WIDE Project and ARENA-PAC
Next Challenges on Asia Pacific



Operated by WIDE PROJECT

Takashi Tomine, WIDE Project/NAOJ

APIDT / ARENA-PAC

WIDE Project

Widely Integrated Distributed Environment

Founded 1988 in Japan · 20+ working groups

Global research consortium with industry, academia & government

Network operation

Stable, high-performance Internet

Working groups

MAWI DNS SINDAN AI3

Services

Internet services for everyone

Working groups

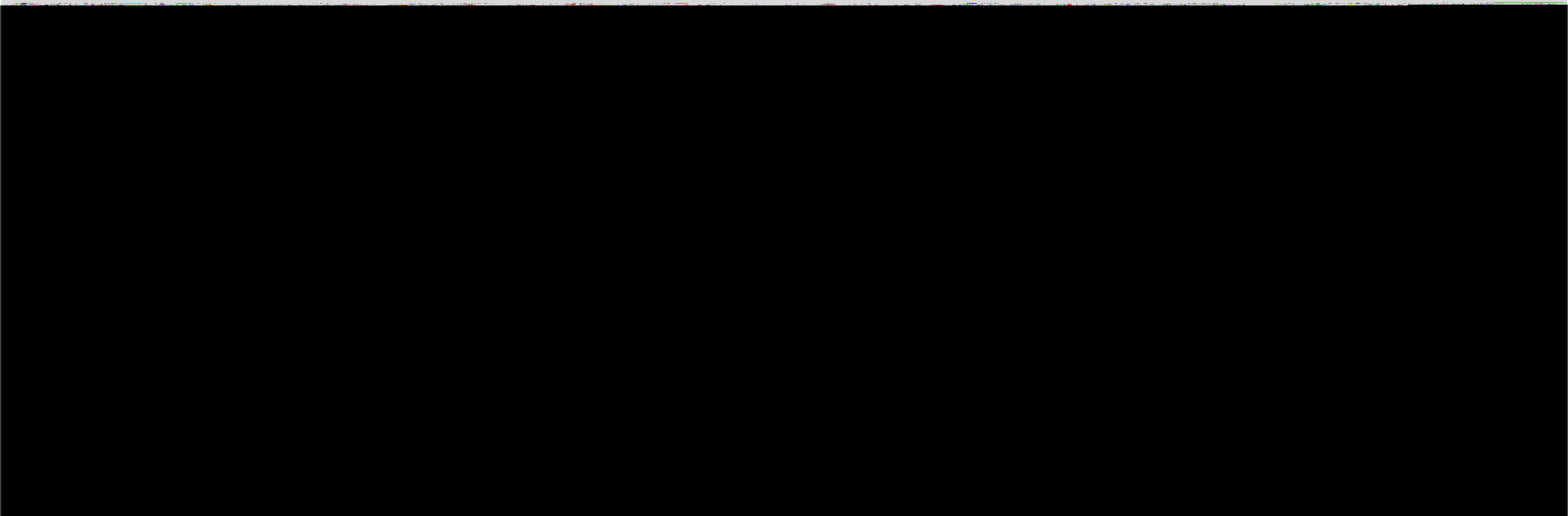
SDM Cloud Medical Crisis

Security

Safe Internet & privacy

Working groups

Swan cybex moCA Netman



DIX-IE Status Summary

- What's DIX-IE ?
  - Distributed Internet eXchange In Edo
  - IXP（Internet eXchange Point）operated by WIDE project
  - From 1994 started as NSPIXP(Network Service Provide Internet eXchange Project)

- DIX-IE : KDDI / NTT-COM / BBTower 3 sites in Otemachi
  - KDDI Otemachi 5F / 9F
  - BBTower Shin-Otemachi 5F / Otemachi 3F
  - NTT-COM Otemachi 9F

- Paricipants
  - 10Gbps 14 AS
  - 1Gbps 11 AS
  - 100Mbps 2 AS

NSPIXP3 Dojima, Osaka

NTT Dojima 3rd Bldg.
Kita-ku, Osaka



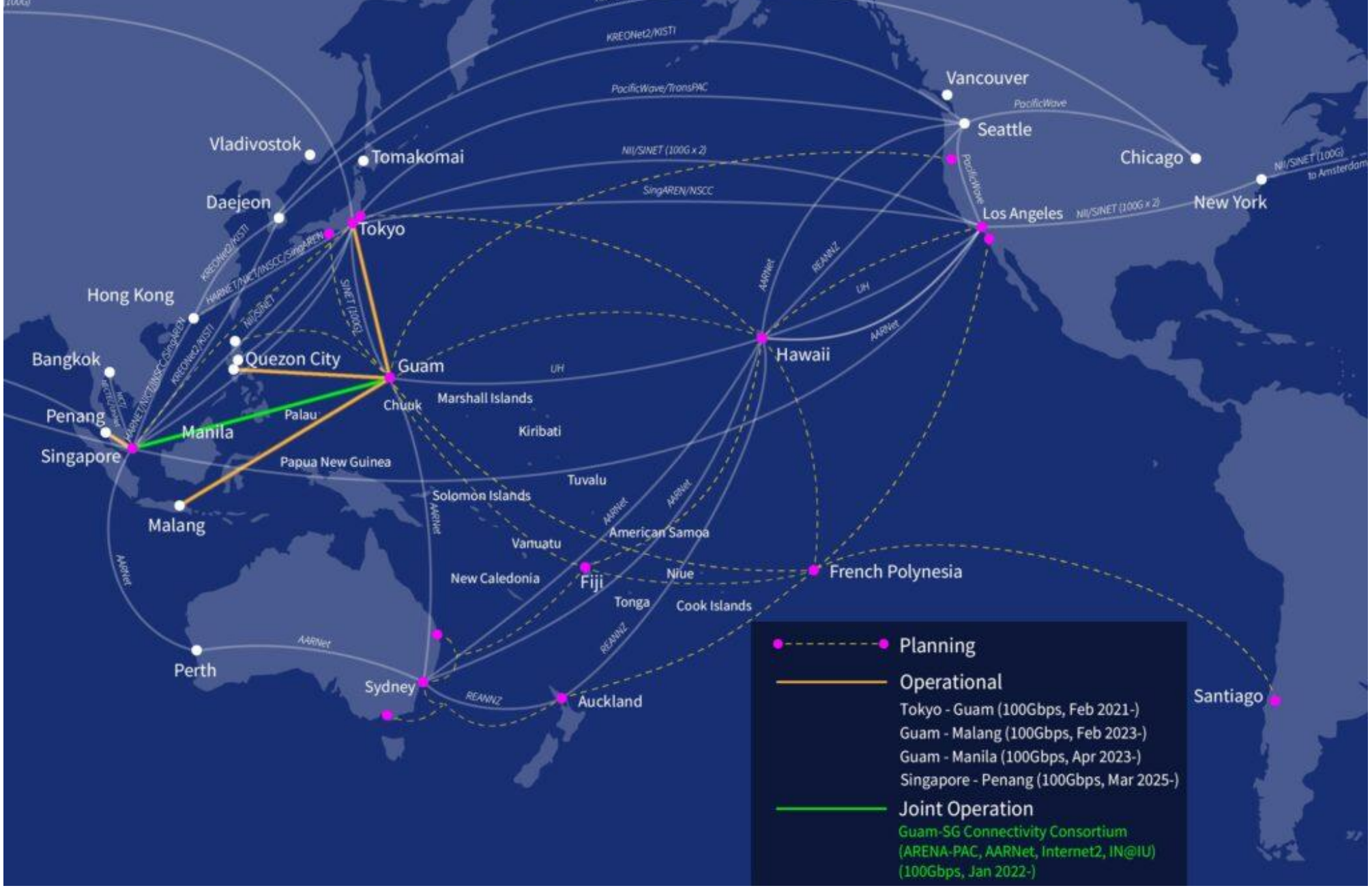
DIX-IE

Otemachi, Tokyo (3 sites)

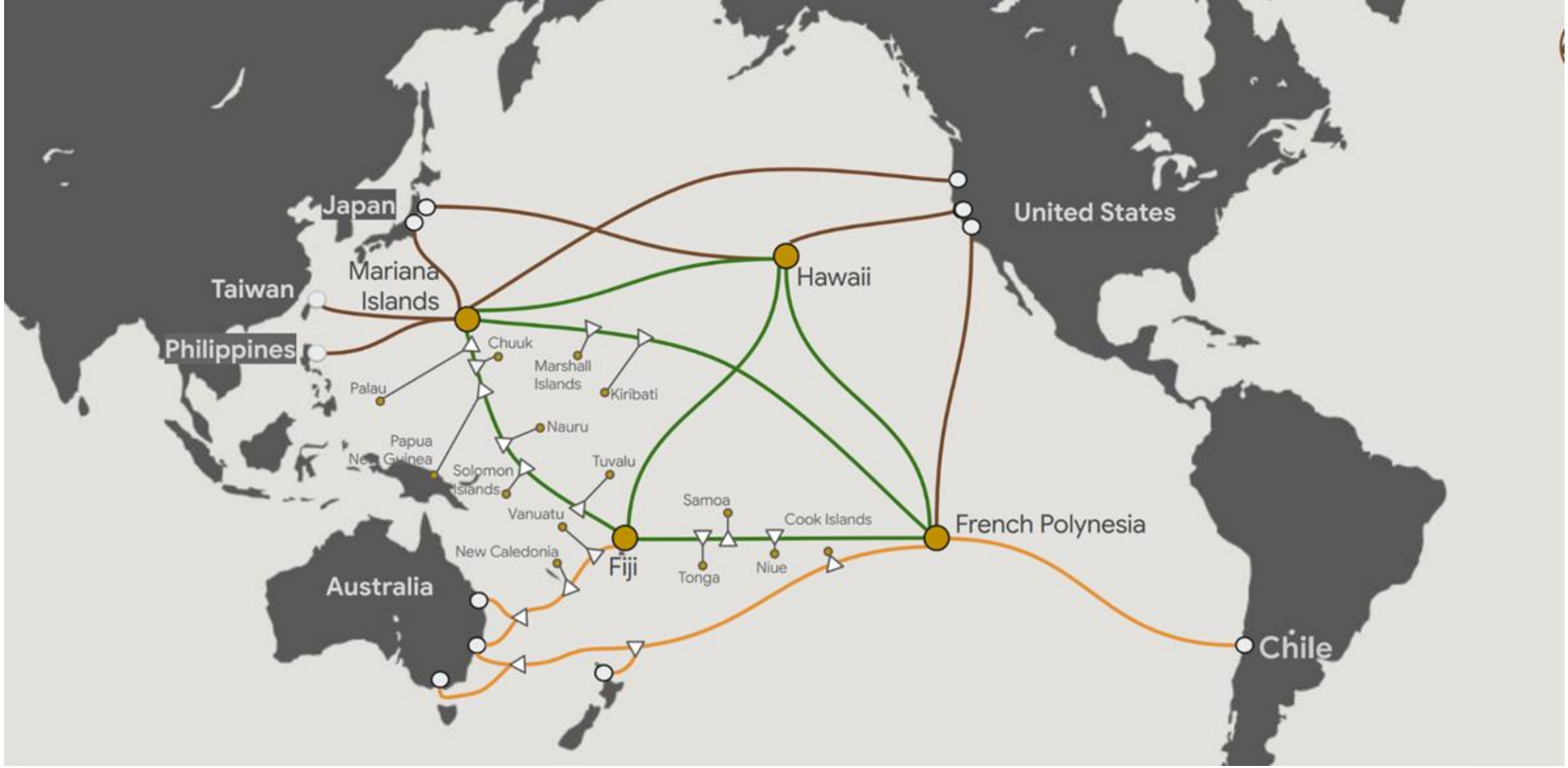
docomo Business
Otemachi Bldg. Annex

KDDI
Otemachi Bldg.

BroadBand Tower
Shin-Otemachi Site



Arena-PAC's First Investment
GOREX – To Asia



Arena-PAC's Second Investment Plan
Pacific Connect – Pacific Islands, Infrastructure and Beyond



Arena-PAC's Third Investment Plan
Tokyo-Singapore with Broader and Stabler Backbone

2026: A New Chapter in the Pacific

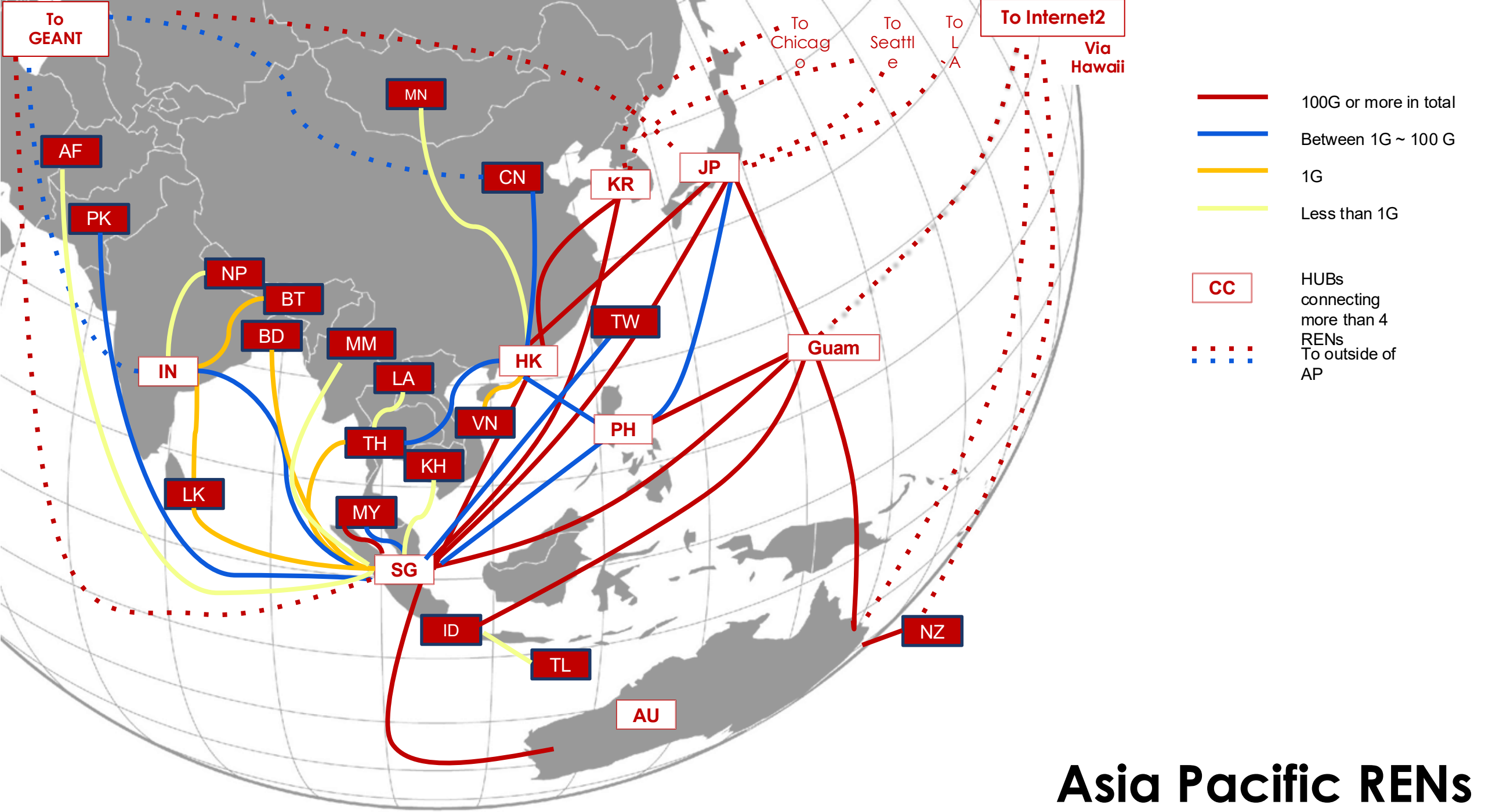
2026



NREN-PAC

SOI Asia

SOI Pacific



Asia Pacific RENs

Based on Asi@Connect Map (Jan 2022) and APOnet map (Nov 2023)

Research and Education Network in Asia Pacific

AARNet - Australian NREN

AfgREN - Afghanistan NREN

BDREN - Bangladesh NREN

CamREN- Cambodia NREN

CSTNET - China Science and Technology Network

CERNET - China Education and Research Network

DrukREN – Bhuban NREN

ERDEMNET – Mongolian NREN

JGN - Japanese testbed network (NICT)

HARNET - Hong Kong NREN

KOREN - Korean NREN

KREONET- Korean NREN

IDREN - Indonesian NREN

LEARN - Sri Lankan NREN

LERNet – Lao NREN

MAFFIN – Japanese Agriculture Network

mmREN – Myanmar NREN

MYREN - Malaysian NREN

NREN - Nepal NREN

PERN - Pakistani NREN

PREGINET - Philippine NREN

REANNZ - New Zealand NREN

SINET - Japanese NREN (NII)

SingAREN - Singaporean NREN

TLREN – Timor-Leste NREN

TWAREN - Taiwanese NREN

ThaiREN - Thai NREN

VinaRen - Vietnamese NREN

APAN

Asia-Pacific Advanced Network

TEIN / Asi@Connect

Trans Eurasia Information Network

ARENA-PAC

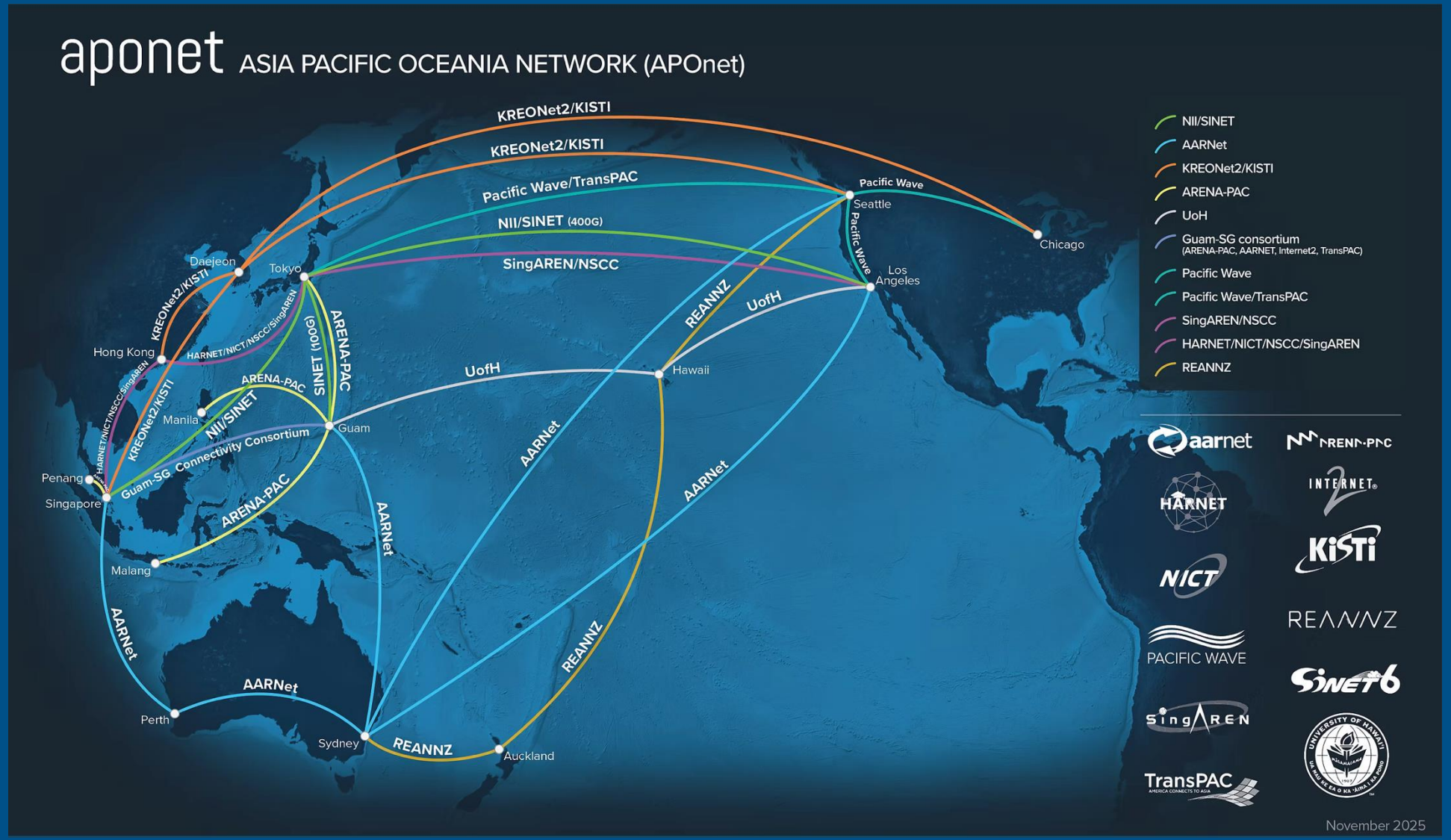
Arterial Research and Educational Network in Asia-Pacific

WIDE Project

International Internet research organization based in Japan

Based on the APNIC service region, APAN members, and our project partners

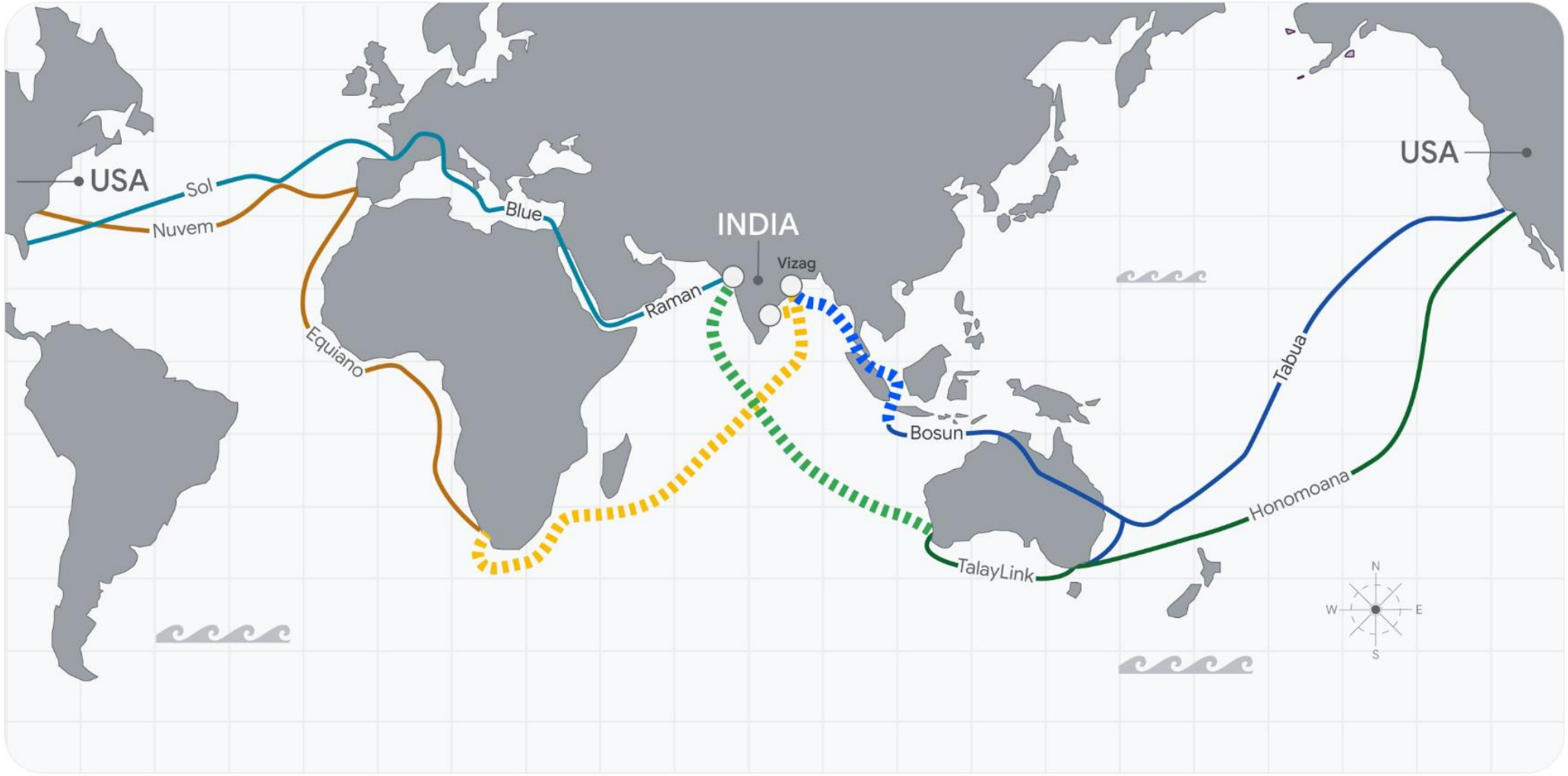
APOnet and CINJI networks



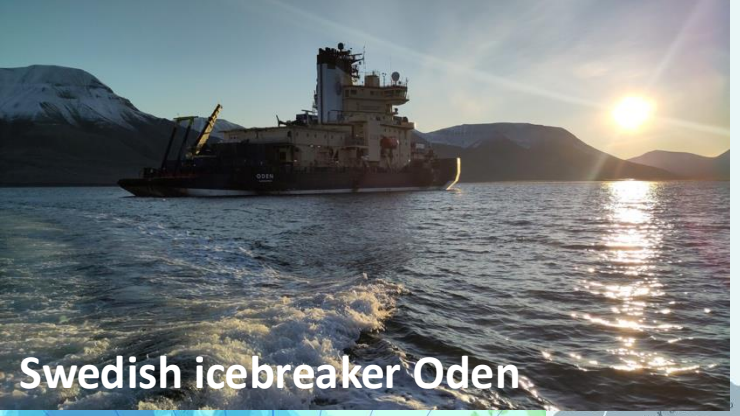
Infrastructure

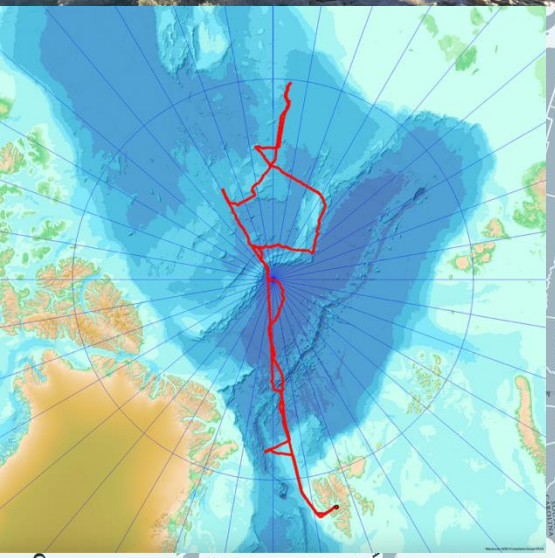
Announcing America-India Connect and new investments to advance global AI access

February 19, 2026



Source: https://polarconnect.net/





LEGEND

Polar Connect

Far North Fiber

Ice Concentration 16-09-2021

- Sea Ice Edge
- 10% - 40%
- 40% - 100%

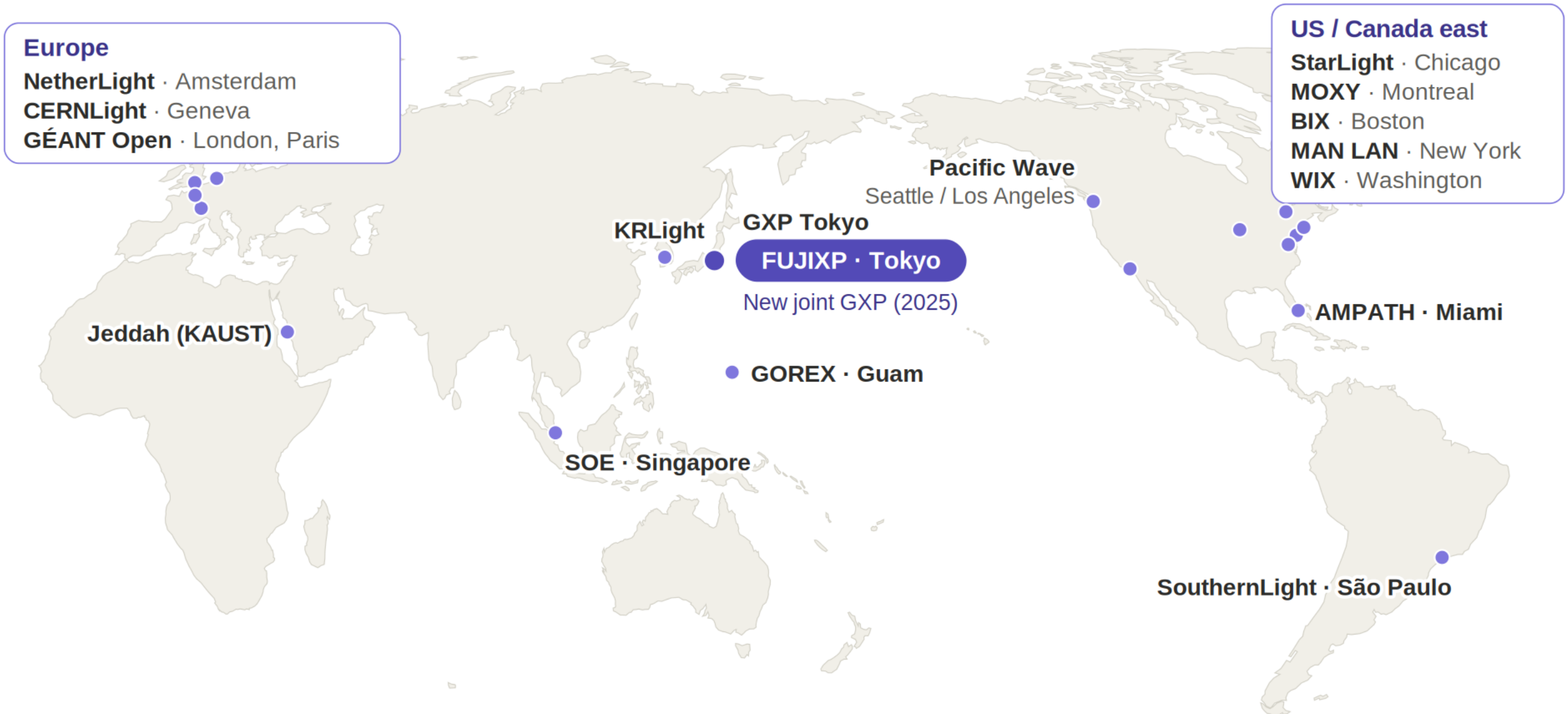
Exclusive Economic Zones

- Canada
- Denmark
- Norway
- Russia
- USA
- Iceland

22.04.2025

Global eXchange Points (GXPs) for R&E networks

Open exchange points where R&E networks interconnect: the hubs of the global R&E network

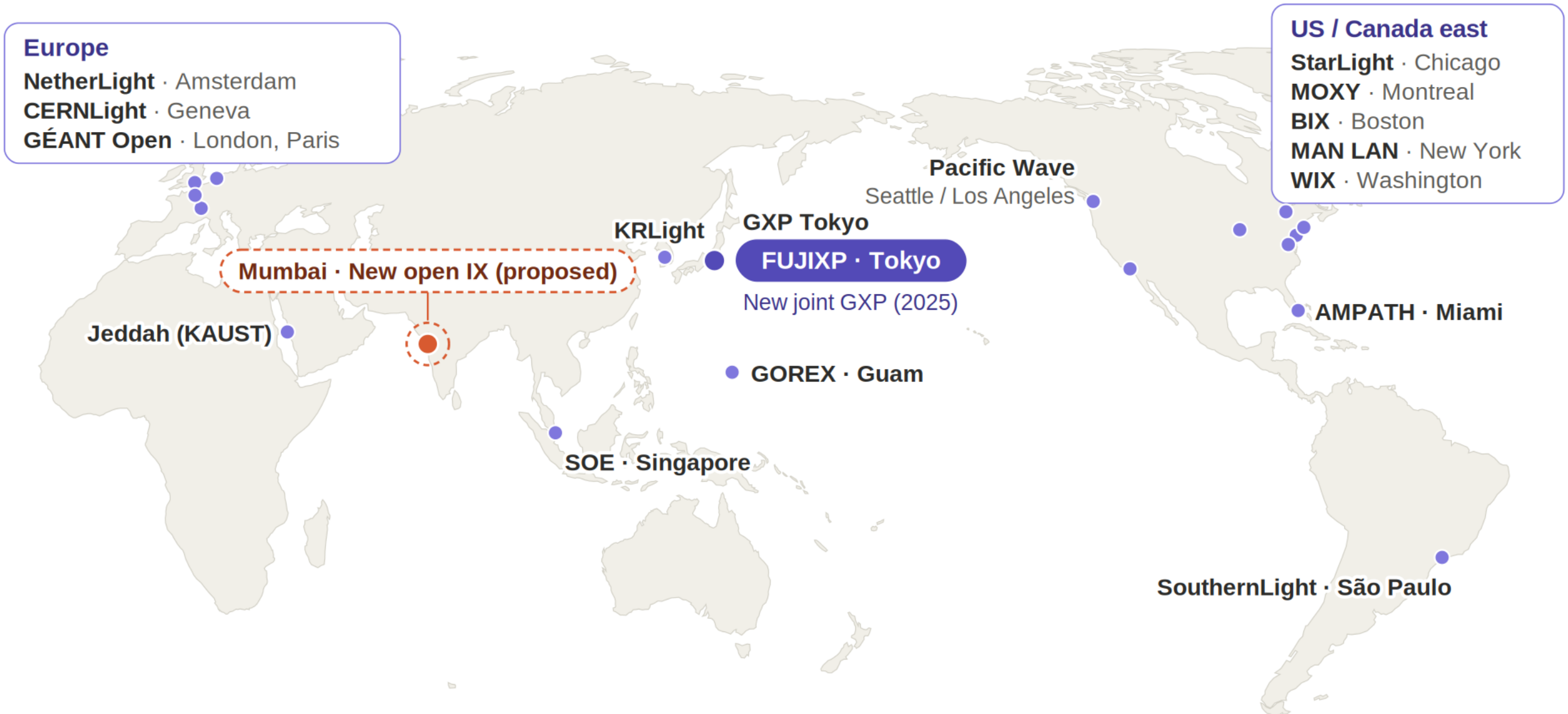


● Existing GXP

Selected GXPs, compiled from public sources (Oct 2026)

Global eXchange Points (GXPs) for R&E networks

Open exchange points where R&E networks interconnect: the hubs of the global R&E network



● Existing GXP ◉ Proposed

Selected GXPs, compiled from public sources (Oct 2026)

ARENA-PAC

Arterial
Research
and
Educational
Network
for
Asia
and
PACific

