



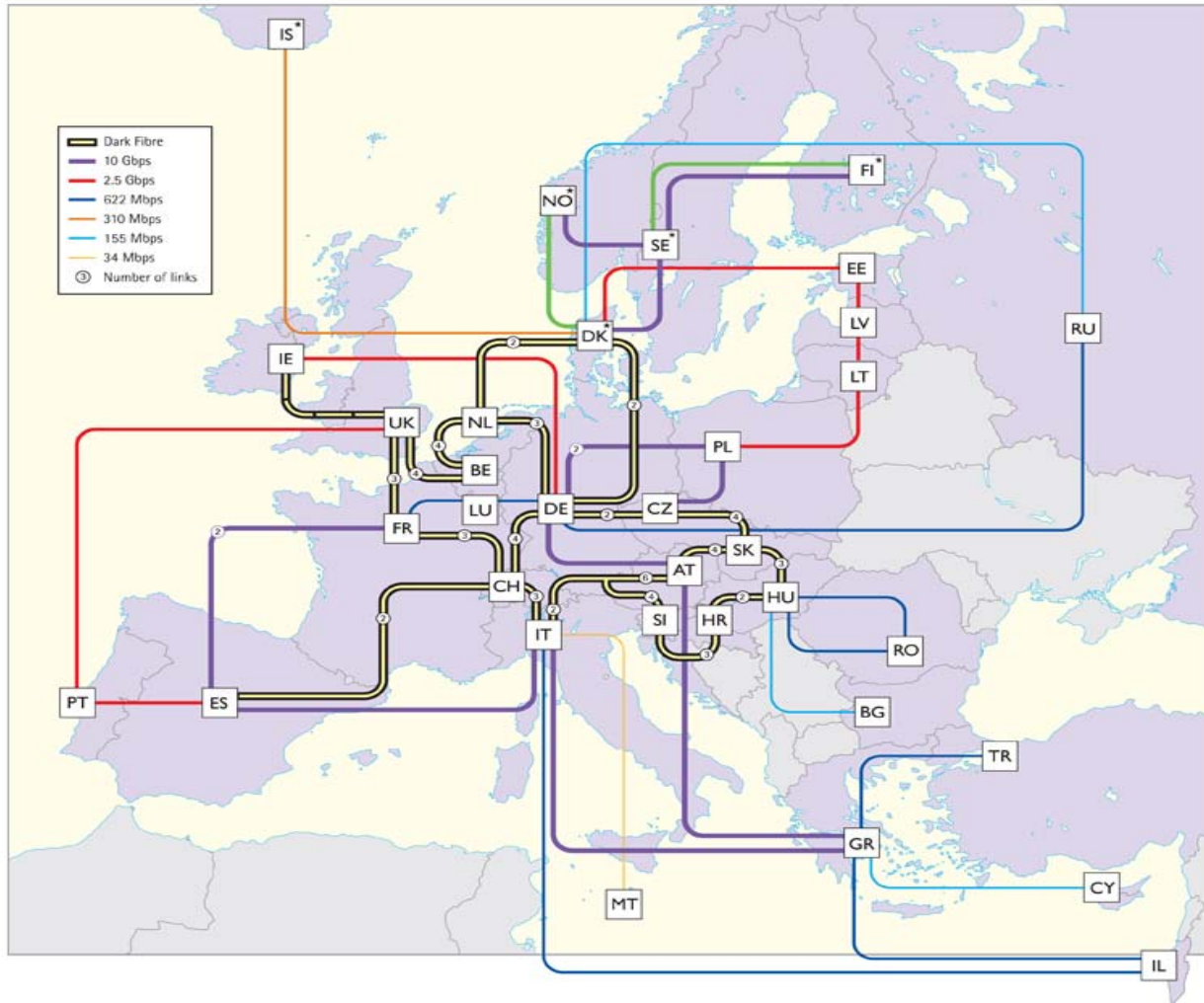
# Spring 2006 Internet2 Member Meeting

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# GÉANT2



Connect. Communicate. Collaborate



# GÉANT2 and Services



Connect. Communicate. Collaborate

- Pan-European Hybrid Network Over Dark Fibre
  - 12,000 Km. of Dark Fibre
  - DWDM equipment: Alcatel 1626 LM
  - TDM Switches: Alcatel 1678 MCC
  - IP equipment: Juniper
- Services
  - IP services over DWDM: Already Operational!
  - P2P services (ie. between big supercomputing centers): Under provisioning

# P2P services



Connect. Communicate. Collaborate

- Part of GÉANT2+ services
- Typically available for NREN on the Dark Fibre Cloud
- Types:
  - Over G.709 wavelengths:
    - 10Geth or STM-64 interface
    - Directly over the DWDM equipment
  - Over TDM equipment:
    - 10 GEth LAN PHY with VLAN capability
    - Multiple 1GEth
    - STM-64/STM-16 channels => Already used to provide IP Backups

# Global P2P services



Connect. Communicate. Collaborate

- 3 x 10Gbps links between GÉANT2 and Abilene
  - Frankfurt - Washington (currently being upgraded)
  - Amsterdam – NY (IRNC)
  - NY – London
- Extra 10Gbps connection is being planned
- Possibility of implementing P2P services in some of these transatlantic connections serving customers in US and Europe
- *Let's go for it!*