Networking as a means for finding and funding solutions.

"Structural changes in higher education across the Circumpolar North"

24.1.2011

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Outline

- Nordic Council of Ministers and networks
- Re-structuring of the Higher Education Landscape in the Nordic countries. (Short overview)
• Nordic Council of Ministers
  – Governments

• Nordic Council
  – Parliamentarians

What is Nordic Council of Ministers

• Countries
  – Iceland
  – Denmark (Presidency 2010)
  – Norway
  – Finland (Presidency 2011)
  – Sweden

• Autonomous Areas
  – Greenland
  – Faroe Islands
  – Åland Islands
• 11 Council of Ministers
• Headquarter in Copenhagen
• 25 institutions
• More than 25% of the budget for education, IT and research
• Offices in St. Petersburg, Kaliningrad, Tallinn, Riga and Vilnius.
• Information points in Murmansk, Archangelsk and Petrozavodsk

Also an Arctic and a European perspective

Arctic 8 ad hoc working group for education and research
The Top Level Research Initiative
NORIA as an open part of ERA
The Bologna process and Norden as an attractive HEA
IMPORTANT

NCM MIRROR NATIONAL SECTORAL STRUCTURES

Now the turn to history...

From institution Building to Networks
Nordic collaboration; the old school model in the 70s, 80s, mid-90s

- Broad Nordic agenda: collaboration in all fields
- Inward looking perspektive
- Establishment of joint Nordic Institutions – funded over Nordic budget
- Fully funded Nordic R&D programmes and projects

Mid- 1990s

Sweden and Finland joins the European Union

→ “crisis” – what about Norden?
→ Search for new policy direction
New policy direction

2003 - 2005
Establishment of the Nordic Research and Innovation Area (NORIA)

with two Pillars
NordForsk
Nordic InnovationCenter (NICe)

and at the same time:
Nationalisation of Nordic Research Institutes

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

Nordic premiers held their summer meeting on 18 and 19 June at Punkaharju. 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.

Therefore, 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.
The Riksgränsen declaration

"The Riksgränsen Declaration represents a boost to joint Nordic efforts to face up to the challenges posed by globalisation," it emerged from a press conference featuring the five prime ministers and the Secretary General of the Nordic Council of Ministers after the Nordic 'Davos Meeting' in Riksgränsen.

"The most important aspect of Nordic co-operation is that the countries jointly apply their research and innovation capacity and competitiveness in order to meet global challenges."

The Nordic Globalization forum 2009
26. - 27. February, Iceland

- The Financial Crisis - Setback or Opportunity for Progressive Climate Policy?
  - invited guests from the business, research, and political communities and citizens' organizations and international guest lecturers
- Working groups discussions with back reports
  - Group A: Small economies' vulnerability
  - Group B: Progressive climate policy during a crisis
  - Group C: Energy, the environment and innovation
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.

"**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 integrated 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."
Nordiskt globaliseringsforum 20. mai 2010

Grønn vekst
-perspektiver
for et styrket
nordisk samarbeide

Globalisation projects in 2011

<table>
<thead>
<tr>
<th>Globaliseringsinitiativ</th>
<th>bud 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Globaliseringsforum och generell profilering av Globaliseringsinitiativ</td>
<td>3800</td>
</tr>
<tr>
<td>2. Nordisk toppforskning (TFI)</td>
<td></td>
</tr>
<tr>
<td>3. Innovationsrepresentation i Asien</td>
<td>2000</td>
</tr>
<tr>
<td>5. Bekämpande av grænshinder i Norden</td>
<td>1300</td>
</tr>
<tr>
<td>6. Utvecklingen av det nordiska forsknings- och innovationsområdet (NORIA)</td>
<td>3500</td>
</tr>
<tr>
<td>7. eScience</td>
<td>8600</td>
</tr>
<tr>
<td>8. Frunjande av higre utbildning i Norden</td>
<td>6000</td>
</tr>
<tr>
<td>9. En god uppløsning av ungdomar og vuxna,</td>
<td>2000</td>
</tr>
<tr>
<td>10. Belysning av konsekvenser av klimaforandringer på naturressurser i Norden</td>
<td>4700</td>
</tr>
<tr>
<td>11. Kultur och kreativitet</td>
<td>7000</td>
</tr>
<tr>
<td>12. Halsa och vilfurd</td>
<td>13000</td>
</tr>
<tr>
<td>13. Energi och transport, samt uppföljning Energiexpo</td>
<td>11600</td>
</tr>
<tr>
<td>14. Klimatvinstigt byggeri</td>
<td>7500</td>
</tr>
</tbody>
</table>
Today – network oriented approach

- Towards a smaller, more focused and outward looking Nordic collaboration
- Build on national priorities and positions of strength
- Increased focus on nordic added value
- Nordic collaboration as a platform and a “stepping stone” ...
- ... and Networks as main tool

Example: Investments in R&D - how to use a very small budget?

<table>
<thead>
<tr>
<th>Mill DKK</th>
<th>% av off. forskning i Norden</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norden</td>
<td>52,395</td>
</tr>
<tr>
<td>NordForsk</td>
<td>108</td>
</tr>
<tr>
<td>NICe</td>
<td>71</td>
</tr>
<tr>
<td>Andre</td>
<td>64</td>
</tr>
<tr>
<td>NMR F+i</td>
<td>243</td>
</tr>
</tbody>
</table>

Kilde: NMRs budsjett 2007 + Eurostat
Nordic Networks within Education and Research – all levels included

Future?: Nordic Academy, integrating Master, PhD and NCoE

Nordic Centers of Excellence

Nordic Master Programmes

Nordplus

Individual – institutional networks – different needs/different networks

Institutional platforms

NordForsk, Top-level research initiative

NordMaster Programmes

Nordic Centers of Excellence

Networks of national centers of excellence

NordPlus networks

Networks of national research schools

Individual networks, students, researchers, teachers

Recherche networks
Research networks – annual calls
(Open now!)

**BUMANPokTA, SAMFUNNSFAG OG TVÆRVIDENSKAPELIGE NETTVERK**

2007
- Visions of the Past: Images as Historical Sources and the History of Art History
- Food and body in everyday life: socio-cultural perspectives (PolAff)
- Nordic Networks for Philosophy of Religion
- Nordic Research Network for Media, Migration and Society
- Nordic Game Research Network (NGRN)
- Northern Europe – from Cold War Division to Restructured Europe
- Nordic Network for research on Psychology and Law (NNPL)

2006
- Nordic Language Variation Network
- Samtiden nordiska bildvärld: Visuell analys som vetenskaplig metod
- The Bodily Turn
- Network on Impact Research
- Nordic/Baltic Research Network on Gender Responsive Budgeting
- Nordic Samband: konsument, medborger, lærende subjekt
- Place, Mediated Discourse and Embodied Interaction (PlaceME)
- Nordic networks for Wittgenstein research
- Nordic Research Network on the Mediatization of Religion and Culture
- Nordic-Baltic ShakespeareNetwork
- Samtiden nordiska bildvärld: Visuell analys som vetenskaplig metod

2005
- Network for Scandinavian Dialect Syntax
- Network for the study of Early Christianity in its Greco-Roman Context
- Ret og litteratur i Norden
- Nordic Cultural Landscape Research Network
- Kultur- och Miljöhistoria i Nordisk Vikingatid och Medeltid
- Nordic Network for Research on Communicative Product Qualities
- Nordic Avantgarde Network

**Networks of national research schools**

- **Nordic Network of Astrobiology Graduate Schools**
- **NordiQ: Nordic Education Network for Quantitative Proteomics**
- **Nordic Finance Network (NFN)**
- **Barents Arctic Network of Graduate Schools (BANG)**
- **Musculoskeletal system and physical activity**
- **Nordic-Baltic Doctoral Network in Psychology**
- **NordLing -The Nordic Graduate School Network in Language Studies**
Networks of national Centre of Excellence

- Nordic Network of Astrophysics and Cosmology (NNAC)
- Understanding of Promises and Barriers in Childhood and Adolescence
- Nordic Network on Computational Chemistry (NCoECC)
- Nordic Language Variation Network
- RNA in Biology, Biotechnology and Medicine
- Nordic Finance Network (NFN)

Nordic Centres of Excellence (NCoE) – virtual networks

- Virtual networks of Nordic top-scientists
- Within nationally prioritised fields with substantial national investments
- Nordic top-funding for networking, collaboration, mobility and education
  ‘double common pot with no fair return’
- Examples: Food, Nutrition and Health; Welfare; Global Change; Molecular Medicine; Humanities and Social Sciences
Nordic Centres of Excellence

- Microcomparative syntax
- Systems biology in controlled dietary interventions
- Cognitive control
- The Nordic welfare state
- Disease genetics
- Biosphere-aerosol-cloud-climate interactions
- Empirical labor economics
- Reassessing the Nordic welfare model
- The dynamics of ecological systems
- Water imbalance related disorders
- Bioactive food components
- Medieval expansion of Europe
- Ecosystem carbon exchange
- Neurodegeneration
- Luminescence research
- Health – Wholegrain food
Added value through Nordic collaboration

Strategic top-level research

Innovation

Collaboration with business and industry

International connections across sectors
Historic Nordic initiative

### Funds for the programme (5 years)

<table>
<thead>
<tr>
<th>Total</th>
<th>Funds from the Nordic Council of Ministers</th>
<th>National funds</th>
<th>Funds from Nordic institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>384.8</td>
<td>44.9</td>
<td>225.8</td>
<td>114.1</td>
</tr>
</tbody>
</table>

Top-level Research Initiative Programmes

The initiative consists of the following six sub-programmes:

- Effect studies and adaptation to climate change
- Climate change’s interaction with the cryosphere
- Integration of large-scale wind power
- Sustainable biofuels
- Nanotechnology and energy efficiency
- Carbon capture and storage

Within the framework of these six themes, the initiative also includes:

- A Advanced climate modelling
- B Social sciences and humanities
- C A focus on the Arctic area
NCM - networks

Conclusions

Typically bottom-up based networks...

... but with some element of top-down...

... established together with the countries and their actors...

... and not "alone" on the nordic “level” by nordic actors
Conclusions cont.

We typically fund:

- seed-money,
- collaboration,
- mobility
- pilot activities,

...not substantial research, wages, permanent running of programmes etc.

Conclusions

We need:

Cross-sectoral platform for policy dialog

Increased flexibility:

- opt-in/opt-out
- Can one country represent Nordic added value?
- Open boarders for wider international collaboration

Integrated instruments

- different levels, types, sectors, R & E & Innovation
Re-structuring of the Higher Education Landscape in the Nordic countries. (Short overview)
Denmark

Key words:

System level: concentration, coordination and integration

Institutional level: Institutional profiles, focusing

Mechanism:
Political, top down, linked to globalisation agenda

Universities in Denmark
College sector re-structuring

<table>
<thead>
<tr>
<th>Institution</th>
<th>1998</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yrkeshögskolor (KVU)</td>
<td>73</td>
<td>42</td>
</tr>
<tr>
<td>Enskilda MVU-institutioner</td>
<td>110</td>
<td>21</td>
</tr>
<tr>
<td>CVU</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td>183</td>
<td>85</td>
</tr>
</tbody>
</table>

2011
9 Erhvervsakademier ("business academies")
7 Professionshøjskoler ("Professional colleges")

Finland

Key words
- Binary system: universities and Universities of applied Science
- Policy context

a) the aim of science, university, technology, and economic policies is to build a knowledge economy
b) the science and university systems have no monopoly as producers of knowledge
c) the concept of science-based knowledge is moving towards innovation-based technology
d) in order to promote a smooth societal change it is necessary to develop new technologies and to promote the competitiveness of the economy.

(Science Policy Council)
### Structural development plan (2005)

**Key words:**

- concentration
- networks
- leadership
- autonomy
- private/public ownership

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<table>
<thead>
<tr>
<th>Aktiva strukturella utvecklingsprojekt</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Den nya Kalto-högskolan som bildas av Tekniska högskolan, Helsingfors handelshögskola och Konstindustriella högskolan och baserar sig på en stiftelse</td>
</tr>
<tr>
<td>• Östra Finlands universitet, som bildas av universiteten i Joensuu och Kuopio och Åbo nya universitet, som bildas av Åbo universitet och Åbo handelshögskola</td>
</tr>
<tr>
<td>• Haaga-Helia yrkeshögskola som har bildats av Helsingfors yrkeshögskola för företäkskonomi och Haaga ammattikorkeakoulu</td>
</tr>
<tr>
<td>• Yrkeshögskolan Metropolia som bildas av Stadia och EVTEK samt yrkeshögskolan Novia som bildas av Yrkeshögskolan Sydväst och Svenska yrkeshögskolan</td>
</tr>
<tr>
<td>• Lapplands universitet, Rovaniemen ammattikorkeakoulu och Kemi-Tornion ammattikorkeakoulu stärker sitt strategiska samarbete genom att bilda ett högskolekonsortium. Ett liknande samarbete pågår mellan yrkeshögskolorna i Södra Karelen, St Michel och Kimmene och Villmanstrand tekniska universitet</td>
</tr>
<tr>
<td>• Strukturer utveckling av högskolebiblioteken. Bibliotekens samarbete ökas, arbeten som förstärkas och bibliotekens antal minskas</td>
</tr>
<tr>
<td>• Högskolornas gemensamma dataadministration</td>
</tr>
</tbody>
</table>

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Norway

- Long term integration of UC into the HE-sector
- Undifferentiated/unitary system – pressure towards homogenization
- Quality driven academic drift
- UC becomes U (Nordland, Agder)
- NTNU
- Regional collaborative networks, towards mergers? Oslo, Inlandsuniversitetet, Bergen, Finnmark/Tromsø/Narvik

- Main mechanisms are: bottom-up, voluntary, quality driven

Sweden

- Similar to Norway

- UC turns U, process now stopped(?)

- Some federations/mergers Linné university, SU/Pedagogical university/Artec Colleges in Stockholm

- New regional networks

Västsvenska universitetssamverkan,
Pentaplussamarbetet, Akademi Sydost, Örebro universitet – Mållardalens högskola, Ituniversitetet
mellan Chalmers och Göteborgs universitet och Högskolan i Halmstad – Högskolan
i Skövde – Örebro universitet.
## Conclusions

Two models…

- Denmark/Finland
- Sweden/Norway

... with different approach, mechanisms and speed

*Great potential for mutual learning among the Nordic countries (and others)*

... NCM will commission a study during feb-april 2011 to map the status of organizational re-structuring in the Nordic university sector.