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NordForsk

Nordic Research Collaboration

NordForsk

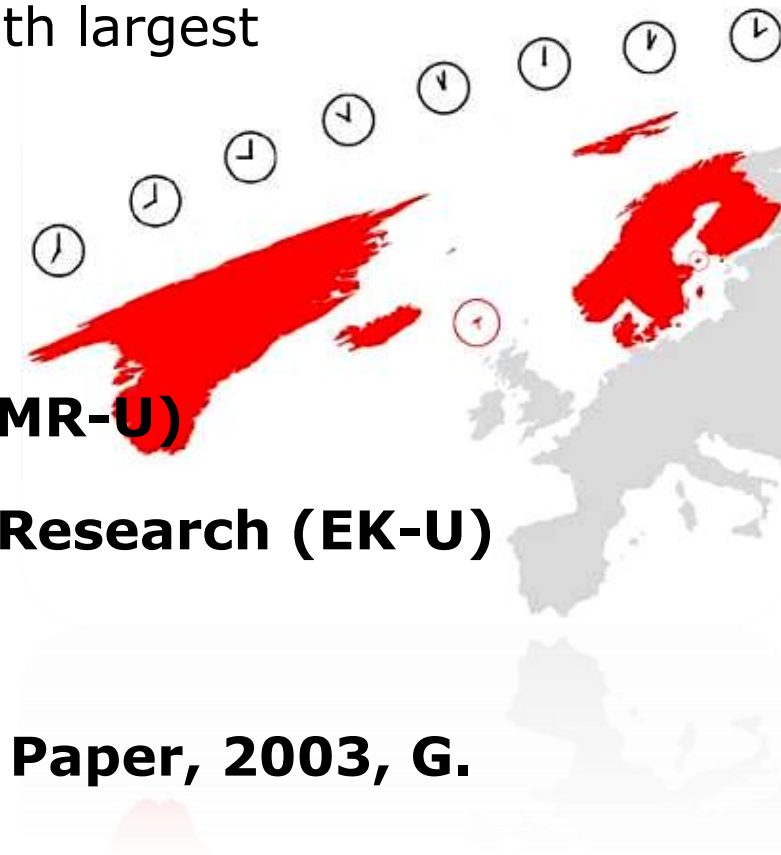
Nordic Collaboration

History of Nordic collaboration



NordForsk

- **Five countries:** Denmark, Finland, Iceland, Norway and Sweden
- **Three autonomous areas:** Faroe Islands, Greenland and Åland
- 8 time zones, 26 million people, many official languages, 10th largest economy globally
- **Helsinki Agreement 1962**
- **Nordic Council of Ministers 1971**
- **The Council of Ministers for Education and Research(MR-U)**
- **Nordic Committee of Senior Officials for Education & Research (EK-U)**
- **Nordisk forskerutdanningsakademi (NorFA) 1990s**
- **NORIA, Nordic Research and Innovation Area (White Paper, 2003, G. Björkstrand)**
- **NordForsk 2005**



Galdhøpiggen
2469

Kebnekaise
2102

Hvannadalshnjúkur
2110

Gunnbjørn Fjeld
3700

Halti
1328

Nordic Council of Ministers - 1



- Forum for Nordic governmental co-operation, founded in 1971
- The Prime Ministers have the overall responsibility for Nordic Co-operation, the Ministers for Nordic Co-operation assume responsibility for the co-ordination of inter-governmental co-operation in practice
- The Presidency of the Council of Ministers rotates between the five Nordic countries, Iceland holds the Presidency in 2014
- **The purpose is to work toward joint Nordic solutions that have tangible positive effects – Nordic synergies – for the citizens of the individual Nordic countries.**

Nordic Council of Ministers - 2



• 10 individual Nordic Councils of Ministers:

- for Legislative Affairs (MR-LAG)
- for Health and Social Affairs (MR-S)
- for Education and Research (MR-U)
- for Labour (MR-A)
- for Gender Equality (MR-JÄM)
- for the Environment (MR-M)
- for Fisheries and Aquaculture, Agriculture, Food and Forestry (MR-FJLS)
- for Finance (MR-FINANS)
- for Culture (MR-K)
- for Business, Energy & Regional Policy (MR-NER)

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In Brief – Development of Nordic Research Collaboration



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Tradition

Extensive informal collaboration among researchers

Societal preconditions

Similar governance structure and societal function of national research funding systems

Policy

Cooperation through FPs/ERA, Science Europe, ministerial collaboration and exchange of information

Research funding agencies level

Joint committees of the Nordic research councils within (i) medicine (NOS-M), (ii) natural sciences (NOS-N) and (iii) the humanities and the social sciences (NOS-HS), NordHORCs

Nordic institutional level

NordForsk as driving force for the NCM institutionalized collaboration

NordForsk

- *Platform* for joint Nordic research and research policy development in the Nordic countries
- Established by the Nordic Council of Ministers in 2005
- Aim is to *facilitate* cooperation in all fields of research when this *adds value* to work being conducted nationally
- Main stakeholders are the national research financing bodies in the five Nordic Countries
- Basic funding from the Nordic Council of Ministers and additional funding by stakeholders, especially the Research Councils in the different countries

NordForsk Strategy 2011-2014



- Main goal is to strengthen research in the Nordic region, and thereby contribute to a globally competitive European Research Area (ERA)
- Increase the quality of Nordic Research and Research Policy
- Strengthening and increasing the use of Nordic research infrastructure and, when relevant, linking this to European and global infrastructure





NordForsk's main collaboration areas:

- Research funding
- Research infrastructures
- NORIA-ERA
- Analysis
- Communication

NordForsk's Board

One representative of the Research council in each country

Three representatives from university cooperation

One representative from industry

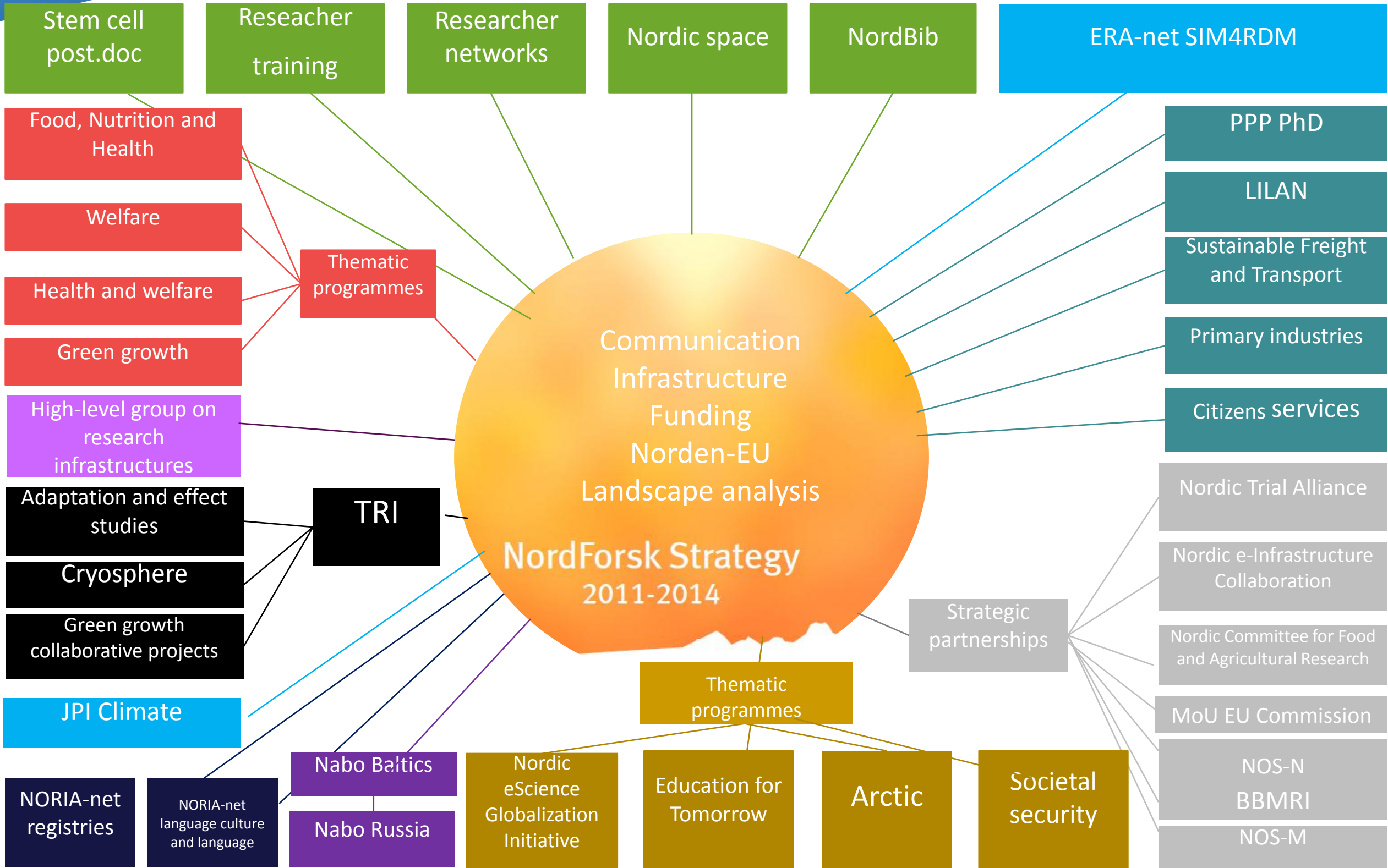
Observers from Greenland, Faroe islands, Åland Islands, the Baltic countries, Nordic Council of Ministers, Nordic Innovation and NordForsk secretariat



NordForsk activities



NordForsk



Framework conditions

Political framework conditions

Nordic budget key, core NordForsk budget, consensus in political governance structure

Research funding agencies level

Majority decision at institutional level, e.g. NordForsk
Budget key, funding agreements

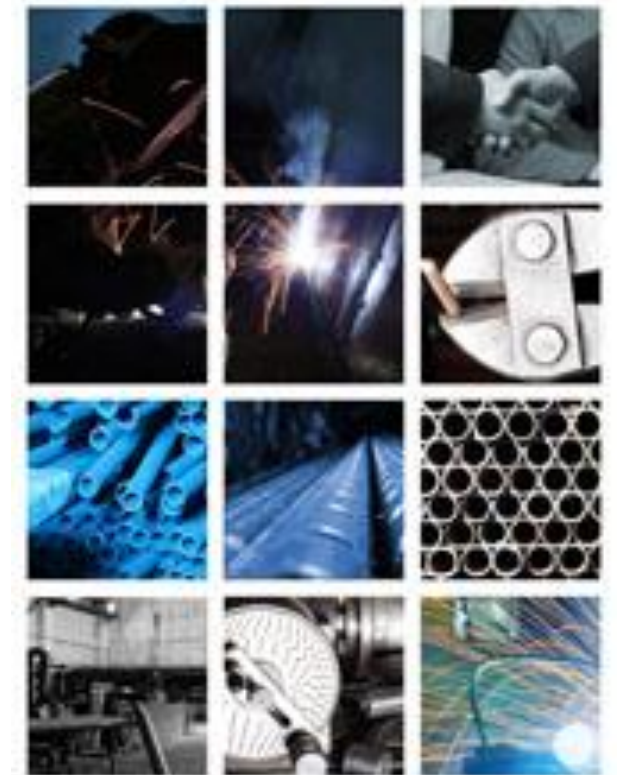
Nordic institutional level

Flexibility and trust

NordForsk

Always work with national co-funding as an indicator of relevance for all stakeholders

Always common pot with no fair return



Nordic-EU Relations

Background

- NordForsk Strategy 2011-2014 and Sub Strategy for Nordic-EU Relations
- ERA Framework Public Consultation 2011
- EU Commission Communication on “Reinforced European Research Area Partnership for Excellence and Growth” 2012 (July 2012)

Nordforsk's Main Activities

- Open recruitment procedures
- Researcher careers
- Doctoral training
- Academia-industry mobility
- Mobility-teaming
- Gender-equality and gender mainstreaming in research
- Research infrastructures
- Cross-border operation
- Open access and eScience
- Knowledge transfer

Research Programmes and Funding

- **Idea phase**

NordForsk's programmes are designed to respond to key societal challenges and policy priorities in the Nordic countries. Ideas for programmes are developed in cooperation with a wide range of stakeholders: Researchers/expert groups, policy makers, industry representatives, universities etc.

- **Preparatory phase/development of programme memorandum**

Usually performed in close cooperation with a NORIA-net (established by the NordForsk Board); a high level group of representatives of the national research financiers in the Nordic countries. If needed, assisted by expert groups/advisory groups

- **Concretizing the programme - developing a call**

Establishing a Programme Committee (decision by the NordForsk Board) to assist/advice on i.a.

- Thematic scope and priorities
- Instruments
- Programme budget
- Consultations on co-funding with national research financiers to decide on their financial contributions to the programme
- Key aims/evaluation criteria/eligibility criteria

- **Launching the call (one or two steps)**

- **Evaluation (by international experts) – peer reviews, panels**

- **Recommendation by a Programme Committee on projects to be funded**

- **Funding decisions by the NordForsk Board**

- **Communication/dissemination activities**

Funding principles



- The Nordic financiers contribute to common pot of the programmes (usually funded 1/3 by NordForsk basic budget and 2/3 by national research financiers)
- Main applicant to be based in co-funding Nordic country
- International cooperation encouraged in all programmes
- All programmes open for participation of individual researchers from other regions (researcher mobility; guest researchers)
- All programmes open to research teams and institutions from other regions, provided that these document their contribution to the project budget

“Nordic Centres of Excellence are established to strengthen cooperation between outstanding researchers, research groups and research institutions within areas of priority for the Nordic countries. Nordic Centres of Excellence add value to research done in the countries and increase the impact of Nordic research in Europe and worldwide.”

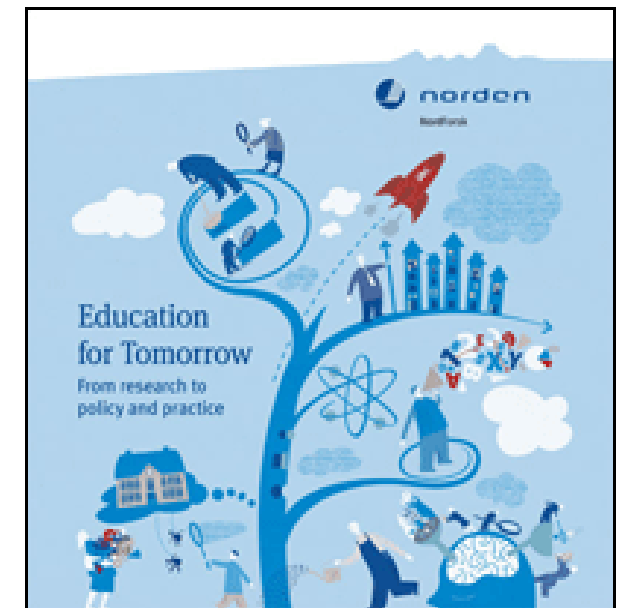
- Work based on a single research agenda, joint management, coordinated researcher training, communication, and research infrastructure collaboration.
- Normally 5 years, more than 2,5 M€ Nordic funding
- Standard procedure: Mid-term and final evaluation, regular meetings, communication, interaction with a Scientific Advisory Board etc.

Some ongoing joint Nordic programs and initiatives

- Health and Well-being
- Nordic eScience Globalisation Initiative (NeGI)
- Education for Tomorrow
- Top-level research initiative
- Joint Nordic Initiative on Arctic Research
- JPI Climate
- Green Growth
- Societal Security
- Nordic Infrastructure Collaboration



NordForsk



Background to the Programme

- Health and Well-being is an area of Nordic strength and potential
- Nordic political priority
- Preparatory actions including policy reports emphasize increased Nordic cooperation
- Research-, research-driven innovation-, and policy activities
- Ambition is to ensure international dimension (EU H2020)

- NordForsk has allocated 7 M€ to the Programme
- Total budget appr. 15 M€ at the moment
- SE, FIN, IS, NO, and Nordic Council of Ministers have confirmed their participation
- Stakeholders will be invited to develop the Programme further
- Contact person: Maria Nilsson maria.nilsson@nordforsk.org

Upcoming calls for funding

- First call will target the theme "Distribution of health and well-being"
- To be announced late spring/summer 2014
- An additional call will target "user-driven innovation in health and well-being" (Living Labs) (2014)
- NordForsk plans to allocate additional funding to "Nordic Pilots on register-based research" targeting establishment/use of joint Nordic research infrastructures (registers) (2014)

Nordic Trial Alliance - towards a common clinical research area



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Aim

to strengthen Nordic clinical research

Objective

to contribute to sustainable Nordic well-being

Facts

- An initiative from the Nordic Council of Ministries
- Part of  **norden**
Sustainable Nordic Welfare
- Three year pilot project:
2013 – 2016
- Hosted by NordForsk
- Funded by Nordic Council of Ministries and NordForsk
- NTA is based on established national networks for clinical research



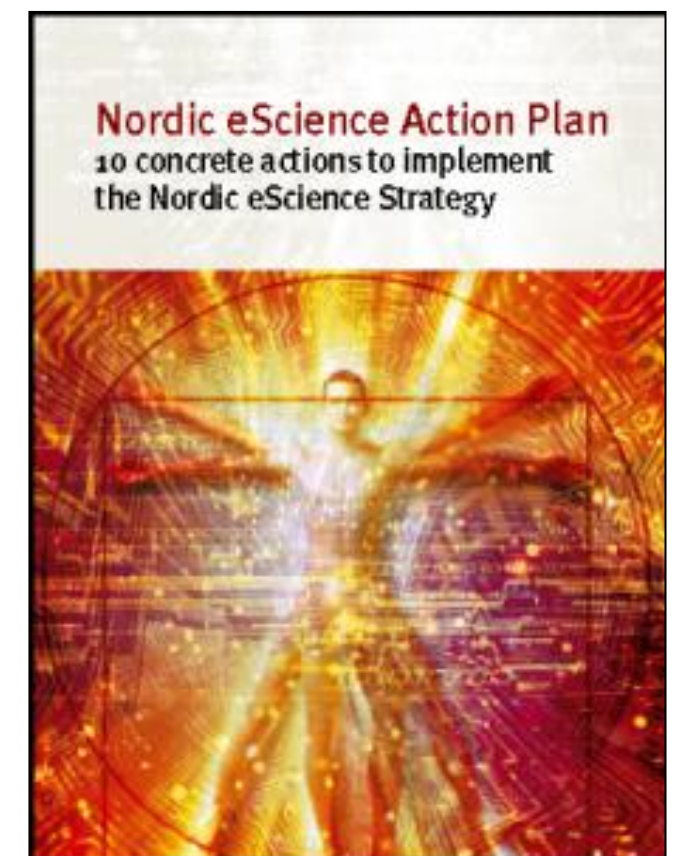
Nordic eScience globalisation initiative (NeGI) - 1



- The eScience globalisation initiative is a large Nordic research and educational initiative, to promote Nordic collaboration on eScience.
- The total budget for a five year period (2011-2015) is approximately 13 M€.

Objectives

- Training Researchers in e-Science Tools and Methods
- A Nordic e-Science Masters Education
- Sharing and Specialising Nordic e-Science Educational Modules
- Fostering Nordic e-Science Collaboration through Mobility



NordForsk has established three new Nordic Centres of Excellence in the field of eScience, with focus on climate change and health.

The Nordic Information for Action eScience Center

- Headed by Professor [Joakim Dillner](#), Karolinska Institutet.
- The objective of the centre is to develop new methods for cancer screening.

Nansen Environmental and Remote Sensing Center

- Headed by Professor [Geir Evensen](#), University of Bergen.
- The objective of the centre is to develop and improve mathematical methods for use of data in climate research.

eScience Tools for Investigating Climate Change at High Northern Latitudes (eSTICC)

- Headed by Senior Scientist [Andreas Stohl](#), Norwegian Institute for Air Research (NILU).
- One research team lead by Docent Hannele Korhonen, Finnish Meteorological Institute, Kuopio
- The objective of the centre is to develop new tools for predicting climate change.

Call for research projects

- The development of generic eScience tools and methods designed to contribute to research activities in climate, health as well as other areas in a longer term perspective
- Application deadline: 4 April 2014
- Budget: € 1,5 million
- A maximum of € 0,5 million may be sought for a project period of 3–4 years.

Upcoming Call (after summer 2014)

- Funding for developing and giving specifically developed courses in eScience tools and techniques at the Nordic level, and for student participation in these courses

Education for Tomorrow



- Large-scale thematic programme in Educational research and dissemination, co-funded by all the Nordic countries, Nordic Council of Ministers and NordForsk
- The programme is initiated by the Nordic ministers of education.
- Total budget 10 M€ for 2012-2018

The objective is

- to strengthen the Nordic region's position within educational research in Europe and beyond.
- to provide funding for research projects that strengthen the knowledge base for educational policy.
- to disseminate the results to a wide array of stakeholders in the Nordic region and internationally.

Executed calls

- Nutrition learning and health
Budget : 0,5 M€
- Research projects in Education for tomorrow
Budget: 4,5 M€
- NCoE in Education for tomorrow
Budget: 3 M€

Contact person: Kaisa Vaahtera kaisa.vaahtera@nordforsk.org



Background

- The Nordic Prime Ministers stated in the Riksgränsen declaration (2008):

“The Nordic region is in a strong position to pioneer work on combating climate change. We will therefore intensify Nordic cooperation and promote initiatives striving to ensure that a new international climate agreement is reached in 2009. A sustainable Nordic model for meeting climate change will demonstrate the potential for combining reduced emissions with economic growth”

- The largest joint Nordic research and innovation initiative to date, initiated by the Nordic Prime ministers in 2008 (total budget around 50 M€).
- Aims at excellence in research - involve the very best agencies and institutions in the Nordic region

Top-level Research Initiative - 2

Sub-Programmes

- Effect studies and adaptation to climate change
- Interaction between climate change and the cryosphere
- Energy efficiency with nanotechnology
- Integration of large-scale wind power
- Sustainable biofuels
- CO₂ – capture and storage (CCS)

Horizontal areas

- Social sciences/humanities
- Arctic region
- Advanced climate modelling



Three new research projects in 2014

Total funding 5,8 M€ over three years. All Project leaders are from Norway

- GreenICE - Impact of future cryospheric changes on Northern Hemisphere. Climate, green growth and society.
- GreenMAR - Resource-based green growth under climate change: Ecological and socio-economic constraints
- DOMQUA - Drinking water treatment adaptation to increasing levels of DOM (dissolved organic matter) and changing DOM quality under climate change

- A new Nordic research programme on green growth is in the pipeline at NordForsk. It is planned as a 5 year programme, running from 2014/2015 to 2018/2019.
- The programme will be multidisciplinary combining natural sciences, technical sciences, social sciences and the humanities, aiming to provide new knowledge and education on how the Nordic countries can jointly advance long-term green growth in the region through research and innovation.
- The programme will be constructed around three thematic focus areas: **Bioeconomy; understanding societal change;** and **climate change.** However, the contents of the programme and also the financing instruments to be employed will be decided later.
- NordForsk is currently in consultations with financing bodies in the Nordic countries to seek support to the programme.
- Contact person: Unni Rørslett unni.rorslett@nordforsk.org

Joint Nordic Initiative on Arctic Research



- "*Responsible Development of the Arctic: Opportunities and challenges – Pathways to Action*"
- Cross-disciplinary
- International research cooperation at highest level
- Integrating research with monitoring and data collection
- Support joint use of research infrastructure
- Strengthening the knowledge base for political decision making, education, industrial and human development



The Nordic Centre of Excellence Programme on Welfare Research (2006 – 2011)

- NCoE Reassess: Reassessing the Nordic Welfare Model
- NCoE NordWel: The Nordic Welfare State - historical foundations and future challenges

The Nordic Centre of Excellence Programme on Food, Nutrition and Health (2007 – 2011)

- NCoE HELGA: Nordic Health – Wholegrain Food
- NCoE MitoHealth: Centre for Bioactive Food Components and Prevention of Lifestyle Diseases
- NCoE SYSDIET: Systems biology in controlled dietary interventions and cohort studies

Final evaluation in 2014

Contact person: Kaisa Vaahtera kaisa.vaahtera@nordforsk.org

- Excellent research infrastructures are a prerequisite for conducting competitive research of high international quality in dynamic environments
- Excellent e-infrastructures are a prerequisite also for efficient use of research infrastructures
- Research infrastructure is a topic of mutual interest for all the Nordic countries and an area where Nordic cooperation can make a contribution
 - Pooling of national resources
 - Reduced fragmentation
 - Creating critical mass
- NordForsk's activities aim to strengthen Nordic cooperation on research infrastructure policies, strategies and funding
 - Joint Nordic actions
 - Flexible funding schemes
 - Allowing variations of common pots and variable geometry

Goals Within Research Infrastructure Cooperation



I) to increase the **use** of existing research infrastructure

II) to facilitate the **establishment** of cross-border infrastructures

III) to facilitate **joint Nordic actions** towards the international research infrastructure arena



Increased Use of Research Infrastructure



NordForsk increases the **use** of existing national, Nordic, and international research infrastructures by:

- Funding research infrastructure cooperation through joint Nordic research programmes

e.g. the Nordic eScience Globalisation Initiative, Nordic Centres of Excellence

- Promoting Nordic awareness of existing and future research infrastructure initiatives through conferences and workshops

e.g. several conferences with focus on eInfrastructure and RI gathering key stakeholders

NordForsk recent Calls



Nordic Research Infrastructure Networks: Cooperation on International Research Infrastructure Projects

- Application deadline: Feb 21, 2014

Support to Nordic clinical research projects

- Application deadline: Mar 21, 2014

eScience Tools and Techniques

- Application deadline: Apr 04, 2014



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Thank you for your attention!

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