

Optical/Photonic Networking and Grid Integration

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Advanced Internet Research Group (AIRG)

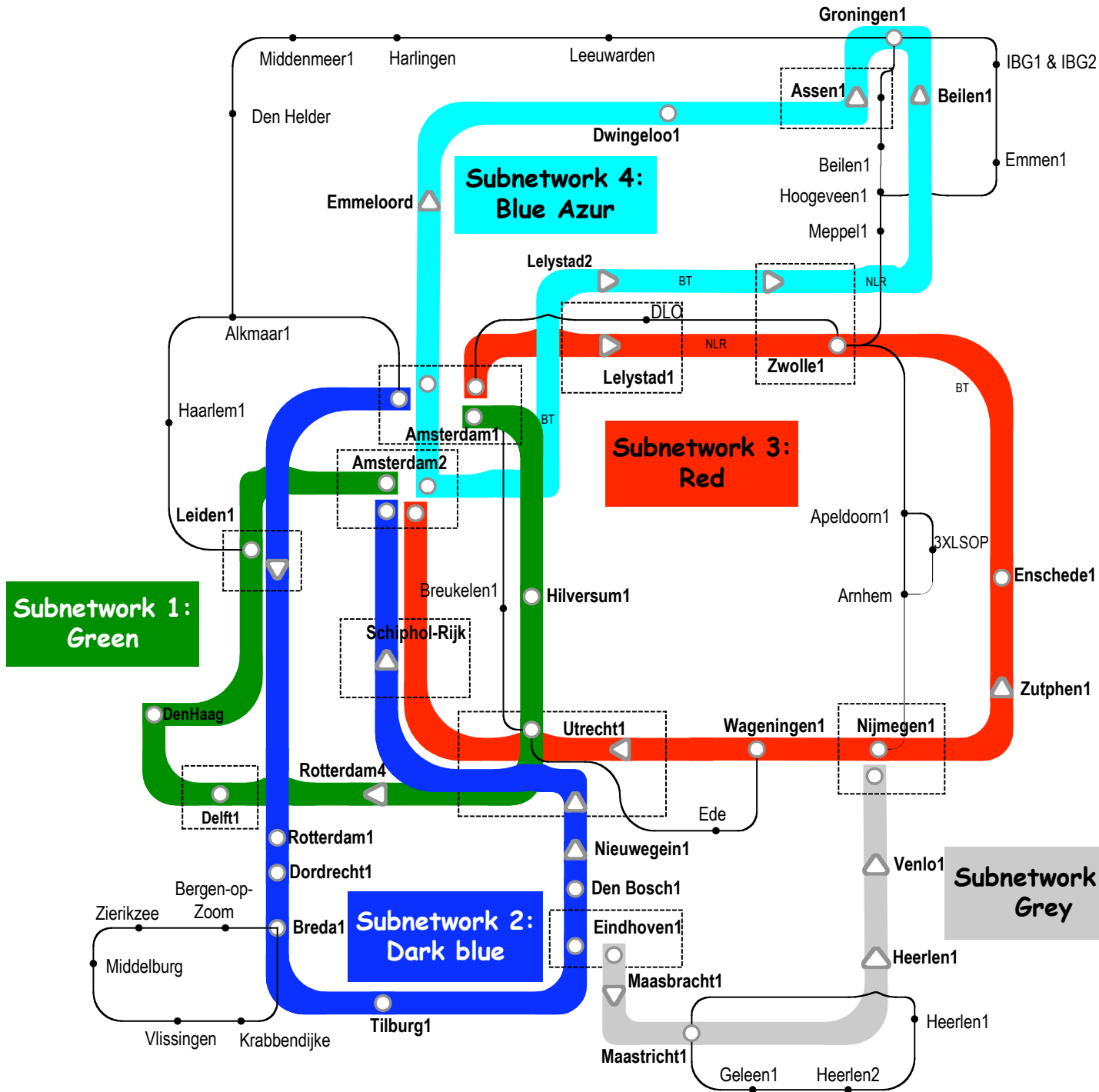
UvA



Contents

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- Because we were only allowed 4 slides and 5 minutes

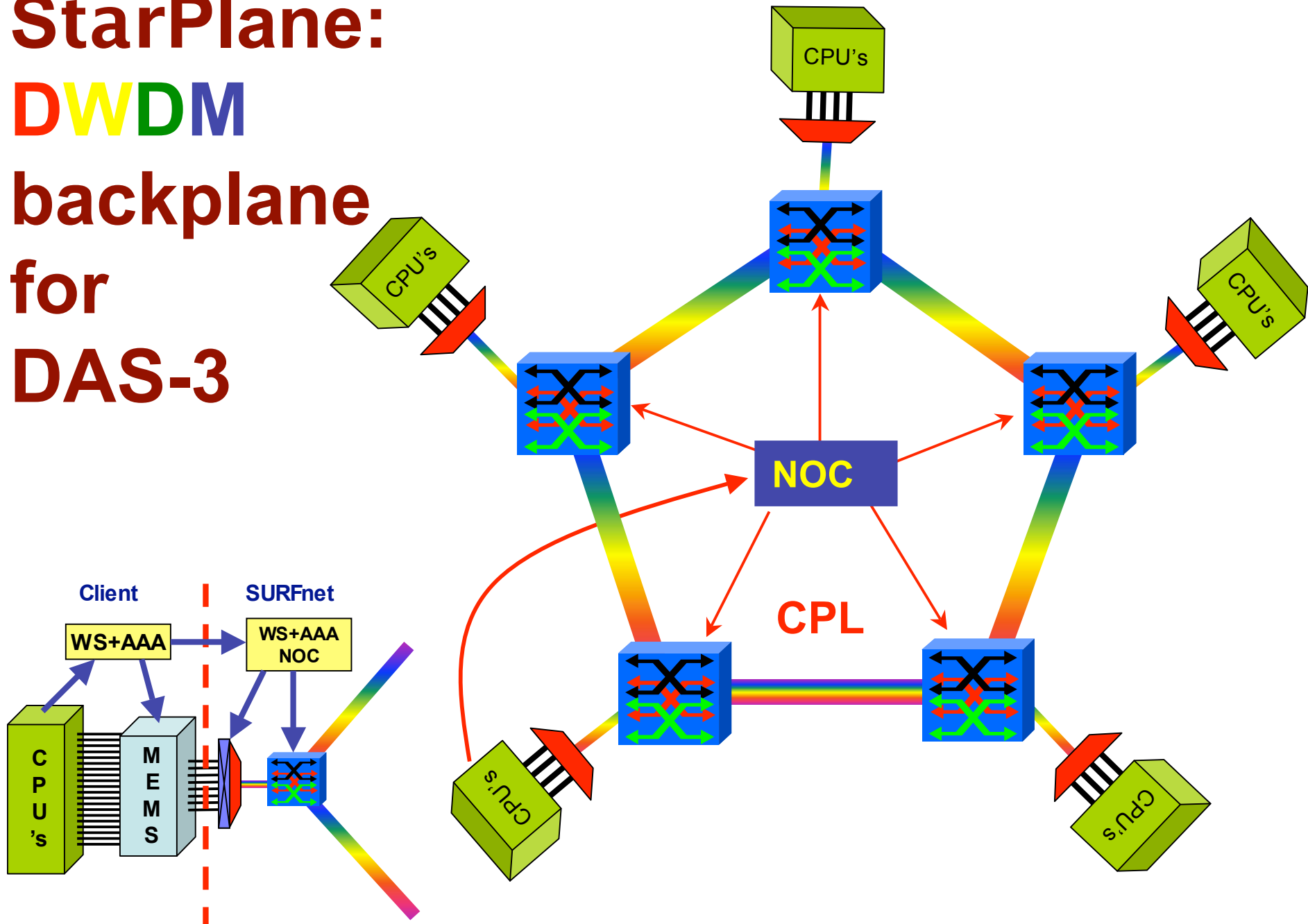


SURFnet6

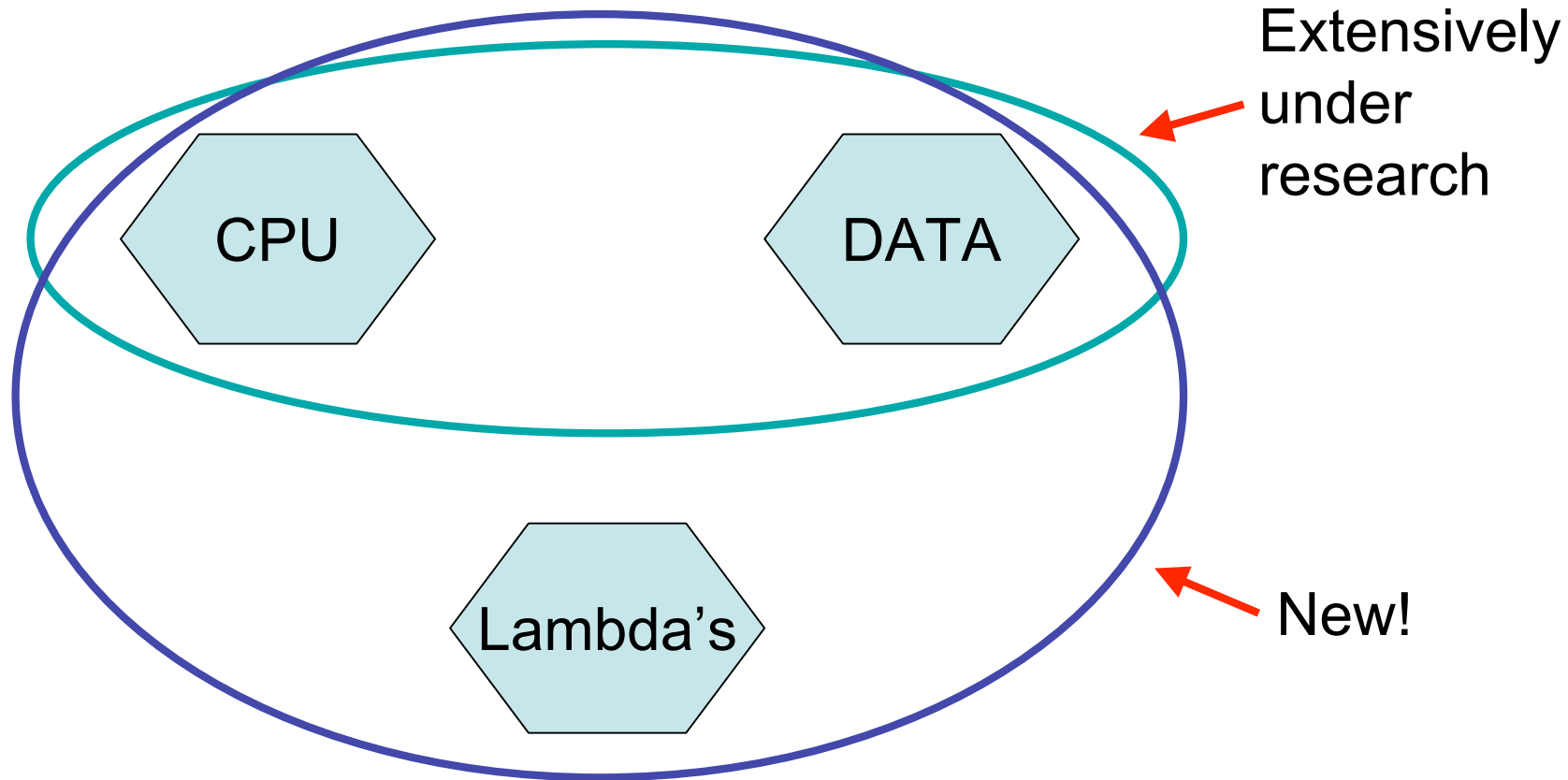
6000 km
Dark Fiber

Our
National
Laboratory

StarPlane: DWDM backplane for DAS-3



GRID-Colocation problem space



Research @ AIRG

- Optical networking architectures and models
 - Optical Internet Exchange architecture
 - Lambda routing and assignment
- IP transport protocols, performances monitoring and measurements
 - With respect to performance
 - Monitoring and reporting
 - Traffic generation with Grid infrastructure
- Authorization, Authentication and Accounting
 - Concepts and Architectures, resource virtualization (RDF)
 - Grid integration, service composition, workflow management
 - Service plane demonstrators over GLIF
 - Applications (VLE, Collaboratory)

International Playfield



Q4 2004

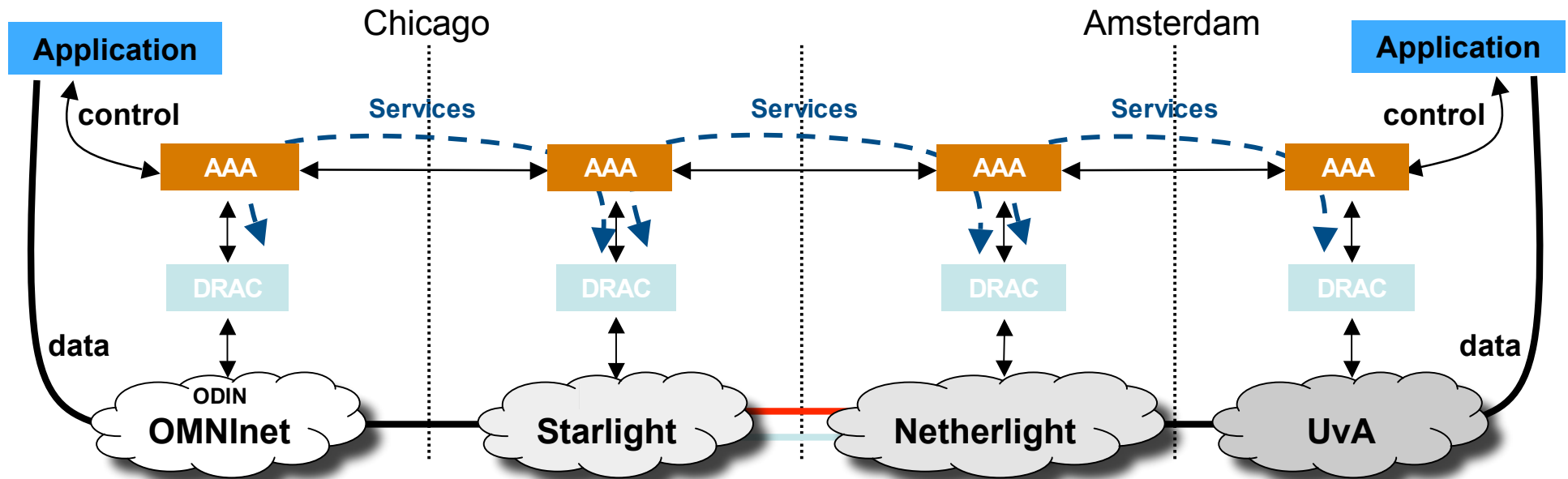
Visualization courtesy of
Bob Patterson, NCSA.

www.glif.is www.iGrid2005.org
www.gigaport.nl

www.optiputer.net

slide 4

SC2004 Lambda Service Demonstrator



- finesse the control of bandwidth across multiple domains
- while exploiting scalability and intra-, inter-domain fault recovery
- thru layering of a novel SOA upon legacy control planes and NEs

Questions ?

More info:

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