



# Concluding remarks

**How to promote mobility for students and  
researchers in the Baltic Sea Region?**

Copenhagen. 23 November 2010

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# Preliminary conclusions

- From mobility in it self to mobility for substance, for excellence
- Public Private Partnership as an engine for boosting the knowledge triangle
- It is about mindset
  - (and also some real border hindrances)
- The need for substantial and creative incentives for making the Knowledge triangle spin
- The mode of communication boosts major changes
- Brand and promote the Nordic and Baltic Sea knowledge area

- C The best platform for and mobility and innovation: in  
p Openess, transparency, diversity,  
• T low level of hierarchy, freedom of ideas and democracy een  
(e

# Why do we need mobility of academics, students and researchers?

- Quality, personal development, knowledge sharing
- Collaboration in research and innovation, networks, initiatives and critical mass needs
- Labour market needs, in particular the needs of knowledge intensive enterprises
- For market integration

**What do we know?**

# Mobility as inflow

## Inflows of foreign workers into OECD countries

	Tusinder									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Danmark	3,1	3,6	5,1	4,8	2,3	4,3	7,4	13,6	17,2	7,6
Finland		10,4	14,1	13,3	13,8	15,2	18,7	21,0	23,0	25,0
Norge	14,0	4,8	17,8	23,5	25,2	33,0	28,3	40,5	54,8	52,5
Sverige	2,4	15,6	12,6	10,0	10,2	8,5	5,8	11,5	9,6	11,0

Kilde: International Migration Outlook 2010<sup>4</sup>

Note: Se rapporten for detaljer med hensyn til opgørelsesmetoder.<sup>5</sup>

Since 1985 the percentage of young educated to an academic level has increased from < 5 to over 20%

# What do we know about mobility for academics in Norden?



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EPINION

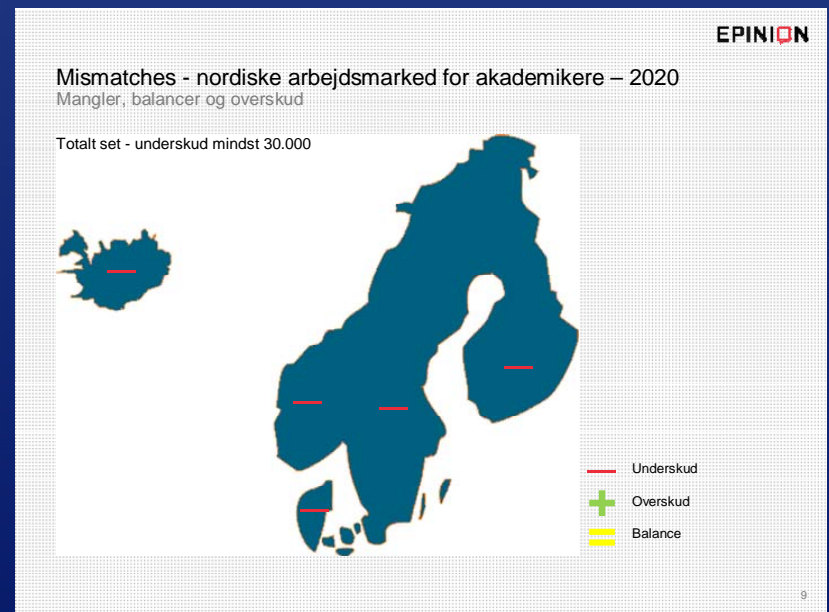
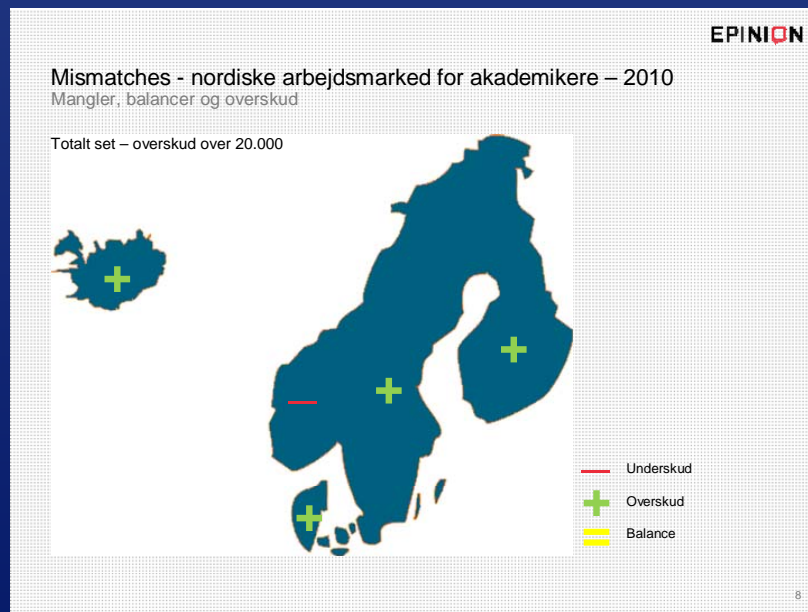
## Akademisk arbejdskraft- mobilitet i Norden

Nordisk Ministerråd

*Kortlægning af mobilitet  
og fleksibilitet på  
det fællesnordiske  
arbejdsmarked for  
akademikere  
– et 'feasibility study'  
med fremadrettede  
anbefalinger*



# What do we know about mobility for academics in Norden?



# What do we know about mobility for academics in Norden?

The feasibility study by Epinion finds a lack of at least 30.000 academics in 2020

A study by AE, Denmark, finds that Denmark alone will need 180.000 more academics to feed private and public sector in 2020 (Børsen 22/11/2010)

Needs Public sector 70.000  
Needs Private sector 210.000  
Educated/offer: 100.000  
Lack: 180.000



**What we really know – is  
that we don't know! (enough)**

# The analysis

# The first Nordic Globalisation Forum in Riksgränsen, 8–9 April 2008

While many of the necessary changes have to happen at the local, national, or EU level, regional collaboration among the Nordic countries can be significant in a number of areas:

- **Deeper regional market integration** is critical to overcome the multiple costs of the small national markets;
- **global excellence in science** is easier to achieve in a regional context;
- **human capital attraction** is more effective if global talent gains simple access to the entire region;
- **cluster development** can become more effective through stronger regional competition and collaboration among clusters;
- articulating **the specific value the Nordic region offers to businesses** can support the positioning of individual regions; and
- a consensus on key elements of globalization at the Nordic level can contribute to more effective national policy debates.

## Global Pressure – Nordic Solutions?

The Nordic Globalization Barometer 2008



# The second Nordic Globalisation Forum Iceland, 26–27 February 2009

**”Competitiveness fundamentals** are likely to become even **more important** when the **current crisis has dissolved**. The Nordic region **needs to retain its key strengths, especially on skills and research**. These are areas in which Nordic collaboration could help, for example by moving further towards an integration Nordic innovation area. ....

The Nordic position in knowledge production in the field of energy and environment is good but not outstanding. There are few institutes with global visibility, but a relatively high number of smaller universities and other research institutes. **An integrated Nordic <research and>innovation area would create a valuable counterforce.”**

## Global Pressure – Nordic Solutions?

Nordic Globalization Barometer 2009



# Global Pressure – Nordic Solutions?

Nordic Globalization Barometer 2010



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The analysis of **corporate R&D activities** puts some of these competitive challenges facing the Nordics into clear focus. Actions are needed both on competitiveness and on globalization readiness:

- Highly skilled employees and world-class research are the bedrock of Nordic competitiveness and a key reason for the high level of R&D intensity in the region. In both areas, the region is in danger of falling behind markets needs, not the least because of a lack of global perspective and Nordic integration. If there is one critical issue that the Nordics need to get right, it is this one.

# The politics



VALTIONEUVOSTO

Statsrådet Finnish Government

## 19.6.2007 - Nordic premiers meet at Punkaharju to promote more skilled, visible and thriving Nordic region

The premiers shared a positive attitude towards the opportunities and challenges of globalisation for the Nordic countries.



They want to utilise these opportunities and meet the challenges by developing further the Nordic model, the fundamental parts of which are citizens' future welfare, competitiveness of enterprises, employment and economic growth, as well as a common culture and investment in sustainable development.

The premiers also want develop the strengths of the Nordic countries, the high-standard and extensive education system, expertise and research work, the ability to utilise information technology, as well as creative implementation of innovations.

The premiers agreed to launch a new Nordic endeavour in globalisation. The synergy benefits of the work carried out at the European and regional level will be utilised in the implementation. More profound co-operation with the Baltic countries reinforces the competitiveness of the entire Baltic Sea region and increases opportunities to utilise globalisation.

# Norden skal motvirke proteksjonisme og møte krisen med grønn vekst

Brev februar/mars 2009



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"For å utvikle og styrke Norden ytterligere skal vi fordype og utvikle samarbeidet vårt på hele kunnskapsområdet. Norden og Europa har et dynamisk indre marked. Dette markedet bygger på de fire frihetene for personer, varer, tjenester og kapital. **Vi skal også fokusere på den femte friheten – fri flyt for kunnskap** – der ideer, studenter, lærere og forskere fritt kan bevege seg over grensene, og som stimulerer til fri tilgang til kunnskap."

- Anders Fogh Rasmussen, statsminister, Danmark
- Fredrik Reinfeldt, statsminister, Sverige
- Jens Stoltenberg, statsminister, Norge
- Jóhanna Sigurðardóttir, statsminister, Island
- Matti Vanhanen, statsminister, Finland



# The Nordic measures and instruments

# Initiatives in particular relevant for mobility

## Globalisation initiatives

2. Nordic Top Level Research (TFI)

6. Further development of the Nordic Research and Innovation Area (NORIA)

7. eScience

8. Promoting Higher Education

## Others

Nordplus

Knowledge infrastructure for the fifth freedom in the BSA

**Nordic Master School in Innovative ICT**  
- CONNECTING TO THE GLOBAL INNOVATION POWERHOUSE

*Find Your*

**What is NMS iICT**

**NMS iICT**  
**DTU**  
**KTH**  
**TSE**  
**UTU**  
**ÅA**  
**Living & Benefits**  
**Innovation**

**General Information**  
Nordic Master School in Innovative ICT (NMS iICT) is a network of the International ICT Master Programmes at five world-class scientific universities in the Nordic countries: the University of Turku (UTU), the Åbo Akademi University (ÅAU) and the Turku School of Economics (TSE) in Finland, the Royal Institute of Technology (KTH) in Sweden and the Technical University of Denmark (DTU). This global Innovation Powerhouse offers high expertise in research based iICT education.

**Structure**  
You study in one of the Master Degree Schools at one university, but you can customize your studies with an exchange period at another university of the NMS network. The NMS curricula are linked to the core competence research fields of the universities; by participating in an exchange period you are able to gain the core competences of more than one university. However, the exchange period is not an obligatory part of the programme, and studying the whole degree at one university provides excellent course selection possibilities as well. Upon graduation, in addition to the Master of Science degree (MSc), you will receive a Nordic Master School certificate from the network.

**Want to turn your vision into venture?**  
We teach young professionals the necessary Innovation and Business skills that help them start their careers in the business world straight after graduation or even establish their own companies. An Innovation and Entrepreneurship study module is an obligatory part of the NMS program. Even if you aim at a career in academia rather than in business, these studies are guaranteed to benefit you in the future.

**Gain excellence in**

- Business and Innovation in ICT
- Information Systems and ICT Services
- Information and Communication Security
- Biomedical Informatics
- Algorithms and Computer Science
- Wireless and Network Systems
- Distributed Systems
- Software Engineering
- Embedded Systems
- Computer and VLSI Engineering
- Nanoelectronics and Photonics

Nordic Master in Gerontology

Nordic Master in Plant Pathology

Nordic Master in the Religious  
Roots of Europe

Nordic Master in Marine  
Ecosystems and Climate

Nordic Master in Innovative  
Sustainable Energy Engineering

Nordic Master in Innovative  
Information and Communication  
Technologies

"Degree or Master of  
Science (Two Years)"

**Duration:**  
2 years, 120 ECTS

**Location:**  
KTH, Sweden; Chalmers,  
Sweden; NTNU, Norway;  
TKK, Finland; DTU,  
Denmark; HI, Iceland.

**Programme start:**  
Late August 2009



# Nordic Academy

Nordic Master

+ Nordic Centre of Excellence

+ Nordic Phd, Enterprise/Industry PhD

= Nordic University / Academy ???

# Knowledge Triangle Networks - Universities

- Knowledge exchange – Research – education – innovation
- Two thematic networks, one generic:
  - Design
  - Health
  - Generic
- + Umbrella function
- Three years, 500.000 DKK, two step call for proposals – soon!

Nordplus is the Nordic Council of Ministers' most important programme in the area of lifelong learning. More than 10,000 people in the Nordic region benefit from it every year.

- Nordplus Junior
- Nordplus Higher Education
- Nordplus Adult
- Nordplus Horizontal
- Nordplus Nordic Languages and Culture

 [Read more...](#)

#### Nordic & Baltic countries



#### Project examples



##### Focus on the climate issue

In 1999 Tina Sælbek Schmidt went to Iceland for a training course. As a biology teacher, she realized already...

 [Read more...](#)



 [More projects...](#)

#### Nordplus Framework general news

18.08.10

##### 44 applications to the Nordplus adult programme now approved

The application round for the Nordplus Adult programme in the spring of 2010 is now terminated and the result is that 44 new Nordic-Baltic initiatives now can get started.

 [Read more...](#)

17.02.10

##### Nordic Climate Day 2010

November 11 is the date for Nordic Climate Day 2010, targeting school pupils in all the five Nordic countries. Climate issues have also been decided as an overarching priority for the Nordplus Framework.

 [Read more...](#)

 [News archive...](#)

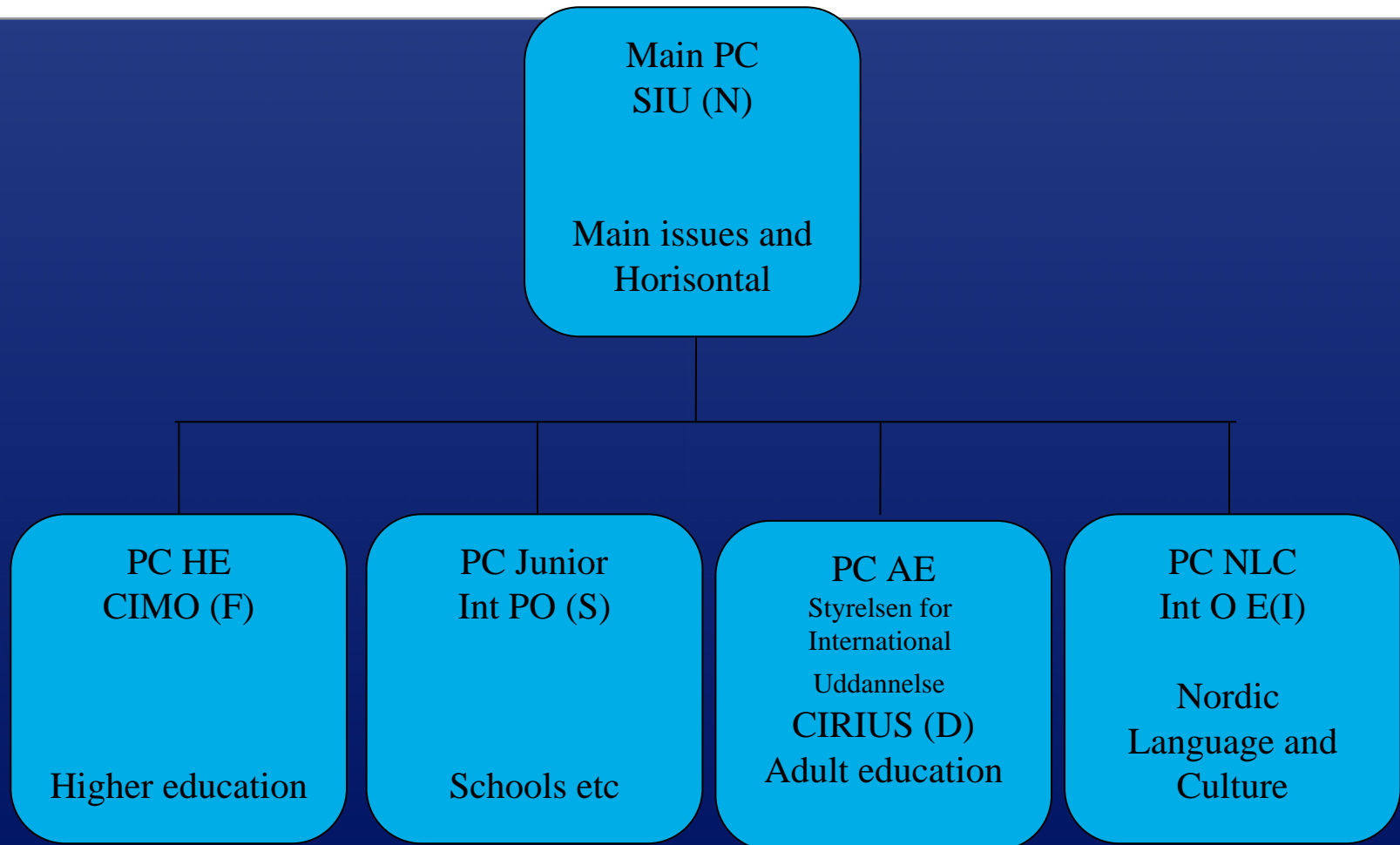
#### Dates and events

Application deadline for Nordplus Framework  
**01 March 2011**

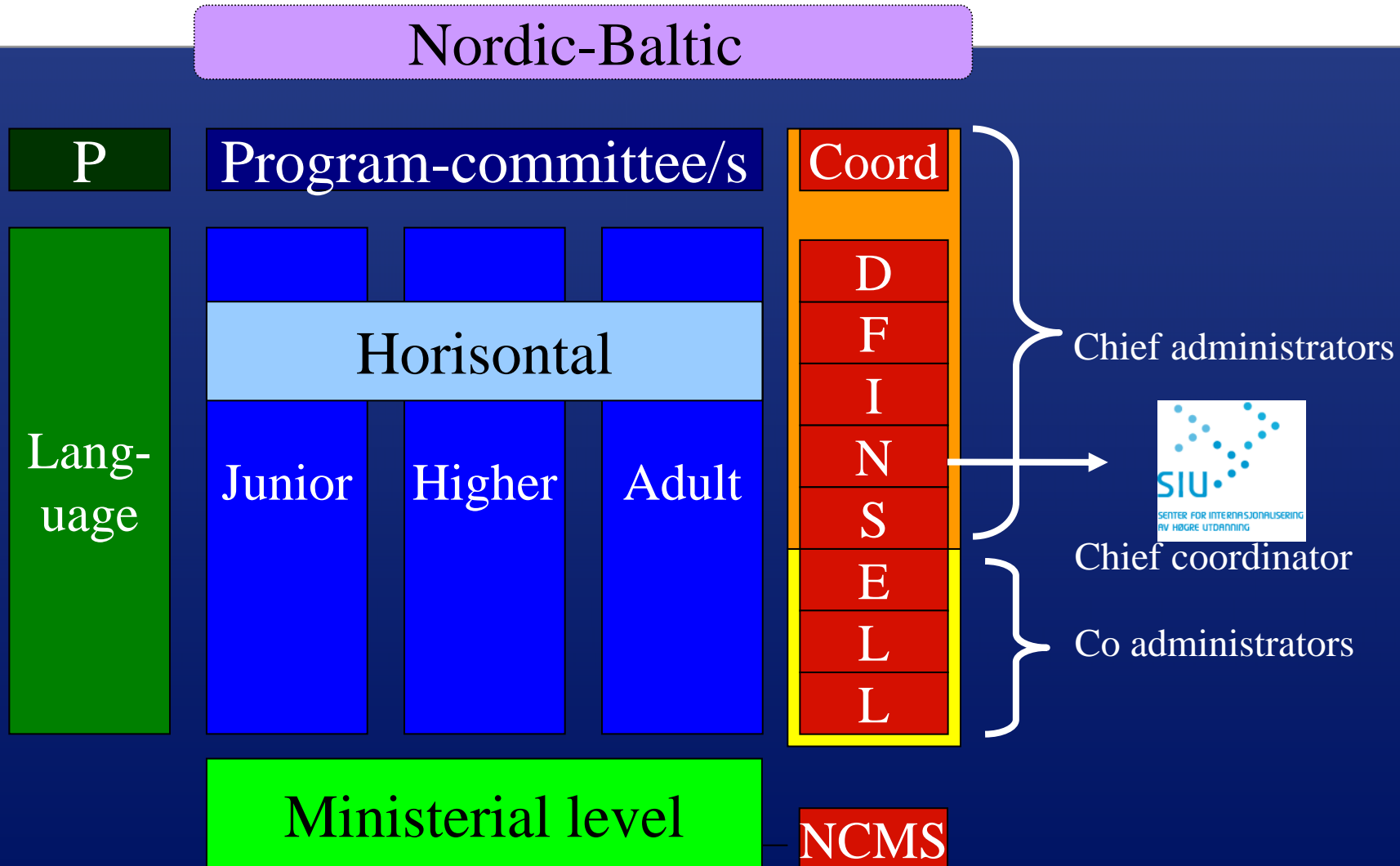
 [More events...](#)

## Nordplus – now:

- Evaluated (and what is the Nordic and Baltic added value?)
- First discussions on the new programme to take place in February
- To be decided – june – november 2011
- New framework programme to be launched 1/1/2012



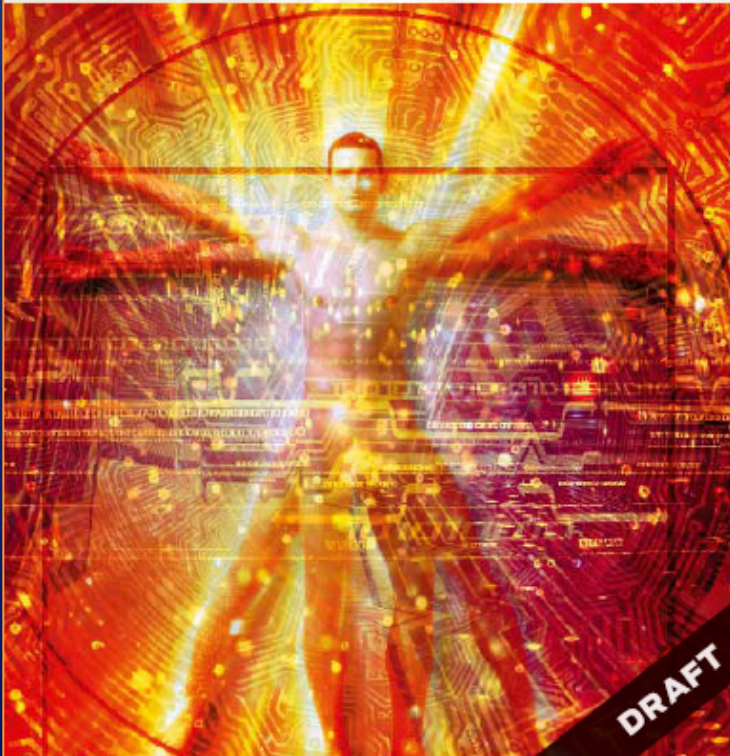




# eScience – now as Initiative

## Nordic eScience Action Plan

10 concrete actions to implement  
the Nordic eScience Strategy



## Wikipedia:

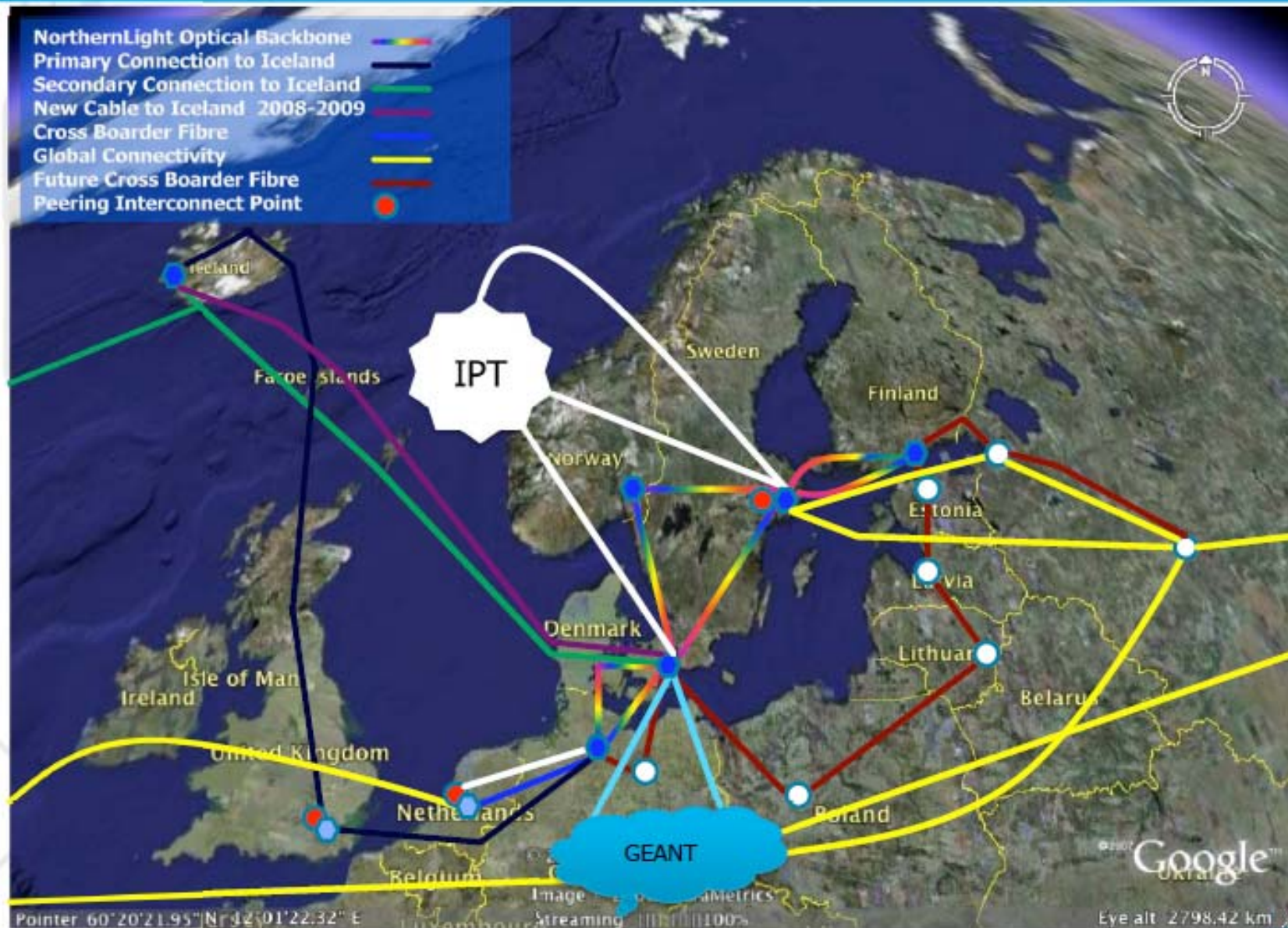
The term e-Science (or eScience) is used to describe computationally intensive science that is carried out in highly distributed network ...

## Towards a Baltic Sea charter on knowledge infrastructure for the 5th freedom?

- Networks
- Digital services
- eScience



knowledge infrastructure  
for the 5th freedom





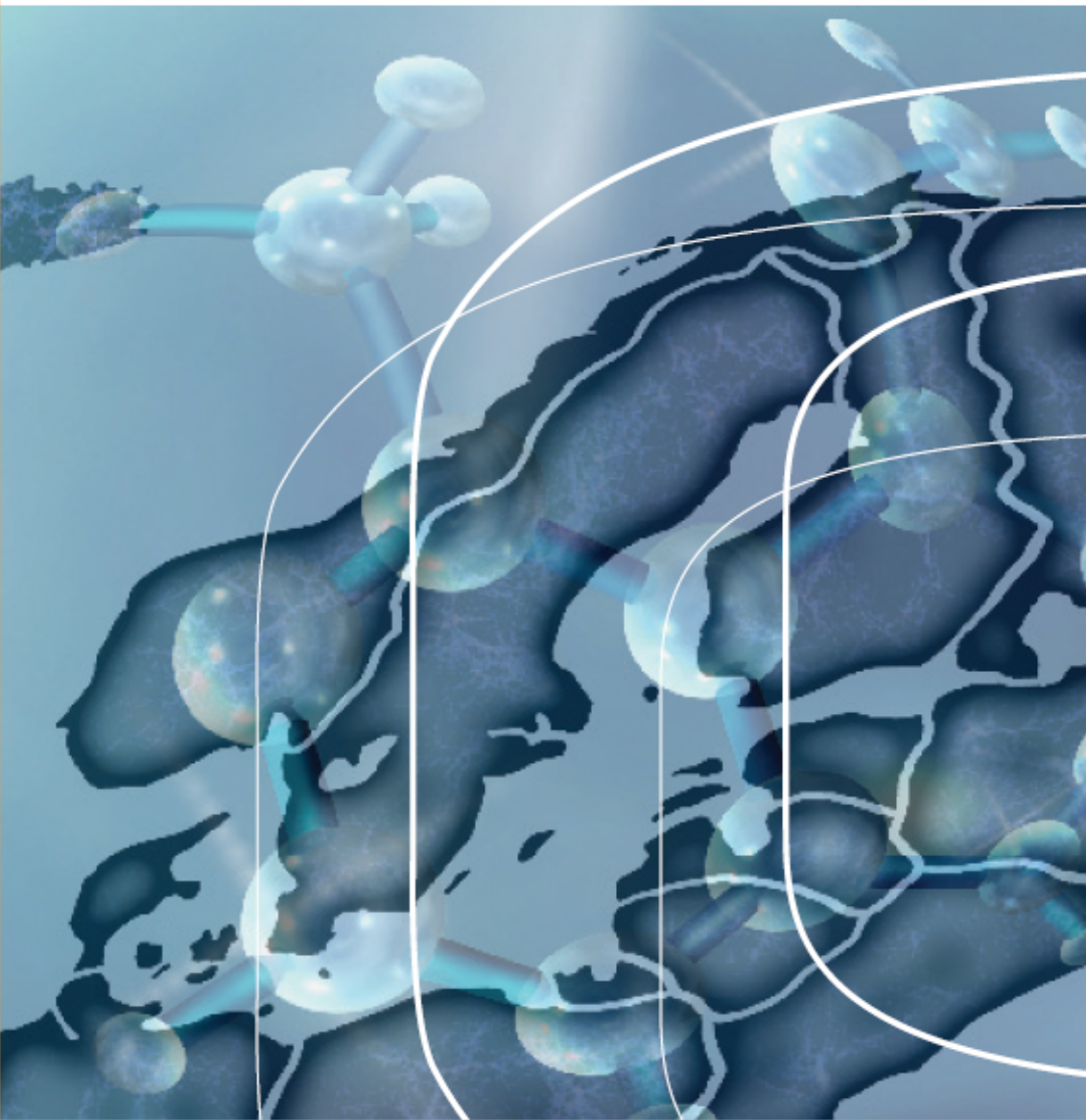
# Knowledge Infrastructure for the Fifth Freedom in the Baltic Sea Area

A feasibility study for the Nordic Council of Ministers



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Nordisk Råd



## Knowledge Infrastructure for the Fifth Freedom in the Baltic Sea Area

A feasibility study for the  
Nordic Council of  
Ministers

# Three steps initiative up to now

## Nordic eScience

Research, Edu  
Sustainable In

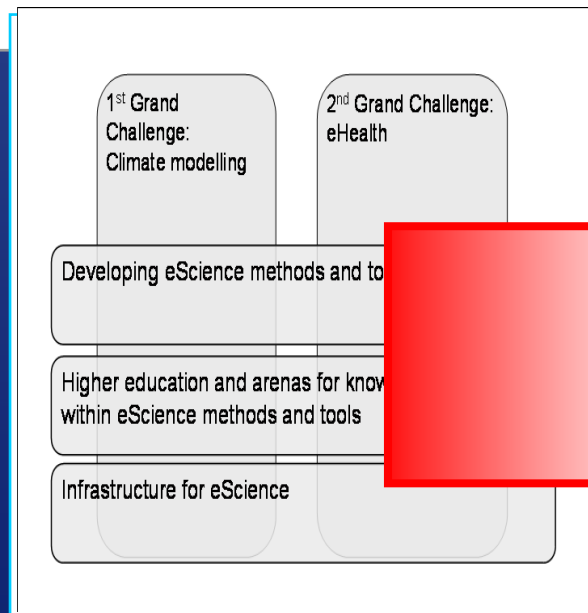
A strategy document f  
2007-07-17

### Nordic eScience Action Plan 10 concrete actions to implement the Nordic eScience Strategy



Nordic eScience  
strategy and action  
plan

2006 - 2009



Nordic eScience  
globalisation project

2010



A baltic sea  
knowledge  
infrastructure for  
the fifth freedom

2010 and onwards

# Ministers decision 5/11/2010

# Invitation

## What

- The Nordic Ministers with support from the Baltic Ministers invite the other states around the Baltic Sea, Poland, Russia and Germany to consider establishing a joint Knowledge Infrastructure for the Fifth Freedom.

## Who

- Meeting Senior Officials assisted by experts

## When

- Spring 2011

- NCM invites, in some areas, to use the instruments it has, where it is feasible (bottom up, if not eligible for funding – carry own funding)
- When carry forward the knowledge infrastructure thing, NCM consider to organise a workshop in cooperation with a coalition of willing funders (NIB, EIB, EEA-grants, EU-FP7 and others)
- The knowledge infrastructure for fifth freedom – a great opportunity or joint efforts and success



With the preliminary conclusions in mind  
We need to do more – but  
**we also need to know  
more**

Nordic Council of Ministers –  
promoting the fifth freedom  
in the Baltic Sea Area



# The Icefjord, Greenland

