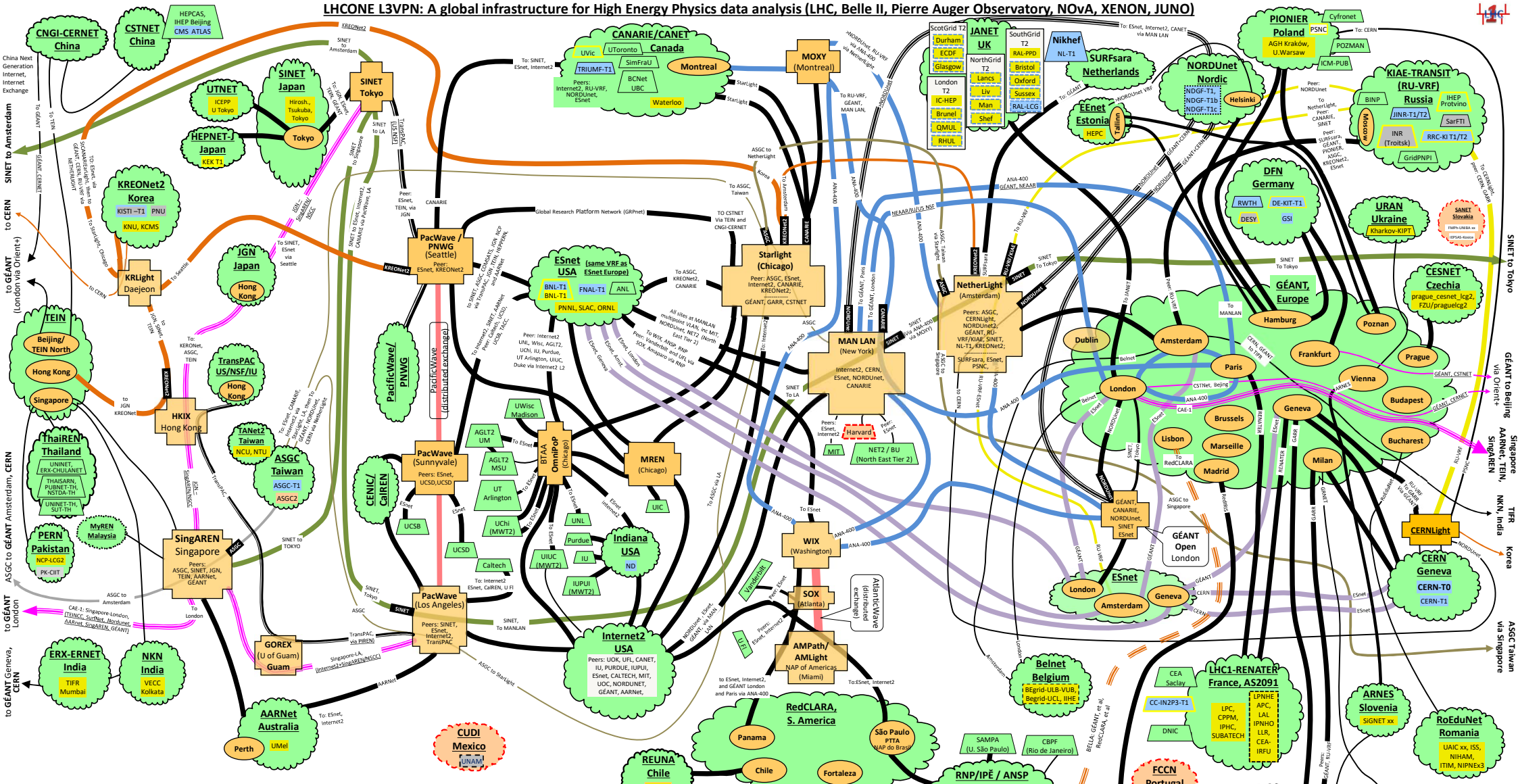


LHCONE L3VPN: A global infrastructure for High Energy Physics data analysis (LHC, Belle II, Pierre Auger Observatory, NoVA, XENON, JUNO)



LHCONE Map Ver. 5.4, September 2020 – WEJohnston, ESnet, wej@es.net

LHCONE VRF domain/aggregator

- ANSF Connector network – provides, e.g., an L2 path between VRFs.
- London Provider network PoP router
- CUDI Not currently connected to LHCONE
- Exchange point

Communication links:

- 1/10, 20/30/40, and 100Gb/s or N x 100G
- Underlined link information indicates link provider, not use
- Dotted outline indicates distributed site
- Blue dashed outline indicating a WLCG federation site not currently on LHCONE

International infrastructure by provider/collaboration

- various
- GÉANT
- SINET, Japan
- ASGC, Taiwan
- ESnet transatlantic, USA
- JGN, SingAREN (+ TIENCC, SurfNet, NORDUnet, GÉANT on the London link)
- ANA-300/400 - Various links provided by CANARIE, ESnet, GÉANT, Internet2, NORDUnet, SURFnet, SINET, IU/NSF
- NORDUnet
- KIAE, Russia
- KREONet2, Korea
- BELLA, GÉANT, et al, RedCLARA, et al
- HEPGrid (UERJ)
- Sites that are standalone VRFs

- PNU LHC ALICE or LHCb site
- CNAF-T1 LHC Tier 1 ATLAS and CMS
- Uchi LHC Tier 2/3 ATLAS and CMS
- KEK Belle II Tier 1/2

NOTES

- ONLY links involved in LHCONE are shown
- LHCOPN links are not shown on this diagram
- For map explanation see "Interpreting the LHCONE Map" at <https://www.dropbox.com/sh/padkfo58j01raz/AAD85k8f5H9FhCjA4eCtea?dl=0>

