



norden

Nordic Council of Ministers

# STUDIE 1

*Norden som global vinderregion*



**Nordic Ways of Interaction Between  
Public Research and Business**

# Nordisk Innovationskraft – Strategier og virkemidler til øget samspil mellem forskning og erhvervsliv i de nordiske lande

## Förord

Ett gott samarbete mellan forskning och näringsliv anses ha en väsentlig betydelse för att säkra och bibehålla en hög levnadsstandard och en låg arbetslöshet. Under de senaste åren har de nordiska länderna framställt olika typer av strategier, rapporter och utredningar som behandlat diverse sätt att stimulera till ett effektivt samarbete mellan forskning och näringsliv.

Denna studie ger en överblick av utvecklingen i våra nordiska länder samt en jämförelse av de konkreta resultaten av olika strategier som man använt sig av. Den frågeställning som man burit med sig är "Vad har fungerat bra och vad har fungerat mindre bra?"

Studien försöker identifiera trender och gemensamma drag i de olika länderna vad gäller samspelemekanismerna på såväl institutionell som strategisk nivå. Den skall inte ses som en fullständig beskrivning av ländernas innovationssystem, utan snarare som en inspirationskatalog och ett verktyg som Norden kan använda sig av för att hämta inspiration och dra nytta av varandras erfarenheter inom området. Som exempel kan nämnas studiens indikation om att de nordiska ländernas innovationspolitik tenderar att gå mot en ny fas av mer långsiktiga och mindre byråkratiska lösningar.

Min förhoppning att den har en inspirerande effekt och att den kan stimulera till fortsatt debatt och nya initiativ såväl på nordisk som på nationell nivå, vilka kan främja samspelet mellan näringsliv och forskning.



Øystein Djupedal  
Minister of Education and Research

# Nordic Ways of Interaction between Public Research and Business

Strategies to increase cooperation and interaction between public research and business are of increasing importance for Nordic governments. This comparative analysis of state of affairs in Nordic countries aims to map current trends, efforts made and identify what seems to work. Among other things it is concluded that innovation policies in Nordic countries tend to be alike, with an increased focus on long term planning and relatively similar organisational structures and instrument types. The study describes 12 inspiring examples.

The study is compiled for the Nordic Council of Ministers by Oxford Research, which has been aided by a reference group with representatives from NordForsk, Nordic Innovation Centre, Nordic Energy Research and the Nordic Council of Ministers' secretariat.

## Report series: The Nordic Region as a Winner in the Global Innovation Economy

During its Norwegian presidency, the Nordic Council of Ministers for Educational and Research Issues (MR-U) has wanted to identify potentiality for policy developments within certain policy areas, which are relevant for the Nordic countries in the light of globalisation and increased pressures on national economic competitiveness. The interest in such issues and their policy implications, nationally and possibly at the joint Nordic level, takes its point of departure in a discussion paper, which the Council had produced bearing the title "*The Nordic Region as a Winner in the Global Innovation Economy*"<sup>1</sup>. The paper concludes an array of *positions of strength*, and forwards several policy recommendation. The Nordic Council of Ministers has in continuation hereof, decided to look more closely at four specific policy areas, which in different ways are believed to be important for the Nordic countries efforts to position themselves as *knowledge economies*. Four independent studies have thus been commissioned, and are now published in a series title "*The Nordic Region as a Winner in the Global Innovation Economy*". The studies are not expressions of the Nordic Council of Ministers' policy or positions, but are merely an expression of the fact that a further discussion of the policy implications of these issues is thought necessary:

1. Nordic Ways of Interaction Between Public Research and Business
2. Quality Assurance of Higher Education in the Nordic Region: Towards mutual recognition and increased cooperation
3. Building Nordic Strength through More Open Funding: The Next Step in NORIA
4. Reading Skills in the Nordic Countries

The Study will be available in Scandinavian with an English summary 16 October 2006 at

<http://www.norden.org/pub/sk/showpub.asp?pubnr=2006:574>

(Preliminary design version)

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<sup>1</sup> The Nordic Region as a Winner in the Global Innovation Economy (Only summary in English)

<http://www.norden.org/webb/pressrelease/pressrelease.asp?id=1275>

# Nordic Ways of Interaction between Public Research and Business

Oxford Research A/S

## EXECUTIVE SUMMARY

Globalization has put innovation high on the Nordic agenda. Therefore, the Nordic Council of Ministers has desired to focus on the Nordic strategies for interaction between research and the business community. The ambition is to allow the Nordic countries to inspire each other to define new, national innovation initiatives.

This report should primarily be perceived as an inspiration catalogue – and not an evaluation of the Nordic countries' performance in terms of promoting innovation, nor an analysis of whether or not the Nordic countries' innovation systems are about to develop into one regional system. Moreover, the report does not constitute a complete description of innovation systems in the Nordic region, but is about a more selective identification of concrete, national initiatives which encourage interaction between research and the business community.

The method of this report has been to focus on that the described initiatives are as current as possible. At the same time the desire has been to put emphasis on the initiatives that appear to be most effective with regards to creation of interaction between research and the business community. In many cases evaluations of the many different initiatives are not available, and therefore several of the statements in the report are based on evaluations presented by national officials who have been monitoring the initiatives closely. The interviewed officials have requested to be anonymous, and therefore quotes as well as a list of the interviewees are not included in the report. However, the consulting firm Oxford Research, who has carried out the study vouches for the correct reproduction of the gathered evaluations.

Small countries don't have the resources to commit too many mistakes when utilizing limited resources. Therefore, officials, politicians, business leaders, and researchers look to the other Nordic countries when they are seeking inspiration for creating local changes. What works? How can we learn from it? And can we do something similar?

Initially, this report presents an overall perspective on the development in the Nordic innovation systems. The starting point is the comprehensive and detailed literature, which describes the interaction between research and the business community. These reports all have in common that they present recommendations on how to create more effective innovation systems and improved interaction. The report provides an overview of the experts' recommendations and thereby lays a basis for the concluding chapter.

## Nordic interaction strategies

The description of the interaction strategies in the Nordic countries focuses on the politically controlled institutions that are responsible for encouraging the development of innovation systems, e.g. Ministries, government agencies, public institutions, research councils etc.

The report contains a separate chapter about each of the five Nordic countries. The study of each country begins with a short overview of central elements of the national innovation system. Hereafter, the topics emphasized in the respective countries' interaction strategies are elaborated on. In the elaboration, emphasis has been put on coupling the strategic dispositions carried out on government level with concrete initiatives.

## Mechanisms for better interaction

It is positive that the Nordic countries experiment politically with the creation of new initiatives, which can stimulate research and the ability to innovate. Only through continued adjustments of the innovation system can the Nordic competitive position be maintained.

At the same time innovation systems and research interaction are relatively new phenomena in the Nordic region when broadly viewed. Therefore, the field has been experiencing several newly developed initiatives, pilot projects, and experimental schemes.

This provides a good basis for learning from each other's experiences.

The mechanisms consist of public programmes and initiatives, which are meant to encourage the interaction between the public and private research as well as strengthen the inter-relationship between the innovation system's stakeholders. These could e.g. be innovation environments, tech trans offices, tax incentives, research funds aimed at the business community etc.

Some of the initiatives have been tested and the entire interaction field is moving into a maturity phase with solid knowledge about which initiatives and mechanisms that are effective.

It is in particular important for small countries such as the Nordic countries, which don't have sufficient resources to invest research funds into wrong initiatives with unfortunate incentives or with limited effect. The list of initiatives should not be considered to be exhaustive, but the most important initiatives are included in the study, which is separated into four sections:

- Prioritisation of research funds for increased interaction
- Interaction initiatives related to research and development
- Human resources/knowledge mobility
- Commercialisation of research

This part of the report can be used for inspiration and the continued work to create effective interaction between public research and the business community in the five Nordic countries.

The report is concluded with recommendations for the continued work within this field at a Nordic level.

The overall picture is that the number of mechanisms for encouragement of the interaction between research and the business community has increased significantly, that the quality of the individual mechanisms has improved through evaluations, and that the funding of the field has been markedly strengthened.

At the same time the field of innovation has become a more central part of the business policy in the five Nordic countries – it has moved higher on the political agenda – and the field of innovation has been strengthened through institutional changes in both the central administration and at universities and research institutions.

Moreover, it is clear that a comprehensive exchange of knowledge and mechanism in the Nordic region is taking place, and thereby a better and more effective interaction between research and the business community is created. However, full steps towards common development of initiatives or systematic exchange of experience have not yet been taken.

It is evaluated that it is possible to strengthen the interaction between research and the business community at a strategic level by:

- Leveraging the political fora at Nordic level to create a common Nordic agenda for encouraging interaction between research and business community through knowledge sharing and best practice.
- Creating a more systematic evaluation of initiatives for encouragement of the interaction between research and business community to achieve increased comparability between the different initiatives across the Nordic countries.
- Developing pilot trials with common interaction initiatives at Nordic level.
- Encouraging industrial cluster development and marketing of special Nordic strengths through common cluster programmes.
- Encouraging commercialisation of research through best practice related to the many pilot projects within technology transfer.
- Strengthening the researcher mobility e.g. through a Nordic industrial research agreement.