

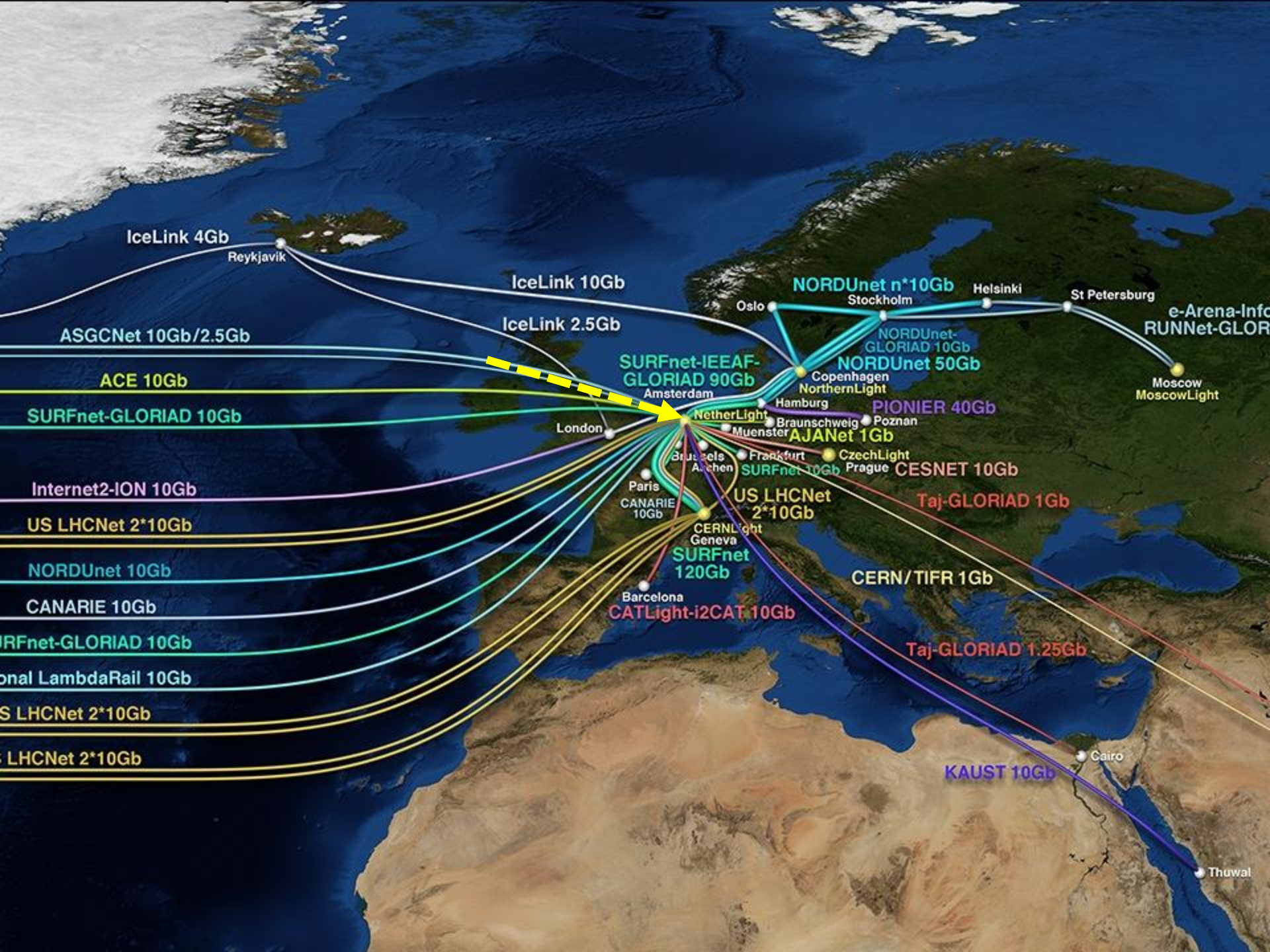
NetherLight Innovation Update

GLIF Annual Meeting

Gerben van Malenstein

Chicago, Illinois, USA – October 11, 2012



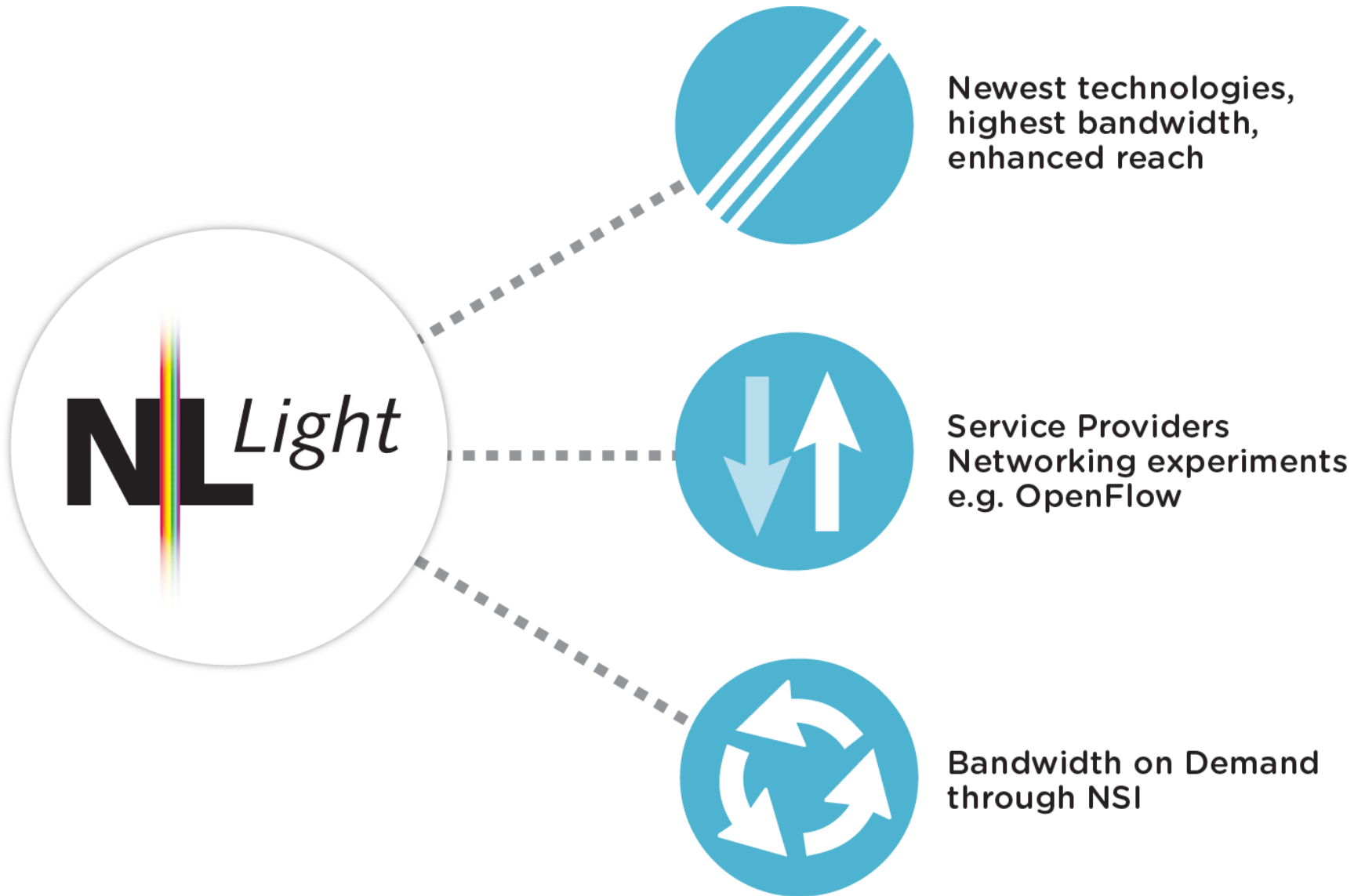


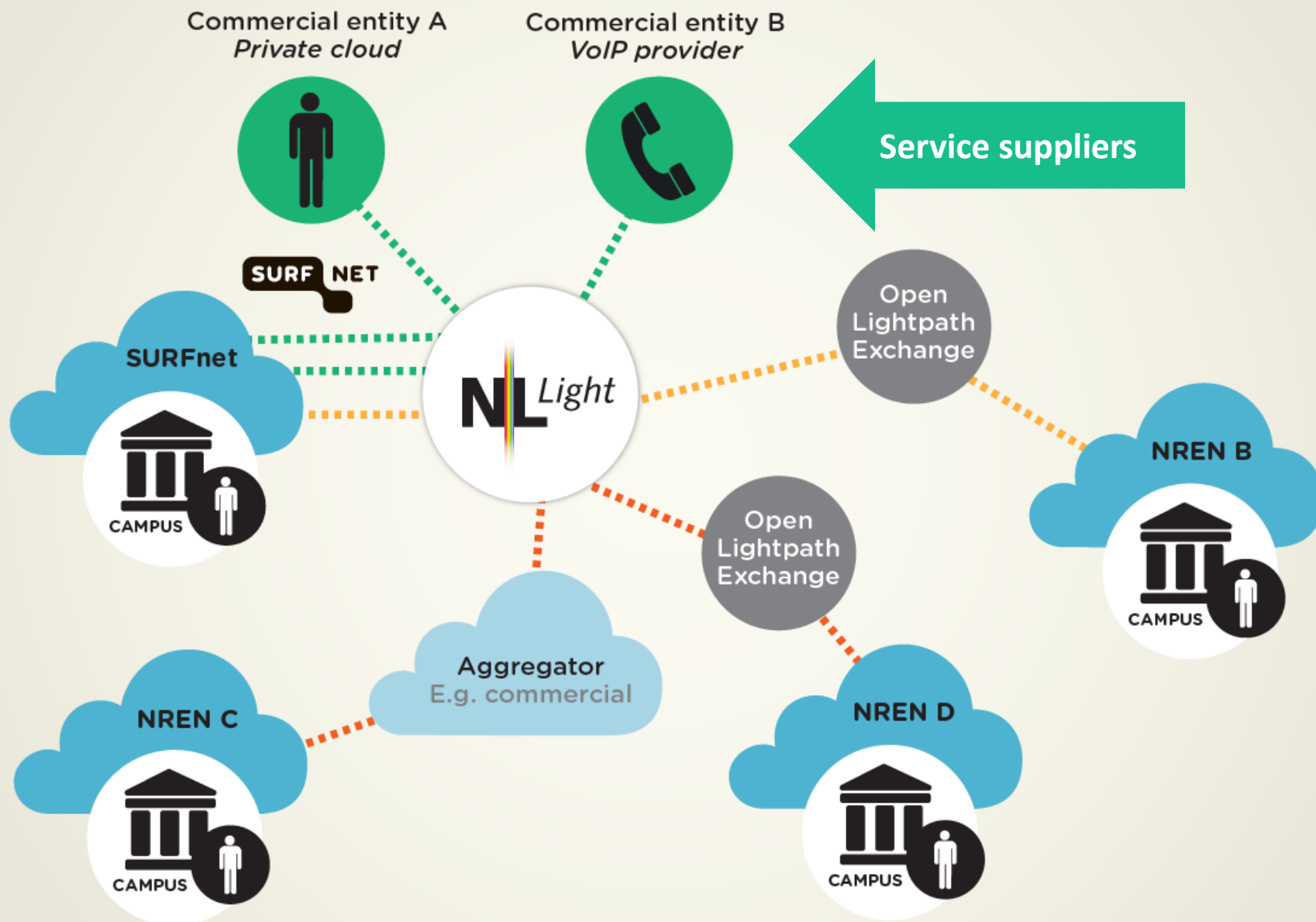
[illegible]

- **Dark Fiber Maastricht (Netherlands) – Hasselt (Belgium) in service since April 2012**
- **10GE Amsterdam – London in service since August 2012**

Core Values at NetherLight

- SURFnet facilitates **interconnects** on a global scale between R&E networks, international carriers and (cloud) service providers.
- SURFnet strives to use **cutting-edge networking technology**.
- SURFnet promotes competition and innovation hence supporting an **open connection policy** (anyone can connect) and not imposing use policies with regard to the traffic on the interconnects.
- SURFnet actively contributes to international connections with other networks, preferably using **Open Exchanges** in order to enhance higher education and research purposes.







SIP Trunk

Embedding the service in the campus with a lightpath

Commercial entity
VoIP provider

onexs



131.155.165.9

SURF NET



SURFnet

NL Light

Windesheim



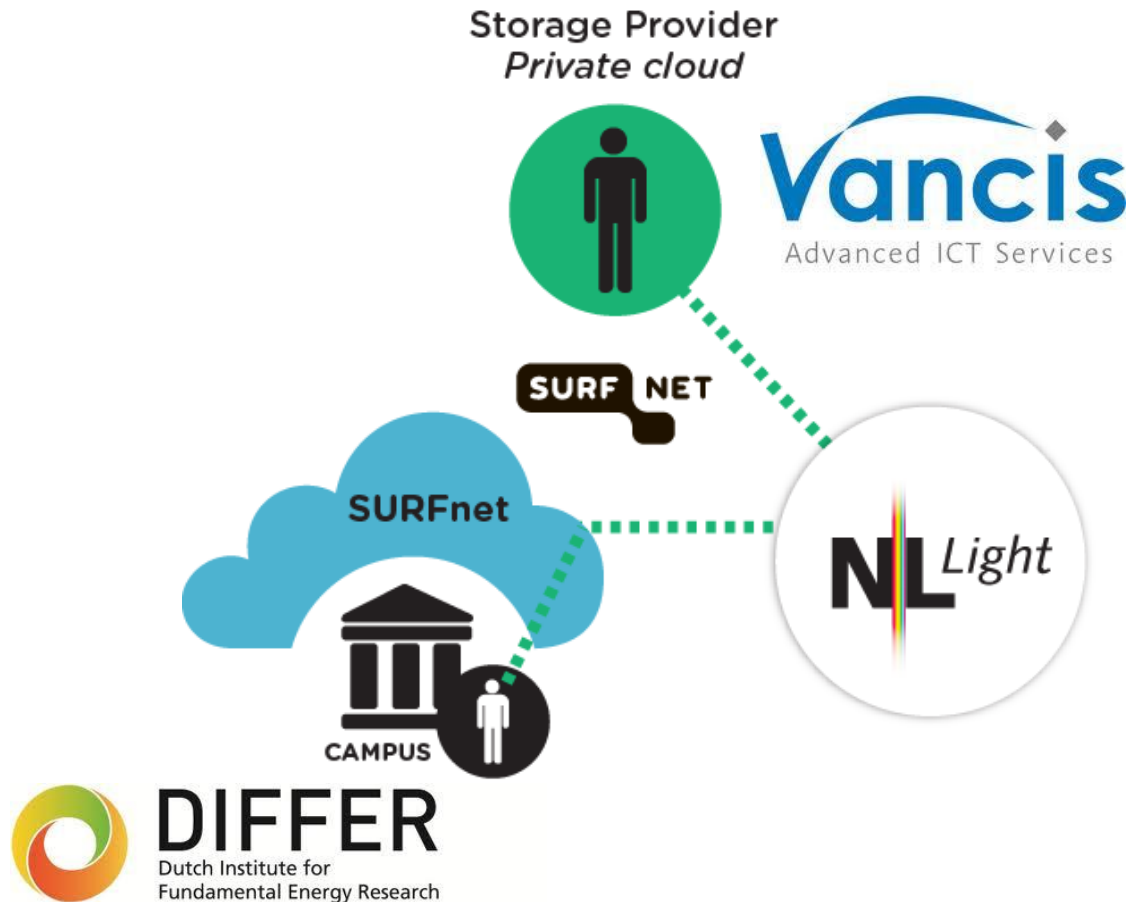
CAMPUS

131.155.0.0/16





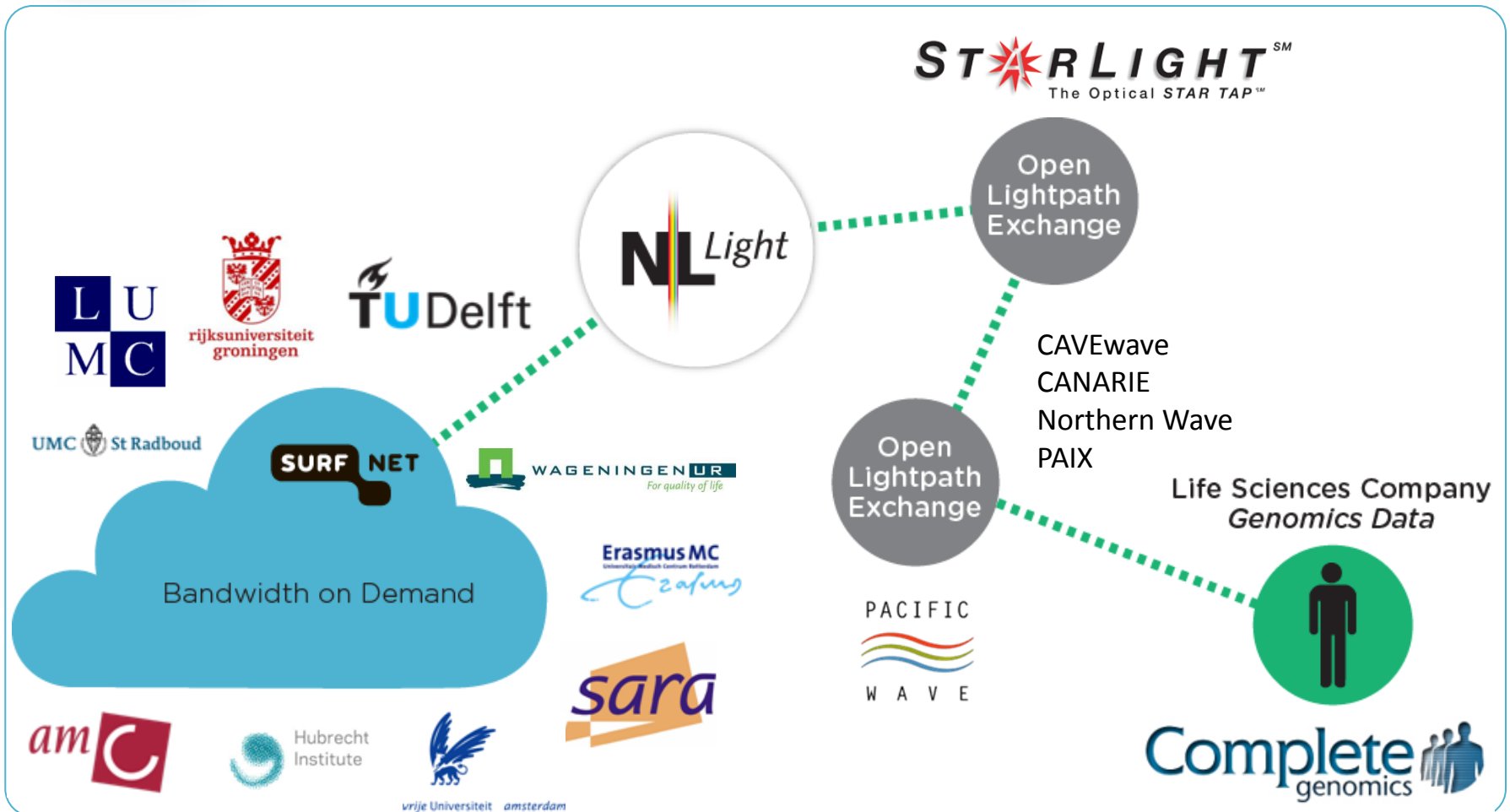
Storage: back-up





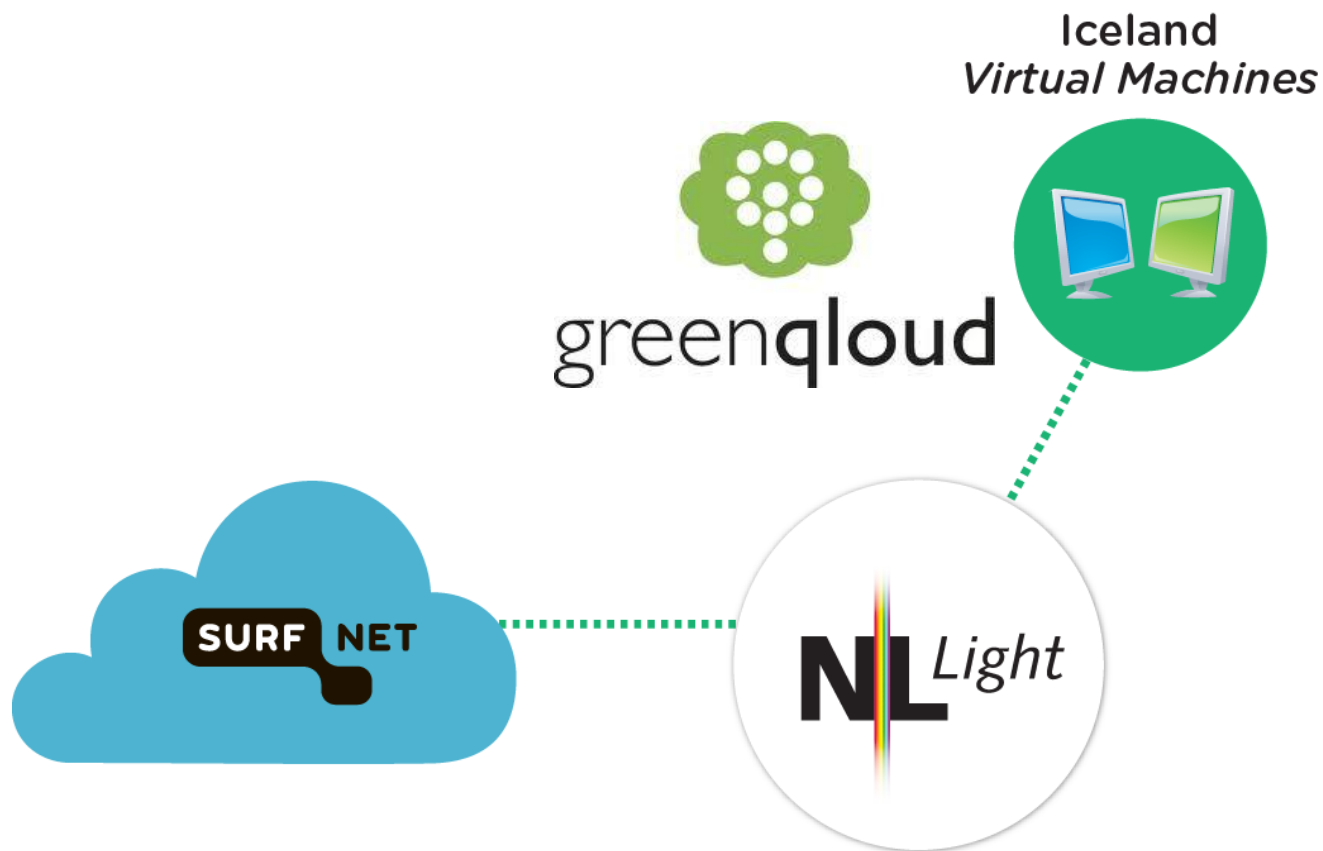
Genomics

Winner of Enlighten Your Research 3 – Jan Bot

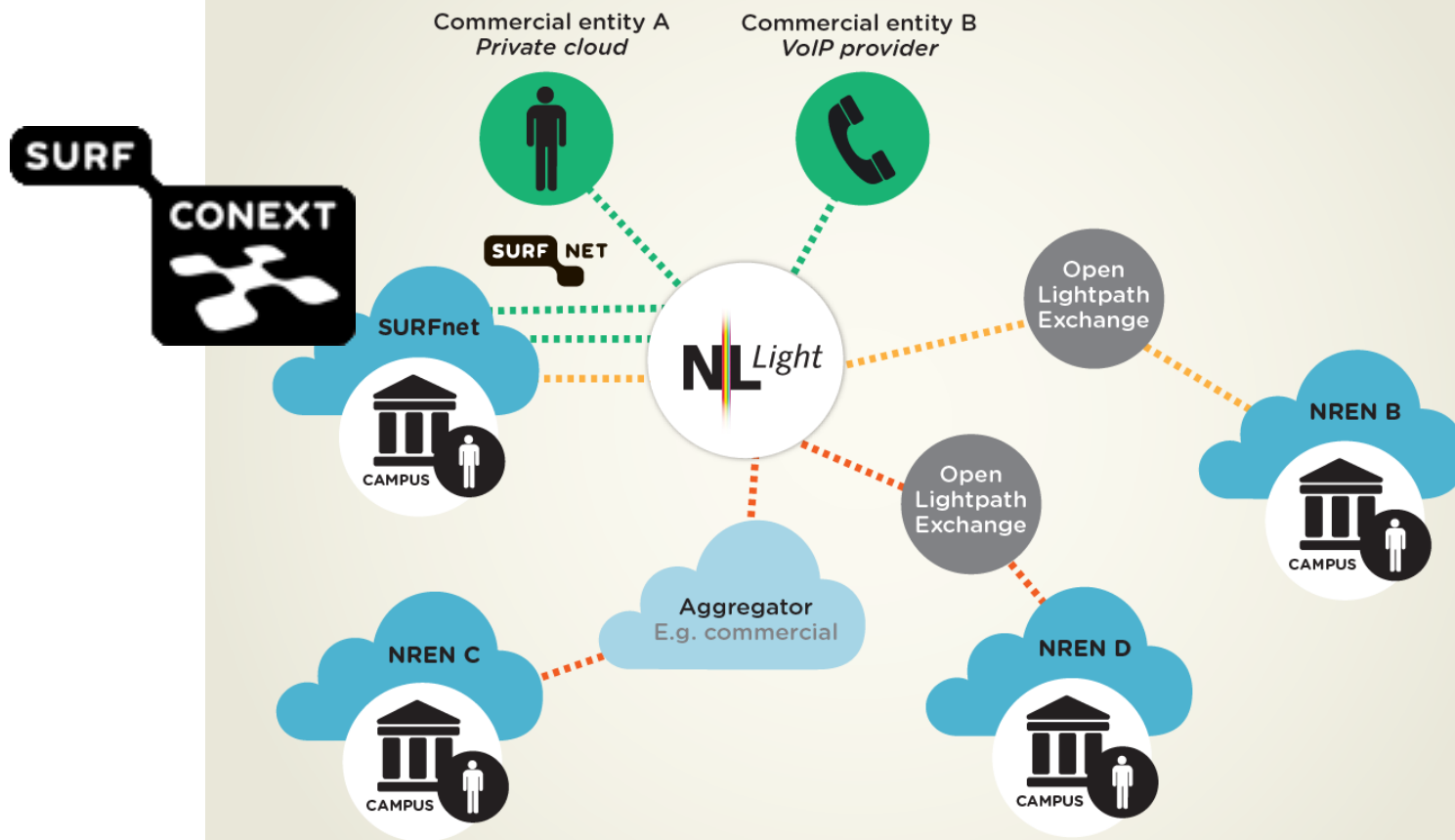




Virtual Machines (Pilot)



Near future





Overview

Reservations

Virtual Ports

Log Events

Add a Reservation

Label backup experiment data 2012-09-17

Team BoD test team

Source port SURFnet kantoor Utrecht - Host 3

Destination port Storage @SARA

Starts (date + time) 2012-09-17 yyyy-mm-dd 15:05 hh:mm ☐ NowEnds (date + time) 2012-09-17 yyyy-mm-dd 18:05 hh:mm ☐ Forever

Bandwidth 500 Mbit/s Low Med High ?

Options ☒ 1+1 Protection ?

Save

Cancel

How it works

Source and Destination

Select the source and destination port for your reservation, if you are member of more than one group you can select the virtual resource group to be used.

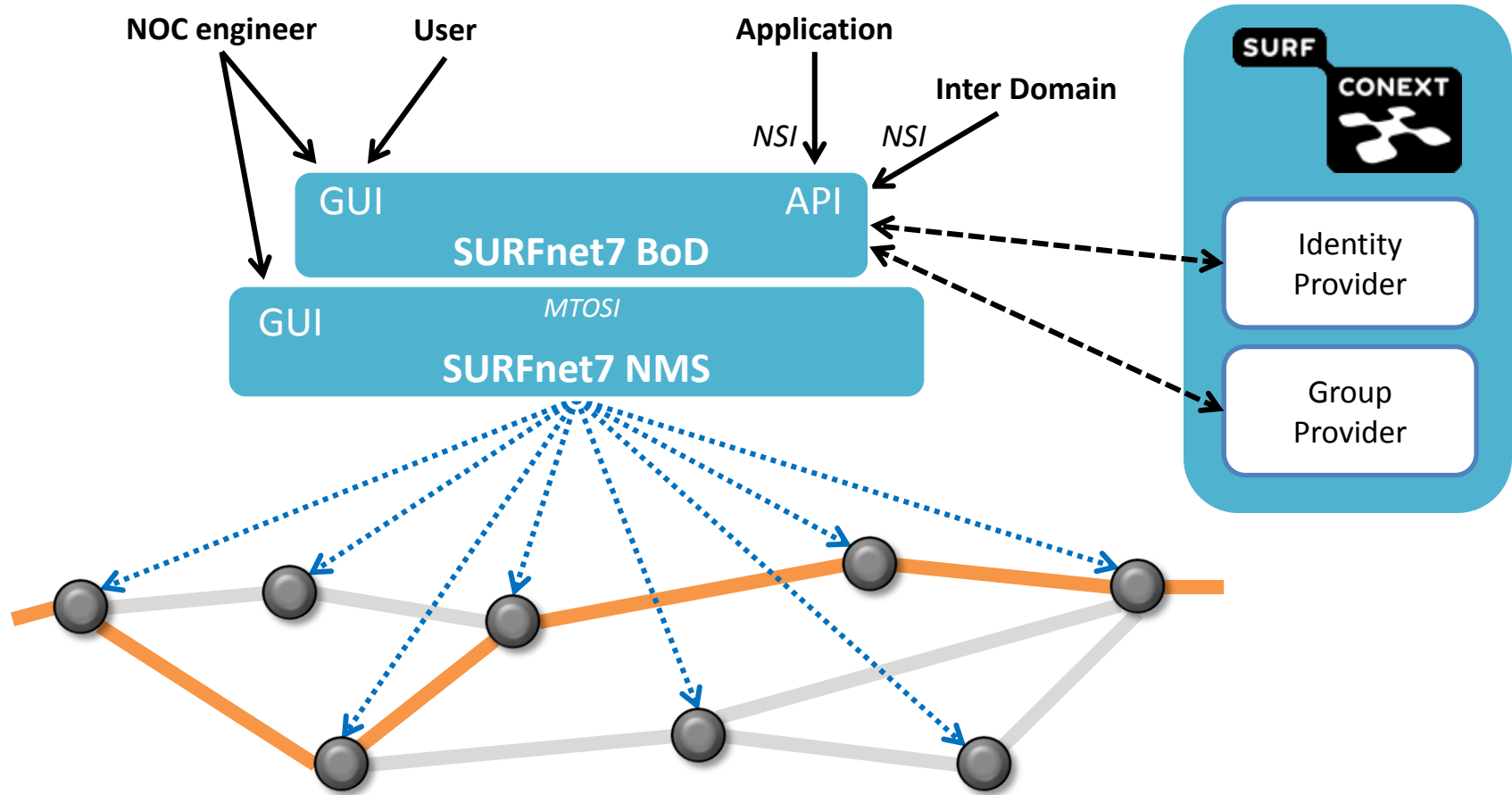
Start and End Time

Select the start and end date and time for your reservation, the time that it takes to setup and tear down your bandwidth on demand circuit falls within this period.

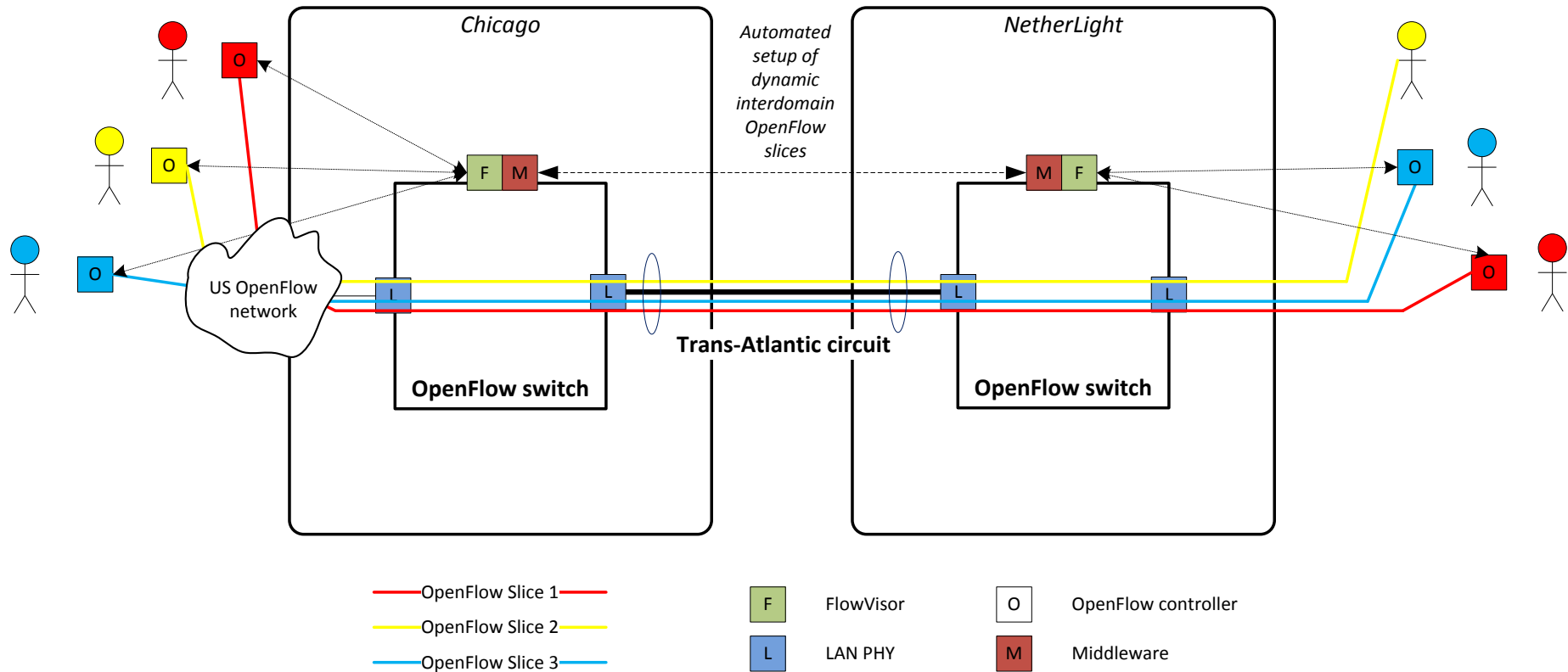
Bandwidth

Select the amount of bandwidth you want to reserve, you can use the quarter, half or full bandwidth buttons or specify it with a 1Mbit/s granularity.

BoD in SURFnet7



Interdomain OpenFlow slices



2013

- Trans-Atlantic connectivity tender framework
- Interdomain OpenFlow slices available
 - Manually provisioned, later on automated provisioning
- Connecting more/different service suppliers
 - Second NetherLight location
- LHCONE Dynamic P2P connectivity pilot
- NSI-CS 2.0, topology service,
BoD authentication & authorization, ...



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