



ASGC T1 report

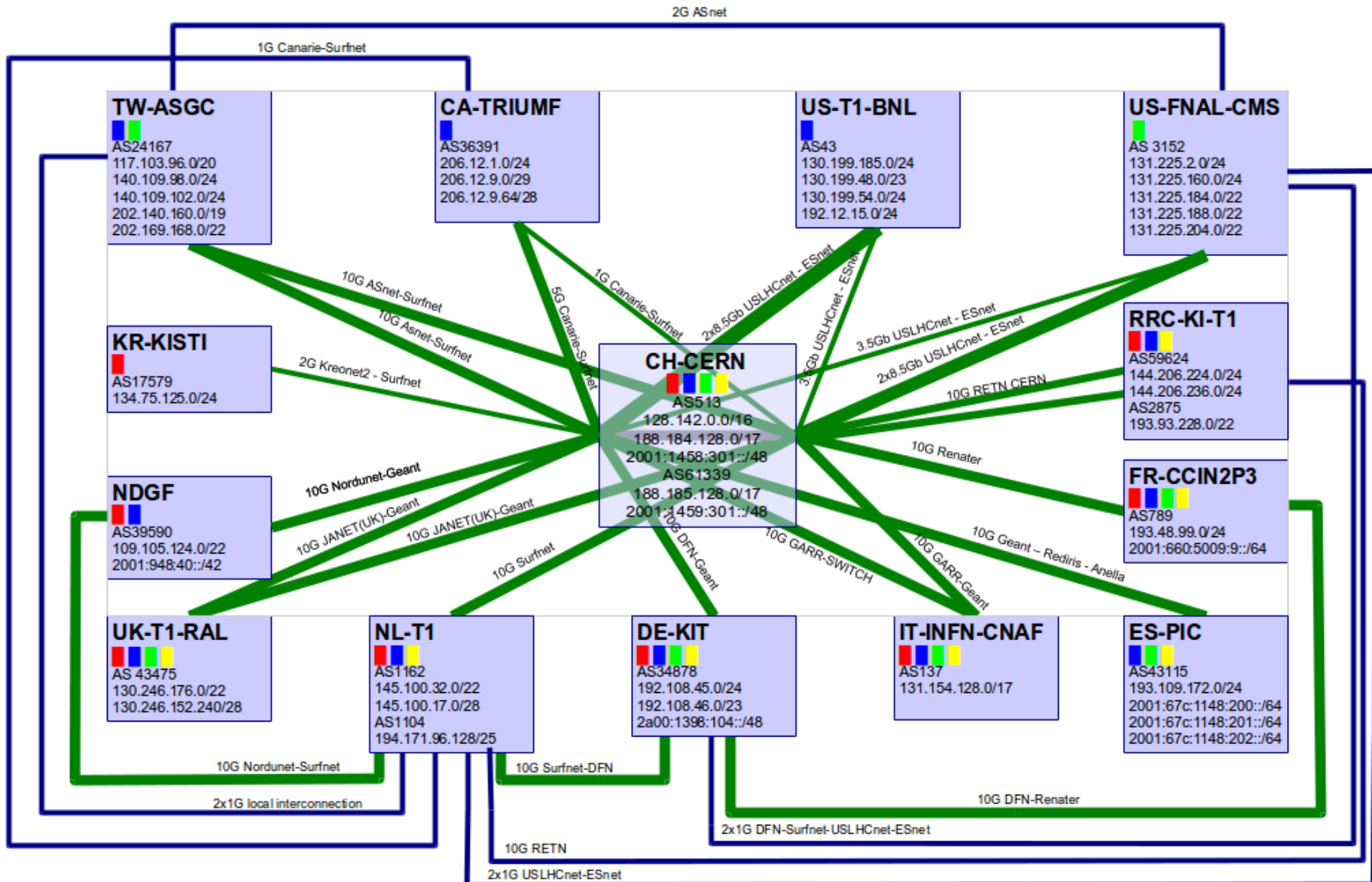
HSIN-YEN CHEN

APAN38

NanTou

13 Aug. 2014

LHCOPN



— T0-T1 and T1-T1 traffic
— T1-T1 traffic only
 Not deployed yet
 (thick) >= 10Gbps
 (thin) <10Gbps

■ = Alice ■ = Atlas
■ = CMS ■ = LHCb

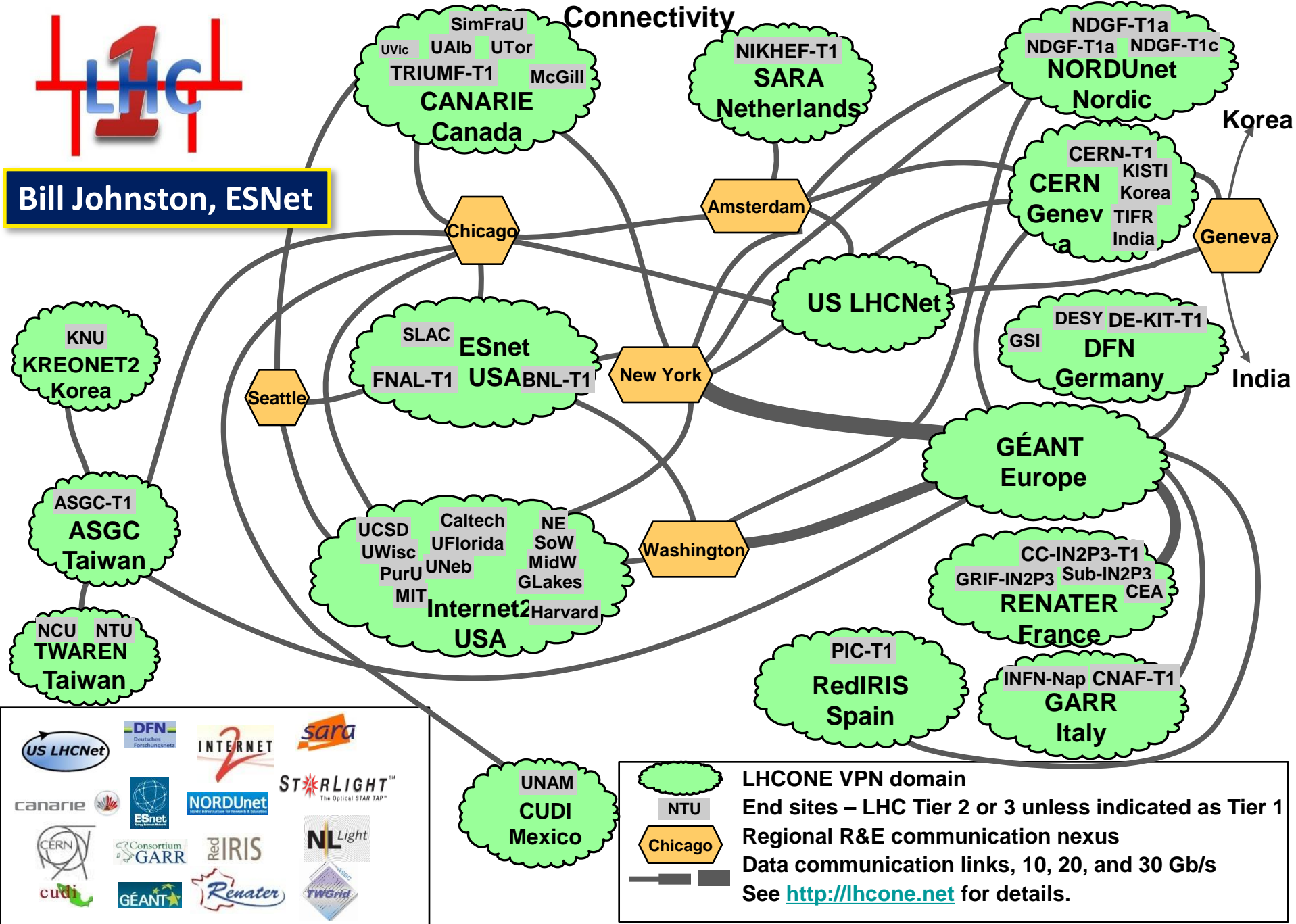
p2p prefix: 192.16.166.0/24 - 2001:1458:302::/48
 edoardo.martelli@cern.ch 20140620

LHCONE: A global infrastructure for the LHC Tier1 Data Center – Tier 2 Analysis Center



Connectivity

Bill Johnston, ESNet

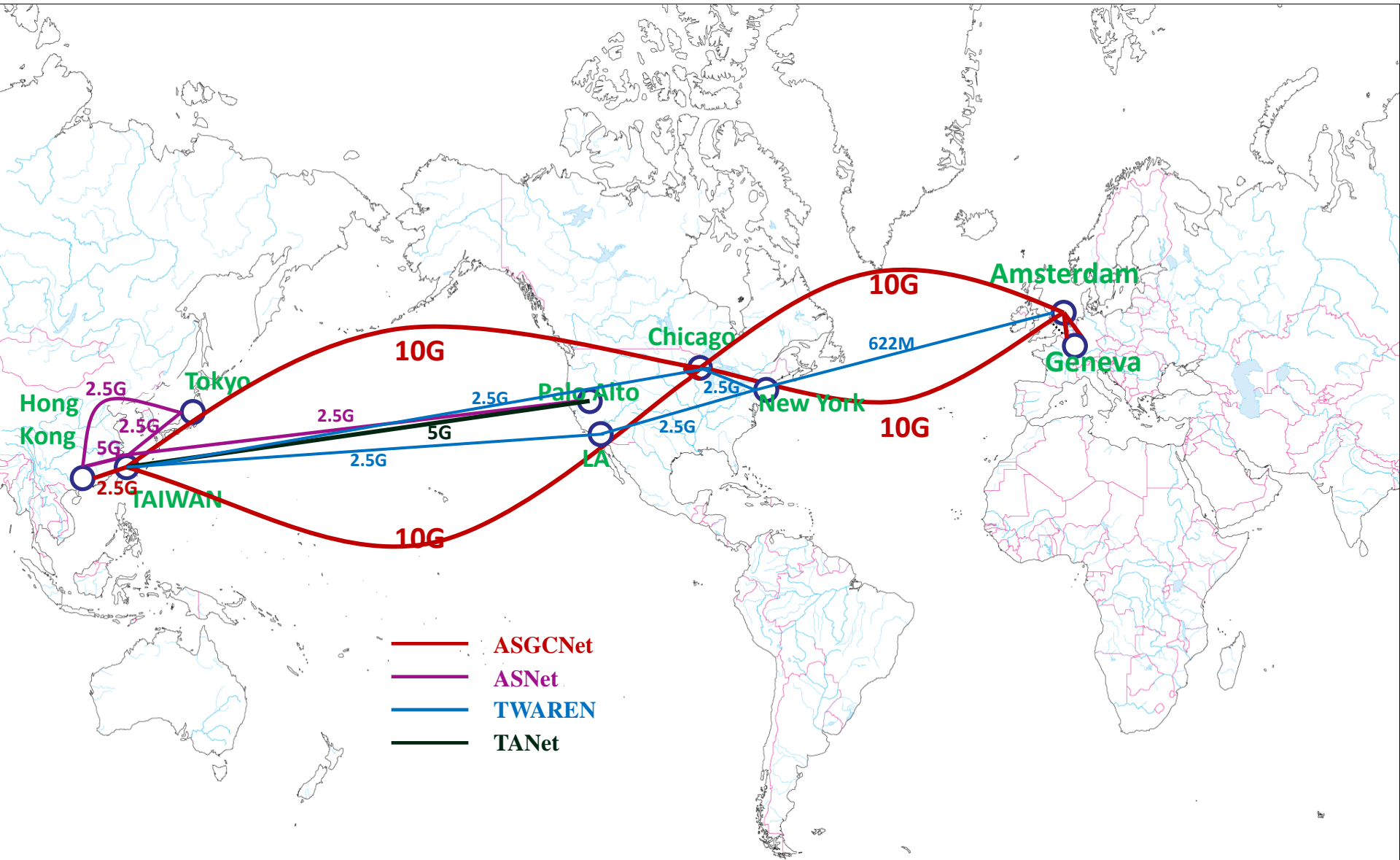


- LHCONE VPN domain
- Chicago
- End sites – LHC Tier 2 or 3 unless indicated as Tier 1
- Regional R&E communication nexus
- Data communication links, 10, 20, and 30 Gb/s

See <http://lhcone.net> for details.

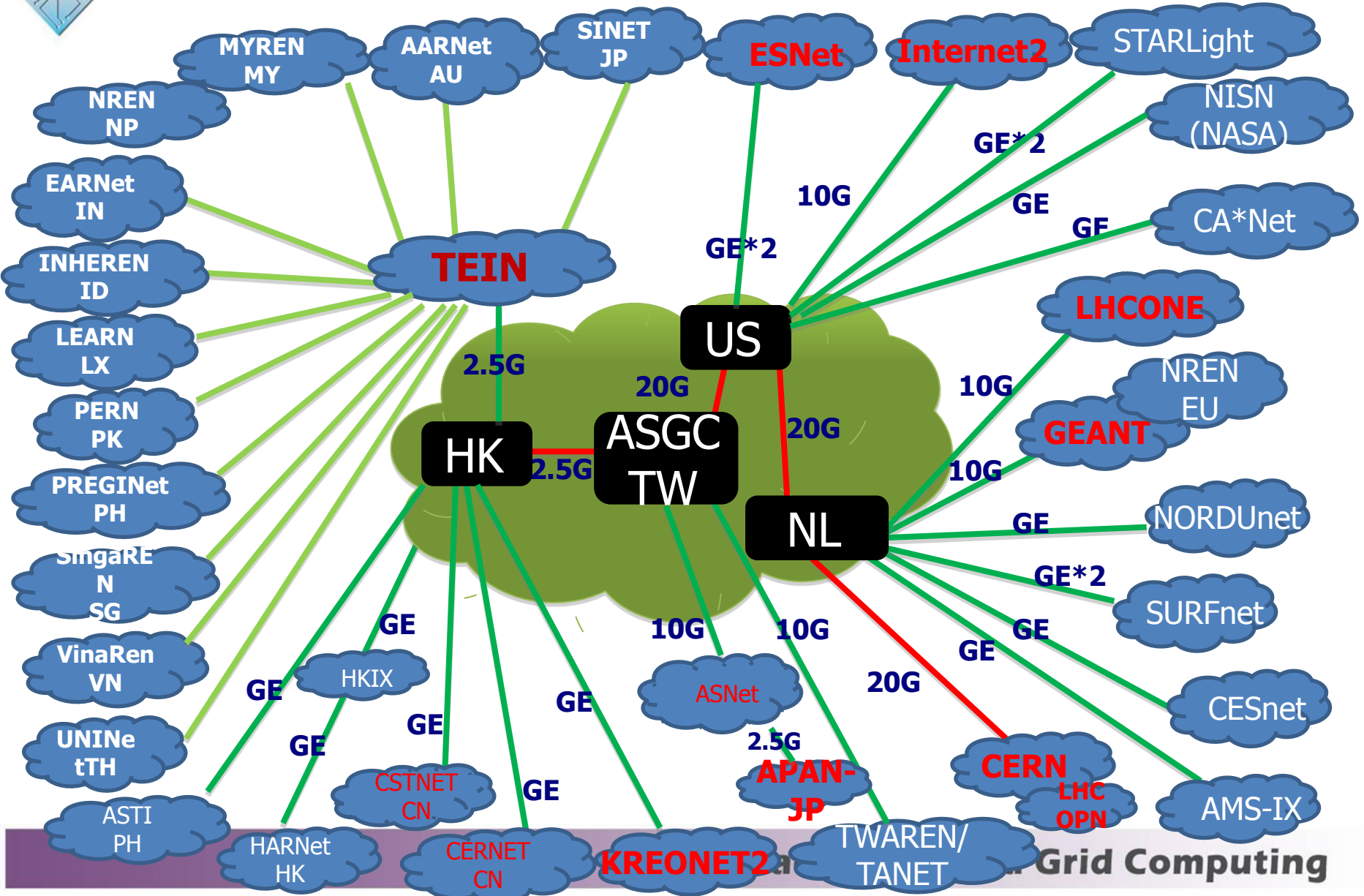


TAIWAN Global R&E Network





ASGC e-Science Global Network





LHCONE networking in Asia

- ASGC could provide the 20Gb global backbone (TW-US-EU) for Asian HEP communities
 - ASGC has an open policy to support the networking for all LHC experiments (ATLAS, CMS, Alice, LHCb) in Asia
 - ASGC has good connectivity with APAN (inc. KR, JP, CN, etc.) and TEIN
 - L3VPN Asia hub on HK



LHCONE VRF on ASGC

- LHCONE VRF between GEANT and ASGC at AMS
- Plan to connect the CERN LHCONE VRF at AMS
- Plan to implement the LHCONE VRF connecting the Internet2 and Esnet at CHI
- Plan to implement the LHCONE VRF connecting Asia Tier-Xs at HK



Network Information

- ASGCNet: AS24167
- IP segments
 - IPv4: 117.103.96.0/20
 - IPv4: 140.109.98.0/24
 - IPv4: 140.109.102.0/24
 - IPv6: 2400:4500::/32



Network performance measurement & monitor

- PerfSONAR
 - [Install the PerfSONAR PS 3.3.2](#)
 - <http://lhc-bandwidth.twgrid.org/toolkit/>
 - <http://lhc-latency.twgrid.org/toolkit/>



Question/Comment?