T2s connectivity
WLCG connectivity - today
WLCG connectivity - tomorrow

R&E Internet

WLCG T2 network

LHCOPN

T0
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.
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)

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