 Project History

- Oct 2000 Trans-Eurasia Information Network endorsed by ASEM 3, Seoul
- Nov 2001 Seoul – Paris link starts (“TEIN1”)
- Mar 2003 EC studies for TEIN 2nd phase start (“TEIN2”)
- Jan 2004 TEIN2 Information Day held, Brussels
- May 2004 EC/DANTE TEIN2 contract starts
- Oct 2004 TEIN2 planning studies completed
- Dec 2004 TEIN2 network procurement begins



TEIN2 Partners

- Beneficiaries: China (CERNET), Indonesia (ITB), Malaysia (MDC), Philippines (ASTI), Thailand (ThaiREN), Vietnam (MOST)
- Non Beneficiaries: Japan (APAN-JP, MAFFIN, NICT, NII), Korea (KISDI), Singapore (SingAREN)
- Third Parties: AARNet, Academia Sinica
- European: France (RENATER), Netherlands (SURFnet), UK (UKERNA)
- Contracting Partner: DANTE



Modalities



- European Commission funding up to 10 M Euro/80% funding for beneficiaries, others participate at own cost
- EC has contracted DANTE to manage TEIN2 up to Dec 2007
- TEIN2 Technical Committee provides forum for project partners, met 8 times since May 2004

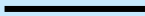



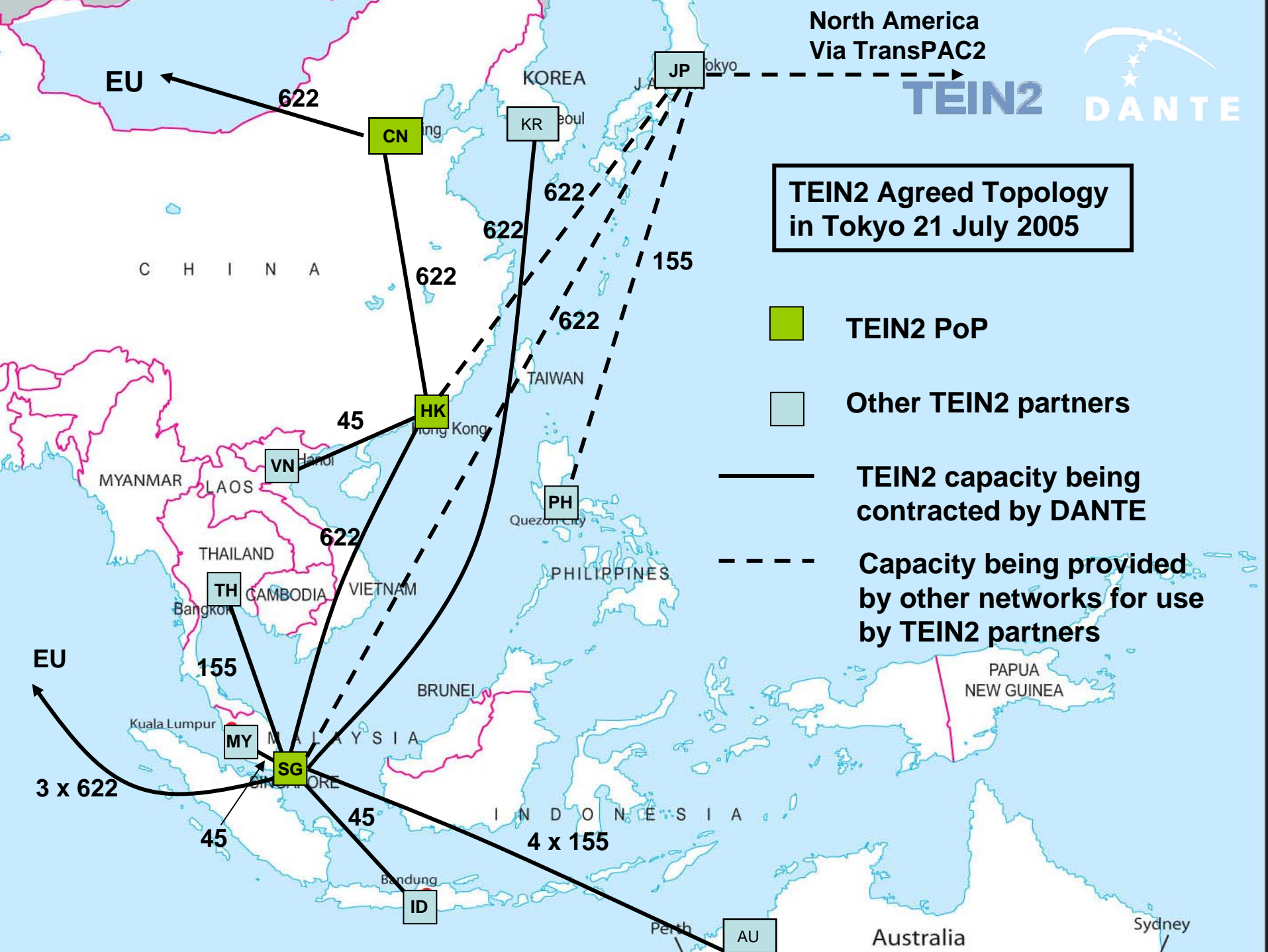
North America
Via TransPAC2

TEIN2

**TEIN2 Agreed Topology
in Tokyo 21 July 2005**

-  TEIN2 PoP
-  Other TEIN2 partners

-  TEIN2 capacity being contracted by DANTE
-  Capacity being provided by other networks for use by TEIN2 partners





TEIN2 PoPs Status

- Singapore
 - Kim Chuan data center
 - Operational
- Hong Kong
 - Mega I-Advantage data center
 - PoP under construction
- Beijing
 - At CERNET premises
 - PoP under construction

Generous router equipment donation from





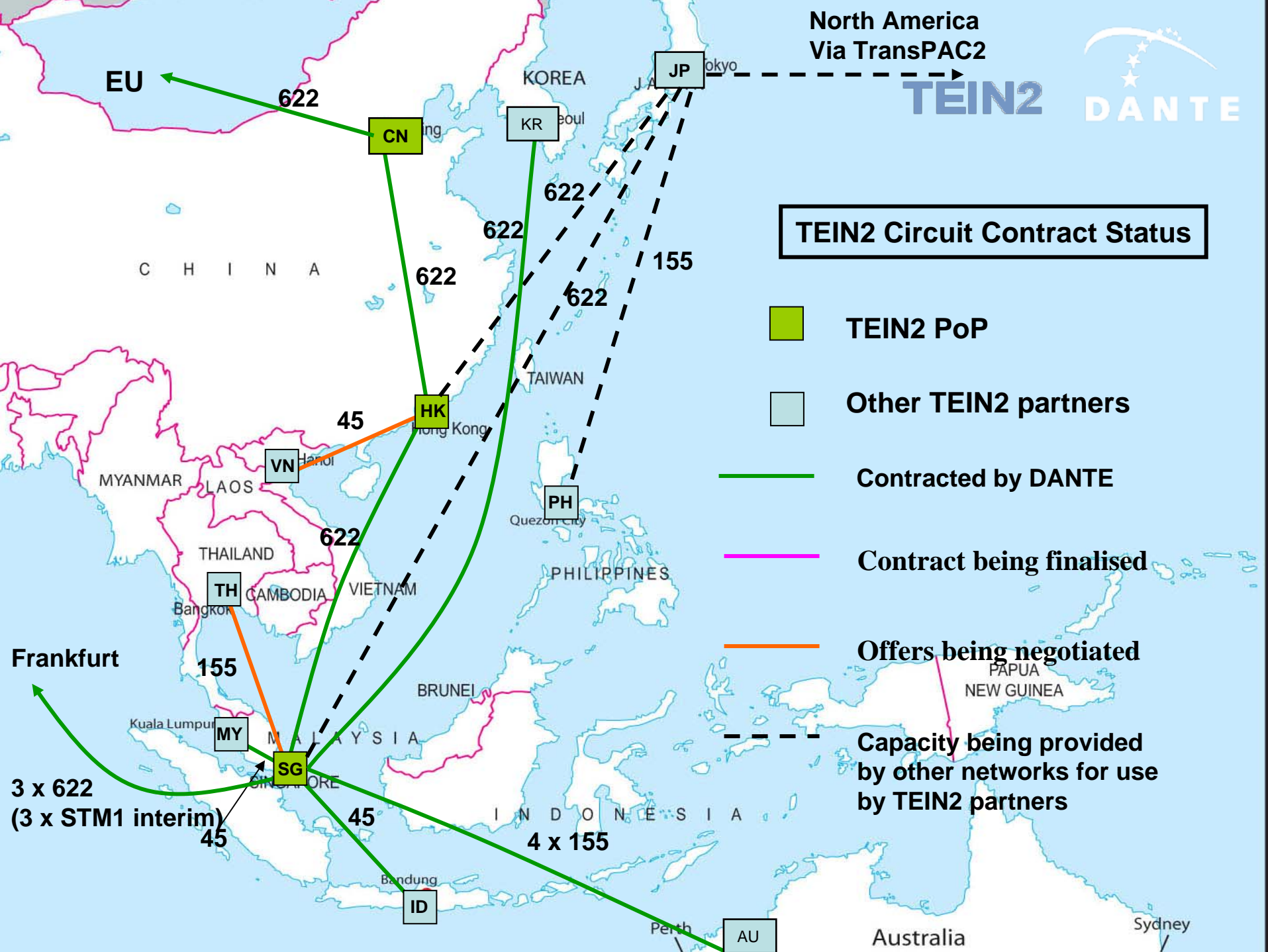
North America
Via TransPAC2

TEIN2

TEIN2 Circuit Contract Status

- TEIN2 PoP
- Other TEIN2 partners

- Contracted by DANTE
- Contract being finalised
- Offers being negotiated
- Capacity being provided by other networks for use by TEIN2 partners





North America
Via TransPAC2

TEIN2

Circuit Service Dates



TEIN2 PoP



Other TEIN2 partners



Operational



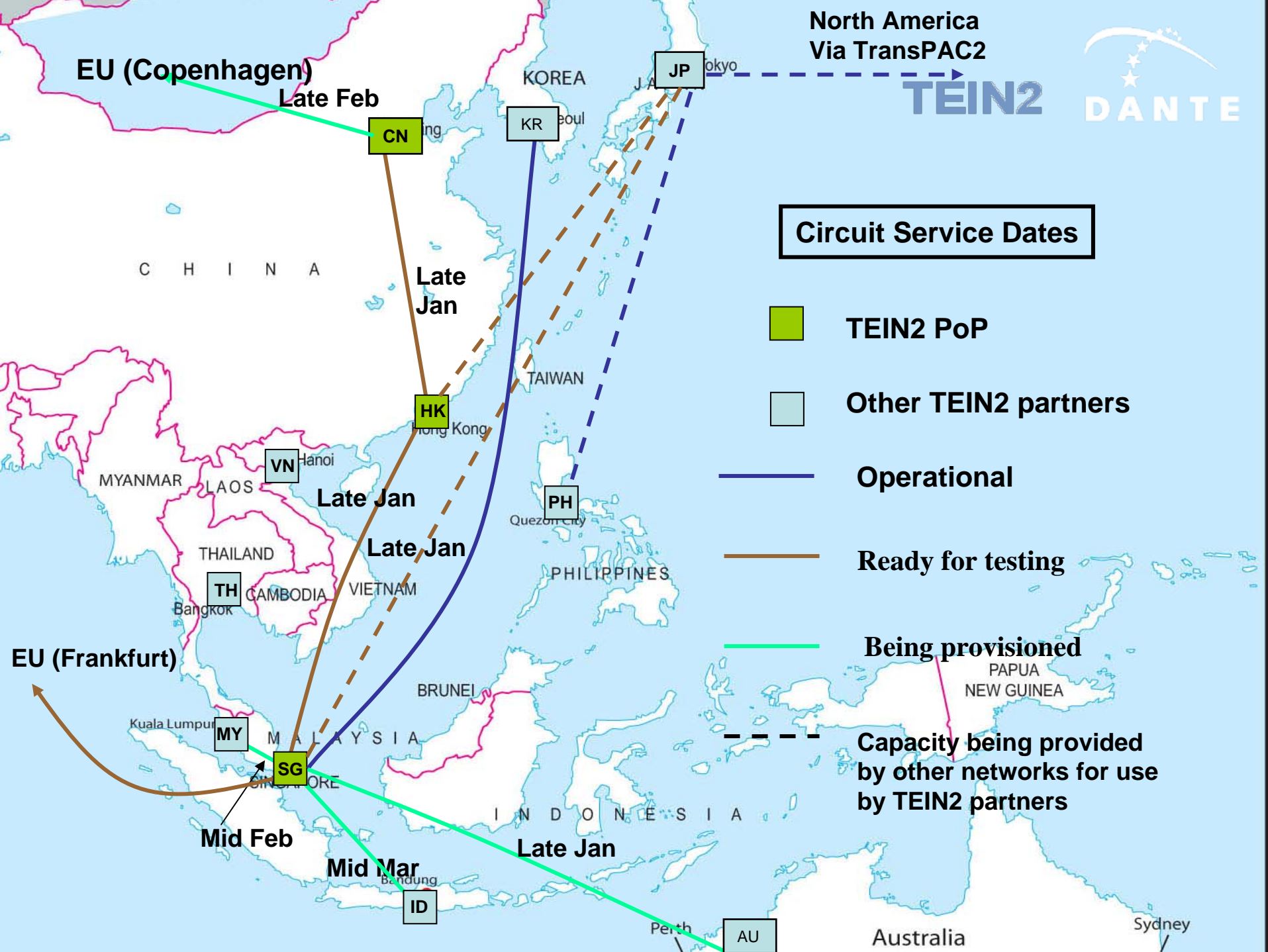
Ready for testing



Being provisioned



Capacity being provided
by other networks for use
by TEIN2 partners





TEIN2 NOC

- TEIN2 NOC service formally tendered under European procurement rules
- Contract awarded to Tsinghua University (CERNET NOC provider)
- TEIN2 NOC being constructed in Hong Kong
- Co-operative working with APAN-NOC and other partner NOCs being established



Conclusions

- The first substantial intra-Asian network is entering service
- Provides first direct regional Asia-Europe R&E links
- Offers great opportunities for collaborative research projects within Asia and Asia/Europe
- Forms the basis for long term research networking 2008 onwards