

# **NORDUnet IceLink**

**Arctic Region Research Infrastructure** 

## **René Buch**

CEO



**Nordic Infrastructure for Research & Education** 





#### **The Arctic Region**





### **The IceLink Project**

Objective

NORDUnet

- Provide Adequate & Sustainable access to Iceland
- Provide Option for future Expansion into Greenland
- Provide Option for future expansion into Farao Island
- Link North Atlantic Region with Canada & Alaska



### **The IceLink Project**

### **Project Partners:**

NORDUnet

- NORDUnet Nordics
- National Science Foundation US (GLORIAD)
- Canarie Canada

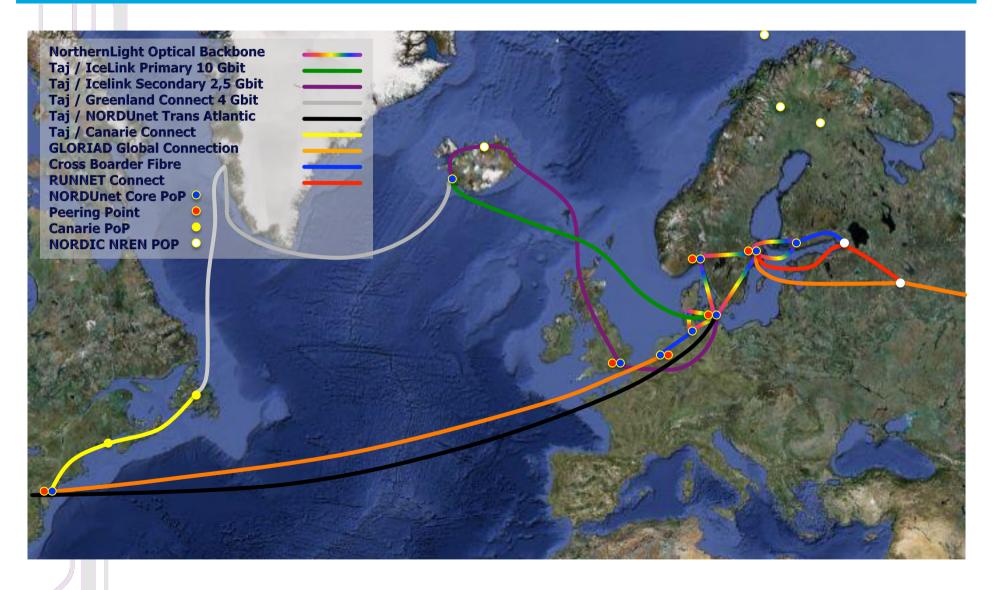
Project Cost:

Total: 1.070.000,- € / Year:

- NORDUnet 650K €
- NSF 220K €
- Canarie 200K €



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#### **Intra Nordic Infrastructure**

- The National NRENS of
  - Norway Uninett

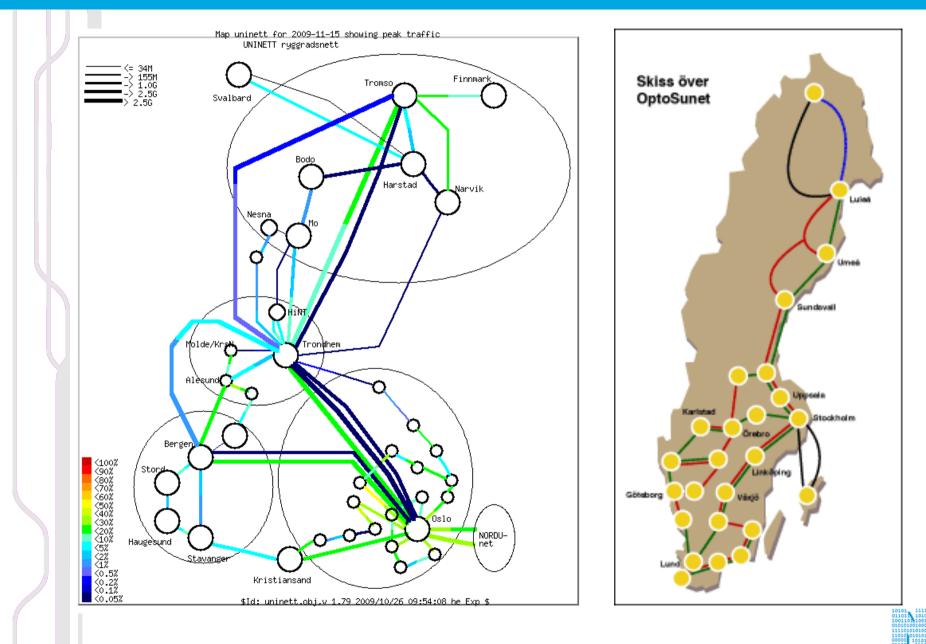
NORDUnet

- Sunet Sweden
- Funet Finland
- Rhnet Iceland
- Adds additional connectivity into the arctic region:





#### **UNINETT & SUNET**















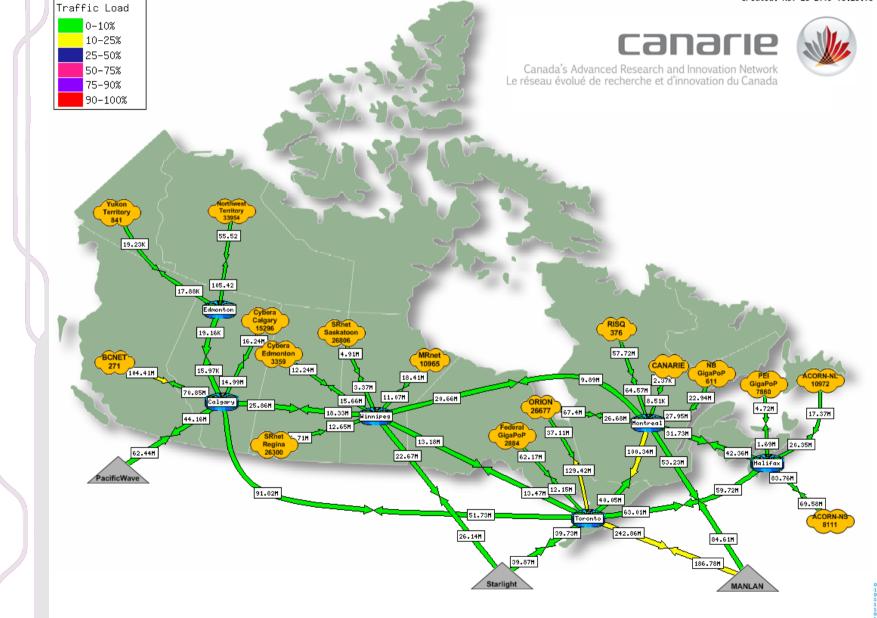






#### Canarie

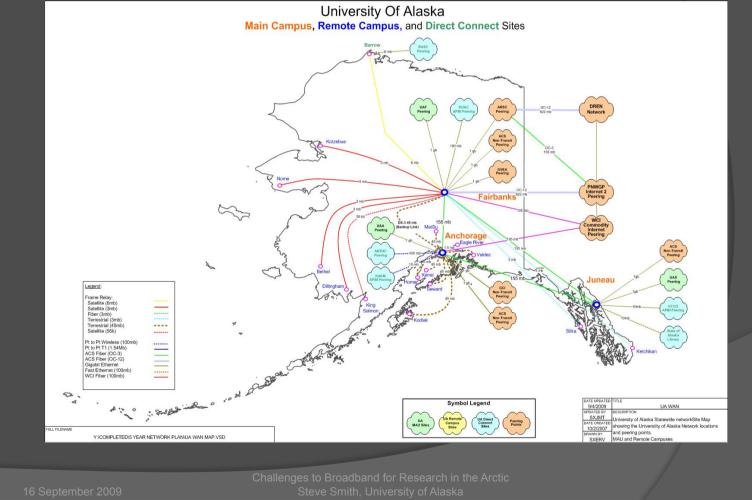








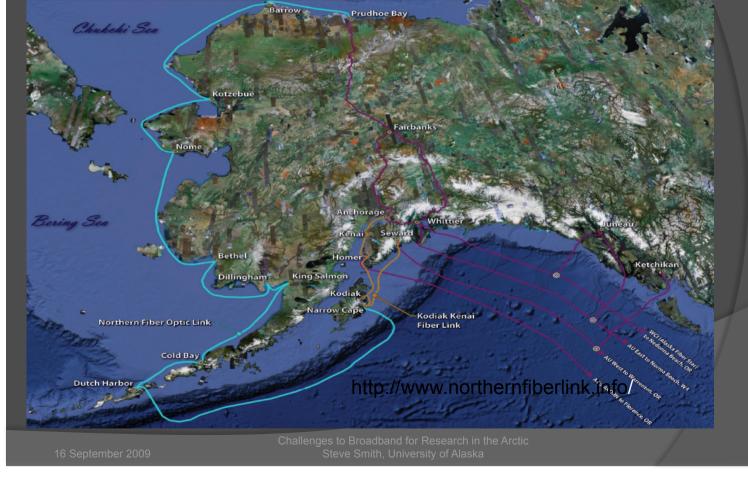
#### University of Alaska WAN map





#### **UoA**

### Northen Fiber Optic Link (NFOL) Proposed Network (in blue)



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#### UoA

#### TERRA Proposed Network: Regional Hubs, High Speed Backbone



- Regionally Hub Terrestrial Networks
- Combination of Microwave and Fiber Optic Segments
- Extend Existing Fiber Optic Network
  - Fault Tolerant Ring
  - High Speed Backbone

Map: GCI

Challenges to Broadband for Research in the Arctic Steve Smith, University of Alaska

16 September 2009

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- General Overall Strategy
  - Community requirement
  - Federation of resources
- Iceland:
  - Local Infrastructure In progress
- Greenland:
  - Break Out extremely expensive Local Politic need to be addressed
  - Internal Infrastructure
- Farao Island:
  - Break Out in Negotiation





#### Links

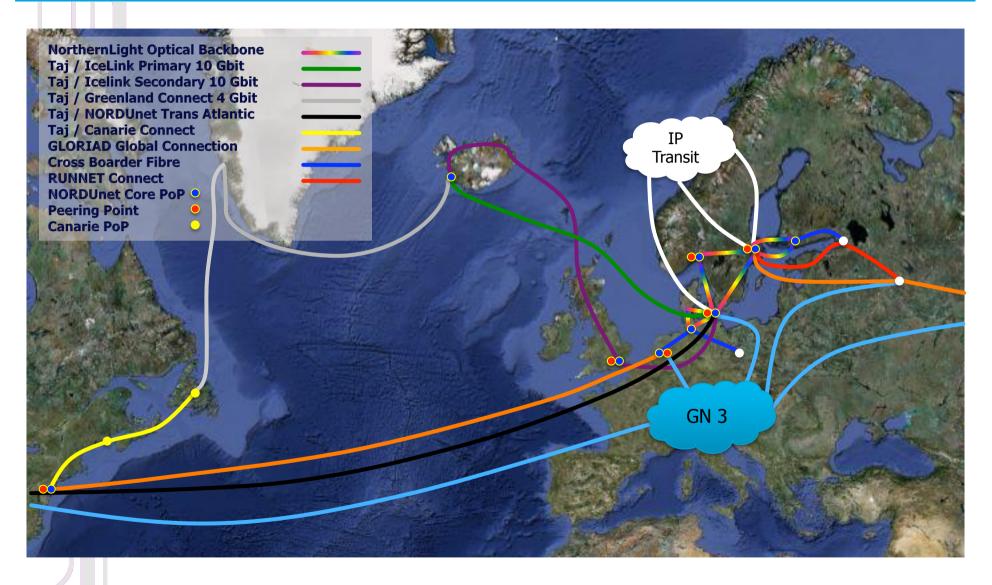
NORDUnet Strategy: René Buch CEO, NORDUnet <u>http://nordunet.tv/0012530027211864/nordunet\_the\_new\_strategy</u>

The Challenges of Broadband Networks in the Arctic, Steve Smith, University of Alaska:

http://www.nordu.net/conference/ndn2009web/steve\_smith.html



#### NORDUnet Nordic infrastructure for Research & Education NORDUnet Q4 2009







# NORDUnet

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