

ASGC Networking

NREN:ASGC

Country:Taiwan

Presenter: Hsin-Yen Chen

The Asi@Connect Project Meeting/ 6 Aug. 2018
Auckland



Building Advanced Distributed Computing Platform

Strategy: Collaborations with Research Groups - Applications Drive & Technology Push
R&D: DiCOS, System Efficiency & Machine Learning Applications

Application (Science)

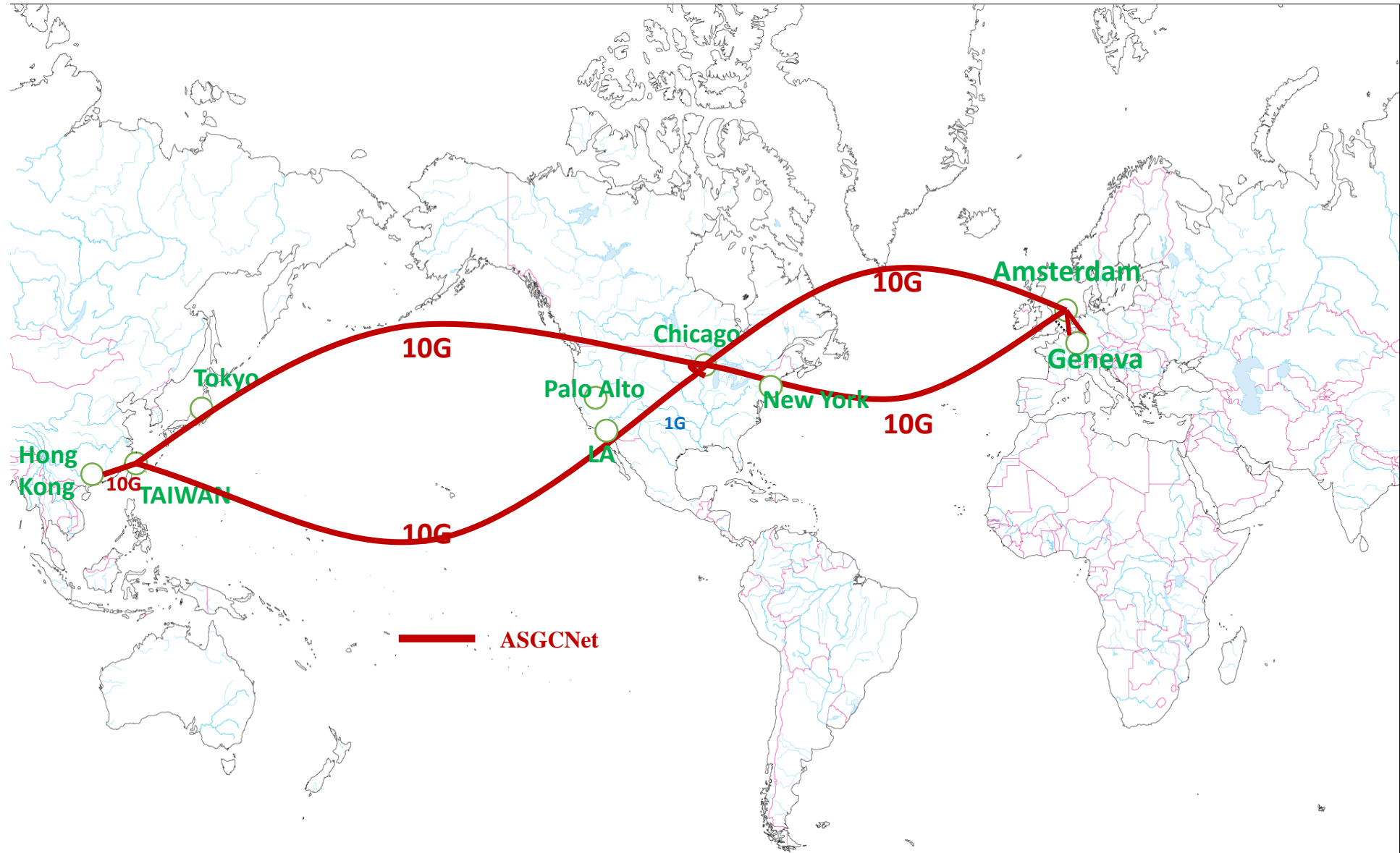
- ATLAS, CMS (High Energy Physics)
- Alpha Magnetic Spectrometer (Particle & Astronomy)
- KAGRA, VIRGO (Gravitation)
- TEXONO (Neutrino)
- World Wide Grid Computing (CERN)
- Advanced Networking (iCAIR)
- Proton Therapy (NCU, CGU/CGMH)
- Deeper Understanding Natural Disaster
- Soundscape Monitoring Network
- Earth Science
 - Cryo-EM (2017)
 - Computational Biology (2017)
- Bioinformatics (U. Chicago)

DiCOS: Distributed Cloud Operating System

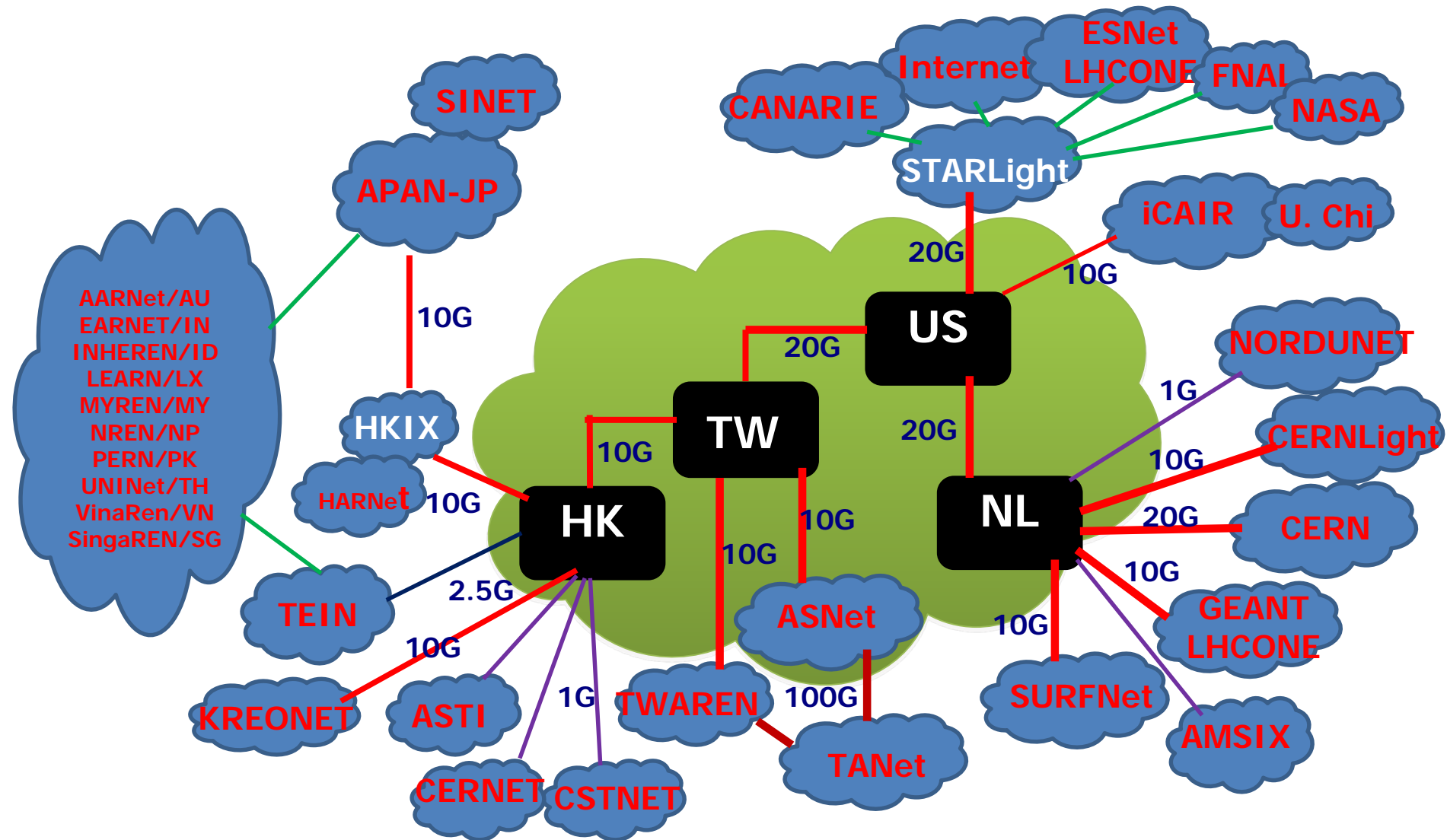
- Leveraging WLCG technologies and moving from petabyte-scale towards exabyte scale:
 - ~100PB in 2017 and expected to have ~1000PB in 2025;
 - Mobilizing 10PB/month
 - 2M+ jobs/day
- Extending beyond high energy physics
- Growing our own R&D Capability

ASGC Global Network

Sep. 2013 ~ Sep. 2018



ASGC e-Science Global Network



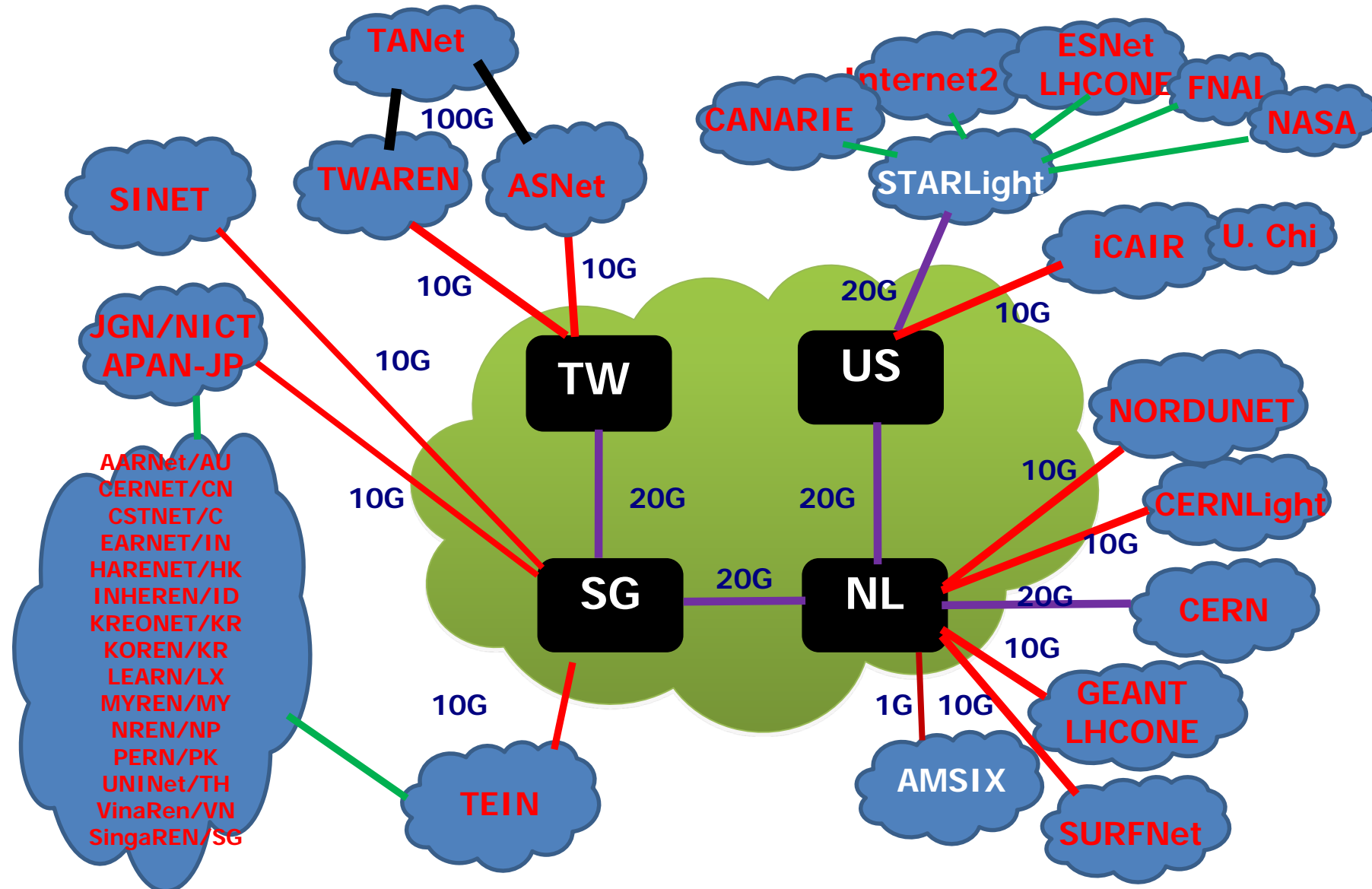
ASGC Global Network

1 Sep. 2018



ASGC e-Science Global Network

Sep. 2018



TAIWAN 100G Global Ring

Sep. 2019

