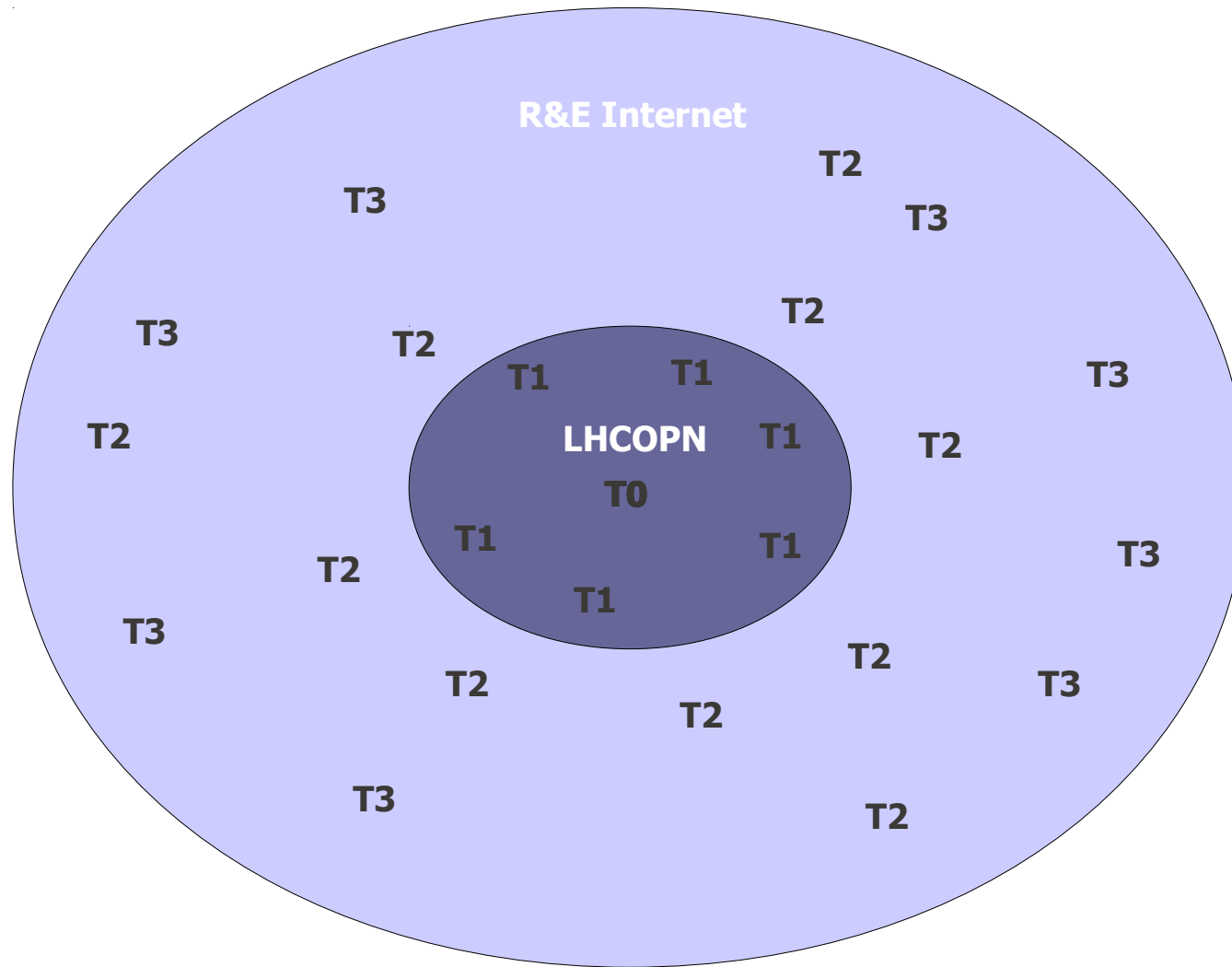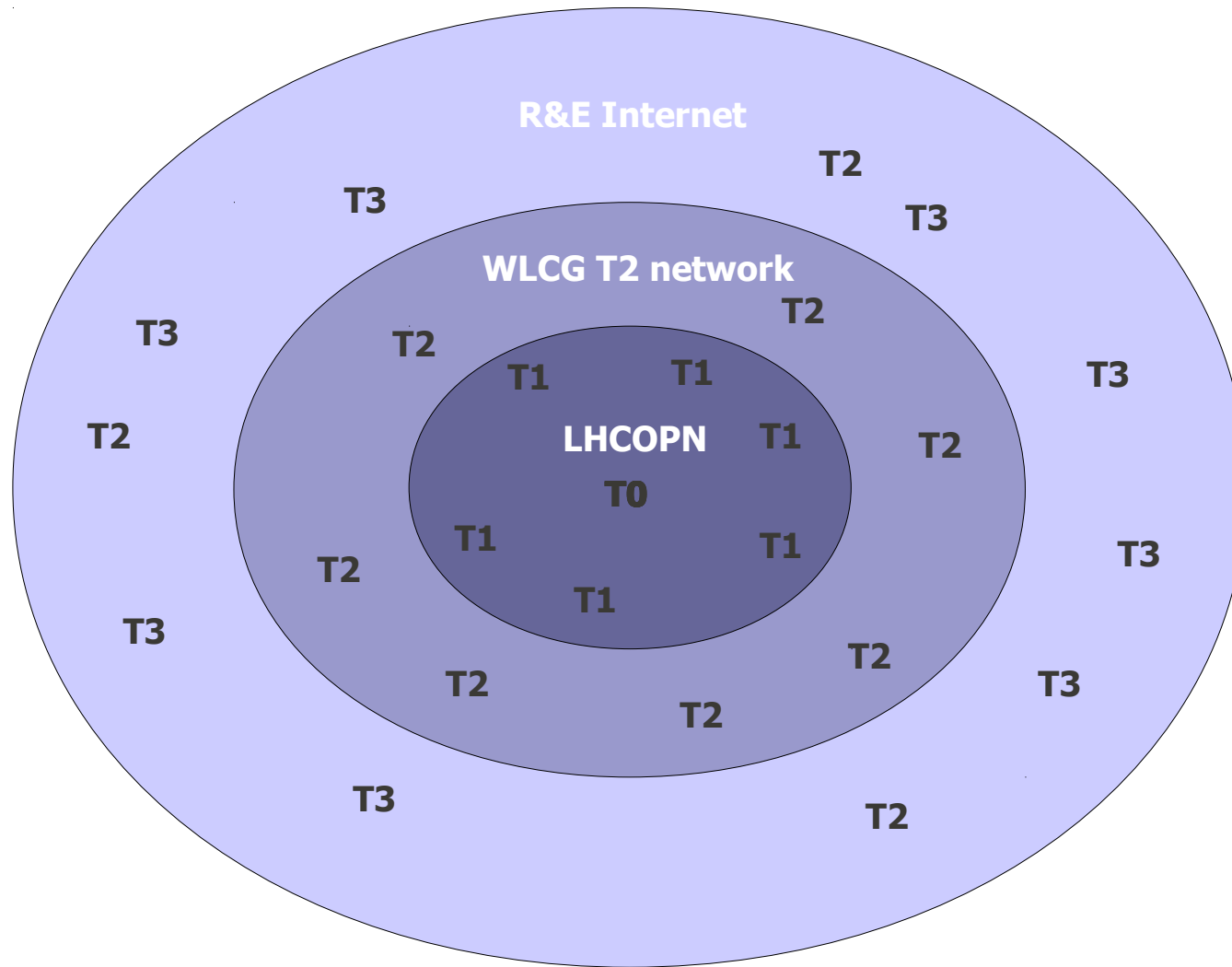# T2s connectivity

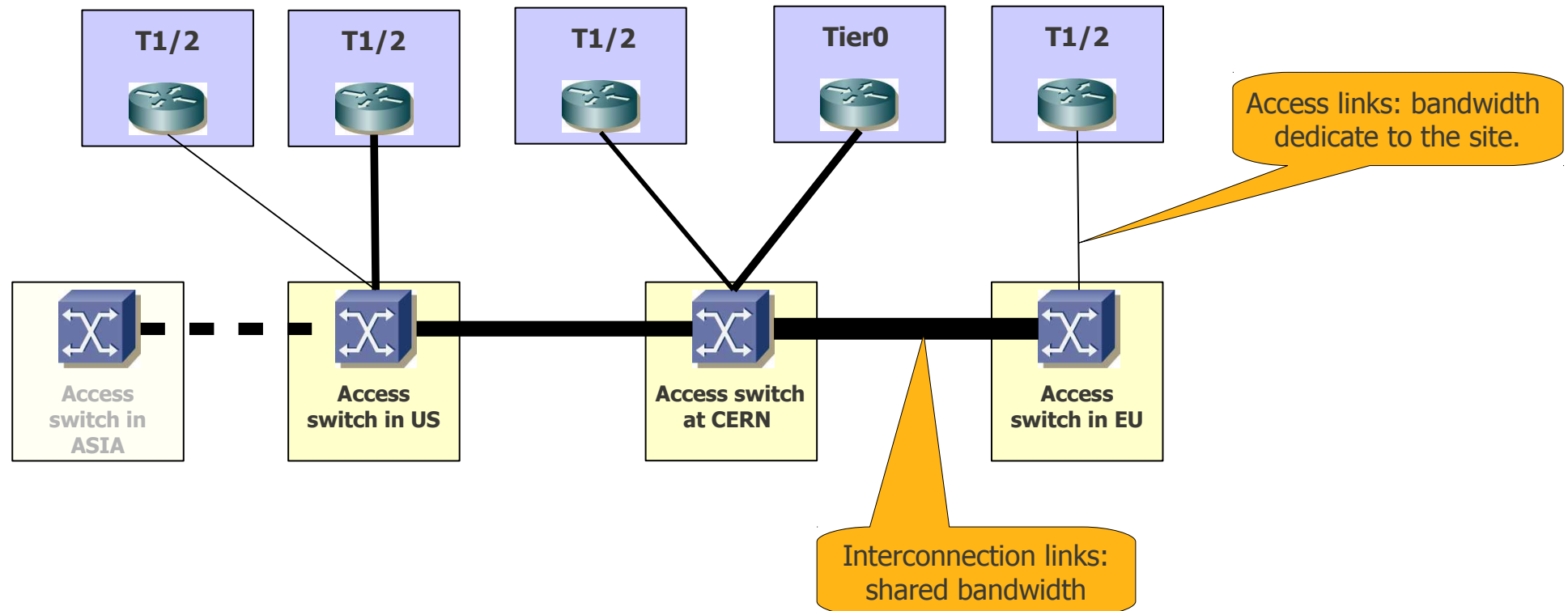# WLCG connectivity - today

WLCG connectivity - tomorrow

# A possible architecture

Distributed IXP model

- Few strategic access locations interconnected with fat pipes.
- Provides connectivity among all members
- Flexible access: everyone can set its own preferred routing policy with anyone else, with the bandwidth it needs/can_afford.

T1/2   T1/2   T1/2   Tier0   T1/2

Access switch in ASIA

Access switch in US

Access switch at CERN

Access switch in EU

Access links: bandwidth dedicate to the site.

Interconnection links: shared bandwidth
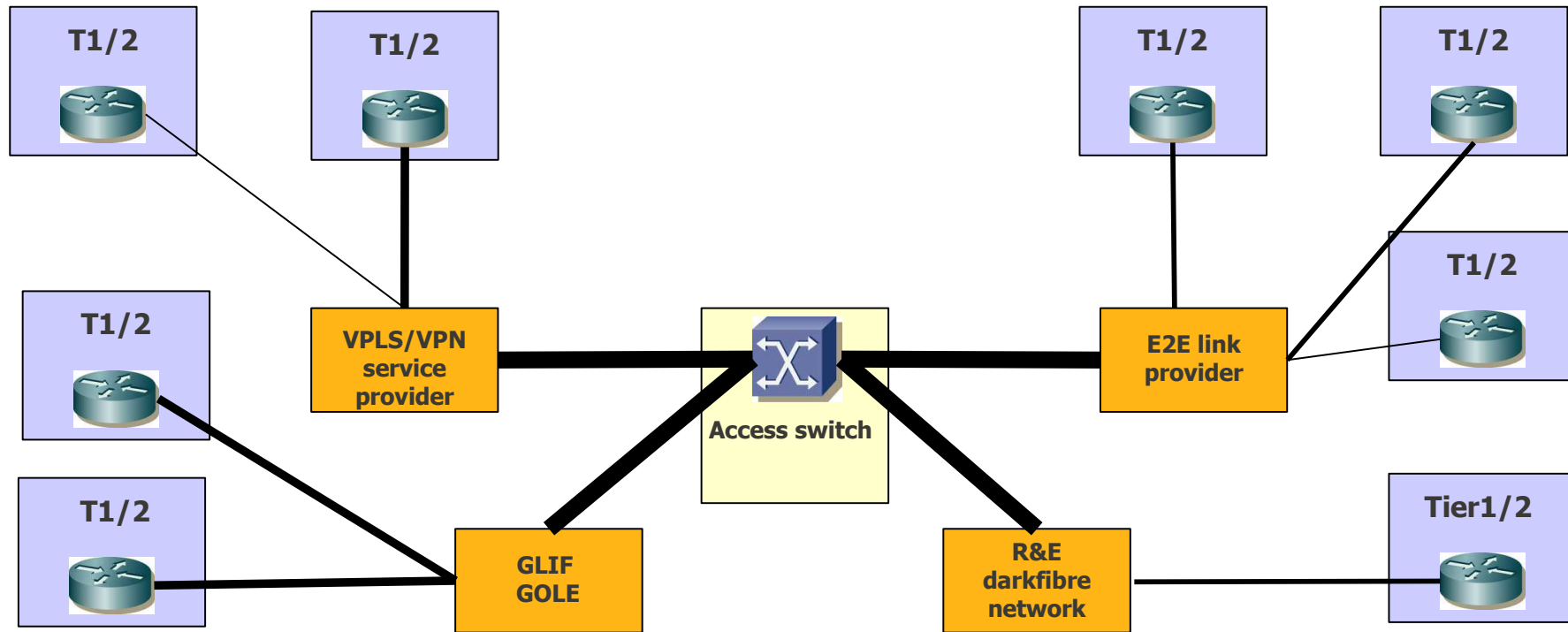
Connectivity Hub

Layer 2 multipoint-to-multipoint connectivity among all the members:

- Free to peer with any connected member
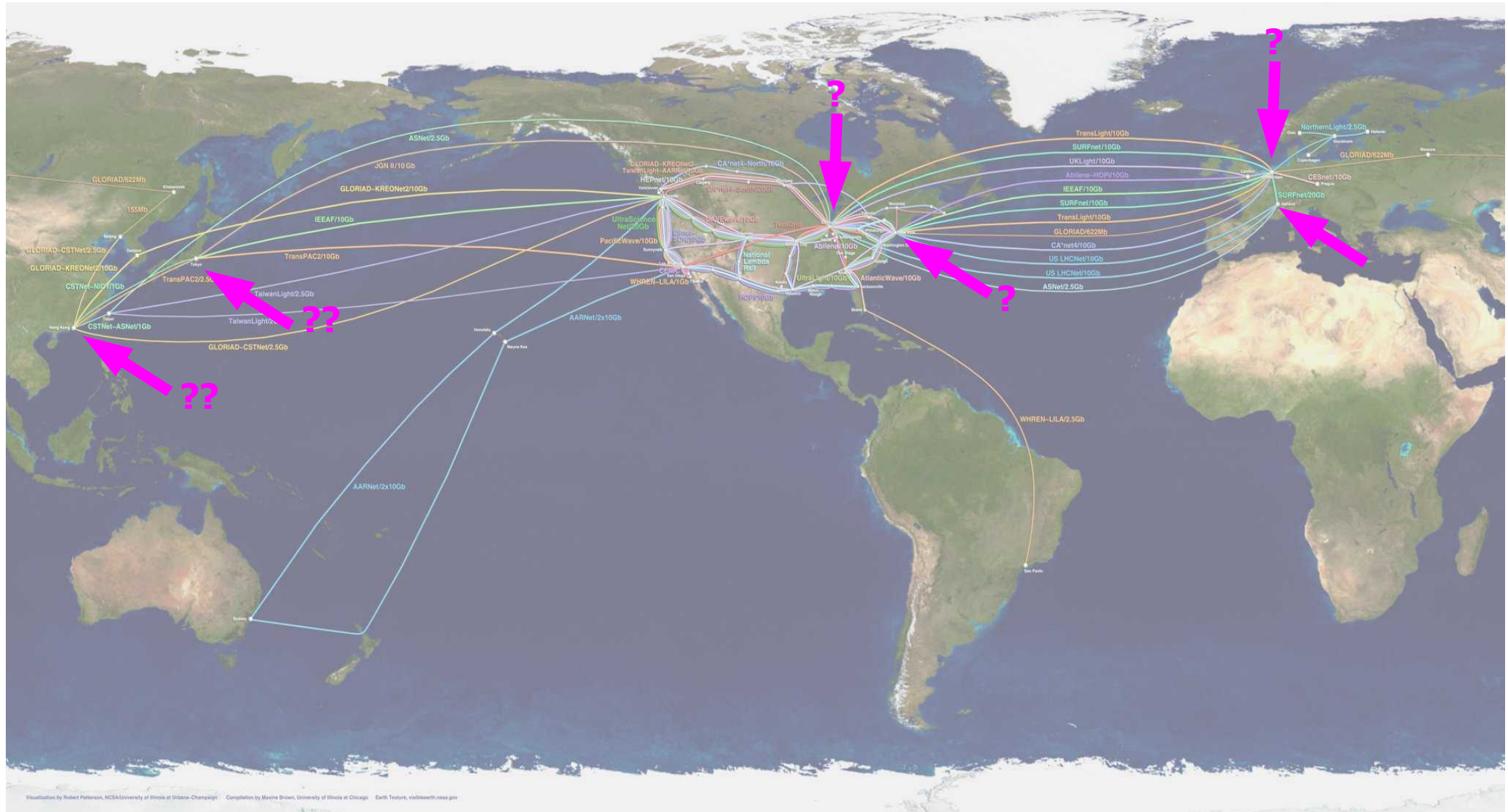- Bandwidth of the access links may be increased on-demand
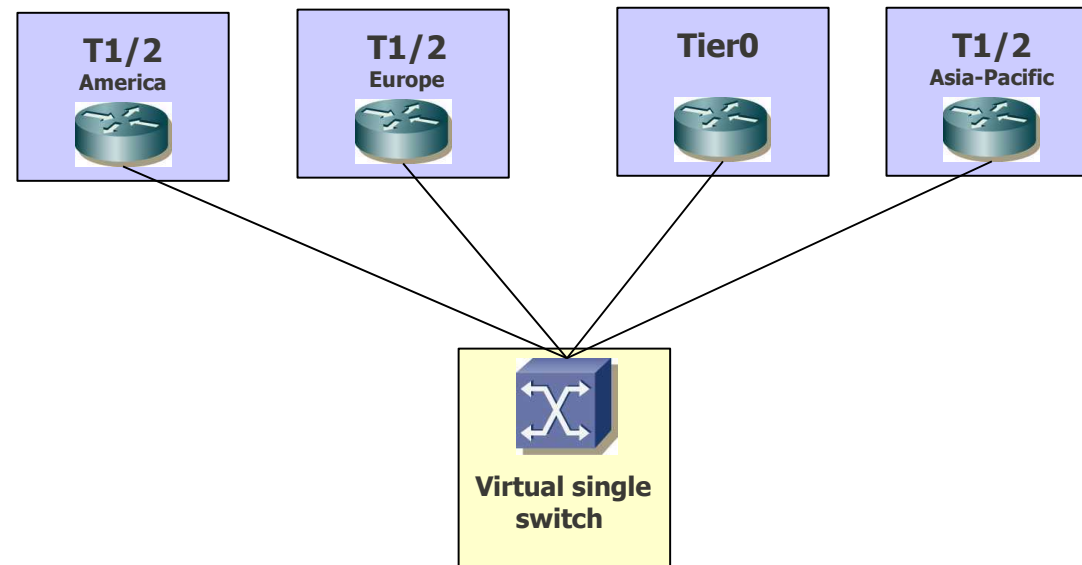
Access links

- Provided by any R&E network
- Permanent links, optionally with dynamic bandwidth
- Any site can choose the best size that fits its needs
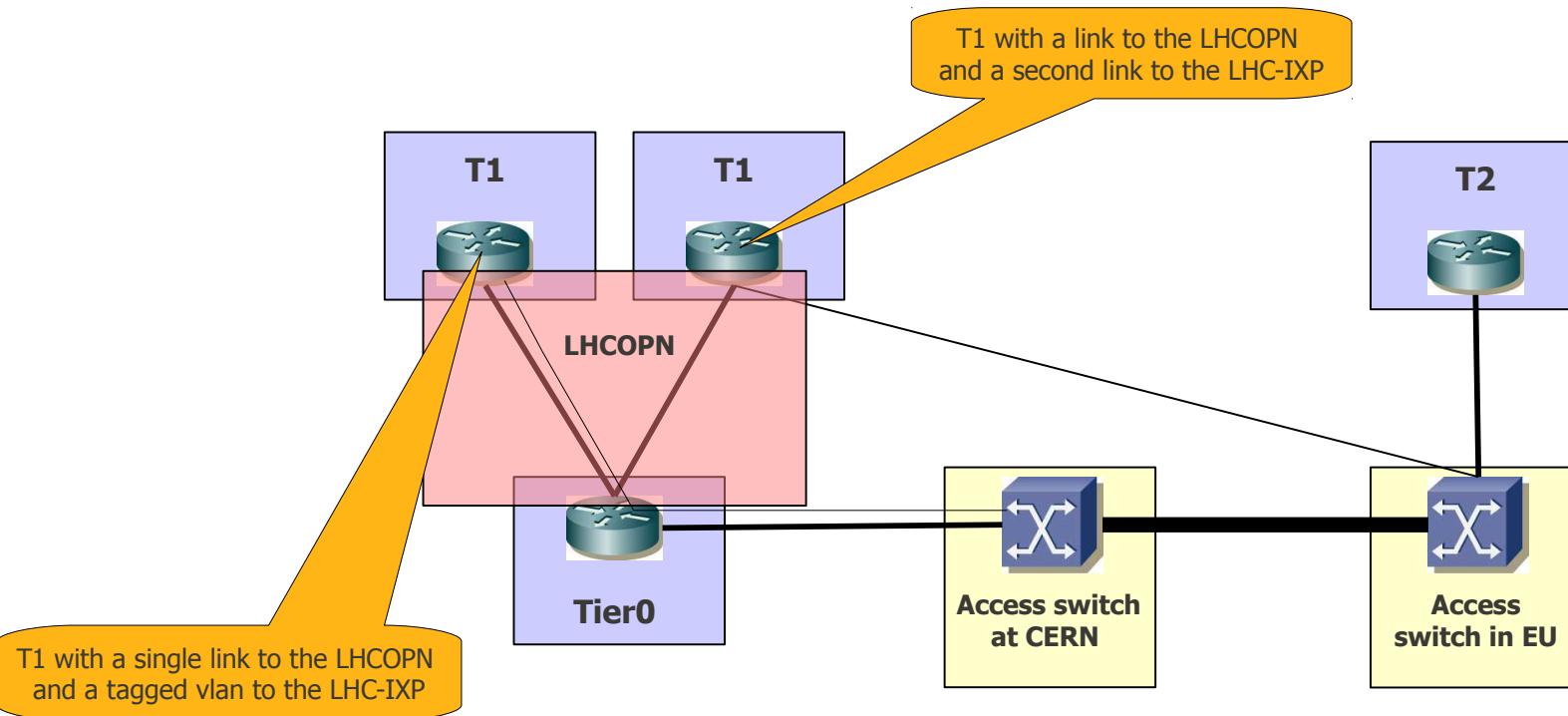
Where?

Integration with the LHCOPN

Tier1s can also connect to the LHC-IXP/HUB:
- with a tagged vlan over their LHCOPN link
- with the backup LHCOPN link (or a tagged part of it)

T1 with a link to the LHCOPN and a second link to the LHC-IXP

T1 with a single link to the LHCOPN and a tagged vlan to the LHC-IXP

T1

T1

T2

LHCOPN

Tier0

Access switch at CERN

Access switch in EU

The LHCOPN may be dedicated to the T0-T1 traffic and move the backup and T1-T1 capabilities to the LHC-IXP/HUB

Comments?