

NORDUnet

The Network in motion

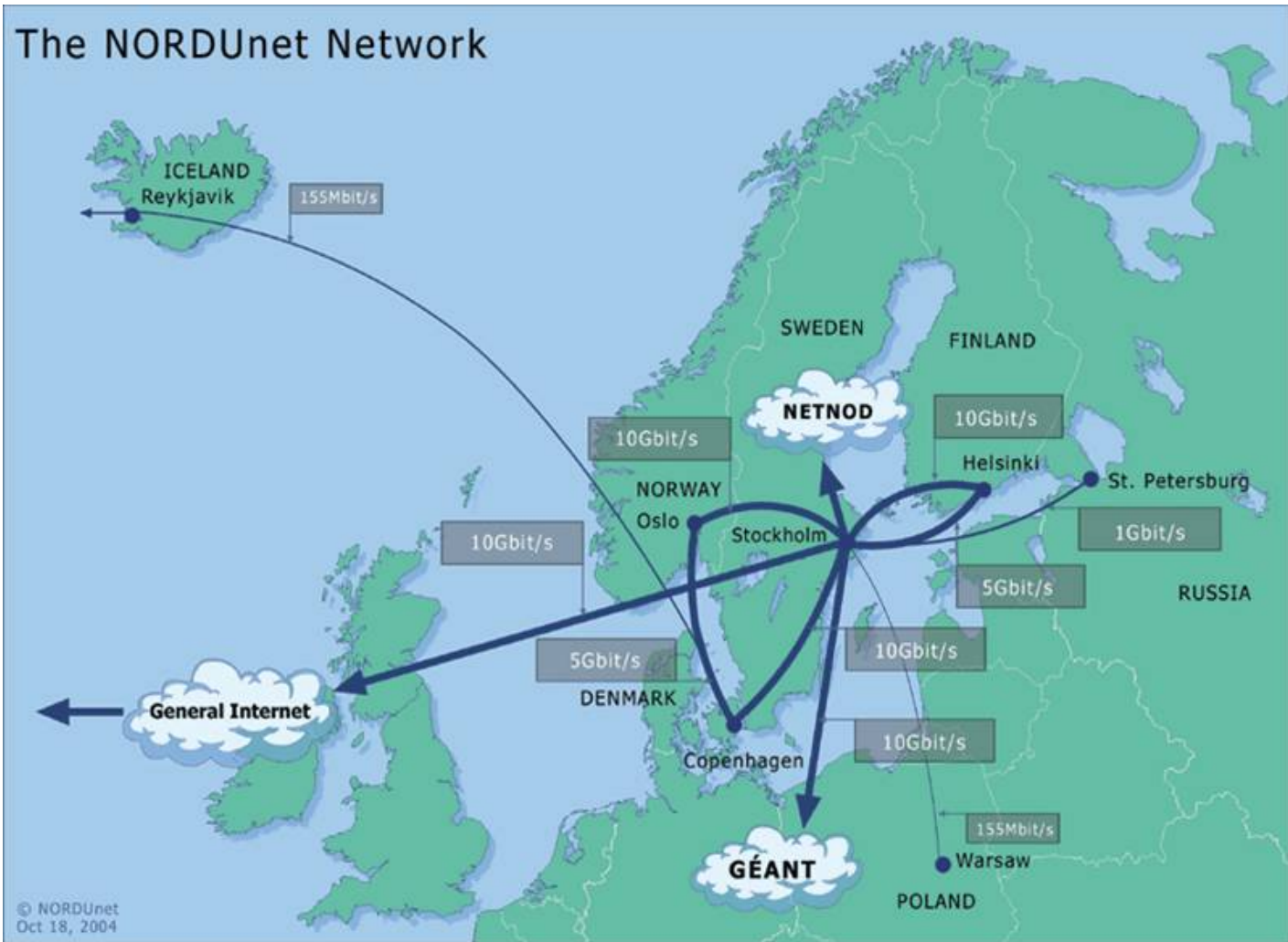
René Buch
CEO NORDUnet



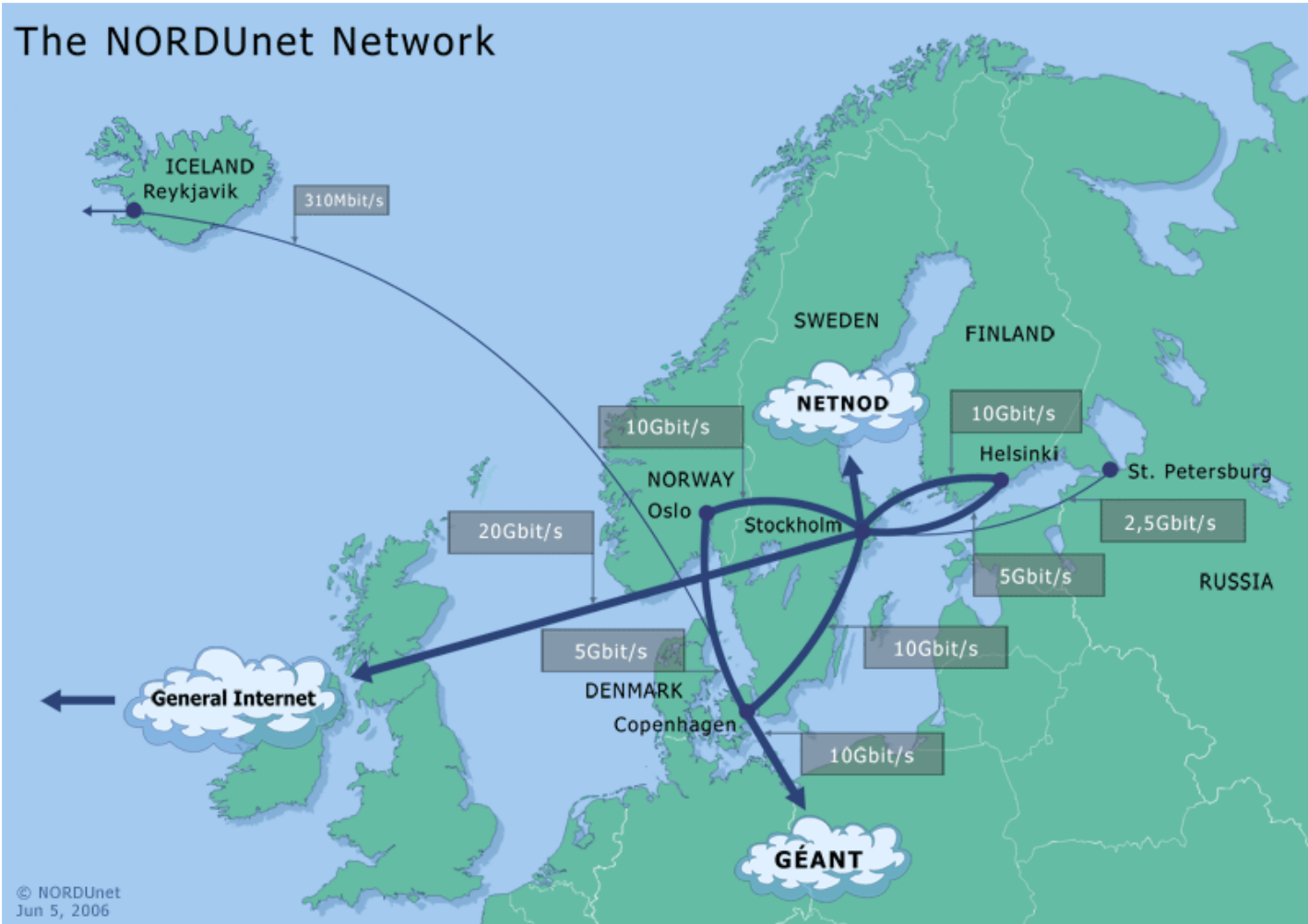
NORDUnet Network Evolution



NORDUnet Network 2005



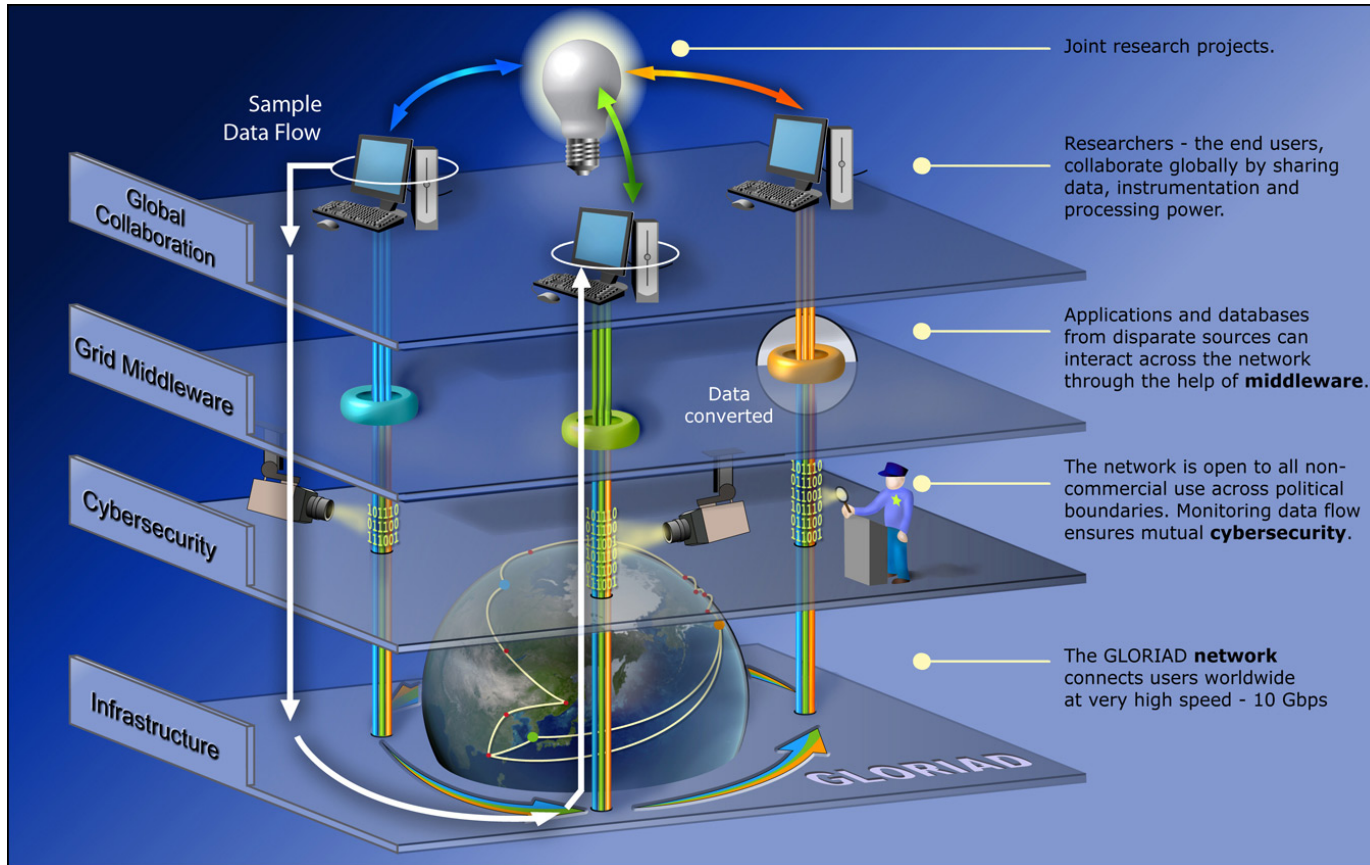
NORDUnet Network Current



GLORIAD Topology - Current, Plan for Years 2-5



1+1+1 = ?



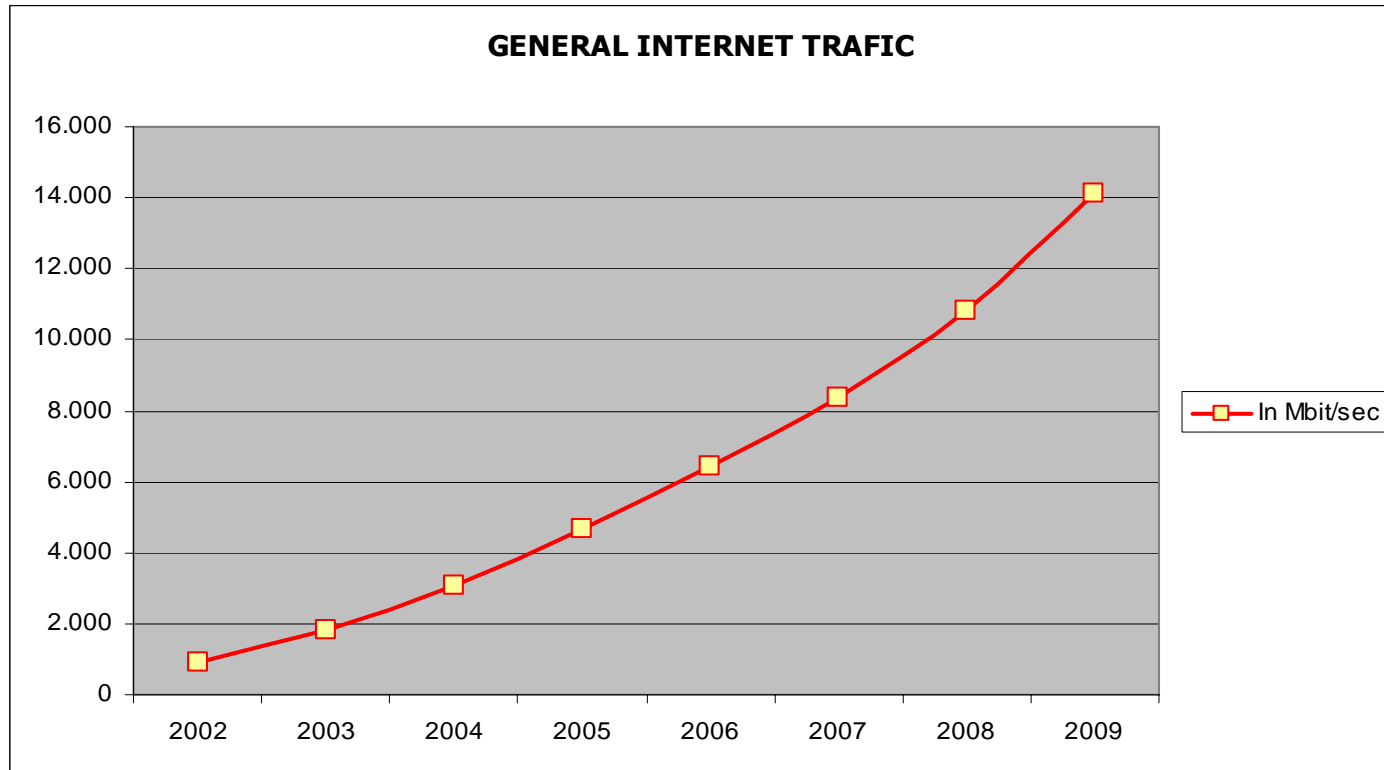
Network Evolution Drivers

User Requirements

- High capacity (1GB+)
- Project specific architecture and configuration
- On demand provisioning
- Non-Standard requirements
- Cost Control



IPT Traffic Projections



NORDUnet Network ROADMAP

- Implement Nordic Optical Network
- Integrate to NREN optical network
- Establish fibre link to Holland & The East
- Integrate NORDUfibre into:
 - GLORIAD (NeatherLight & Russia/Moscow Light)
 - GLIF
 - GEANT2
- Establish NORDUnet Optical Exchange
- Ease special circuit on demand provisioning
- Enable Cross Border Fibre capability

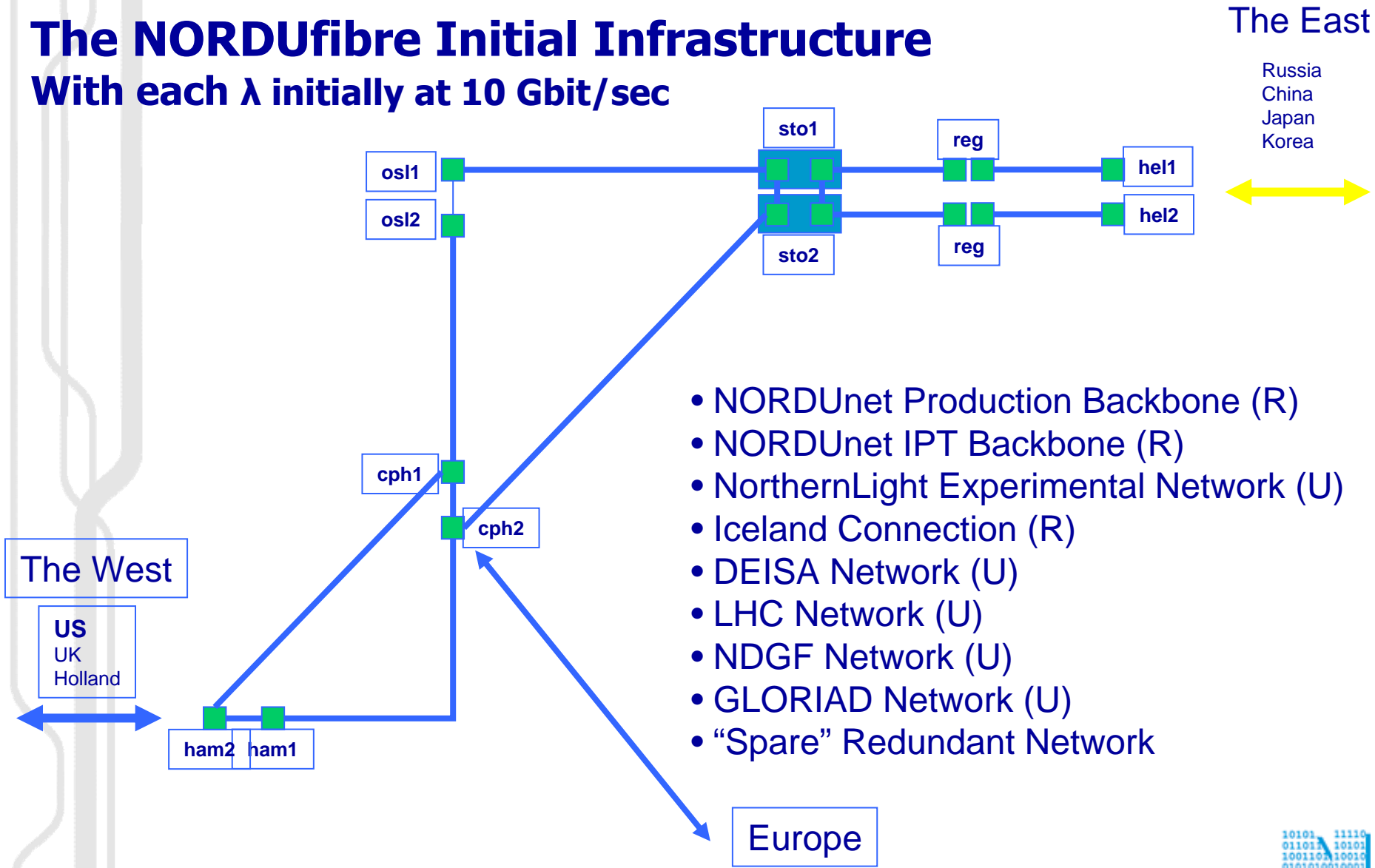


The NORDUfibre Project

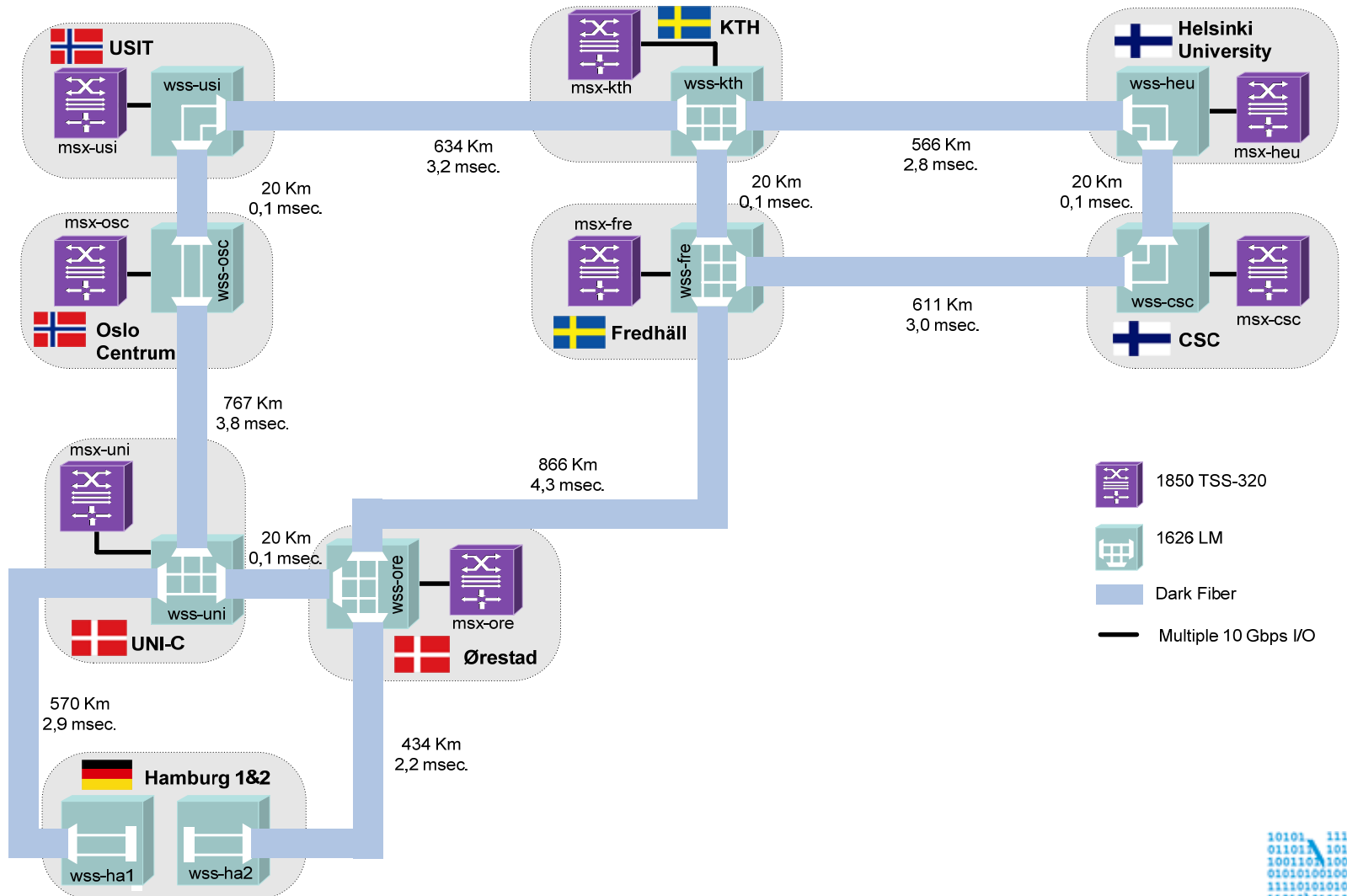
- Fibre for Scandinavian ring
 - Tender Completed – Contract signed
- Fibre for Finland Link
 - Tender Completed – Contract Signed
- Fibre for Southern Cross
 - Tender Completed – Awaiting board approval
- Equipment
 - Tender Completed – Contract negotiation in progress.
Expected Finalized within two weeks.
- Operational
 - Primo Q2 2007



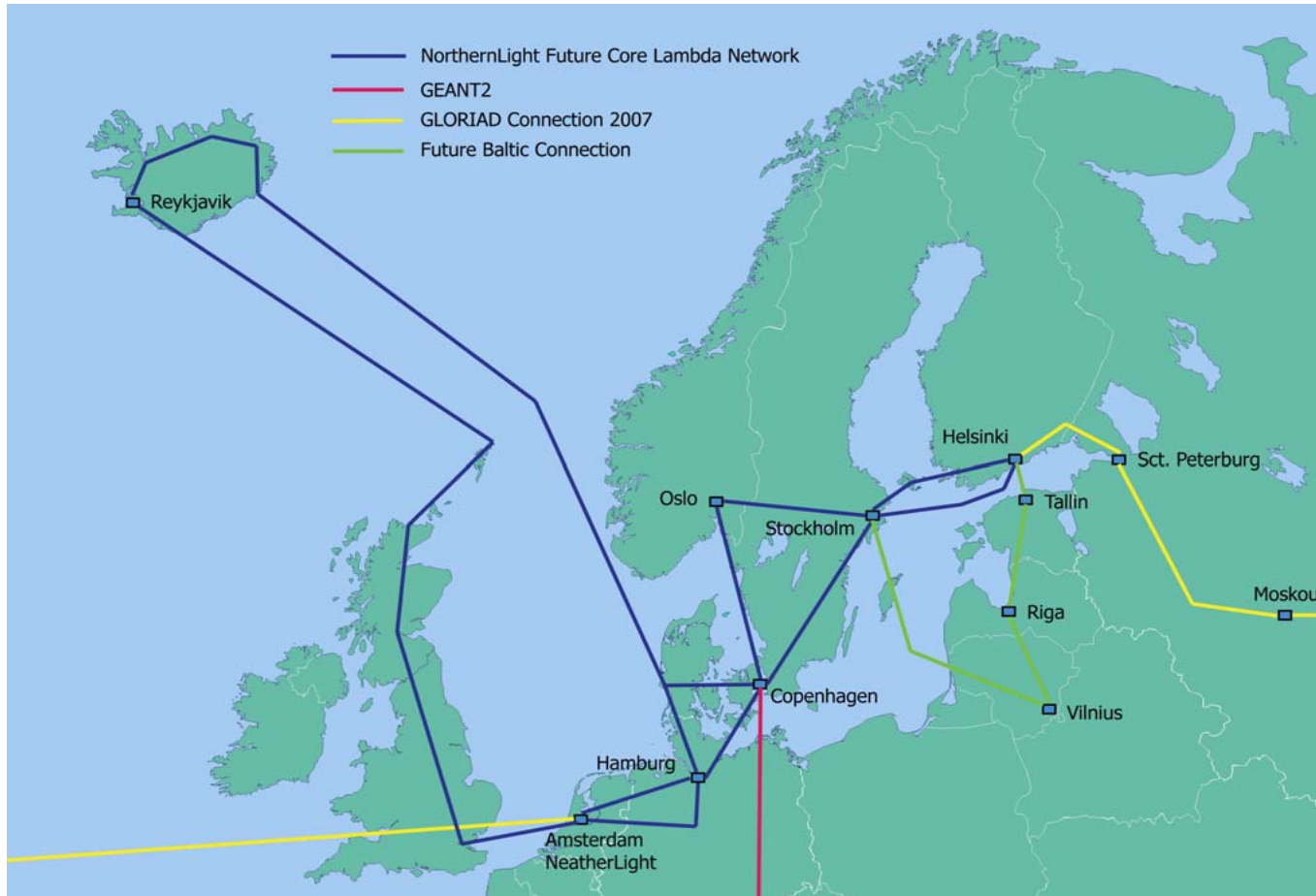
The NORDUfibre Initial Infrastructure With each λ initially at 10 Gbit/sec



A more detailed view



NORDUnet – Where we would like to move



NORDUnet Open Optical Exchange

- Distributed Optical exchange solution based on cutting edge technology
- Initially Redundant nodes available in
 - Stockholm
 - Copenhagen
 - Helsinki
 - Oslo
- Targeting user configurable capabilities

NDGF

The Nordic Data Grid Facility



NDGF Responsibilities

Coordination of Nordic Grid Resources:

- Hardware – CPU's and Storage
- Software – GRID Middleware
- GRID Deployment Staff Resources
- Coordinate CERN Projects related to CERN LHC
- 1. "Customer" – High Energy Physics
- Facilitate the GRID Capabilities for other scientific areas:
 - Astronomy
 - Bio Informatics
 - Atmospheric Sciences
 - ...



NDGF Progress

- Host Contract signed on May 16th 2006
- NDGF Staff:
 - Development Manager
 - Lars Fischer – Shared with NORDUnet
 - Technical Coordinator
 - Michael Grønager - Started June 1 2006.
 - CERN Coordinator
 - Oxana Smirnova – Started June 1 2006
 - Software development Coordinator
 - Josva Kleist – Started September 1. 2006.
 - 2 Out of 4 National node coordinator hired
 - 3 out of 6 Software Developers



Other NORDUnet Milestones

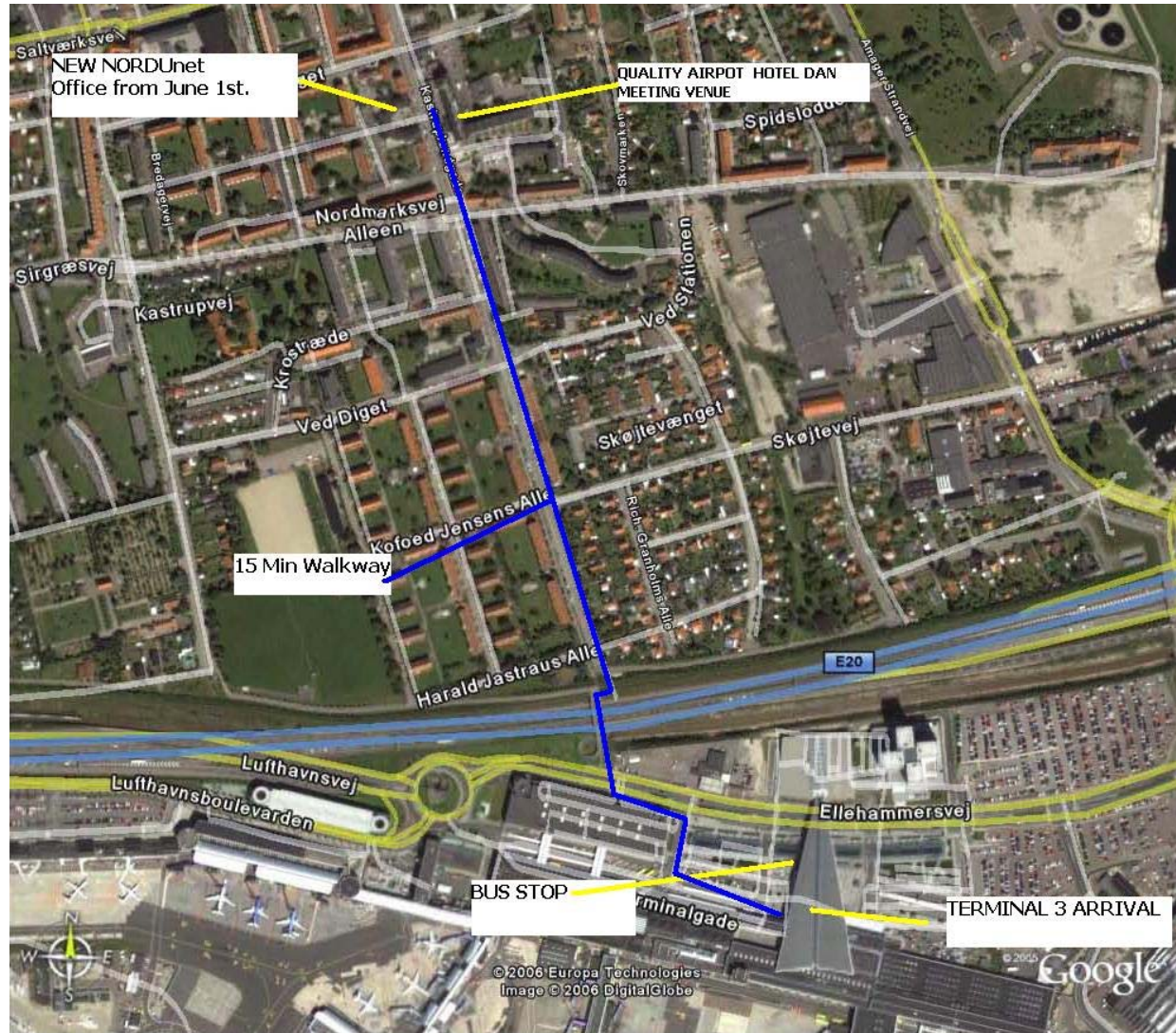


New NORDUnet Office From June 1st

- Centrally Located close to:
 - Copenhagen Airport
 - Train connections to Nordics
 - Metro Connections to Copenhagen (Mid 2007)
 - High way to Nordics
 - Copenhagen City
 - Hotels
- New facilities
 - Meeting Room facilities to accommodate 28 People
 - Hotel next Door
 - Flexible Office, incl. Guest Offices with 1 Gbit Internet Access
 - VoIP based Phone system **NEW NUMBER +45 32 46 25 00**



New NORDUnet Office



New Staff

- Tony Breach – Optical Network Manager
 - Started April 1. 2006
- Berit Hansen – Office Manager
 - Starting on October 1. 2006
- Heino Radmer – Optical Network Architect
 - Starting on October 1. 2006.

NORDUnet & NDGF

Questions ?

