

Nordic e-Infrastructure Collaboration ...and some opportunities

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norden

NordForsk



Nordic e-Infrastructure
Collaboration

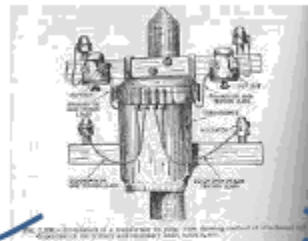
Three stages of infrastructure development:

1. Electricity infrastructure: Precursor stage

Pearl Street Station



electric pole



electric light



2. Electricity infrastructure: Formation stage



3. Electricity infrastructure: Consolidation stage++





[Photo: Doc Searls](#)

The Nordics

- Many systems in the Nordics at the **Precursor Stage**
 - Large technical systems
 - Centrally (nationally) controlled
- NeIC can add value at the **Formation Stage**
 - Technology transfer between the Nordic countries and disciplines
 - Adaption to national conditions, giving technical variations plus social, cultural, organizational, legal, and financial adjustment
- ...and at the **Consolidation Stage**
 - Fostering development of generic *gateways* allowing systems to interoperate (resource allocation procedures, standards, ...)



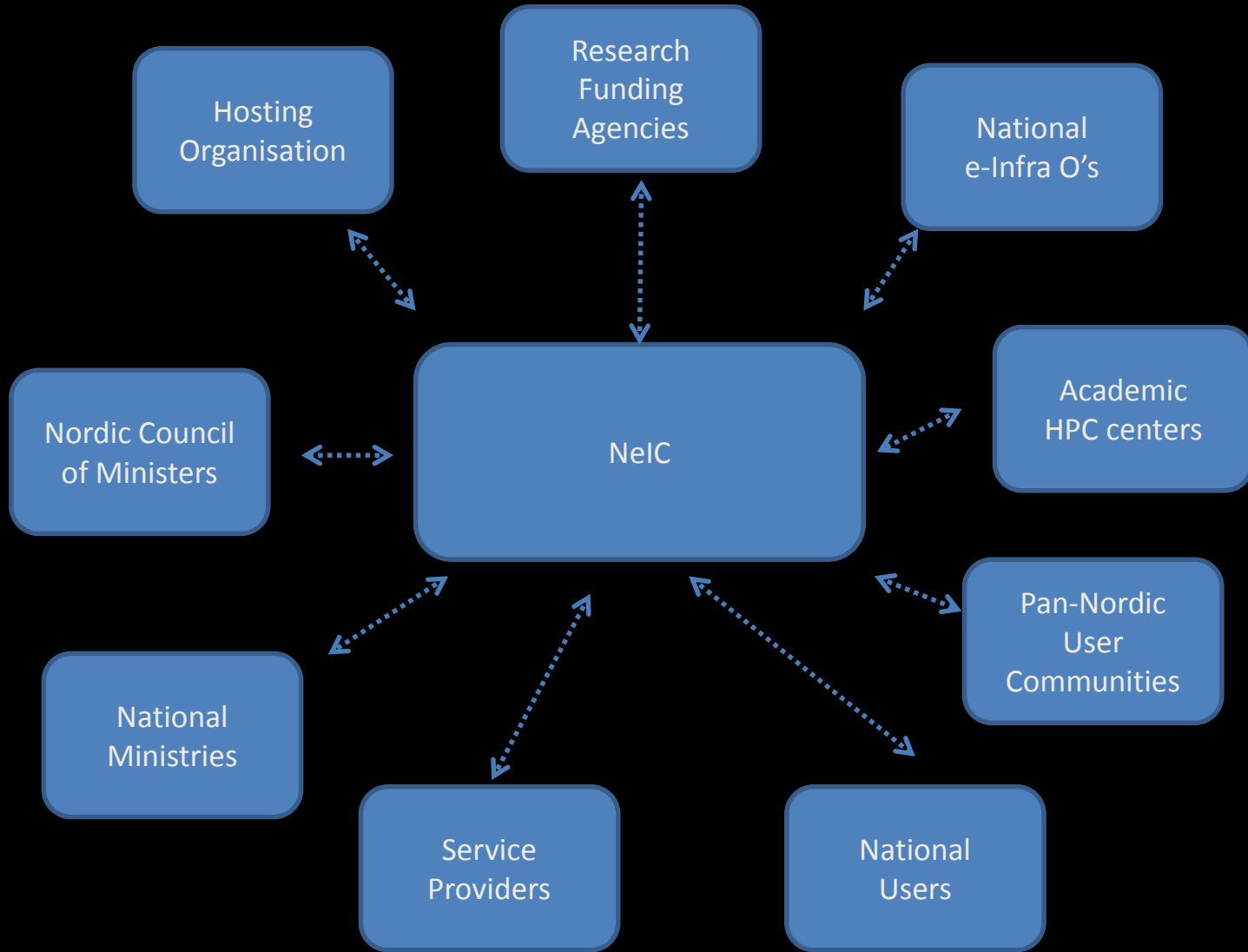
[Photo: dream is destiny...](#)

NeIC 'Owners'



MINISTRY OF EDUCATION,
SCIENCE AND CULTURE





Some Operational Principles

- *Open and reliable*
 - Activity initiation process
 - Collaboration model
- Priority to *stakeholder engagement*
 - Stakeholder roles
 - Systematic engagement

Motivated by providing *added value to researchers*,
striving for *continuous improvement*

NeIC's Collaborators

- National e-Infrastructure providers
- International research infrastructures
 - Partners must have national formal role
- Nordic research communities
 - Ex. Nordic Centers of Excellence

Nordic dimension and added value is key



Some Activities

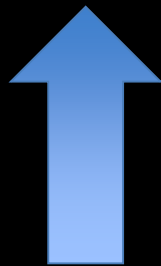
1. Easy sharing of data - B2Share Nordic
2. Sensitive data - Tryggve
3. Federated cloud - Glenna
4. Supporting physics at CERN with data processing services
5. Supporting “Nordic” ESFRI projects with e-Infrastructure services
6. Policy support for Nordic stakeholders

Two modes of project initiation

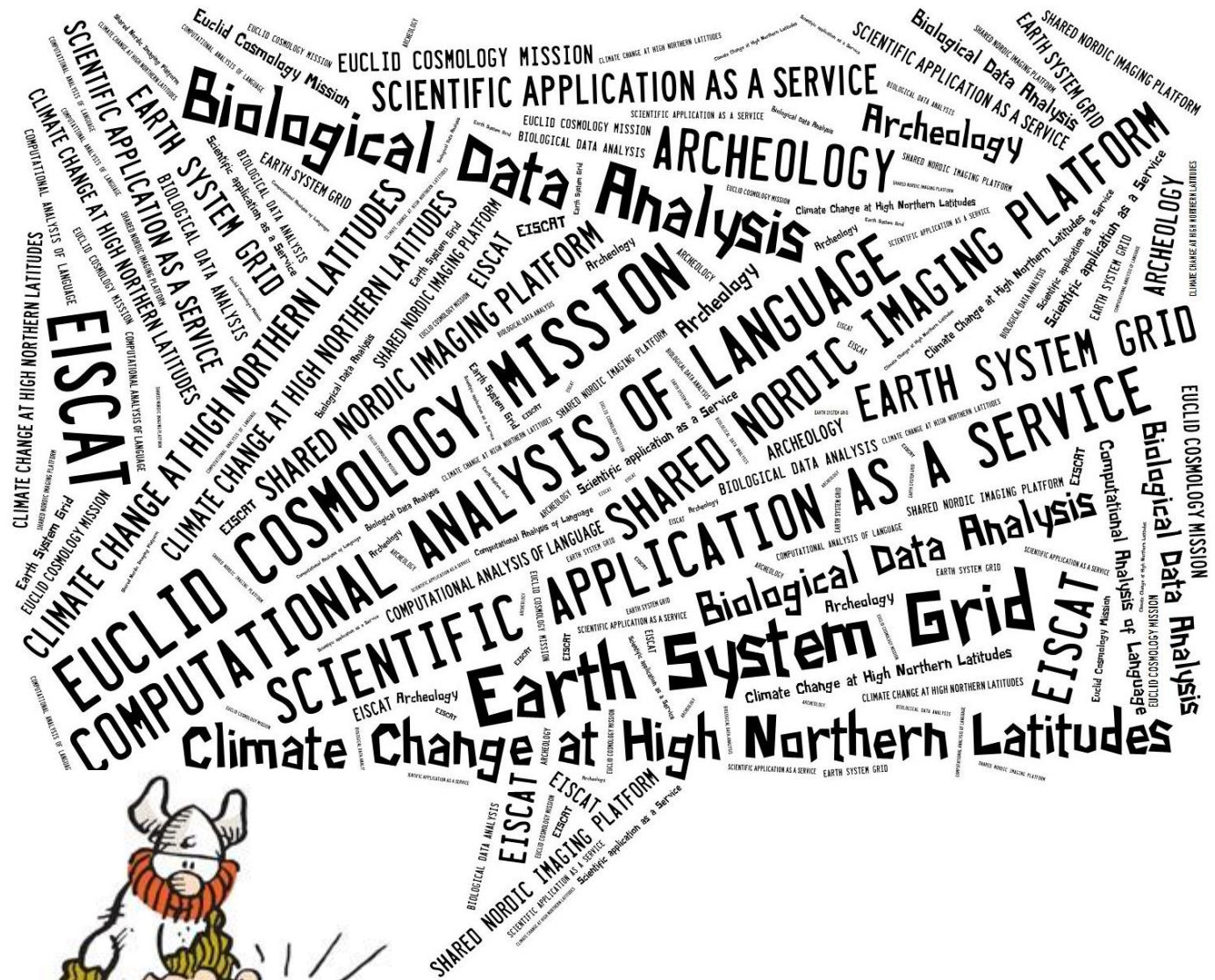


Top-down:
by research councils or e-infra providers

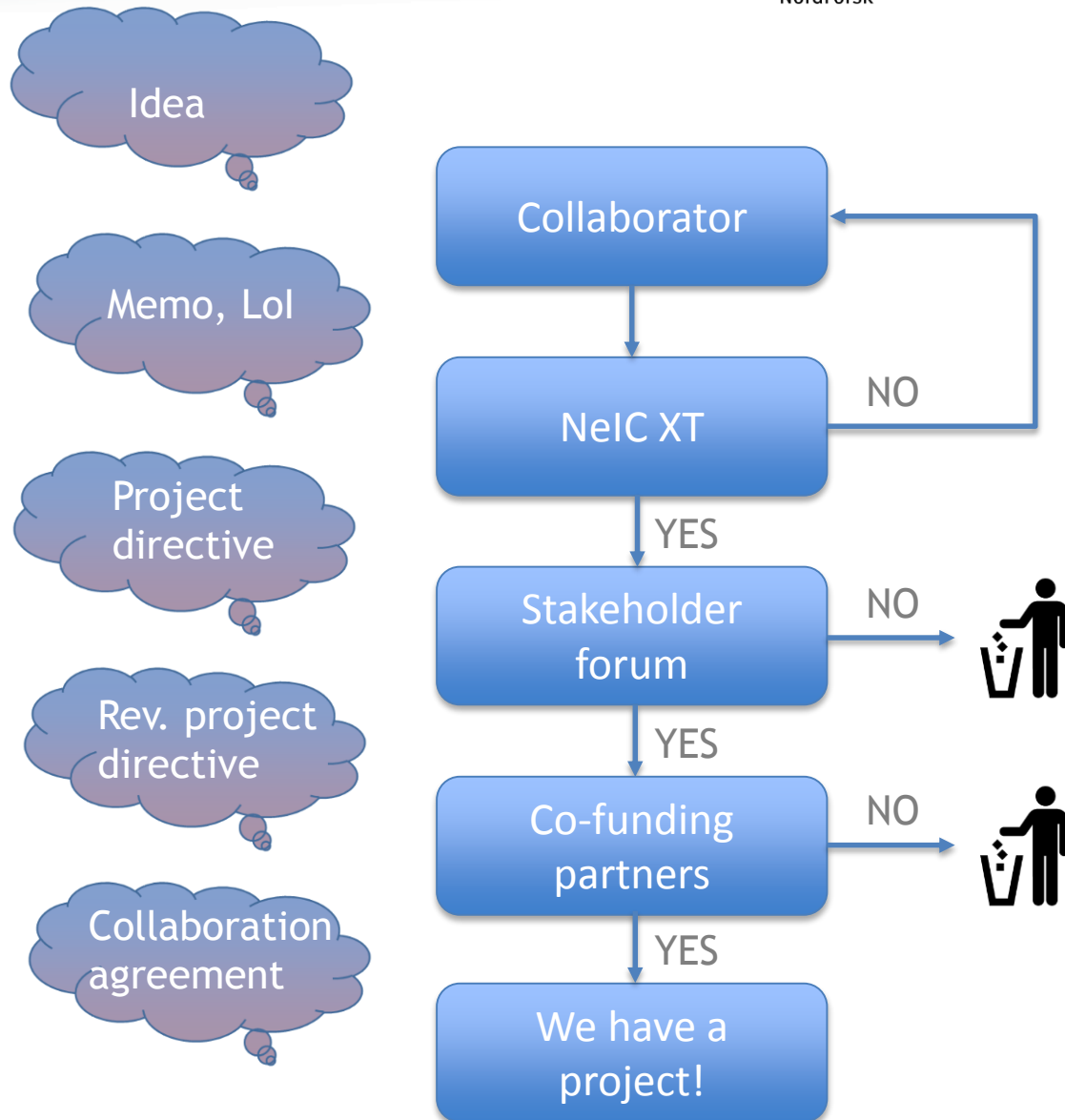
NeIC



Bottom-up:
by research communities



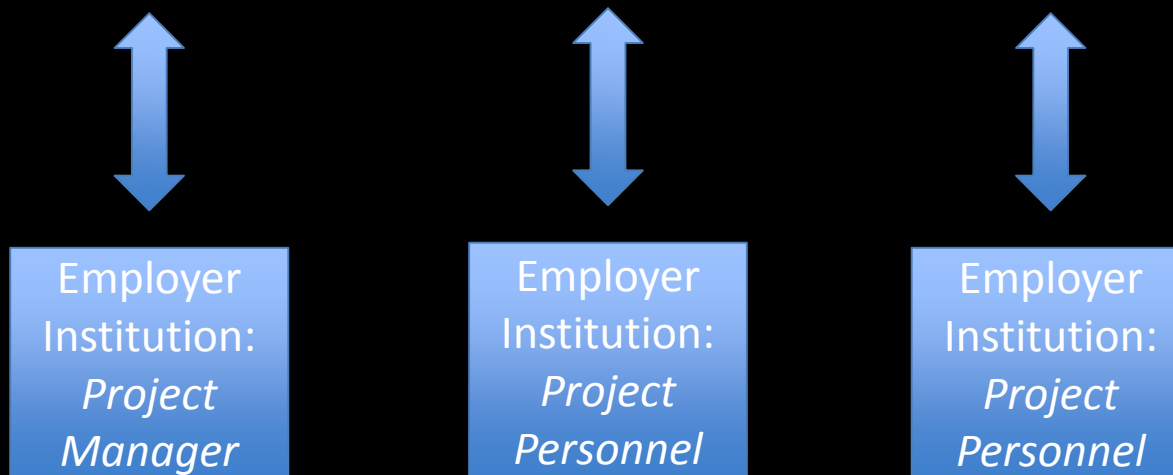
Letters of Interest 2014



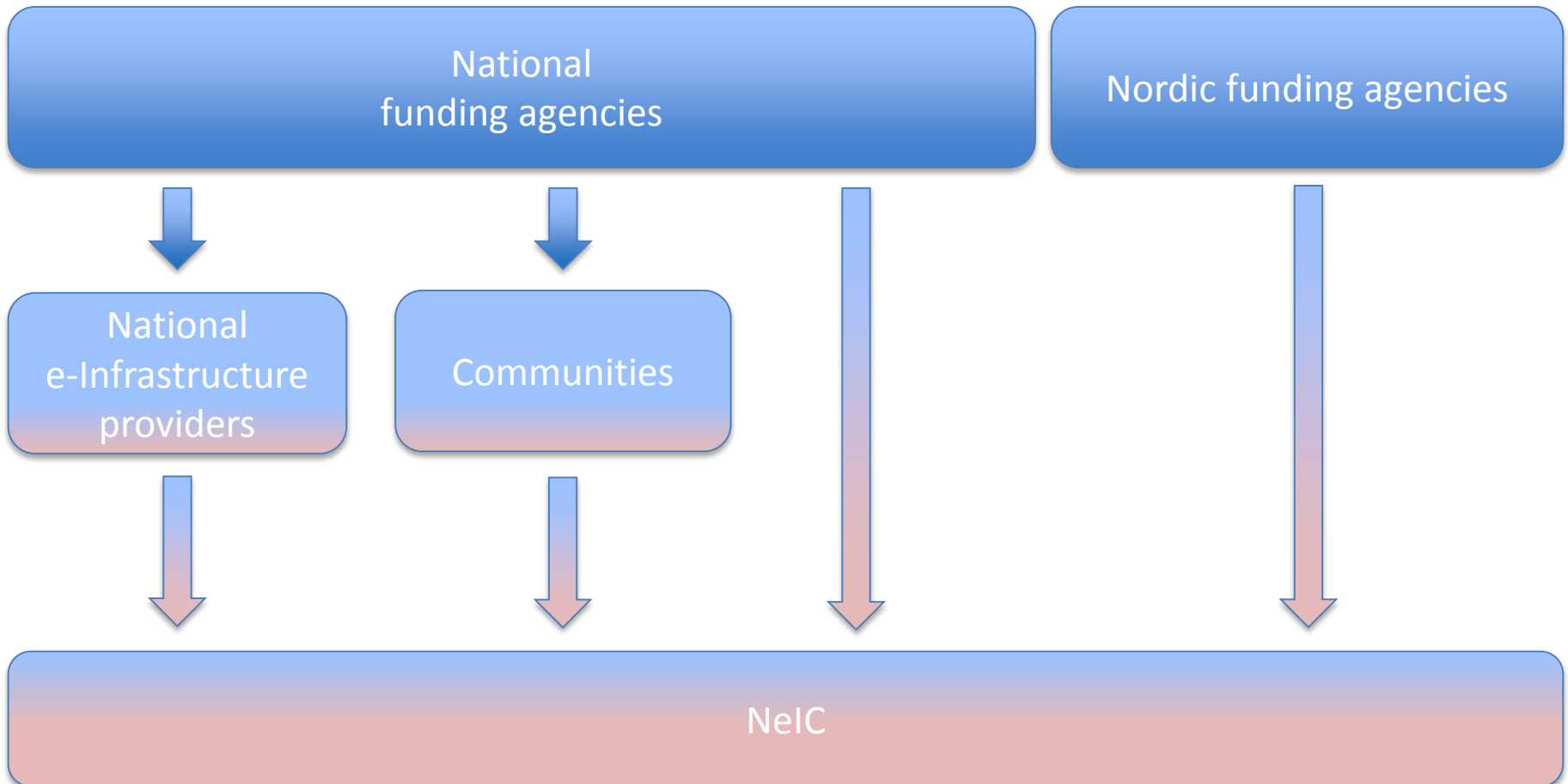
Collaboration model



Service Agreements



Funding - Input stream



NeIC 2016-2020 plan

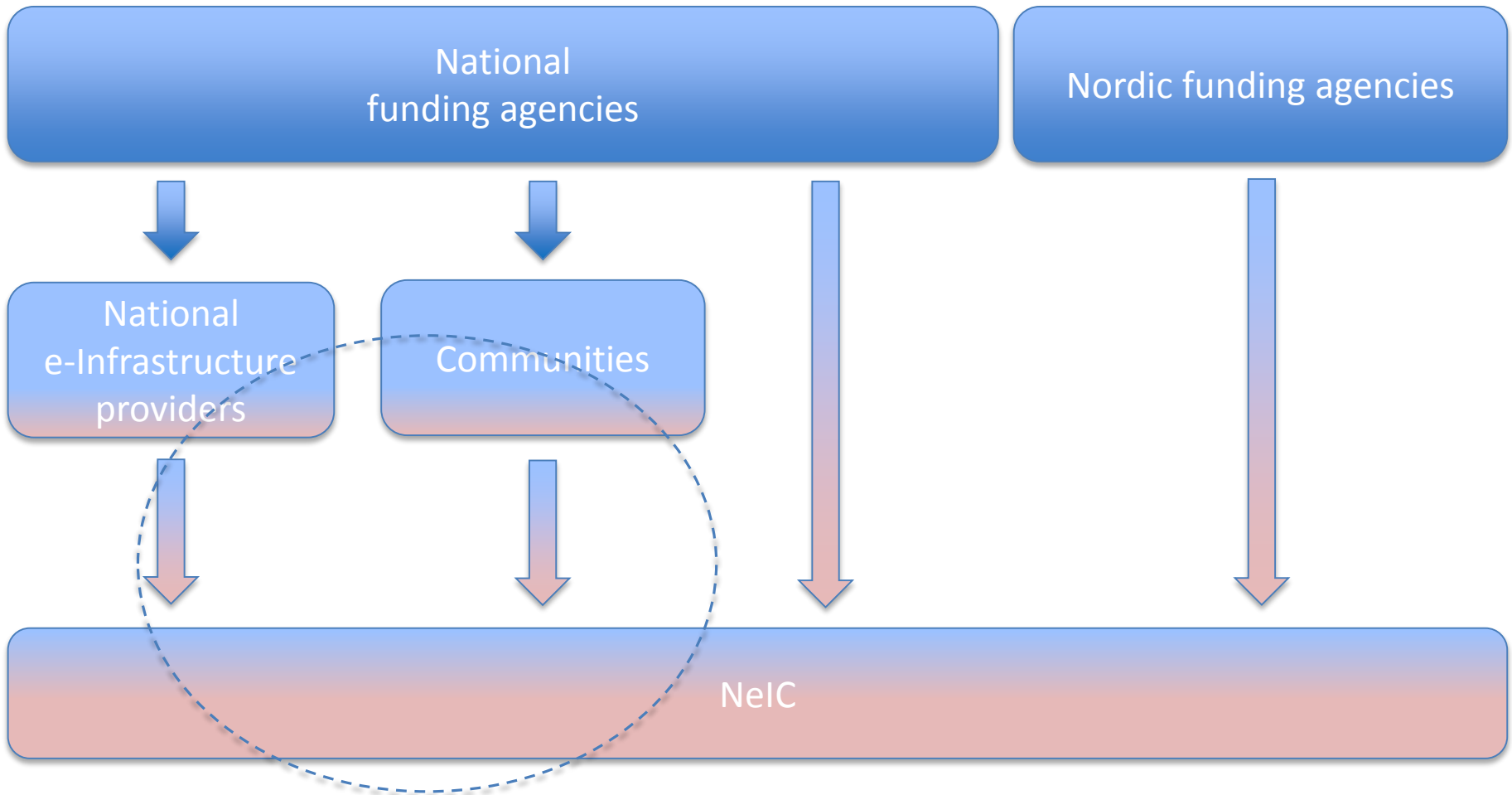


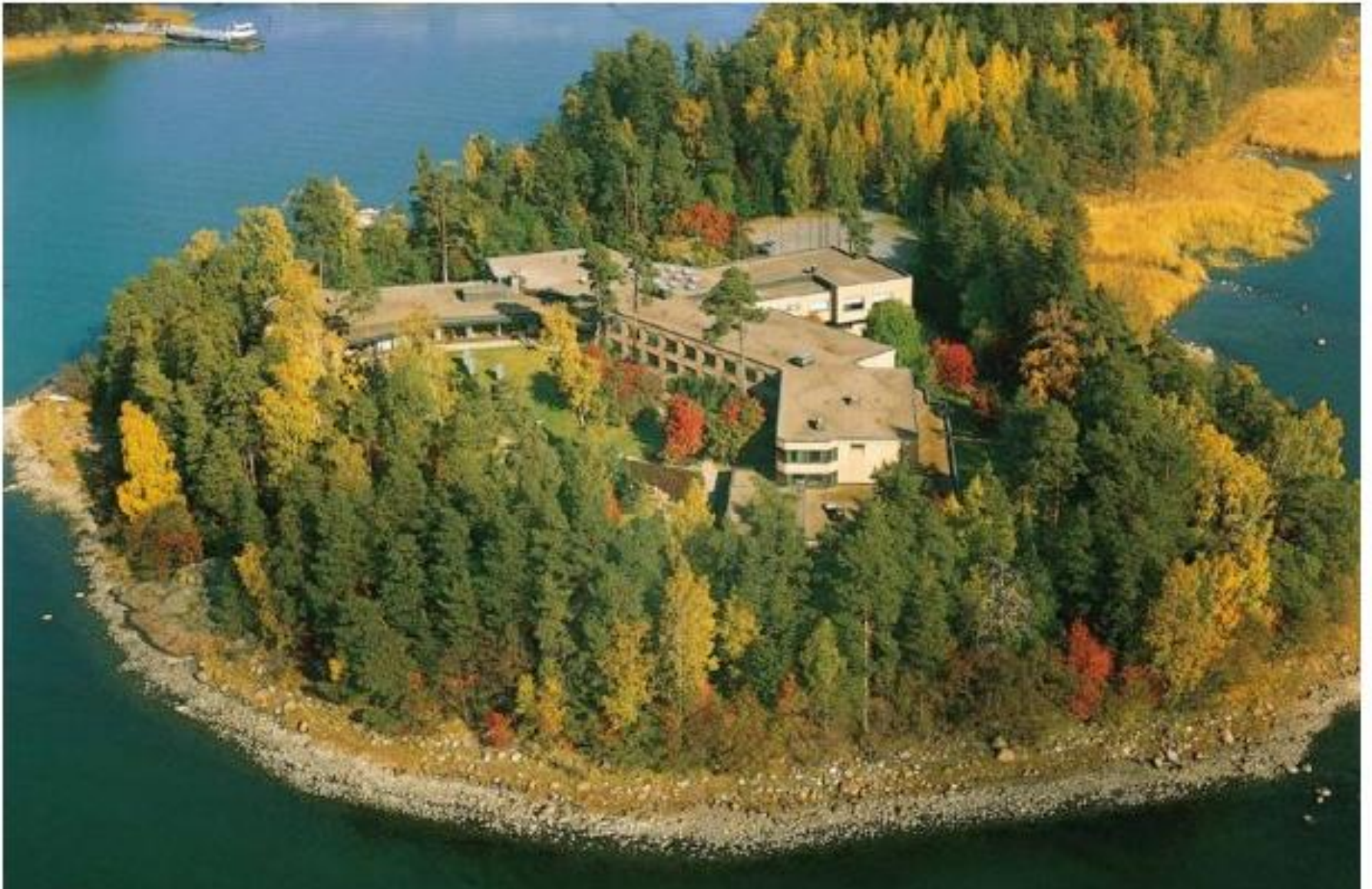
- On request from funding agencies
- In collaboration with e-Infra providers
- Input from Nordic communities
- Current and new initiatives

NeIC 2020 - Broad themes

1. Generic services
 - Cloud, Data, HPC, resource sharing
2. Bio-Medical Sciences
 - Services for sensitive data, ...
3. Nordic Tier-1
 - Joint operations towards CERN
4. Environment and Climate Science
 - Biodiversity, climate modeling,
5. Emerging Communities
 - Computational linguistics (2 FTE/yr), ...
6. Integrating activities
 - Security, Accounting, Networking (meetings), Training

Same co-funding model





- NelC2015 Conference
- Espoo, Finland, 5-8. May, 2015



NeIC All Hands 27-30 Jan. 2015, Skeikampen