



Using TEIN2 while Planning TEIN3

TEIN-07-006

David West, DANTE

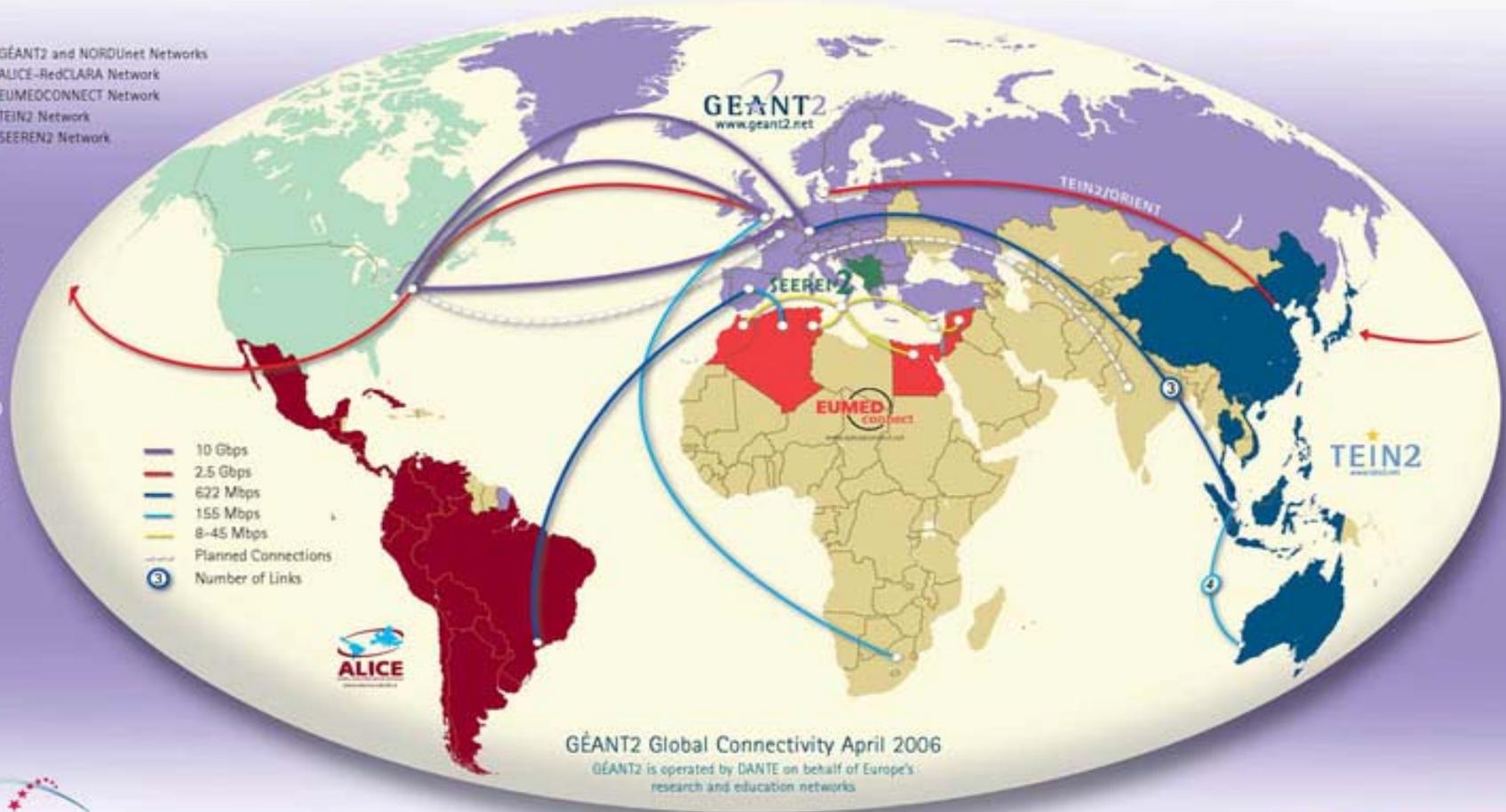
Global Collaborations,

APAN, Manila, 23 January 2007

GEANT2 At the heart of Global Research Networking

- GEANT2 and NORDUnet Networks
- ALICE-RedCLARA Network
- EUMEDCONNECT Network
- TEIN2 Network
- SEEREN2 Network

www.geant2.net



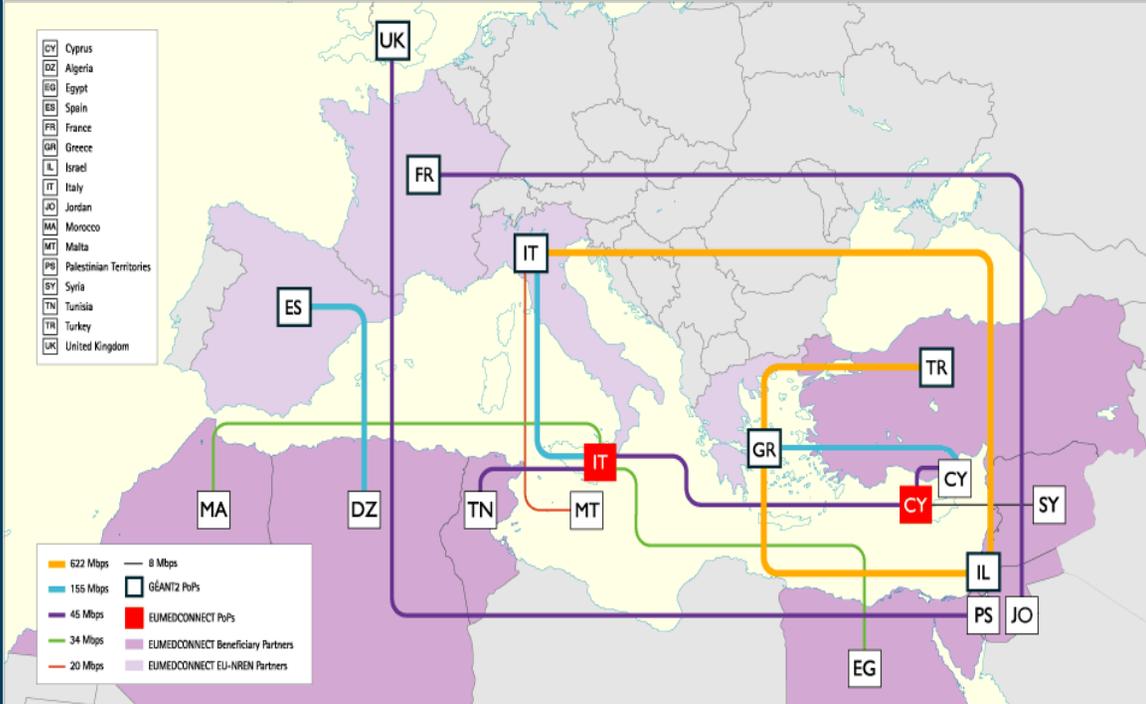
★ Connect ★ Communicate ★ Collaborate



EUMEDCONNECT



Connect. Communicate. Collaborate



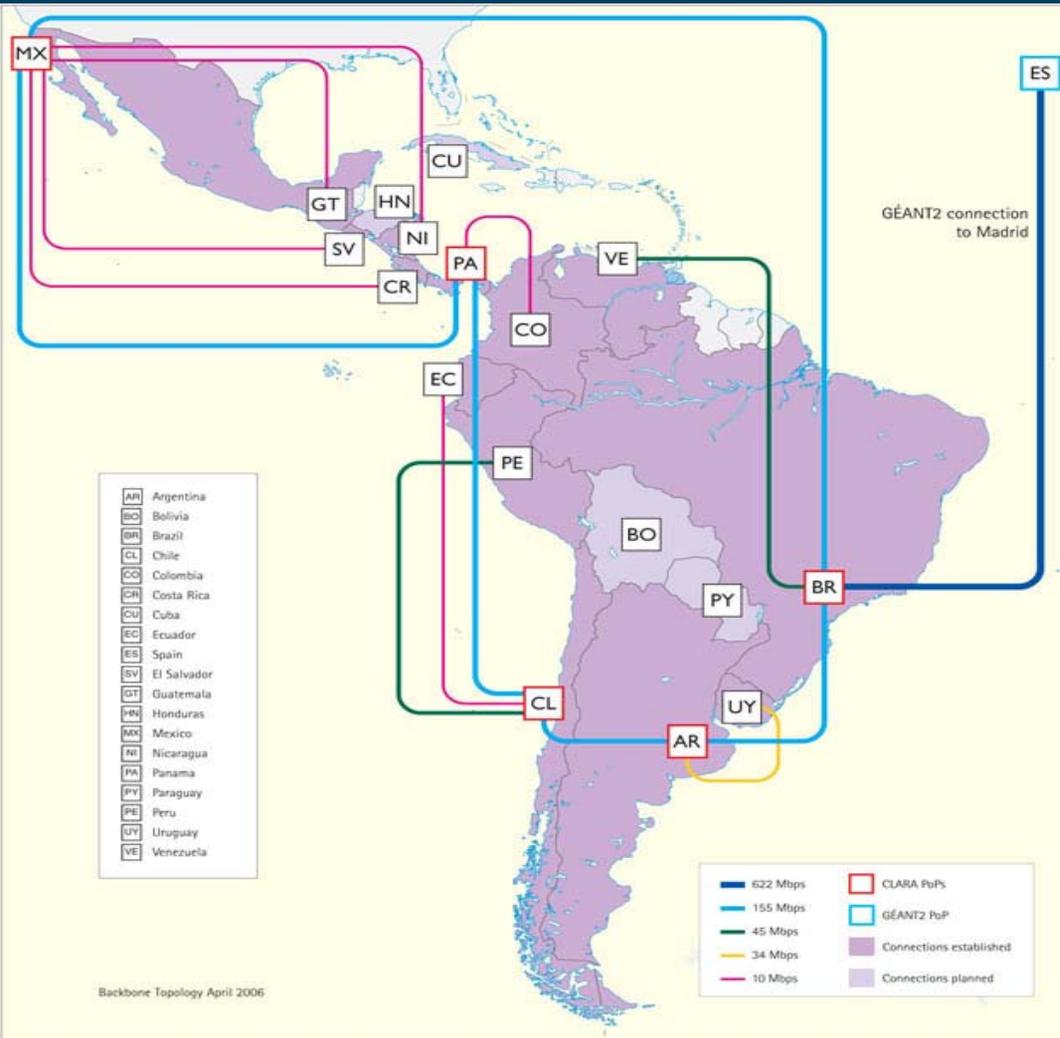
- 11 Mediterranean countries Connected
- Platform for EUMEDGRID and other EU/MED projects
- Contracted to July 2007, May be extended to Dec 2007
- EUMEDCONNECT2 being planned



ALICE/CLARA



Connect. Communicate. Collaborate



18 NRENs connected

Contracted to March 2007

12 month extension expected

CLARA taking on
Network responsibilities





International Research Networking


TEIN2
www.tein2.net




TEIN2
www.tein2.net

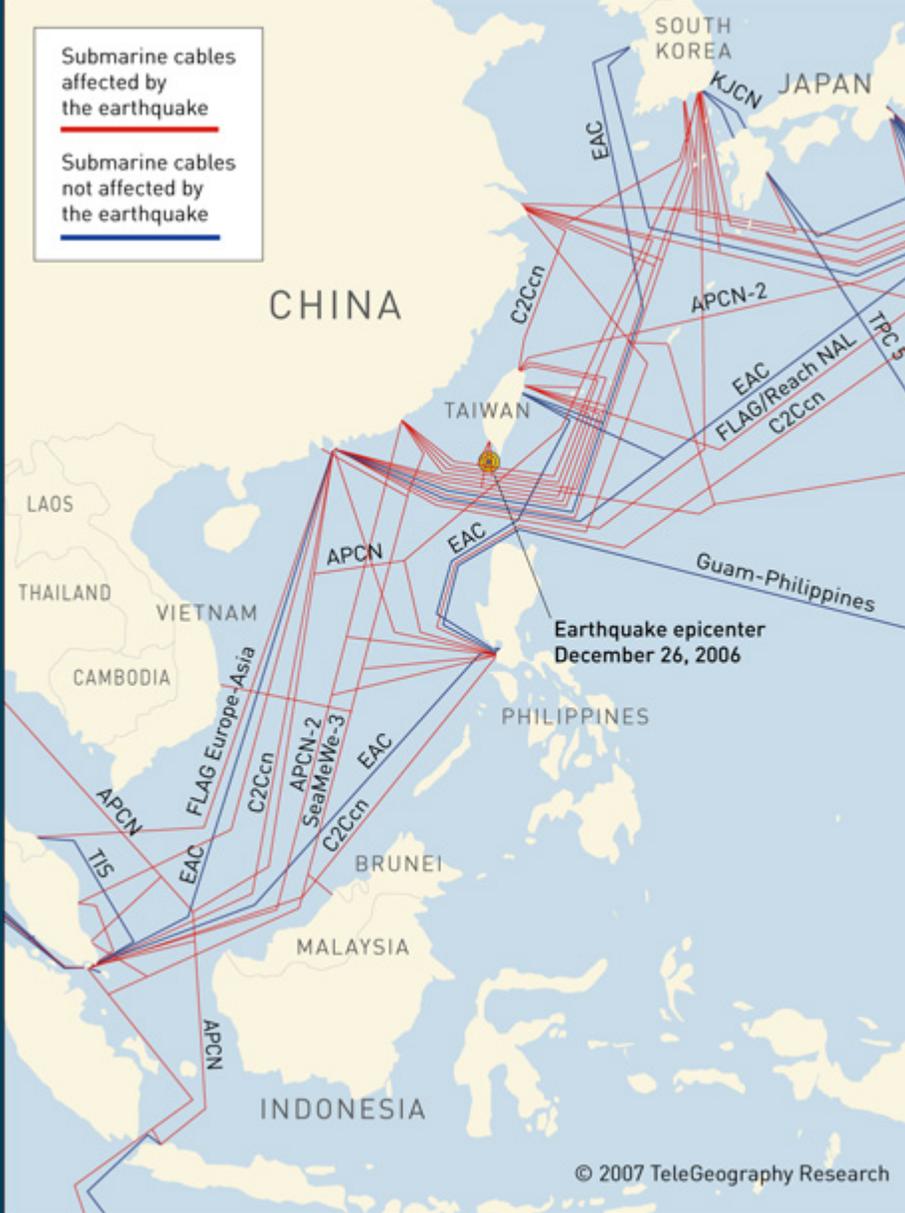

ALICE
America Latina Interconectada Con Europa

EUMED
connect


DANTE

Submarine cables affected by the earthquake

Submarine cables not affected by the earthquake



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International Research Networking

Source: Telegeography



International Research Networking

TEIN2 Partners

Connected:

Australia, **China**, **Indonesia**, **Japan**, **Korea**, **Malaysia**,
Philippines, **Singapore** **Thailand**, **Vietnam**

Connection being discussed:

Brunei, **Cambodia**, **Hong Kong**, **Lao**

Future possibilities:

India, **Mongolia**, **New Zealand**, **Pakistan**, other S Asian
countries

Key

ASEM countries

Joining ASEM

Others



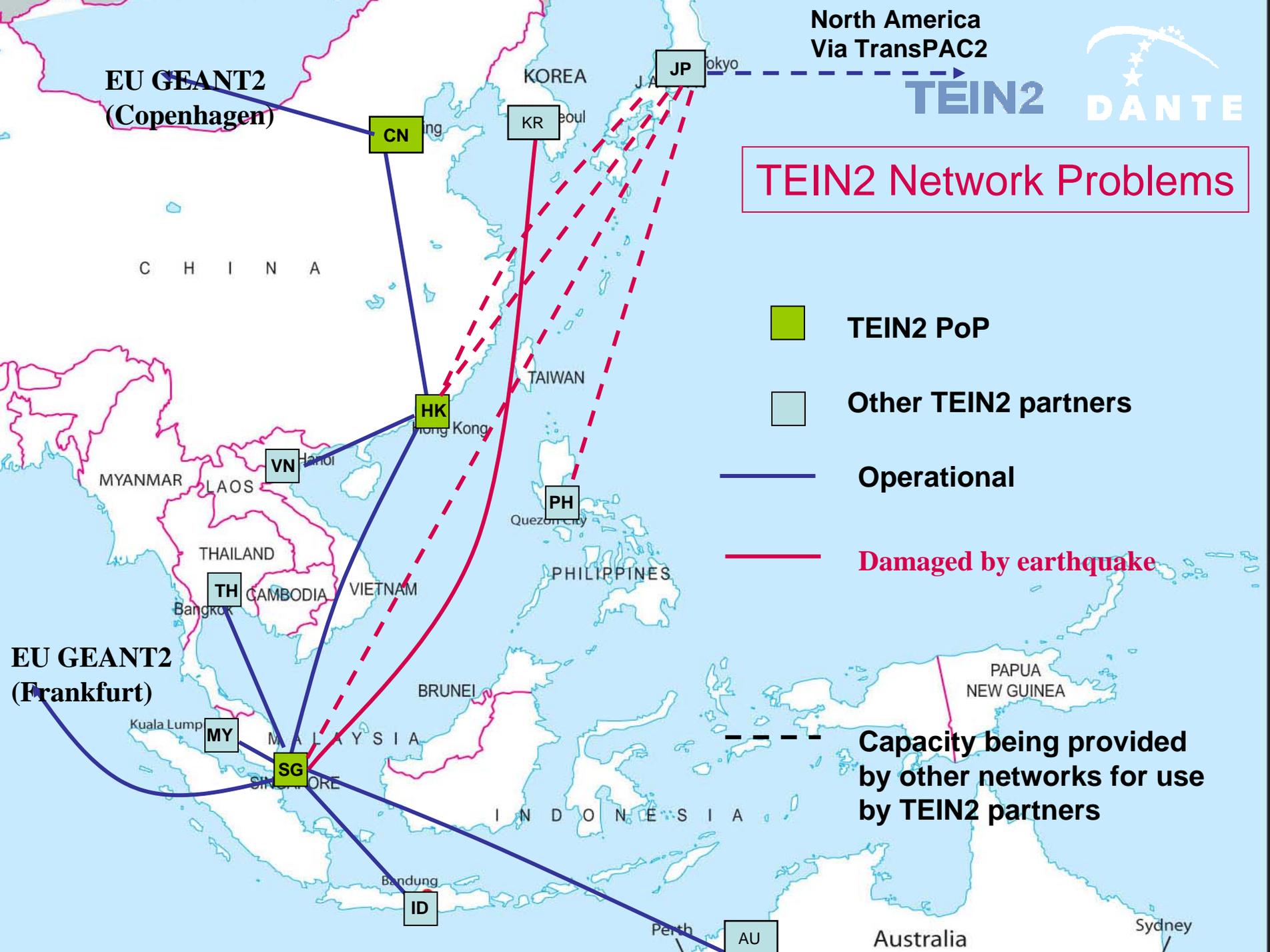


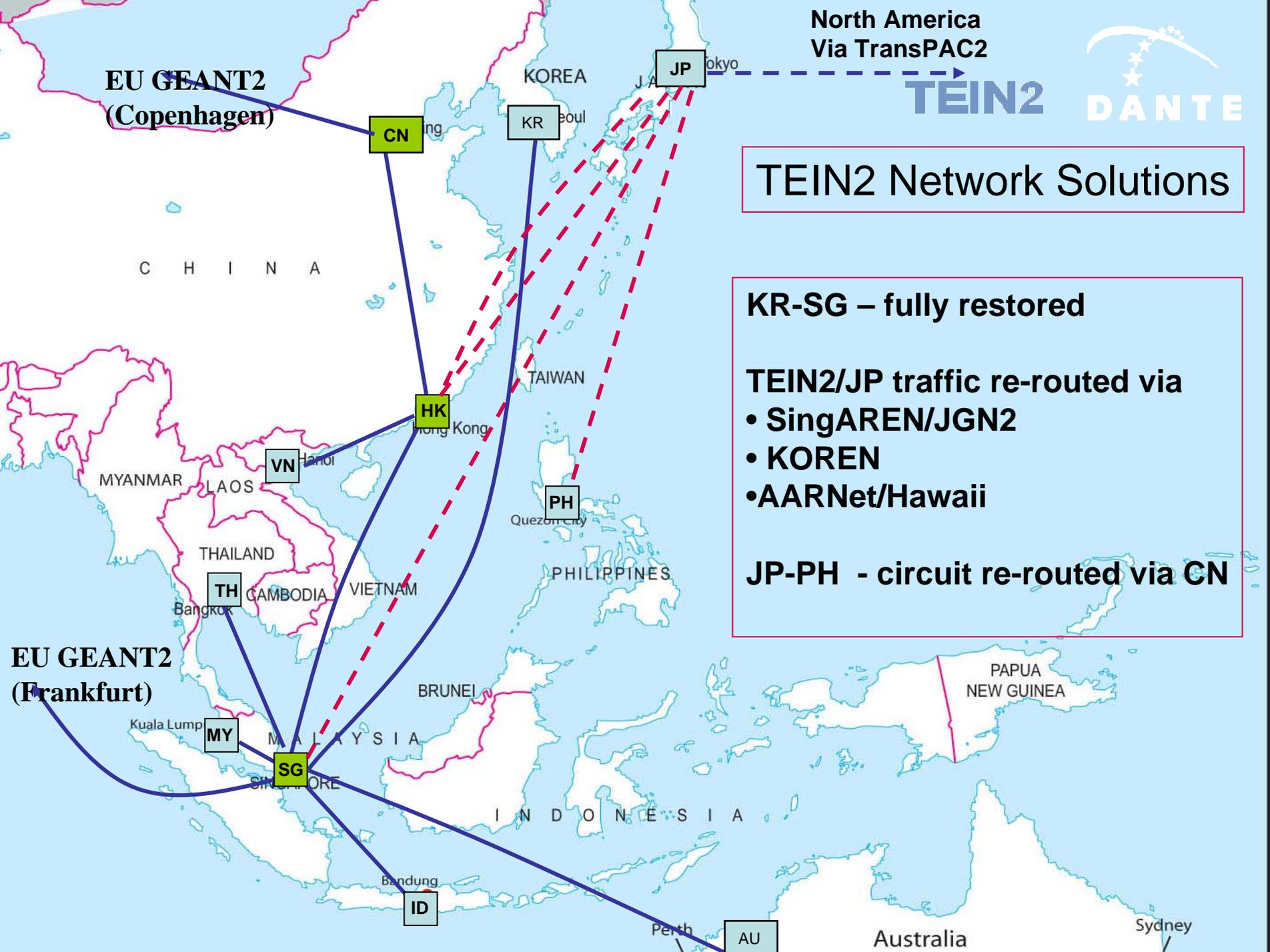
North America
Via TransPAC2

TEIN2

TEIN2 Network Problems

-  TEIN2 PoP
-  Other TEIN2 partners
-  Operational
-  Damaged by earthquake
-  Capacity being provided by other networks for use by TEIN2 partners





North America
Via TransPAC2



TEIN2

TEIN2 Network Solutions

- KR-SG – fully restored**
- TEIN2/JP traffic re-routed via**
 - SingAREN/JGN2
 - KOREN
 - AARNet/Hawaii
- JP-PH - circuit re-routed via CN**

**EU GEANT2
(Copenhagen)**

**EU GEANT2
(Frankfurt)**

C H I N A

KOREA

KR Seoul

JP Tokyo

CN Beijing

HK Hong Kong

TAIWAN

PH Quezon City

VN Hanoi

PHILIPPINES

TH Bangkok

VIETNAM

MYANMAR

LAOS

THAILAND

CAMBODIA

BRUNEL

MY MALAYSIA

MY Kuala Lumpur

INDONESIA

ID Bandung

PAPUA NEW GUINEA

Australia

AU Perth

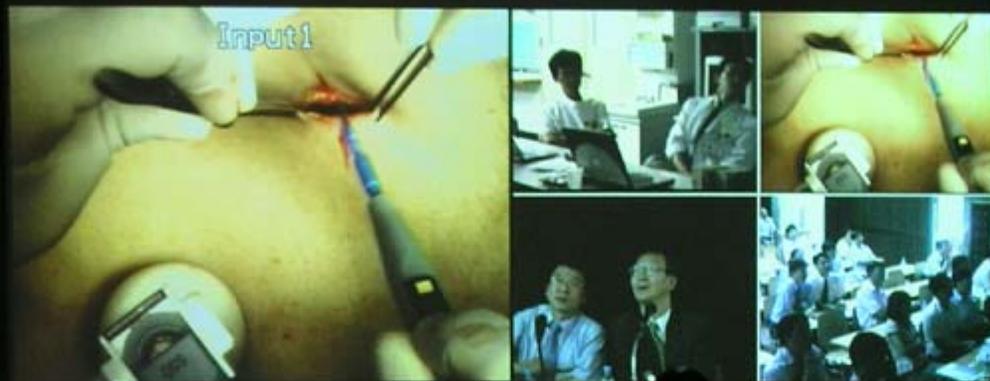
Sydney



**Thanks to all partners for great
teamwork!**

[Especially NOC folk at AARNet,
APAN-JP, U Hawaii, KOREN, MAFFIN,
NICT, NII, SingAREN, TEIN2]

Tele-medicine application



Enabling and promoting applications



International Research Networking

- Tele-medicine – well established, Manila is involving all TEIN2 partners for first time
- Earth Monitoring e.g. Disaster warning, Oceanography, Climatology. High potential areas.
- E-learning
- E-Heritage
- E-Science e.g collaborations between Europe and China (incl EU/China TEIN2 link now upgraded to 2.5 Gbps via Project ORIENT)



TEIN3 Sustainability

- EC is planning to fund TEIN3:
 - amount/period/terms to be confirmed (April 2007?)
 - *may* include funding for additional ASEM partners
- Bilateral discussions continuing with
 - TEIN2 partners (esp. non beneficiaries)
 - Other external funders
- TEIN3 being planned to follow TEIN2 seamlessly from cSept 2008:
 - Network will be re-tendered
 - Organisation transitioned to Asian ownership (close working with APAN)