

### The NSI Software:

The OGF NSI framework and the CS protocol standard have been independently implemented in software by several of the organizations participating in this demonstration. The software packages and the developing organizations are:

- OpenNSA** – NORDUnet, Copenhagen, DK
- G-LAMBDA-A** – AIST, Tsukuba, JP
- AutoBAHN** – GEANT Project, Poznan, PL
- DRAC** – SURFnet, Amsterdam, NL
- G-LAMBDA-K** – KDDI Labs, Fujimino, JP
- DynamicKL** - KISTI, Daejeon, KR
- OSCARS** - ESnet, Berkeley, US



establishment of GOLEs (GLIF Open Lightpath Exchanges) around the world and the partner contribution of high capacity transport links to interconnect the GOLEs. This distributed pool of switching and transport resources provides a global “expressway” for emerging hybrid technologies such as NSI. This global fabric of GOLEs provide “open” peering and cross-connect policies unmediated by the host organizations.

The GLIF **Automated GOLE Pilot Project** leverages these infrastructure resources to provide test bed facilities to support the development of user controlled network services for the scientific research community.

### The OGF:

The Open Grid Forum was established to bring together the emerging global Grid Computing community to standardize the means by which globally distributed computing, storage, and instrument resources are integrated into effective applications and workflows. The high performance networking community has engaged with the OGF and is working to standardize the **Network Service Interface**

(NSI) Framework as a means for integrating network resources into the grid environment. The NSI will provide users and applications with the ability to dynamically acquire and manage network resources as predictable and deterministic components of the grid infrastructure.

### The GLIF:

The GLIF (Global Lambda Integrated Facility) is an international community of R&E network service providers and research teams promoting advanced concepts in optical and photonic network services. The GLIF encourages and supports the

The participating Automated-GOLE Pilot + NSI Demonstration participants and supporters are:

- NORDUnet + NorthernLight (Nordics)
- NetherLight (NL)
- PSNC + Pionier (PL)
- CERNLight (CH)
- CzechLight + CESNET (CZ)
- University of Amsterdam (NL)
- NOVI Project (NL)
- i2CAT (ES)
- GEANT (EU)
- GLORIAD (US)
- StarLight (US)
- Internet2 ION + MANLAN (US)
- ESnet (US)
- CalTech + USLHCnet (US, CH)
- CANARIE (CA)
- AIST (JP)
- JGN-X (JP)
- KDDI Labs (JP)
- KISTI (KR)

