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Nordic Innovation Centre

September 2008

Nordic Technology Transfer Network in the Nordic Region

- Discreet, easy and free for members to seek and provide technology across the entire Nordic region
- Driven by the desire for technology demand and industry contacts = more market "pull" traffic for everyone
- It's all about making the connections — <http://techtrans.dk/da/nordic-techtrans-network>



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Title: Nordic Technology Transfer for Regional Innovation		
Nordic Innovation Centre project number: 07051		
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Abstract: Technology Transfer (TT) is on the rise in Europe with an increased focus on cooperation between public research and the business community, as it enables good ideas and inventions to be transformed into products and services for the benefit of society. This project has sought to create the first Nordic Technology Transfer Network, enabling technology transfer professionals from all sectors to engage in the exchange of knowledge through the implementation of an e-based knowledge-exchange platform. The creation of this pan-Nordic TT-network was approached by a series of five regional workshops, with attendance from the local business communities and public research institutions. The network has all along been moderated by a project steering group with representatives from the five Nordic countries. The network's e-tool was further developed and customized during the project lifetime, allowing Nordic TT professionals to seek and exchange knowledge on a global level, to accommodate the Nordic technology transfer sector's expressed need for an international dimension. The project has unearthed and consequently addressed the difficulties faced by technology transfer in the region, including isolation, unawareness of peers and, in some cases, a lack of national technology transfer strategies. The project has initiated a cross-fertilization of the Nordic TT sectors, facilitated and enhanced Nordic knowledge exchange while simultaneously stimulating the technology transfer discussions in the participating countries. The project has furthermore produced a first-ever list of public Nordic TT offices/units that constitutes a much-needed "who's who?" within Nordic technology transfer. A major project conclusion is the need for formalized technology transfer coordination on a Nordic level. A network of the proposed kind would, through its coordinating role and support activities, be able to enhance the performance of the Nordic technology transfer sector, raise its levels of competences and improve the region's commercialization processes.		
Topic/NiCe Focus Area: Innovation Policy		
ISSN:	Language: English	Pages: 108
Key words: Technology, transfer, technology transfer, tech-trans, tech trans, innovation, Nordic network, Nordic technology, Nordic innovation, network, innovation policy		
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Executive summary

Project purpose

This project seeks to increase the effectiveness of the Nordic technology transfer (TT) process as a whole. The project aims to develop a network between Nordic TT actors in order to enhance the performance of regional innovation systems. A main objective is to improve accessibility to resources and contacts by implementing an e-based infrastructure. The knowledge sharing tool on which the Nordic Technology Transfer Network is based, enables an easy exchange of intellectual property. The ambition is that a cross-fertilisation of the regional TT environments will not only bring the Nordic technology transfer community closer together but also improve commercialization processes based on intellectual property in the Nordic countries.

In order to meet these objectives, a proactive method and approach was applied. The project was initiated by conducting a round of introductory workshops, one in each Nordic country. At these workshops, the network idea and its e-tool was presented to local technology transfer representatives from all interested sectors of society. The idea was to start with a pilot phase. During this, the network members would become familiar with the network idea and the simple e-based infrastructure that makes up the backbone of the network. After the initial pilot phase, improvements based on observation and user-evaluation would lead to a new and improved networking tool. The project's steering group has acted as national network contact points/moderators for the Nordic Technology Transfer Network (NTTN) throughout the project.

Results and conclusions

The general conclusions from the local NTTN-workshops held in Copenhagen, Tampere, Stavanger and Reykjavik pointed in two directions: firstly, a great and sincere interest in entering a Nordic technology transfer network was evident. The participating Nordic technology transfer professionals acknowledged that the NTTN enters a vacant spot, namely providing a much needed link between Nordic technology transfer peers. Participants simultaneously emphasized the lack of a "who's who?" within Nordic technology transfer as a main concern – one of the desired effects of the NTTN. Secondly, the experiences from the conducted workshops present an image of a highly

diverse and differentiated region in terms of technology transfer. Workshop discussions and testimonials implied a substantial difference in the maturity of the regional technology transfer environments in experience, legislation and the level of organization. The most forward looking discovery across the region was, however, the identification of a demand amongst Nordic technology transfer professionals for enhanced Nordic cooperation and an outline of the Nordic technology transfer sector.

A real interest in cooperation across the Nordic Region is evident from our workshops and the discussions that followed. The Nordic Technology Transfer Network addresses these demands by offering a means of strengthening the informal contacts between the Nordic tech-trans environments. By paving the way for an easy sharing of knowledge through a simple e-infrastructure, the NTTN mobilizes the unearthed demands of Nordic tech-trans professionals. Pinpointing the barriers faced by Nordic technology transfer professionals whilst offering a new way to increase the accessibility of technology, have been some of the valuable results. By setting a Nordic technology transfer agenda, the NTTN-project has created a national agenda in each of the Nordic countries, thereby stimulating thoughts on regional technology transfer. Doing this, the Nordic Technology Transfer Network has brought forth a viable and practical tool that addresses the Nordic technology transfer challenge; a novelty that could, in the long run, benefit the entire region and its inhabitants.

Recommendations

The steering group behind project 07051 “Nordic TT for regional innovation” recommends a number of points and a plan of action for further work and developments within the field of Nordic technology transfer integration, based on the experiences drawn from the present project.

There is a need for a continuing and expanding creation of an infrastructure between the technology transfer offices/units in the Nordic region. This infrastructure should especially be directed towards creating links with industry. The project has been the first ever to draw up a list of the relevant technology transfer actors in the Region. The next natural step is to utilize this information to create a network of coordination between Nordic technology transfer offices/units. This goal would be facilitated by the creation of further local coordination between technology transfer offices in each Nordic country. A Nordic collaborative network - perhaps modelled on the Danish National Network for Technology Transfer (*for more information on this network, please see the National*

Profile chapter on Denmark) - should be created. The aim of this is to raise the region's technology transfer sector's performance and level of professionalization. The tasks of this network would be manifold, including holding of workshops and courses, compilation of newsletters and facilitation of technology transfer staff exchange and internships. An important aspect of this network's duties would be to support activity aiming to raise competences within the technology transfer administrations at the public research institutions. The network would also assist with the organizing of a yearly Nordic commercialization survey for international benchmarking purposes¹. This network would be able to prepare an outline of the Nordic technology transfer sector, describing what each member office/unit specializes in and offers. This network would be able to offer more concrete means of exchanging knowledge and ideas through, for instance, the establishment of a Nordic patent-exchange. The Danish National Network for Technology Transfer has a yearly budget of approx. 500.000 €. An equivalent network on a Nordic scale would not be feasible with less funding. The need for a Nordic network like this has been proven through the project by numerous and repeated enquiries from current members of the Nordic Technology Transfer Network, calling for such a network with the described activities and offerings.

¹ Following the work of the EU Commission's expert group on "Knowledge Transfer Metrics" that will disseminate its results ultimo 2008.

Content

PREFACE	3
WHAT IS TECHNOLOGY TRANSFER?.....	5
TECHNOLOGY TRANSFER IN A NORDIC CONTEXT	6
THE MILESTONE PLAN: OBSERVANCE AND IMPLEMENTATION	7
HALFWAY CHALLENGES: SEPTEMBER 2007 - JANUARY 2008	11
IDENTIFICATION OF DEMANDS – WORKSHOPS ACROSS THE REGION.....	11
EVALUATION: USER FEEDBACK AND REVISION	13
USER-DRIVEN IMPROVEMENT: EMBRACE OF A NEW E-TOOL.....	15
THE PROJECT HOMEPAGE	18
REACHING THE TARGET: SECURING AND MAINTAINING NETWORK MEMBERSHIP	22
POOLING THE EXPERIENCE AND IMPLEMENTING ADJUSTMENTS.....	23
THE SYSTEM AT WORK: FACTS AND ASKED QUESTIONS.....	23
SEEKING TECHNOLOGY	23
OFFERING TECHNOLOGY	24
BROAD TECHNOLOGY-RELATED QUESTIONS	24
THE INTERNATIONAL DIMENSION	25
CASE EXAMPLE – AN ACTIVE QUESTIONER	26
NATIONAL PROFILES	27
DENMARK	27
LEGAL FRAMEWORK AND PROCEDURES	27
NATIONAL POLICY	28
STATISTICS.....	29
LOCAL CHALLENGES.....	31
INTER-UNIVERSITY ORGANIZATION	31
FINLAND	32
LEGAL FRAMEWORK.....	32
NATIONAL POLICY	32
INTER-UNIVERSITY ORGANIZATION	33
LOCAL CHALLENGES	33
ICELAND	34
LEGAL FRAMEWORK.....	34
NATIONAL POLICY	34
LOCAL CHALLENGES	36
INTER-UNIVERSITY ORGANIZATION	36

NORWAY	36
LEGAL FRAMEWORK.....	36
NATIONAL POLICY	37
STATISTICS.....	38
INTER-UNIVERSITY ORGANIZATION	39
LOCAL CHALLENGES	39
SWEDEN	40
LEGAL FRAMEWORK	40
NATIONAL POLICY	40
STATISTICS.....	41
LOCAL CHALLENGES.....	41
INTER-UNIVERSITY ORGANIZATION	42
APPENDIX 1 – COMMUNICATION PLAN.....	43
APPENDIX 2 – NEWSPAPER INSERT (<i>BØRSEN</i>).....	46
APPENDIX 3 – INTRODUCTORY BROCHURE	47
APPENDIX 4 - MANUAL	48
APPENDIX 5 – LIST OF PUBLIC NORDIC TT OFFICES/UNITS.....	52
APPENDIX 6 – EXTERNAL COMMUNICATION	67
APPENDIX 7 - MINUTES.....	68
APPENDIX 8 – FEATURE ARTICLE	96
APPENDIX 9 – PROJECT MILESTONE PLAN	99

Preface

In Europe the transfer of technology has gained momentum with a continued expansion of the cooperation between public research and the business community through which good ideas are transformed into products for the benefit of us all.

In a Nordic perspective this has raised the need for a closer collaboration when exchanging information across the Nordic Regions.

In the future, technology transfer will play an increasingly important part in relation to the profile of the research institutions. The goal is by no means to commercialize all research but rather to commercialize research that is well suited for commercialization. Neither is the goal merely to earn money but to raise funds for research without jeopardizing the freedom of research. On the one hand, a more goal-oriented cooperation with industry creates more research freedom through increased resources. That freedom is on the other hand inherently limited due to the restrictions that follow from a more extensive cooperation.

A sound balance is to be found between these two extremes. One of the consequences of implementing technology transfer is that patenting and commercialization should be addressed in the research projects at an early stage. This has become easier as many research institutions now have their own technology transfer offices, which in time have matured to adequately handle the inventions both legally and commercially.

The professionalization of technology transfer should not only be viewed in a restricted perspective. It is of course an advantage to researchers as well as the business community that commercialization is performed at a high level. In a larger perspective, however, and seen from a social point of view, successful commercialization of the results of public research will actually make a difference as important inventions affect the organization of our society as well as the financial and social factors which shape it. This is what makes it an important and joint project.

I do not believe that knowledge sharing within technology transfer has had the best of terms, and I know from the technology transfer offices that it can be difficult in everyday life to find qualified and easily accessible information.

In order to obtain an informed perspective of the field, hopes are that the implementation of the Nordic Technology Transfer Network already has and continuously will make a difference.

The Nordic Technology Transfer Network is building on two action lines for improving the commercialization processes based on IP in the Nordic countries; a) to create the first Nordic Regional Technology Transfer Network between research institutions, innovation actors and private industry; b) to implement a Nordic e-based knowledge exchange platform enhancing accessibility to resources across the Nordic TT network.

The network and system have during the project proved attractive, not only to universities seeking business partners, but also to people seeking technology such as corporates, technology brokers or technology scouts, as it has enabled them to tap into a wide network that may identify “qualified” IP for very little effort. The system has, so to speak, generated more market “pull” traffic for everyone.

The network is based in the Nordic regions, but it is crucial, in the perspective of a globalised market, that it is based on a scalable system. Through a centralised database/ mail management system known as the “Knowledge Vine” (KV), developed together with Manchester University’s intellectual property department, it enables any individual user from a “local/regional” KV network to selectively listen to traffic from other KV networks, or selectively to seek technology on other KV networks.

The network-platform has, as hoped, attracted all players in the field. We are more than 100 partner institutions/organizations now and the number is still increasing. The success is therefore indisputable and I am convinced that this simple tool will make a difference in the daily technology transfer activities of university and industry TTOs.

*Dr. Gert Balling, Secretary General
Danish National Network for Technology Transfer
Chairman, Nordic Technology Transfer Network Steering Group*

What is technology transfer?

Technology transfer is the process of transferring knowledge and technology from scientific research into practical applications for the public and private spheres. Transferring publicly funded technology and research to the greater public carries with it numerous societal benefits. New technologies within areas such as medicine, health service, education and communication become available to the broad public whenever publicly funded research results are commercialized and exploited. When research technologies like these reach the market, they not only benefit the public by increasing the pool of goods to choose from - they also help create jobs that in turn generate tax revenues.

As the core mission of most publicly funded research institutions is the provision of high level research and education, commercialization of research is often the responsibility of academic technology transfer units/offices. These actors seek out and identify potential commercial partners who can advance academic research and ensure that the discoveries and technologies reach the stream of commerce. Simultaneously, the technology transfer offices are dedicated to identifying research that has commercial potential and interest and they take an active part in the following process of strategy and exploitation. Strategies of commercial exploitation can include licensing agreements, joint ventures and partnerships as well as the establishment of separate corporate vehicles that build and further develop on the intellectual property and technology of the 'mother' institution – so called spin-out companies. Finally, technology transfer offices at public research institutions are responsible for protecting the developed technologies through patents; this protects the investment made in research and secures recognition for the discoveries made at the institution.

The gradual and irreversible transition from manufacture-based economies to knowledge-based economies taking place especially in the Northern part of Europe will give momentum to university research and the intellectual property obtained hereby. When developments within research and creative new-thinking become pivotal to sustained economic development and progress, technology transfer from research to society will become increasingly meaningful. It is in this context that we must understand the rise of programs and plans across Europe focused on enhancing economic development through university technology transfer. This places universities and other public research institutions as the natural focal point for developments leading to the improvement of life quality and social as well as economic well-being.

The development and maturation of the technology transfer profession has brought a wide range of stakeholders and specialized intermediaries with it. Today technology transfer professionals can work on behalf of public or private research institutions or with governments, patent agencies, technology parks and technology scouts. Due to this dispersion of the technology transfer arena, technology transfer offices and organizations are often comprised of multidisciplinary staff such as legal advisers, scientists, economists and market specialists. The technology transfer process, with its increased complexity, encompasses a multitude of actors essentially working towards the same diffusion of scientific knowledge but with different objectives and incentives. Professionals

working with technology transfer are frequently presented with technology disclosures within markets and technology areas new to them. It is therefore not uncommon to commence the due diligence process from a standing start. As a business case develops and the exploitation process progresses, substantial additional and supporting knowledge, information and external experience is needed

The generally accepted need for technology transfer combined with an acknowledgement of the potential use of and contribution from all involved parties calls for an effective and useful horizontal line of communication between the multitudes of technology transfer actors.

This is exactly what the Nordic Technology Transfer Network offers.

Technology transfer in a Nordic context

Technology transfer is a key ingredient in the economic sustenance and development of the five small open economies in the Nordic region. The Nordic countries are research intensive and spend a relatively high percentage of GDP on research & development compared to the EU-average (Nordic Statistical Yearbook, 2007: 225. Nordic Council of Ministers, Copenhagen). The Nordic countries have many similarities between them within governmental, institutional and societal fields that, combined with climatic, geographic and economic similarities render collaboration within research and innovation indispensable. These are the some of the reasons why the Nordic Prime Ministers, at meetings in Finland in June 2007 and in Sweden in April 2008, decided to intensify the efforts toward creating a strong Nordic knowledge and innovation arena (*“Ambitious research proposal”* 16/4 2008, news story, www.norden.org). The overall objective is to promote and advance Nordic top-of-the-line research in collaboration with the trades and industries. This strategy underlines the unique Nordic opportunity of joint research and innovation policies that can prepare the Nordic countries for future challenges e.g. climate change and energy innovations, while helping build up the competitiveness of the region.

Although the above statement clearly implies the need for a means of communication and exchange between the various technology and innovation actors in the Nordic region, this has so far been far from the case. Until the launch of the Nordic Technology Transfer Network, a trans-Nordic network connecting technology transfer professionals from public and/ or private research institutions with industry and patent agents did not exist. As these linkages are the very purpose of the Nordic Technology Transfer Network, it is fair to state that our present project has filled up a much needed and vacant spot.

Technology transfer professionals, geographically separated across the Nordic region, are dependent on a network facilitating knowledge exchange and dispersion of new technologies. This tool of communication is a prerequisite for further integration into and benefitting from the region's make-up of universities, high-tech industry and technology brokers. Previously, actors have been focused on exploiting their own organization's intellectual property while using the contacts,

knowledge and networks at hand. This has taken place in general isolation while being unaware of potentially useful knowledge held by peers across the Nordic technology transfer community. In the light of this lack of communication and utilization of Nordic regional potential, the Nordic Technology Transfer Network was created. It aims to improve accessibility to resources and contacts through an e-based knowledge sharing tool seeking to cross-fertilize the regional innovation environments.

Furthermore, The Nordic Technology Transfer Network concept is based on recent analyses of two regional innovation systems in Sweden and Denmark (Innovation Guide 2007, Øresund Science Region, 2006). These analyses showed that cross-fertilization works when a critical mass of innovation actors works within similar areas while effective tools and common standards for knowledge exchange are present. The project proposal was also based on a former recognition from the Nordic Innovation Centre outlining the need for a Nordic technology transfer network.

The EU's revised Lisbon Strategy and initiatives such as the European Commission's innovation strategy ("Putting knowledge into practice: A broad-based innovation strategy for the EU", (COM(2006)502) have both emphasised the importance of improving knowledge transfer between public research institutions and third parties e.g. industry and civil society, while encouraging European universities to take a more active role in the innovation processes. These European level objectives, combined with the above outlined characteristics of the Nordic countries, render it certain beyond doubt that a technology transfer network has great validity and usefulness in a Nordic frame.

The Milestone plan: observance and implementation

Project 07051 "Nordic TT for Regional Innovation" had a milestone plan at its initiation, outlining the most important objectives and deliverables related to the project (please see Appendix 9 – for the complete list of enclosed appendices, please see the report's table of contents). This section of the report will focus on the observance of and outcomes of the action points listed herein, as well as deviances where these have occurred.

Project Start-up, creation of project Steering Group and first Steering Group meeting

The project was initiated as planned September 1st. The Steering Group was assembled (6 members), with the first Steering Group meeting held at the Technical University of Denmark September 14th. The Nordic Technology Transfer Network emerged as a concept. Local Steering Group members were briefed about expectations and further lines of action in each of the Nordic countries (Denmark, Finland, Iceland, Norway and Sweden). Specific details such as the dates of local workshops and intra-Steering Group communication were discussed. More specifically, the following points were presented and/or agreed upon:

Undertaking of workshops

It was specified that project managers Mr. Noel Brings Jacobsen & Mr. Gert Balling would jointly conduct workshops aimed at potential members in each of the Nordic countries, and produce/create the specific content for these. Workshops were predicted to last 3 to 5 hours with a success criterion of approx. 20 show-ups per workshop.

Making of a project ‘teaser’ and/or short introduction

It was agreed upon that a short written and graphical presentation of The Nordic Technology Transfer Network should be produced quickly. This would serve as a first-contact project presentation that would be distributed to all Steering Group members as soon as possible, in order to be passed on to potential members in each of their respective countries. This introductory project ‘teaser’ was then merged with the quickly produced explanatory pilot brochure.

Creation of a project website

The creation of a website for the Nordic Technology Transfer Network project was discussed at the meeting. It was agreed upon that this informative webpage describing the entire project and its prospects would be made as a sub-site to www.techtrans.dk, an already existing website belonging to the National Network for Technology Transfer (Denmark).

Specifics regarding the contact person at each member institution/business

The number of contacts at each member’s end was deliberated. It was agreed that at least one contact should be pointed out with each member institution/business, in case of absence/travel. The role of each network contact was described as that of a gate-keeper, sifting through incoming network traffic and eventually posting and/or answering technology related questions.

Finalization of Communication Plan

A plan listing the project’s planned communication activities was submitted to NICE on October 1st 2007 (Please see Appendix 1 for a copy of the communication plan for Project 07051). This section will deal with the observance of and deviations from the objectives of the communication plan.

The communication plan listed the following objectives designed to attract attention to the Nordic Technology Transfer Network:

- Newsletters
- Website activity
- Press releases
- Newspaper and/or magazine feature article
- External communication by Steering Group members, e.g. conference presentations

Newsletters

Information about the novel Nordic Technology Transfer Network and its potential was included in the November edition of the monthly newsletter published by the *National Network for Technology Transfer* (Denmark). The newsletter reaches out to affiliates of the National Network for Technology Transfer including all Danish universities and various Danish research institutions. Please see the newsletter at http://mail.techtrans-nyhedsbrev.dk/BM2/article_preview.do?id=21

Website activity

A website dedicated to the Nordic Technology Transfer Network can be found at www.techtrans.dk/nttn. The webpage is comprehensive, containing information such as project objectives and rules of participation, a downloadable system manual and a list of network members. As the webpage is a first contact for many prospective network members, it is designed to be concise and explanatory so as to quickly establish an interest in and relevance for joining the Nordic Technology Transfer Network. The thoroughly prepared and designed graphical web content clearly supports this aim. The website contains an online “join”-function, through which members can easily apply for network membership. The website was launched at the beginning of November. For more information and details, please see the *Project Homepage* section of the report.

Press releases

It was decided jointly by the project steering group, that a press release regarding the Nordic Technology Transfer Network would not be made. The original idea behind a press-release was for the media to write about the project, for which reason we instead focused on a newspaper feature article, below, describing the NTTN project.

Newspaper and/or magazine feature article

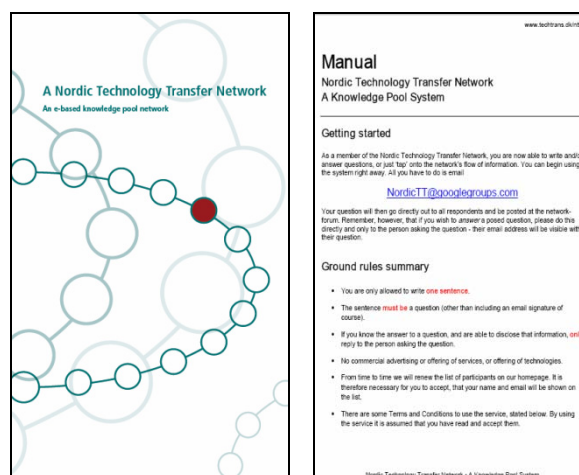
On the 15th of November, an insert in the Danish daily *Børsen* featured an article on the novel Nordic Technology Transfer Network. The feature article had statements from one of the project initiators Mr. Gert Balling (the other being Mr. Noel Brings Jacobsen) and also referred to the project website. Please see the newspaper insert in Appendix 2.

External communication by Steering Group members, e.g. conference presentations

During the lifetime of the NTTN-project, Steering Group members have engaged in a range of different external communication activities. This is most easily depicted in Appendix 6 which contains a matrix of different external communication activities.

Presentation of pilot manual/brochure on the network/system

On October 15th a comprehensive and introductory brochure explaining the outline of the Nordic Technology Transfer Network and the system that supports it was developed. The pilot brochure (500 copies) served as a hand-out to workshop participants at all local workshops (Please see Appendix 3). A Manual for using the e-base of the Nordic Technology Transfer Network was developed simultaneously (Please see Appendix 4).



Introductory brochure (left) and online system manual (right)

Workshops I-IV (Denmark/Sweden, Finland, Norway & Iceland)

The four local workshops took place at the dates listed in the milestone plan, except for the Iceland workshop. Due to practical concerns, the workshop was held at the University of Iceland November 23rd and not November 30th as stated. At these workshops, the role of regional/national moderator was carried out by the respective Steering Group members.

Characteristic of the workshops was a local turnout of between 10-25 representatives from academia and the business community. All workshops commenced with an introductory presentation of the Nordic Technology Transfer Network and its future prospects/potential. The workshops were then characterized by open discussion, questions, and considerations from the participants in concert with the project managers. The workshops were generally regarded as fruitful sessions, extending potential network members' knowledge of the e-based system tool and the Nordic tech-trans sector in general.

For a more detailed description of the contents of the workshops as well as the outcomes of these, please see the *Identification of Demands – Workshops Across The Region* section of the report

Implementation of the e-based knowledge pool system

The launch and implementation of the e-tool, serving as the electronic backbone of the Nordic Technology Transfer Network, took place during the second week of December instead of

December 1st as stated in the milestone plan. The system uses the open and free Google Groups platform and had 94 members across the Nordic Region by August 2008. For a more detailed description of the Nordic Technology Transfer Network's e-system and its functionality, please see chapters *User-driven Improvement: Embrace of a New e-tool* and *The System at Work: Facts and Asked Questions* of the report.

Halfway challenges: September 2007 - January 2008

During the seminal phase of the NTTN project, a number of challenges specifically related to the novel nature of the project appeared. The challenges facing the NTTN project during the first 6 months of its lifetime are described and set out.

The initial project challenges were to inform about the network and secure actual members, whilst boosting the network traffic of technology related questions and requests. The network currently has 94 members of which 65 are unique institutions/businesses. Although this exceeds by far the critical member mass supposedly needed to generate network traffic (as described in the Project 07051 contract), active participation was rigorously promoted.

Keeping track of the project's internal and external channels of communication also proved a challenge; the external communication being between the project initiators and prospective network members was approached continuously. The internal communication challenge is to ensure that confirmed entries are added to the network, receive only relevant membership information and are aware of their actual membership. This requires the maintenance of several contact lists to make sure that only actors who explicitly express interest in joining the network are added. Prospective members who merely express interest in the project are thus simultaneously kept at hand and 'courted' for possible membership.

On a more practical note, the NTTN's preliminary Google Groups IT-base had certain security features that made it impossible to add many network members simultaneously and instantly. This was somewhat of a nuisance as the members we sought to add had indeed already applied for membership. The IT system would send out membership invitations instead (which requires people to actively accept these). We opposed this due to our philosophy that less communication back and forth keeps interested parties motivated. With these limitations, reaching the current number of added and registered members has been a somewhat lengthy and time demanding process.

Identification of demands – workshops across the region

In order to build up a functioning network between Nordic technology transfer professionals, we initially needed to go beyond e-mails, phone calls and homepagings. If future members of a nascent Nordic Technology Transfer Network were by and large unaware of their Nordic peers and colleagues, presenting the network from a distance, without human interaction, would not suffice. Keeping this in mind, a round of four introductory workshops allowing all regional technology

transfer actors to participate was carried out. The workshops held in Copenhagen (joint Danish/Swedish workshop), Tampere, Stavanger and Reykjavik gave a unique opportunity to present the Nordic Technology Transfer Network directly to the people most prone to benefit directly from it. With regards to developing and calibrating the utility of the Network, the sessions proved an extremely valuable source of demand identification.

Workshop attendance was found to be very satisfactory, ranging from 10-25 participants, counting members of public research institutions, industry and private innovation actors such as licensing agents and technology scouts. The workshops focused on presentation of the Nordic Technology Transfer Network idea and allowed participants to share thoughts and comments on the organization of Nordic technology transfer and its state of affairs.

According to a joint mass of workshop participants across the Nordic Region, the NTTN clearly addressed a previously unsatisfied dimension of Nordic technology transfer - the large workshop turnout alone bears witness to this claim. From the four Nordic workshops, the following points sum up the initial project responses:

- The network idea is simple and its relevance easily understandable
- The NTTN differs from other tech-trans networks by being needs-driven only
- The NTTN network succeeds in a much needed mapping of the Nordic tech-trans sector
- The network's free of charge policy is appealing

The perception of a network that is simple to use and simple in its make-up, was a prime factor considered when launching and planning the NTTN project. Feedback from workshop participants showed that known tech-trans networks tend to be both time consuming and of a more formal nature with regards to involvement. The NTTN meets this critique by combining obvious usefulness with a free of charge policy. The workshop participants expressed satisfaction with the Nordic Technology Transfer Network as needs-driven, i.e. the network is there to be used only when needed and does not require any maintenance at all. The network is needs-driven in the sense that it is merely an aggregation of communicative needs across the Nordic region. If these needs for enhanced communication and coordination disappear, the network will dissolve itself as a natural consequence.

The discussions at the workshops and the subsequent sharing of experiences led to the discovery of a generally isolated and fragmented Nordic tech-trans sector. The interest in cross fertilization of regional technology transfer and a 'who's who' within the Nordic tech-trans community was evident; supported not only by the workshop turnouts but also from the contacts that were visibly established there. We thereby attribute members prone to join the NTTN two different motifs; engagement in regional technology transfer exchange as well as the desire to benefit from a mapping of the Nordic tech-trans sector.

Support from and 'recruitment' of workshop participants has shown that the Nordic Technology Transfer Network could not have been launched with similar success had we not conducted local

workshops with personal presence. This claim is supported by the fact that most current network members have been recruited not through advertising and outreach, but amongst workshop participants. Attendance of project staff at local-regional workshops thus acts as an indicator of professionalism and sincerity.

Experience drawn from the local workshops also proved pivotal to our own understanding of the differences between the Nordic technology transfer landscapes. As described by the national profiling sections (please see page xx), Nordic technology transfer professionals face divergent challenges and practices. This discovery of differentiated mindsets and technology transfer conditions contributed further to the implementation of the Nordic Technology Transfer Network. The network does not require any prerequisites and has no bias towards any *modus operandi* in the technology transfer field. Neither does the network favour any set of players within technology transfer, as it appeals to market and public sectors alike.

Based on the workshop feedback, we conclude that the NTTN has filled up several vacant spots within Nordic tech-trans exchange and enhancement.

Evaluation: user feedback and revision

A Steering Group Meeting was held in Lund on April 1st 2008. The following summarises the main points that were discussed at the meeting including the most important project insights and outcomes revealed thus far.

- The all-important subject discussed was how to make members use the network actively and make more people join it.
- The steering group conferred on how to get new members to join the NTTN as well as securing a continuation of network traffic. It was agreed that more questions flowing through the NTTN would be required to enhance the visibly functioning system and to make it more attractive to new members.
- The following months were deemed critical when it came to securing network traffic and keeping current network members motivated. The steering group then agreed, in unison, to ask more questions to the network. Each steering group member committed him or herself to ask several questions to the network over the next two months. Hopes were that this would act as an effective ‘saline injection’ to the network.
- The current NTTN manual (downloadable from the website) and its usability was discussed. It was generally agreed upon that the manual was too long and too comprehensive.
- A draft of a two-page feature article describing the NTTN-project and its current status was submitted to all steering group members for approval. The feature article (Appendix 8) would be distributed through local newsletters and serve to generally raise awareness of the NTTN. The article was completed and distributed to all group members approx. one week after the meeting.

- After a short discussion, it was agreed that individual members of science parks should be allowed to sign up to the NTTN. Small companies and science park tenants with few employees were welcomed as potential members, as they too could contribute with questions and answers.

It was made clear from the steering group meeting that the network system does not have optimal functionality. We therefore committed ourselves to ask questions to the network in order to secure the use of the system and to encourage more members to ask questions themselves. This initiative on behalf of the steering group was partly initiated due to a round of user-interviews conducted in mid-March. From the telephone interviews with members of the network, it became clear that the network wasn't visible enough to the users. A network member from University of Helsinki stated the following, when asked about his view on possible advantages of a Nordic collaborative network:

“The question-based network is a very good idea. It has good potential. I don't know if anyone has used it yet”.

A network member from Karolinska Innovations AB, when asked about the functionality of the system's e-tool, said:

“I guess everyone is just sitting and waiting to see”

The idea of generating and posting ourselves a large amount of relevant questions to the network, in order to increase the interest of members, was unknowingly confirmed by a network member from a large Icelandic University:

“Put out a lot of questions initially; 30-40 questions so people will know what kind of questions are out there, and what has been asked”.

On a more general note, the steering group expressed strong commitment to an involvement on a national level. Some steering group members pointed out the possibility of enhanced Nordic collaboration. Experiences and procedures from the Danish tech-trans network (represented by Dr. Gert Balling, steering group chairman) included technology transfer seminars, workshops and education; practices that could beneficially be exported to all regional technology transfer environments. The steering group viewed a description of the degree of differentiation between the different technology transfer landscapes in the Nordic region, as a concrete project outcome. This lies end to end with the published list of Nordic public technology transfer offices/units.

At present there is no accessible description of the different Nordic technology transfer environments, rendering trans-national knowledge impossible. This was made clear at the meeting and is confirmed by the more substantial national profiling sections of the present report. Steering Group member's access to knowledge on and developments within the Nordic technology transfer arena is limited. We have therefore included in our reporting an extended description of the national

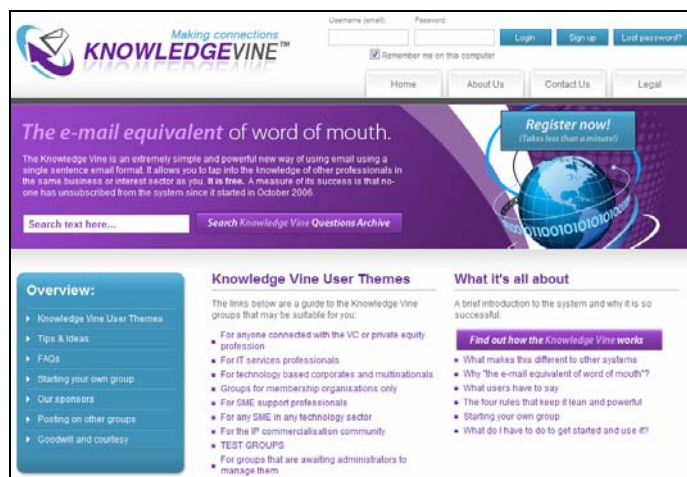
technology transfer environments and, equally justified, a list of Nordic public technology transfer offices/units.

User-driven improvement: embrace of a new e-tool

The steering group meeting on April 1st 2008, together with feedback given to us by network members in mid-March, revealed a need for a change of the network's e-tool. The initial Google Groups software being used had certain shortcomings that required a change of system. The system manual, produced by the project initiators and made readily available at the project homepage, was too long. Several interviewed network members stated that the Google Groups system and the downloadable manual were too complicated. A network member from the Norwegian University of Science and Technology (NTNU) explained it this way:

"I am a little bit familiar with the Google Groups tool, but I have not been using it actively. Google Group seems a bit complex and not so transparent".

It was then decided to produce a small and brief introductory manual to the new e-tool, as all other relevant information can now be found on the systems new website at www.theknowledgevine.net.



Front page of the Knowledge Vine system's homepage

The simplified manual to the new and more user-friendly system rendered the creation of a new brochure superfluous, as the general network idea and way of communicating, i.e. by e-mail, remains the same. The decision to actively engage in the creation of a new system was made through a combination of the steering group feedback and the aforementioned interviews with network members. This adjustment of the e-tool was deemed necessary in order to sustain and maintain network activity and continuity. The new system includes a range of improved features when compared to the initial Google Groups system. The most important of these are described below.

- Steering group members reported a common problem when answering posed questions and requests. Often, the answer to technology requests would not be sent directly and only to the person posing the question, but to all network members. This proved a nuisance as answers to questions are private and meant to be read only by the people asking questions. The new system has an automated control of the answering process made especially to secure this.
- An important and much needed feature of the new system is the ability to easily ‘hook-up’ to other knowledge pools. These could be other national or international knowledge pools as well as sector specific groups. At present there are 14 of these different groups, covering geographical areas as well as industries/sectors. The initial system did not offer its members this free and easy access to post and/or answer questions in other knowledge pools.

Name	Email Address (Click to email the group)	Action
Autritekian Technology Transfer	autritek@theknowledgevine.net	View Group Join
Cultural and Creative Industries	ccid@theknowledgevine.net	View Group Join
Iberian Technology Transfer	istt@theknowledgevine.net	View Group Join
IT Security	it@theknowledgevine.net	View Group Join
Low carbon technology	lct@theknowledgevine.net	View Group Join
Nordic Technology Transfer	nordt@theknowledgevine.net	View Group Unsubscribe
North American Technology Transfer	natt@theknowledgevine.net	View Group Join
Protein Europe test group	proteineurope@theknowledgevine.net	View Group Join
South East Asia Technology Transfer	seatt@theknowledgevine.net	View Group Join
Sustainable building design & development	sud@theknowledgevine.net	View Group Join

Excerpt from the list of interconnecting geographical and sectoral networks within the Knowledge Vine system

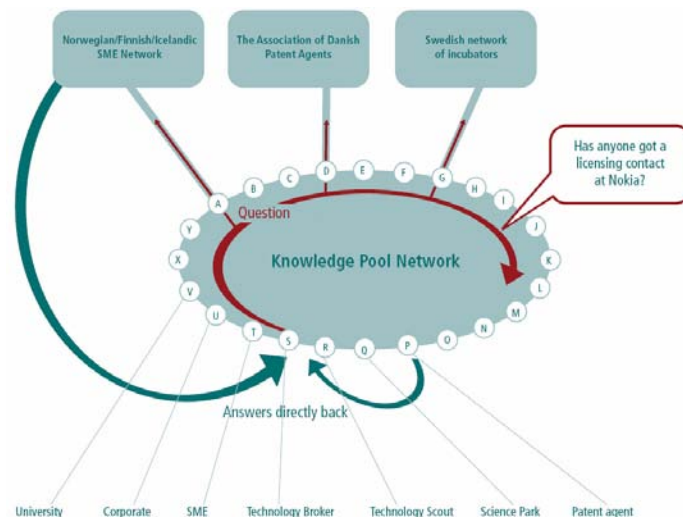
These features make up the most radical improvements of the Nordic Technology Transfer Network’s e-based system.

Other new features include:

- An online question archive containing previously asked questions,
- Automated safeguarding against network questions that are either not formulated as questions or in violation of the network’s ‘one-sentence’ rule.

In order to develop the new system and implement the needed changes, The Nordic Technology Transfer Network has engaged actively in the system’s development process together with its creator UMIP (University of Manchester Intellectual Property Ltd). Our involvement includes specific recommendations on changes and developments and the 3.000 € financing of a software module in the new system platform. The specific module allows users to join the network directly

through its homepage and subsequently be able to join/unsubscribe to as many geographical and/or sector groups as they choose. By co-financing and co-developing the new e-base of the Nordic Technology Transfer Network, our project has moved from using a shareware-software (Google Groups) to using a customized project specific network tool.



Principle model of the Nordic Technology Transfer Network

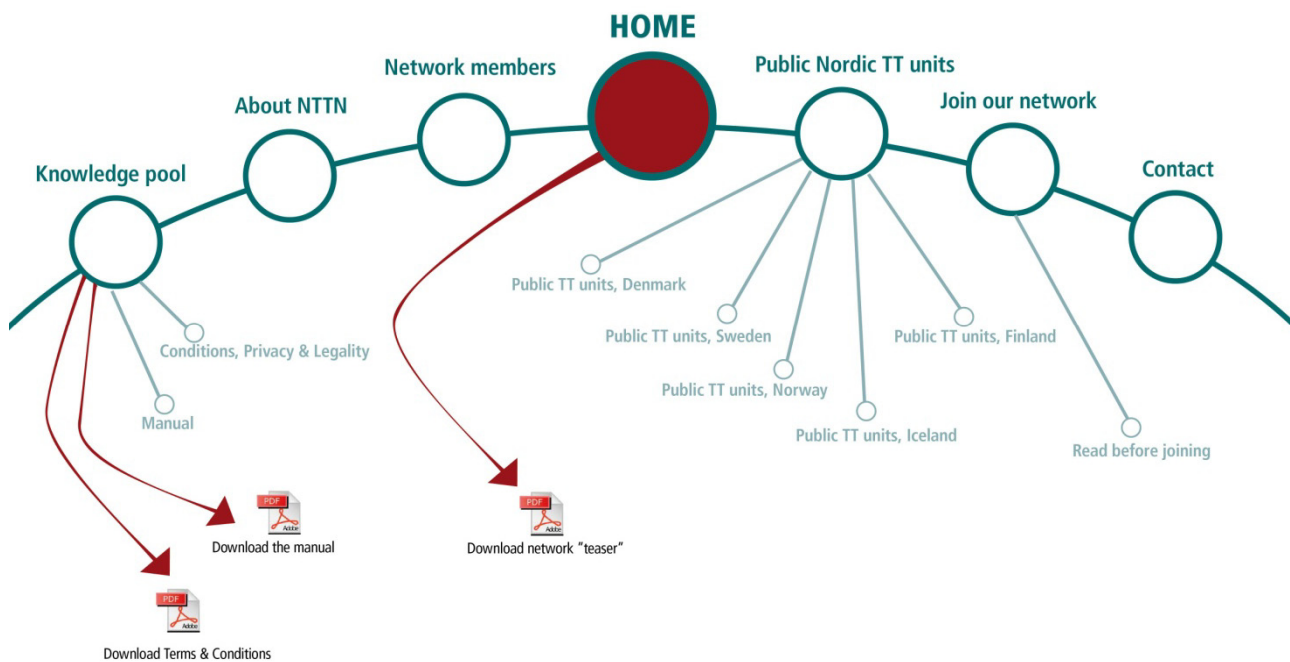
By using a new system with emphasis on global interconnecting ‘knowledge pools’, we have complied with the user demands for a global system with international connections. This wish was expressed by several of the interviewed network members, the Icelandic members in particular. The new system thus lifts the entire regional and national level within the Nordic knowledge pool system. Through the system’s make-up of parallel regional/national units, the Nordic Technology Transfer Network caters to the need for a global flow of information.

The most concrete lesson learned from this aspect of the project has been the obvious fruitfulness of undertaking evaluations through user interviews and the emergence of feed-back through steering group deliberation. By asking the users of the system, we have benefitted from inputs we could not have received by only involving the steering group members. Calling up the people using the network and making personal contacts while simultaneously creating a personal image of us, the people behind the network, has increased the user’s interest in participating and benefitting from the network. As a tech-trans officer from the University of Helsinki’s Strategic Planning and Development Unit said during an interview:

“The Nordic Technology Transfer Network is good, very light weight. It does not need much money or bureaucracy”.

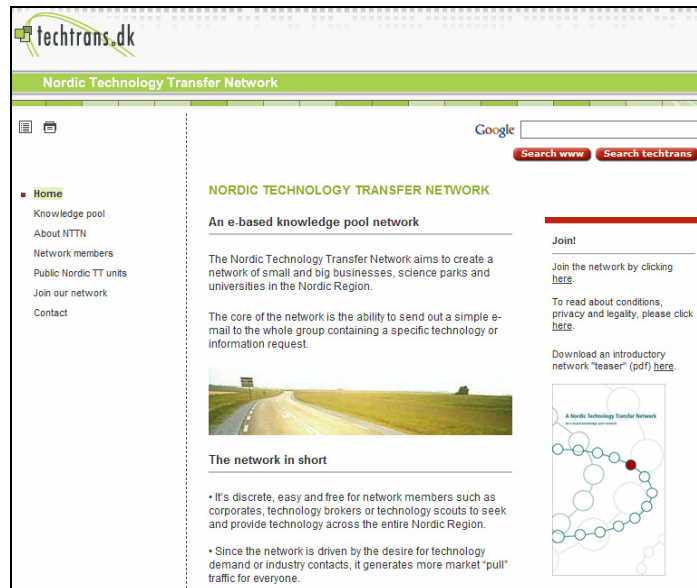
The project homepage

The Nordic Technology Transfer Network has had its own fully operational homepage since November 2007. The web-address is www.techtrans.dk/nttn. The site is thus a sub-site to www.techtrans.dk, the homepage of the Danish National Network for Technology Transfer. This section of the report will present the project homepage and provide detailed information on content and functionality.



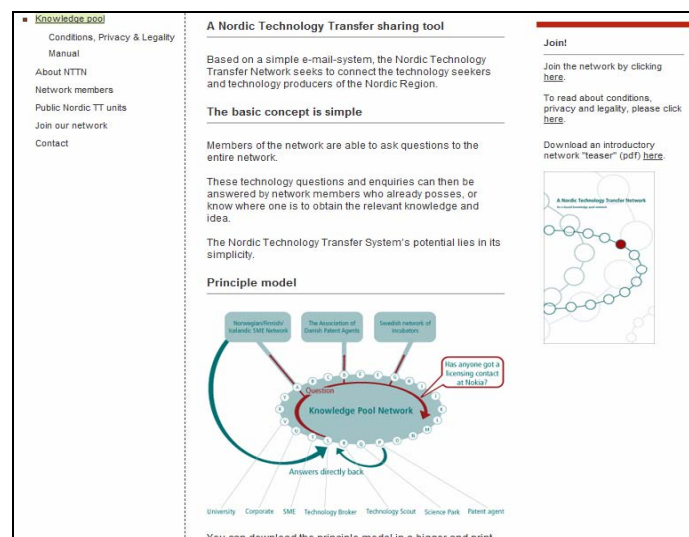
Site-map showing all content on the project's webpage including sub-sites and downloadable material

The **front page** ("home") shown below contains a short and concise explanation of the Nordic Technology Transfer Network, its background and its general use. The left hand side of the page shows six sub-sites, each with its own purpose, e.g. "About NTTN" and "Contact". On the right hand side of the page, it is possible to join the network online through a sub-site, download a document describing the legal and privacy issues involved and a downloadable 'teaser' describing the network and its potential. The homepage has a clear focus on being simple and to the point, explaining its logic composition and structure.



Front page of The Nordic Technology Transfer Network's homepage

Below is a screen dump of the homepage's **“Knowledge pool” sub-site**. This page contains an elaboration of the technology questioning mechanism, as well as an introduction to the simple ‘ground rule’ of the network, i.e. the one-sentence questions. Also depicted is an illustration developed by us to present users, and interested parties, an easily understandable and explanatory graphical figure showing the network’s principal model of internal communication.



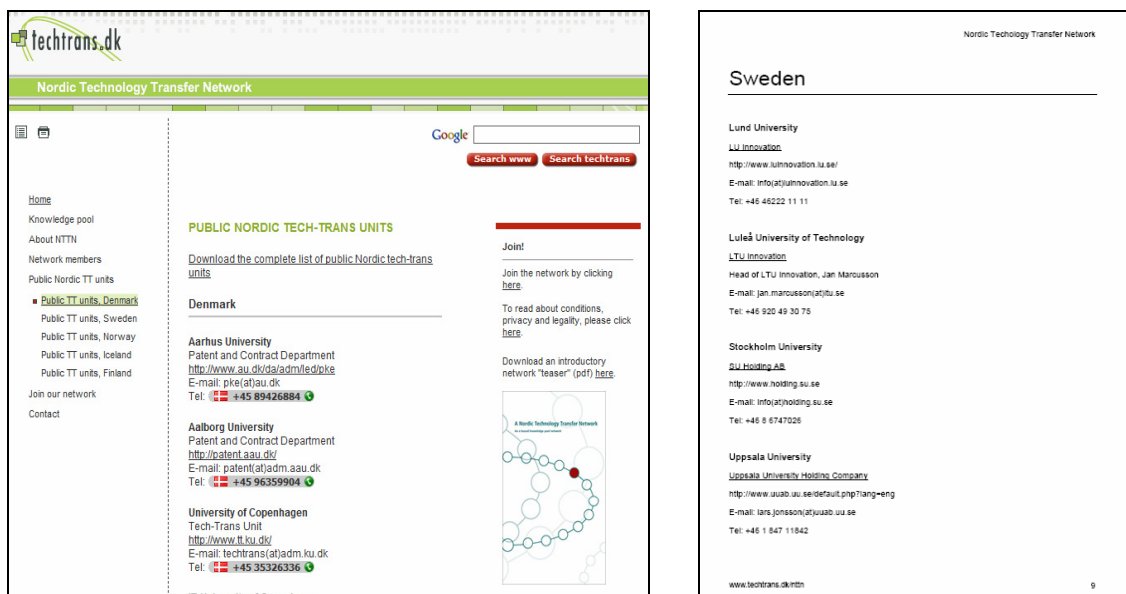
The “Knowledge Pool” sub-site

Below is a screen dump of the **“Join our network” sub-site**. This feature allows prospective users to ‘apply’ for network membership by typing in information about their place and line of work. This way, our project coordinator will receive notice of the membership application, after which a screening process can take place by contacting the applicant, if needed. One of the major improvements of the newly developed network e-system has rendered this join-page somewhat superfluous. It is now possible to join the Nordic Technology Transfer Network and apply for membership directly through its new system-homepage, namely www.theknowledgevine.net. Until all users have embraced the new system and focused their activities there, the original join-function from our webpage will still be fully functional.

The screenshot shows a web browser window with the title "Nordic Technology Transfer Network". The page has a green header bar. On the left is a navigation menu with links: Home, Knowledge pool, About NTTN, Network members, Public Nordic TT units, **Join our network** (highlighted), Read before joining, and Contact. The main content area is titled "JOIN OUR NETWORK" and contains a form with the following fields: Email, First name, Surname, Title, and Organization. Below the form is a red "Join" button. To the right of the form, there is a "Join!" section with text: "Join the network by clicking: [NTTS](#)", "To read about conditions, privacy and legally, please click: [NTTS](#)", and "Download an introductory network 'teaser' (pdf) [here](#)". Below this text is a small graphic showing a network of nodes and connections.

Online sign up function on the "Join" sub-site

The last illustration depicts one of the project’s milestone deliverables: **the list of Nordic public technology transfer offices** made available to the general public from our project webpage. Please see appendix 5 for the complete list.



List of public Nordic technology transfer offices/units on homepage (left) and downloadable PDF-version (right)

The list of tech-trans offices and units at public research institutions is downloadable in full from the relevant sub-site. **The right hand image** is an excerpt from the complete and downloadable document, showing Swedish tech-trans offices and units together with their contact information and, where possible, the relevant contact. Interested parties can choose to search for geographically specific units and offices by selecting the country-wise break down of the list, in the left hand side of the page.

The creation and maintenance of an introductory homepage has resulted in some important lessons. Most evidently, the advantages of having a dedicated project homepage have been manifold. Having a homepage has proved to be an efficient way of reaching a much differentiated target group spread across a large geographical area.

Making the homepage and creating its content has proved to be of a more time- and resource consuming nature than initially anticipated. This is due to the rather substantial amount of the information required to be available on such a site. We deemed it relevant to include, among other things, a total network member list, a 'conditions, privacy and legality' document and examples of questions asked in the UK network. Especially useful turned out to be the electronic version of the 'teaser' or brochure, explaining the project and its implications in its entirety. As opposed to the paper-version of the brochure, which was printed professionally and distributed with success at all four national workshops, the e-brochure has the advantage of being downloadable anywhere, anytime.

However, we have required more professional web assistance than initially expected regarding the development of the homepage and its content. Seeking out and gathering the information necessary for compiling the list of Nordic public tech-trans units/offices has been done single-handedly by the

project initiators. It has been surprising to learn about the extent and amount of tech-trans offices and units spread across the Nordic region. In the process, it has not been possible to ask individual tech-trans offices and units to point out peers and collaborators, even in their respective countries, as they are by and large unaware of each other's existence.

Summing up, the project homepage has proved itself a valuable communication and presentation tool. The homepage has served as a first contact for many current members of the Nordic Technology Transfer Network. The project homepage and the role it serves have thus been considered a must within our project framework and its resulting revelations and insights.

Reaching the target: securing and maintaining network membership

Starting from the project's milestone plan, we have already overtaken our success criterion of 100 network members in all before the 1st of September 2008. As of August 2008, we have a total of 94 members of the Nordic Technology Transfer Network from the five Nordic countries plus 40 members from other countries. This underlines the attractive idea and logic behind the project itself as well as the decisive 'recruitment' effort done during the holding of the four national workshops in October/November of 2007. To see a breakdown of the total member list, we refer to www.techtrans.dk/nttn.

During the entire lifetime of the project, we have continuously drawn members' attention to the fact that network efficiency is optimized through the largest possible membership. More directly, we have encouraged current network members to disseminate knowledge of and experience with the Nordic Technology Transfer Network to colleagues and collaborators. In an e-mail to all network members dated December 13th 2007, we emphasized that "The more people joining and using the network, the more answers the posed questions will generate". Simultaneously, and in a more direct manner, the members of the steering group have, on several occasions, been asked to pinpoint, recommend and perhaps even themselves 'recruit' new members to the network among technology transfer colleagues and peers.

It has proved very useful to spread the word and gather new members through existing network members and affiliates. It is, however, important to stress that such a recruitment process does not take place by itself. Rather, it has to be repeated with regular intervals in order to secure a steady intake of new members. One aspect is reaching a high number of members, a success criterion we have reached. Another equally important area is the 'nursing and fostering' of existing members, in order to secure a high level of activity and continued engagement in the use and development of the network. With regards to this aspect, we have not had the necessary resources to act with sufficient insistence. Had we used an aggressive recruitment-, loyalty- and adherence strategy, we could have experienced exponential membership growth. Unfortunately, within the natural limits and framework of the project, it has not been possible to utilize such a strategy and such means.

Pooling the experience and implementing adjustments

In order to secure optimization of the newly implemented system, the steering group/ local moderators have actively asked for feedback from users on the 'old' system during the summer from May – August 2008. This information was then passed on to the secretariat in order to pool reported experience on the use of the system. The feedback results from this progressive strategy have been added to the general pool of feedback concerning adjustments and implementation of the user interface. The data was used to secure the best possible optimization of the functionality and usability of the system when switching to the new platform, which took place during the summer months of 2008. Simultaneously, this feedback has helped the secretariat's understanding of where the network's users might need more guidance when using e-based systems like that of the Nordic Technology Transfer Network.

The system at work: facts and asked questions

As of mid-August 2008, the Nordic Technology Transfer Network had a total of 94 network members from the Nordic countries stemming from 66 separate entities. The make-up of the total membership counts 29 public universities/institutes of higher education, 34 private companies/industry members and three members from regional authorities, e.g. Southern Sweden Regional Development Authority. Membership has been rising steadily throughout the life span of the project, with larger clusters of sign-ups immediately after and around the time of the regional introductory workshops.

Some 30+ technology related questions were posed on both the former Google Groups system and the new Knowledge Vine platform. These questions cover a wide field from narrowly formulated and concise technology-related questions to more broad and general inquiries on technology conditions and possibilities within the Nordic region.

A few examples of questions asked within the Nordic Technology Transfer Network will be shown here, broken down by category:

Seeking technology

"Does anyone know of any research being undertaken in, or active commercialization of, smart metering technologies, particularly in the area of renewables?"

"Does anybody have any tips on nordic companies that are involved in the production of wireless equipment (mobile phone, WiFi, Wimax, Femtocells etc.), all the way down to component level, as for example RF Power Amplifiers?"

"Who manufactures 'see-through' plastics for use in medical training devices?"

Offering technology

"Does anyone know investors/companies that have a general interest in Alzheimer? We have a technology that can detect early stage Alzheimer that we are looking to license".

"Does anyone know of any companies who produce plastic components for the farming industry who might be interested in switching to biodegradable materials?"

"May I know whether there is any tech-transfer office or companies who would like to license or sell a product which can promote adhesion between injection-molded polycarbonate and stainless steel or aluminum casing?"

Broad technology-related questions

"Can anyone recommend market experts in industrial chromatography for pharmaceutical / nutraceutical / food ingredient applications who offer consultancy services?"

"Where are the food clusters in the Nordic countries?"

"Do you have a Procedures Manual for Acceptance, Management and Sale of Stock in Spin Off Companies based on Research conducted at a University when the IPR is owned by the University and the Stock is owned by the University or by a Company owned by the University?"

As the above extracts show, the Nordic Technology Transfer Network has a large scope for posing questions related to technology seeking, -offering and -exchanging, in search of value-adding answers. The examples above clearly prove that it is indeed possible to transform a rather technical and complex technology seeking/offering into a one sentence question. The questions are all easy to read and comprehend, making interested parties able to see their relevance quickly, while uninterested parties easily can skip the question and go on. Statistics on the number of received answers pr. question as well as the quality of these are hard to obtain due to, among other things, the questioners not keeping track of answers and their timelines as well as matters of confidentiality. The following question, posted to the network on June 12th 2008, received three answers however, of which two were deemed to be of high relevance, according to the questioner, an EU research liaison officer from Malmö University

"Does anyone know who wants new, highly efficient, scratch resistant and durable, non-vacuum surface treatment method on plastics or some metals?"

As the Nordic Technology Transfer Network is entirely user-driven, we would expect users to stop using the system should they not be satisfied with the number and quality of answers to their questions. Thus far, no member of the Nordic Technology Transfer Network has quit the network, either by themselves or through us, or expressed a desire to do so.

The international dimension

After the switch over to the Nordic Technology Transfer Network's Knowledge Vine System over the summer of 2008, approx. 40 technology transfer professionals from across the globe have signed up to the network. By doing this, they can monitor the flow of technology questions and exchanges, and have the option to pose questions to the Nordic network themselves. To secure the correct technology transfer profile and to maintain the chiefly Nordic scope, these international 'members' are given a moderated membership status by us. This provides a safety mechanism by which the posed questions are screened and evaluated before being sent out to all network members. This international interest and membership has been much larger than anticipated. The expressed interest of international technology transfer professionals goes hand in hand with statements by Nordic network members given at the local workshops. Here they expressed interest in the possibility of attracting and involving international technology transfer actors in the network. The argument being that this interaction could increase the possibility of receiving usable answers of a high quality, as well as strengthen the international bonds and contacts between Nordic technology transfer professionals and their international peers. The user evaluation carried out in mid-March supports this favourable view towards international engagement. As expressed by a network member from Research Services at the University of Reykjavik during an interview:

"An international technology exchange network including, for instance, the U.S would be very attractive"

The attractiveness of the Nordic Technology Transfer Network - with its membership of professionals from across the Nordic technology transfer field - to professionals outside the Nordic region is confirmed by the non-Nordic network sign-ups described above.

Case Example – an active questioner

An active questioner to the network is the CEO of Laser Consult Kft, a Hungarian technology consulting firm. Numerous questions were posed on both the former Google Groups and the new Knowledge Vine system. Describing the benefits received from both the Nordic Technology Transfer Network and the interconnected knowledge pools accessible through the Knowledge Vine platform, he says:

”The quality and quantity of the received answers, as well as the efficiency and speed of the system, is very surprising. The networking capabilities are impressive. With its help we received contacts, for example of RTDI (*Research, Technological Development and Innovation*) service providers for the automotive industry, within a very short time. We have created very valuable connections with the help of Knowledge Vine. It is really a fantastic resource of expert knowledge and support”.

As an example, the following question was posted on different Knowledge Vine groups on July 1st. 2008:

“Does anyone have any good practice in relation with university spin off programs?”

Based on that simple question:

“We have not only received contacts of professionals involved in this procedure, but we have also received concrete answers with presentations, documentations and examples from Knowledge Vine users. We have received 10 answers within 1 week from 5 countries”.

The successful and sought-after integration of non-Nordic members into the network is thus not a source of concern, but an inevitable consequence of a time in which Nordic technology transfer professionals look both in and beyond the Nordic region for growth and knowledge exchange. We will therefore continue to welcome technology transfer professionals from around the world to the Nordic Technology Transfer Network, as long as the objective of this membership approach remains clear: enhancing and improving the Nordic technology transfer community’s accessibility to resources and contacts while seeking cross-fertilization of the regional innovation environments.

National Profiles

These chapters offer an introduction to the state of technology transfer in each of the Nordic countries. Meant as an introduction to the project's primary areas of interest, these chapters explain some of the results achieved and challenges faced by the Nordic regional innovation and technology transfer environments. The chapters contain information on legal conditions, commercialization results, local challenges and technology transfer organization within each of the Nordic countries. Each Nordic country is unique technology transfer wise and combined with differences in the access to information on regional conditions, the chapters do not set the scene for direct comparisons between the countries. Rather, compiled and composed by the steering group members, they serve as a first-hand technology transfer insight into each of the Nordic countries.

Denmark

Legal framework and procedures

Denmark got its own Bayh-Dole Act² in June of 1999, the *Danish Act of Inventions at Public Research Institutions* (In effect from January 1st, 2000). It focuses on the increasing co-operation between research institutions and businesses to make new knowledge and competence available to Danish society. Based on this law, universities take over promising inventions from the professors/researchers at the institutions. After the inventor has presented his potential patent to the university administration, the university has 2 months to decide if they want to commercialize the research result/s. Within these two months they examine the commercialization potential and search for possible buyers or collaboration partners. If the university decides to take on the risk, they take ownership, pay all the patent related expenses and lead the legal and commercial process in collaboration with the inventor. A successful commercialization is most often based on licensing or assigning IPR and/or in creating spin outs. When this is achieved the net income is split between institution, institute and inventor in equal shares. If the university fails to commercialize the invention, the inventor will not lose any money and if the university does not have any interest in the invention, the inventor is free to commercialize - but if successful, she/he has to split the income anyway. Up until January 1st 2000, the rights to inventions made at public hospitals and universities were assigned to the researchers, an example of the so-called 'professor's privilege'.

² The Bayh-Dole Act: US legislation adopted in 1980. Among other things, it gave US universities, small businesses and non-profits the intellectual property control of their inventions and other intellectual property that resulted from such funding. The act reversed the presumption of title: it permits a university, small business or non-profit institution to elect to pursue ownership of an invention in preference to the government

Finally, the Danish Act of Inventions at Public Research Institutions includes an obligation to the institutions to work more actively on increasing the industrial exploitation of public research.

National Policy

In 2003 report titled "Nye veje mellem forskning og erhverv - fra tanke til faktura - Regeringens handlingsplan" (*Regeringen, September 2003*), the Danish Government agreed to focus on developing a free and well-functioning market for the exchange of knowledge between research and industry. The report stated that Denmark needed an effective and professional infrastructure for knowledge- and technology transfer, in order to support the process of commercialising research results. Simultaneously, the Government decided to closer examine the need for new legislation on the area of knowledge- and technology transfer, and to facilitate the process of establishing spin-off companies. The objective was to secure an increased critical mass and professionalism within the field.

In March of 2006, in a report titled "Bedre kommerialisering af offentlig forskning til gavn for samfundet" (*Danmarks Forskningspolitiske Råd, marts 2006*) the Council lists a number of incentives, aimed at research institutions, designed to improve commercialization within and from the public institutions. It is the responsibility of the research institutions themselves to:

- Ensure that researchers find it attractive to contribute to commercialization. This can be achieved if the universities establish a structure of incentives to encourage commercialization
- Ensure that all researchers have a single portal to turn to for evaluation and selection of ideas with a commercial potential
- Seek out the research environments concerning identification and development of ideas with commercial potential. The research institutions need to organise outreach activities within the institution in order to find ideas with innovation potential

As another objective, the Council wants the technology transfer units at research institutions to reach an internationally comparable level of professionalism. This is to be done by a considerable build-up of resources and competences when compared to the 2006-situation. In order to achieve this, the research institutions should involve private businesses with significant commercial experience and contacts to customers, suppliers and funding. The report also suggests a merger of research institutions and their respective technology transfer units as a means of concentrating expertise and knowledge. On January 1st 2007, 21 universities and research institutions were merged into 8 large universities, with three new research institutions being established (www.ubst.dk – *Danish University and Property Agency*)

The Danish Council for Research Policy suggests a draw up of national benchmarks for the publicly organised and funded improvement of the commercialization of public research. The four main forward-looking points in this respect are

- Stimulation: incentives for innovation within research institutions
- Identification of new ideas and evaluation of their commercial potential
- Funding: access to early-stage capital and start-up/seed funding; also for development of proof of concept
- Entrepreneur service: possibility of services/advise on business plans, marketing etc. with regards to the realization of enterprises

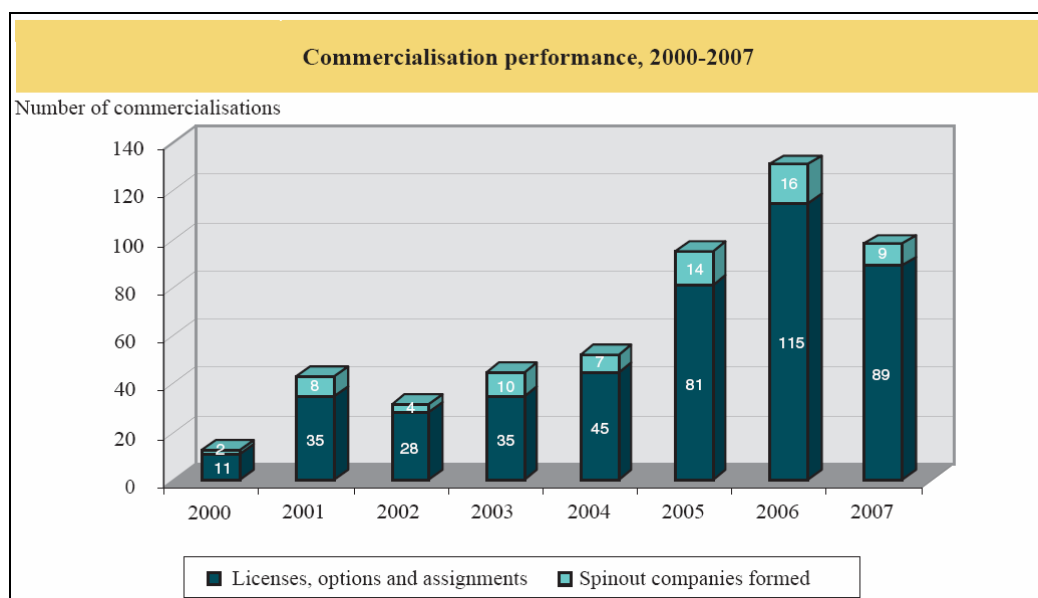
The Danish Government emphasises the need for a short and strong link between the researcher's idea and its utilization within society. This can be done by including into the development-contracts, between the universities and the Minister of Science, Technology & Innovation, goals and objectives for the sale of patents and licenses as well as the establishment of new enterprises.

Statistics

The Danish technology transfer sector has been monitored since 2000. The Danish Public Research Commercialization Survey illustrates the efforts and results of public research institutions in technology transfer and reveals a continuation of the progress made in recent years with the commercialization of research results. The survey is owned by the Ministry of Science, Technology & Innovation and conducted jointly with the Danish National Network for Technology Transfer.

From a standing start in technology transfer in the year 2000, Denmark managed to experience a break through in commercial results already in 2005. At that time, there were 281 invention disclosures, 87 patent applications, 81 agreements licensing or assigning IPR (Intellectual Property Rights), 95 active licenses and 13 new spin outs. In 2006, technology transfer made the headlines in the major Danish newspapers as technology transfer was, for the first time, making a profit. From 2005 to 2006, earnings increased with approximately 85%.

In 2007, Denmark had 358 invention disclosures, 131 patent applications, 89 agreements licensing or assigning IPR, 103 active licenses and 9 new spin outs.



Source: *Public Research Commercialization Survey - Denmark 2007*, p. 8.
 Danish Agency for Science, Technology and Innovation.

The summary statistics for 2007 reveal somewhat of a slowdown in public research commercialization compared to the impressive growth rates in recent years. The number of patent applications and commercial revenues increased in comparison to 2006, while the number of license deals and new spinouts, however, declined. From 2007, several Danish research institutions have been merged. Consequently, technology transfer activities are now concentrated round a smaller number of institutions. Thus, in 2007, around 50 % of the public research institutions accounted for more than 90 % of the overall commercialization activities.

Summary	Universities	Government research institutes	Research hospitals	Total 2007	Total 2006
Invention disclosures received	303	5	50	358	368
Patent applications filed	113	4	14	131	113
Patents issued	8	4	1	13	15
Licenses, options and assignments executed (incl. software)	83	1	5	89	115
Total license portfolio (excl. software)	78	9	14	101	103
Spin-out companies formed	8	0	1	9	16
Technology transfer staff (full-time equivalent)	42,8	4,2	11,2	58,2	56,2
Commercialisation costs (DKK million)	27,0	4,0	3,4	34,4	28,4
License income received (DKK million)	26,7	8,9	2,2	37,8	29,0

Source: *Public Research Commercialization Survey - Denmark 2007*, p. 10.
 Danish Agency for Science, Technology and Innovation.

Local Challenges

The commercialization of promising research results with commercial potential is held up by the time and money it takes to document that a research result can be turned into a good business. There is a need for a more direct pipeline from the research institutions to relevant actors in the innovation environment.

Tech transfer units at the research institutions identify and patent research results with market potential and seek to commercialize these results. Because these projects often lack proof-of-concept they are often difficult or impossible to commercialize. External partners are not willing to take the risk of developing early stage technology. Research institutions are therefore often stuck with promising, but early technologies which they are unable to commercialize.

In 2006, however, Denmark launched a Proof of Concept program. Two cross-institutional proof-of-concept consortia, catering to public research institutions, are located in eastern and western Denmark respectively.

Inter-University Organization

After the introduction of the Danish Act of Inventions at Public Research Institution was passed in 1999, 5 patent consortia were established. The collaboration between these developed into a national network in 2005, The National network for Technology Transfer. The Network is now an alliance between 14 public research institutions (all patent active research institutions in Denmark). The Danish Agency for Science, Technology and Innovation is co-funding the Network together with the member institutions.

With a clear focus on the patenting and commercialization of research results from public research institutions, the Network organizes and manages the following activities:

- Competence developing events (weekly basis)
- Website www.techtrans.dk, patent exchange www.patentbors.dk
- Visibility towards industry (branding/PR, think tanks, joint events, book series etc.)
- Expanding international contacts
- Contributions to the national commercialization survey (closely monitored since 2000. No anonymity on performance)

After the establishment in 2005 of the Danish National Network for Technology Transfer (www.techtrans.dk), the total revenues of public research institutions from commercialization almost doubled from 2005-2006. Thus, for the first time, revenues from commercialization exceeded costs. In 2006 the network launched a national virtual patent exchange for IPR from public research institutions such as universities, national research laboratories and public hospitals in Denmark (one-stop-shop Denmark): www.patentbors.dk.

The Danish National Network for Technology Transfer is represented at the board of ASTP (the Association of European Technology Transfer Professionals), ProTon Europe (a pan-European

network of knowledge transfer offices) and TII (Technology / Innovation / International, independent association of technology transfer and innovation support professionals).

Finland

Legal framework

At the beginning of 2007, the “Act on the Right in Inventions made at Higher Education Institutions (369/2006)” came into force as the ‘Finnish version of the Bayh-Dole Act’. It clarified the uncertainties regarding the rights of inventions from public research. The law applies to inventions patentable in Finland and made either by persons employed by Finnish higher education institutions or by persons holding a research post funded by the Academy of Finland. Within all areas of contract research and sponsored research, the rights to patentable inventions belong to the academic institution, according to the new law. The law also states that an inventor is obliged to submit an invention disclosure to the university, specifying whether the invention was made through open or sponsored research. The act complies with the interests of researchers by securing their right for a compensation of a reasonable size if the university should choose to acquire the rights to the invention within 6 months from the date of the invention disclosure. The amount of the compensation is determined case-by-case and depends on the returns on the invention to the university. Simultaneously, a new law also enforced in Finland from early 2007 effectively ended the hitherto “professor’s privilege”. The new law made university professors and researchers alike subject to the “Act on the Right in Inventions made at Higher Education Institutions” as opposed to previously only technical personnel and laboratory staff.

National policy

The Finnish national policy on technology transfer and development aims to produce technological and social innovations on which internationally successful businesses can be built. The aim of the Finnish science policy is to enhance knowledge and the level of international visibility of the Finnish research in cooperation with different stakeholders. Support is given to high-standard research as well as research expected to make international breakthroughs with additional input. According to www.research.fi, the Finnish science and technology information service, the priorities for Finnish science policy are among others:

- to promote the adaptation and commercialization of research results
- increase the interaction between research and society
- Consolidation of internationalism

Special funding for developing innovation services has been given to the universities by the government since 2000. The universities are also free to formulate their own policies and practises within the field. The so-called “third task” of the universities was introduced in the University Act

of 2004 which includes increased emphasis on the commercialization of research results and the social and regional impact of Finnish universities. The Finnish Ministry of Education plans to implement national measures for enhancing licensing and company creation. As stated in the report “Education and Research 2003-2008” (Ministry of Education, Finland 2004:8, p. 55)

“Universities and polytechnics will boost their relations with working life by developing their business know-how and innovation services and by stepping up the commercialization of research findings”.

A 2006 report by the Science and Technology Policy Council of Finland titled “Science, Technology, Innovation” (Helsinki, 2006), concludes that further emphasis should be placed on development activities and funding that make the exploitation and commercialization of research results more effective. Strengthening of public–private partnerships and development of new operational models are crucial in relation to this aim.

The public sector in Finland considers it its duty to support the creation and commercialization of innovations, and to create new collaborative platforms for these activities. The mobility rates, particularly between universities, research institutes, and the business sector, are also encouraged to be considerably higher than at present. Personal contacts between enterprises and universities born out of research co-operation and contracted research must be better exploited in Finland (“Science, Technology, Innovation”, Helsinki, 2006: pp. 9-36).

Inter-university organization

There is a long-standing collaboration between the innovation services of all Finnish universities. Once annually, in August-September, all known tech-trans professionals are invited (100+ from all Finnish universities) to a joint meeting (. In addition, Finnish technology-transfer directors, legal councils, innovation managers, research liaison officers and industry liaison officers all engage in informal knowledge exchange to a high degree.

Local challenges

A great challenge for Finnish technology transfer seems to be the successful commercialization of technologies whether these are protected or not. More time and qualified tech-trans professionals are needed for this transition to take place. Committing universities to the process involved in commercializing research results and generating new businesses is pivotal. Other present challenges include the improvement of licensing services in Finland and the procurement of qualified assistance to researchers on how to develop successful research-based businesses and companies.

Suggestions for improving the conditions of Finnish technology-transfer include

- Long lasting and continued government funding for the utilisation of research results
- Enhanced education, training and professionalization of university technology transfer personnel
- Development of improved measures to discover and bring forth inventions from research units/researchers and further entrepreneurship education of the latter

Sources:

Ristelli, Leila, 2006. "Technology and knowledge transfer at the University of Oulu". Journal of Industry-Academia-Government Collaboration Vol 2 No. 8.

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http://www.sitra.fi/en/News/release_2007-05-08_research_commercialisation.htm

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<http://www.tut.fi/public/index.cfm?MainSel=1751&Sel=15191&Show=22465&Siteid=33>

Iceland

Legal framework

The Icelandic Act No 72/2004 "Respecting Employees' Inventions", was put into effect on January 1st, 2005. In essence, the law stipulates that all companies, institutions, educational institutions (including universities) etc. have the initial rights to exploit the intellectual achievements of its employees. The law covers intellectual property which could lead to patent applications. Certain basic rules of procedures are also outlined. These laws are very similar to and in fact partly based on Danish law.

Bearing in mind the timespan from application for a patent to the date the patent is issued, the present law has only been effective for a year or so. There is therefore not much experience as to the usefulness or consequences of the law.

National policy

In a 2006 publication by the Icelandic Prime Minister's Office and the Science and Technology Policy Council titled "Science and Technology Policy 2006-2009" (Reykjavik, 2006), one of the highest strategic priorities of the Council is

"to encourage private firms and the public sector institutions to join efforts in strengthening research and development in order to boost successful and profitable innovation and thus international competitiveness based on knowledge".

The Council states that universities need to focus on spreading knowledge about the results from scholarly work, scientific research and technological development and opportunities arising from these, to the society as a whole.

Some of the main points relevant when seeking a strong link between public research, society and the business sector, as listed by the Council, are:

- Scientists must be made more aware of the value of patenting and intellectual property rights and the importance of exploiting their intellectual assets for the benefit of society.
- Increased effort to acquire patents based on research and to encourage companies to use them, as well as an increased awareness of the importance of and ways to secure patents. It is necessary to draw to the attention of companies the technological and innovative potential of scientific results.
- Promotion of the development of a market for intellectual assets and encouragement of the exploitation of research results, particularly in sectors that often are considered to be outside the scope of innovation, such as trade and services.
- There is a need to create a forum for cooperation between universities, spin-offs and research-intensive small and medium sized enterprises, innovative and high-tech companies and public research institutions.

Innovation Indicators

Field	Iceland	European Union countries (EU25)	Category
Knowledge creation	1.17	0.65	Public expenditure
SME	46.5	---	In-house innovation expenditure
Employment	4.97	3.35	High-tech services
Broadband	22.5	10.6	Penetration rate
Innovation Index (GSII)	0.53	---	Max. 0.76 (Finland)
Epo patents	153.6	136.7	Per million inhabitants
USPTO patents	57.4	50.9	-----

Source: 2006 European Innovation Scoreboard

The public sector is the biggest contributor of capital for research and innovation in Iceland, but a few big companies also contribute considerably to innovation. The SME's can only in exceptional cases finance their own research and innovation. Most of them rely on support from the public sector. In recent years the SME's have more and more cooperated in research and innovation, by establishing clusters, innovation centre's etc. to carry the cost and effort they spend in this field.

Local challenges

Iceland faces a number of challenges and difficulties in the area of technology transfer. Some of them are listed here below.

- The Icelandic market is small and limited in both size and manpower. Peer contacts can in some cases be difficult to locate
- There is a poor general understanding of the importance of innovation
- Lack of funds is a constant problem. Private venture capital is very limited. The official sector thus plays a dominating role in financing research and development.
- There is a limited expertise in technology transfer. In the last decade or so there has been an increase in expertise within the field through the operations of influential companies like Marel Food Systems Ltd, CCP (multi-player game developer), Decode Genetics etc. within research and development.

Inter-university organization

There are limited connections between technology transfer professionals in official institutions like universities and innovation centres. At present, there is no organized platform connecting technology transfer staff from the universities in Iceland. While there are only a few examples of connections between universities and private companies, the University of Iceland has been quite active over the years in establishing spin-off companies. Some of these companies have been very successful and are today international success stories.

Sources:

<http://www.rannis.is/files/Visindagagnatækni-2006-2009-enska-1425838205.pdf><http://www.vt.is>

Norway

Legal framework

In 2003, the previous exception which gave exclusive ownership of a patentable invention to the inventor, changed. With ownership now lodged with the employer, this precipitated the requirement for an organization to manage their intellectual property, and the university Technology Transfer Offices (TTO's) were set up.

The majority of the TTO's are actually set up with independence from their university owners – with separate boards. This enables the TTO's to operate with more flexibility and outside the bureaucracies of the institutes. They are then able to have a more commercially led focus than, for example, the TTO's in the United States.

There are national guidelines that suggest a 1/3 split of ownership for universities as follows: one-third goes to the inventor, one-third goes to the institute and one-third goes to the commercialization group. This is negotiable however.

For research institutes the owners are the institute and they have an incentive system for patenting, usually in the form of a bonus for a patent and a percentage of the income from a successful commercialization.

National policy

The Research Council of Norway is Norway's official body for the development and implementation of national research strategy. The council is responsible for enhancing Norway's knowledge base and for promoting basic and applied research and innovation in order to help meet research needs within society. The Research Council of Norway also works actively to encourage international research cooperation. It is the Norwegian research council that secures the rights on behalf of the institutes.

According to FORNY, a joint programme between the Research Council of Norway and Innovation Norway, one of the major challenges faced by the Norwegian economy is a

“growing need to conceive and promote new technology, concepts and methods to generate new value as oil and gas production decrease. The strategy pursued to meet this challenge includes a focus on commercialization of R&D results”.

The commercialization process is still relatively new in Norway and developing. The FORNY programme in total has so far been about 130-140 million NOK per year spent on different programmes. This format will end in 2009 and a new scheme will be put in place for 2010 onwards.

FORNY was established as a programme in 2000, but has existed as a project since 1995. The programme is financed by the following ministries: Trade and Industry; Local Government and Regional Development; Education and Research; Fisheries and Coastal Affairs; Agriculture and Food. FORNY is designed to increase wealth creation in Norway by commercialising research based business ideas with considerable market potential. In order to achieve this, the programme

- focuses on the attitudes and behaviour of research communities in order to make the search for commercialization opportunities an integrated and prioritised task
- helps research institutions establish professional systems and organizations for commercialization of R&D results
- makes available competent support for researchers with research based business ideas
- contributes to nationwide research based business development
- encourages and contributes to increased cooperation between research communities, entrepreneurs, investors, industry and commerce, and public authorities

The actual target group of the programme is the researchers themselves. However, instead of targeting the researchers directly, FORNY works through the institutions that employ them, the technology transfer offices of these institutions, and a selection of their cooperating innovation

companies and science parks. Thus, the target group of the FORNY programme consists of universities, colleges, research institutes, university hospitals and, on certain conditions, individual researchers or small research groups.

The programme offers four kinds of funding:

- Funding of infrastructure activities, i.e. activities aiming to make researchers and research institutions focus on the commercial potential of research results
- Funding of commercialization projects, i.e. the process of establishing a new company or a licence agreement based on a research based business idea
- Funding of verification of technology, i.e. proof of concept
- Scholarships to researchers which will enable them to focus on the commercialization project instead of their regular work

In addition, FORNY offers bonuses for successful completion of commercialization projects. The FORNY funding can cover a maximum of 50% of the costs related to the various activities. Besides FORNY, there are a number of groups working on different aspects of national policy. There is a national debate between the universities to secure rights for patentable and non-patentable ideas. There is a focus on Intellectual Property competence building in universities, TTO's and the Research Council of Norway, as well as a special group looking into intellectual property rights policy in the institutes. This is focussing in particular on the power balance between academia and industry. If the government pays for research, the ownership should be kept within the institutes.

Statistics

According to FORNY there were 54 approved commercializations in Norway in 2007 by the recipients of FORNY funding. This represents a 10% drop in the number of commercializations when compared to 2006. Of the 54 approved commercializations in 2007, 32 of these were sold as licenses while the remainder were establishments of, for instance, new companies.

<i>Year</i>	<i>Number of approved commercializations</i>	<i>Of these, license agreements</i>
2007	54	32
2006	60	32
2005	47	12
2004	22	5
2003	35	9
2002	40	7
2001	50	17

Source: Resultatrapportering for 2007, Nyhetsbrev nr. 2/2008, FORNY

Inter-university organization

There are several networks linking the technology transfer groups in Norway. The FORNY programme links all the recipients of funding (including high schools), together. The 5 university TTO's are linked through TTO Norge, thus comprising the Norwegian Technology Transfer Network. Prekubator (Technology Transfer Office for the Rogaland Region) for instance, is a member of international technology transfer groups such as LES (Licensing Executives Society), ASTP (Association of European Science & Technology Transfer Professionals) and AUTM (Association of University Technology Managers) and uses their meetings to arrange project work days. These are for competence sharing, finding collaboration opportunities on projects and project bundling. What is lacking though, is access to competence within international incubators.

Local challenges

Technology transfer and commercialization of inventions face several challenges in Norway today. There is a culture in academia that distrusts the commercial ideals. This can only be addressed through education, an empathetic approach to developing a new culture which does not alienate researchers and developing a respectable set of policies and guidelines.

There is a lot of money in general through both the Research Council of Norway and other actors such as Innovasjon Norge, regional authorities, industry funds and banks. The smaller regions are sometimes limited in their strength of voice in the big programs; this can limit regional growth. There are certainly insufficient funds and funding types in the early verification phase. Seed and venture funds are found on too late a stage, but we are seeing a number of angel investors coming onto the scene.

The level of bureaucracy when getting support is too high for most small companies. The TTO's have developed routines to manage this, but many complain about the time it takes to provide the reports etc. required. With regards to the industry, there is still a not-invented-here attitude and a risk-averse funding policy. Another challenge is Norway's lack of an adequate international focus with regards to technology transfer and exchange.

Sources

<http://www.forskningsradet.no/servlet/Satellite?cid=1088789229237&pagename=forny%2FPage%2FHovedSideEng>

<http://www.forskningsradet.no/servlet/Satellite?cid=1088789229261&pageid=1088789229261&pagename=forny%2FPage%2FHovedSideEng&site=forny>

Sweden

Legal Framework

The ‘teacher’s exception’, which gives exclusive ownership of a patentable invention to the inventor, is still in force in Sweden. However, there is an intensive debate changing the law – everything from moderate changes in terms of new inventions are forced to be reported to the university, to complete changes in line with the other Nordic countries.

One consequence of the present Swedish law is the lack of statistics and indicators such as company start-ups, amount of patents or royalty agreements. Swedish universities have very moderate control over the flow of inventions and patents within their organizations.

In the daily work with innovation and entrepreneurship at Swedish universities, the ‘teacher’s exception’ is no practical problem as there is normally negotiations between a university technology transfer office (TTO) and specific scientists on the future ownership and the future route of commercialization. In the case of a new start-up company, the scientist usually offers an equity of 15-20 % to the university.

National Policy

A national policy and action plan is expected in a “Research and Innovation Bill“ from the Swedish government in November 2008 .

The Swedish innovation system is characterized by many actors, the major one being VINNOVA – The Swedish Government Agency for Innovation Systems (www.vinnova.se) with a yearly budget of 2 billion SEK. The responsibility of Vinnova comprises innovations linked to research and development. The task is to fund the needs-driven research required by a competitive business and industrial sector and a flourishing society. The vision of Vinnova is to make a clear contribution to Sweden’s development as a leading growth country.

Among different activities, the following can be mentioned:

- Incubator programme
- Financing a scientific idea under transformation to a start-up company
- Supporting the growth of small start-up companies

Another organization playing a major role in the Swedish innovation is The Innovation Bridge Foundation, transferred to a limited company structure in 2005. The task of this organization (mainly owned by the Swedish government) is to improve commercialization by making use of the resources invested in research and development at Swedish universities. The organization thus

attempts to curb the “Swedish paradox“ as being the country with the highest amount of patents but lowest commercial outcome .

The resources of the Innovation Bridge are substantial but difficult to estimate due to the vast number of projects and engagements since the starting point in the mid-1990’s.

The major universities in Sweden run so-called Holding Companies. These are formally owned by the Ministry of Education but managed on a daily basis by the respective university. The overall aim of the Holding Companies is to support scientists in starting and developing new companies as well as being the official body of the university as a shareholder of new start-up companies. The responsibilities of a university TTO and its Holding Company are sometimes not clear.

The Swedish Holding companies, as a group, are part owners of a vast number of start-up companies and have highly competent staff but the drawback of low financial strength.

Statistics

As earlier mentioned there is no accessible commercial statistics from Swedish universities, a problem that has been recognized for a long time. A formation of a national TTO network might be a future solution to the problem.

A comparison based on informal knowledge from various European countries however, show that the leading Swedish universities are very competitive in terms of the yearly amount of new companies started.

A well known fact among Swedish TTO’s is the very low activity at Swedish universities when it comes to royalty as a source of income.

Local Challenges

The key challenge is creating awareness and understanding within the research community regarding commercialization as the way by which research is taken to the market. This involves information and education as well as policies around Intellectual Property within the universities.

There are several national actors providing funding of different steps in the commercialization process. There is however a lack of funding for the initial embryonic phase where, for instance, the novelty of the idea needs to be verified. This creates a gap since this initial verification is needed in order to be able to receive funding for technical and market verification.

Historically, business angels have played an important role but several universities in Sweden are now looking towards the model from Karolinska Institutet. Here, thematic seed investment companies are formed in close collaboration with the university, meeting the special needs for commercialization of research results. This model provides long term funding and takes more or less responsibility for the commercialization.

Inter-University Organization

A national network between TTO professionals does not exist in Sweden, where meetings instead occur on an ad-hoc basis.

Local networks can be found in most European countries – the initiative being taken either by the TTO level or by the governmental side. The most impressive activities seem to occur in the UK, Germany, Spain and Denmark.

A recent initiative from some universities in Sweden resulted in a VINNOVA sponsored investigation on the need of a network in Sweden. The result was an unambiguous yes. One important task is to keep the approx. 28 universities in Sweden (of very different sizes) together in a TTO network .

Key activities in such a network would be:

- to develop competence as a TTO individual
- to strengthen international contacts
- to describe and make “good examples”
- creation of statistics
- to stimulate project cooperation
- engaging in policymaking
- to draw up best practice guidelines
- engaging in industrial cooperation

Appendix 1 – Communication Plan

October 2007

Through the entire duration of the project, there will be a set of continuous and repeated communication activities. The objective of these activities is to ensure that all relevant output from the project will be shared with key publics and interested parties. These include both direct and indirect communication.

Direct communications

Newsletters

General newsletters (e-based) will be sent out from our different platforms, i.e. Øresund Science Region, Øresund University and the Danish National Network for Technology Transfer. These newsletters will contain information about the progress and developments of the Nordic Technology Transfer Network project. The newsletters will be written whenever new and or relevant progress/information has come forth in relation to the project.

Website activity

Early on in the project phase, we will launch a website describing the Nordic TT Network project. The website will be regularly updated and contain all relevant information regarding dates, sign-up possibilities as well as the general relevance of the project. The website will serve both as a portal for already interested and engaged regional actors as well as a first-contact website with introductory explanations and information.

Conference presentations

The project initiators (Mr. Gert Balling and Mr. Noel B. Jacobsen) will both advertise and inform about the project at the different conferences and conventions they participate in. This will ensure that information about the project will reach a broad and diverse audience - all affiliated somehow with the target group and potentials of the project. We will encourage all the members of the Steering Committee to engage in similar informative activities.

Further direct communication activity includes an already made introductory brochure/teaser that aims to further put forth the ideas and thoughts behind the Nordic TT network. We plan to print the teaser in 500 copies and forward it, together with an invitation to the local workshop, as

introductory information to interested and relevant regional actors. Please see the timetable below for further specifics.

Indirect communications

Press Releases

During the project we have initially planned for two press releases – one in the fall of 2007 and one in the spring of 2008. Both the press releases will present the basic ideas and thoughts behind the project. The press releases will aim to catch the interest of potential network members, as well as informing the general public about the possibilities and prospects of a Nordic TT network.

Newspaper and/or magazine feature article

The article will be aimed at both the general public as well as directly interested

parties. The article will share our thoughts on the implementation of the Nordic Technology Transfer Network as well as the idea behind the project. We will describe the interest met and bring interviews/testimonials of engaged network members. With the article we will communicate our experiences and the generated interest associated with creating a Nordic network for technology transfer. An important task is here to formulate and explain the aggregated relevance and perspectives that the project has for the entire Nordic region and its general population.

External communication by Steering Committee members

The respective members of the Steering Committee will communicate and inform about the project through their own local/international channels and networks and the newsletters attached to these. This way we will ensure both broad and locally rooted advertising of the project throughout the Nordic Region.

The timetable below states the approximated dates for the execution of the above described communication activities. The timetable and the communication activities herein are subject to change, due to the new and untested nature of the project.

Item	Specific communication activities	Due date
1.	Project start-up	01.09.2007
2	Launch of website describing the NTTN project and its course. The website will be regularly updated. Presentation of website ‘teaser’, a brief explanatory manual introducing the tools and possibilities of the technology transfer network. The ‘teaser’ will be downloadable (.pdf-format) for all interested parties, and will serve as an easy way of establishing initial contact with the project as a whole. A paper version of the brochure will be made simultaneously and serve as a giveaway at the workshops.	05.10.2007
3	In direct continuation of the first workshop (16 th of October), we will make an initial press release. The press release will draw attention to the immediate experiences of the kick-off Danish/Swedish workshop and advertise the following three. Specific details about the content of workshops as well as a preliminary description of the first completed workshop will be included.	18.10.2007
4	Status report	15.01 2008
5	Second (follow up) press release. The press release will describe and evaluate the outcome of all the workshops including experiences and progress in member sign up. The press release will advertise the now implemented e-based network and encourage interested parties to join.	15.03.2008
6	A feature article/letter will be written and sent to a relevant newspaper or magazine for publication. The article will shed light on the encountered possibilities and challenges of creating a pan-Nordic technology transfer network.	15.04.2008
7	The final and comprehensive administrative rapport will be printed and made public. The Project as a whole will be described and evaluated for everyone’s interest. Interested parties and hesitant prospective network members will have the opportunity to further examine the technology transfer network and sign up. The final rapport will furthermore be distributed directly to the relevant political institutions, e.g. ministries and agencies.	01.09 2008
8	<i>Project end date</i>	01.09 2008

Appendix 2 – Newspaper insert (Børsen)

ANNONCENDSTIK

IDE- OG PRODUKTBEKRYTTELSE | 11

Strategisk IP-Audit

Symbiose mellem forskning og industri

Kommende modelkontrakter kan gøre det lettere for forskning og industri at indgå aftaler med hinanden.

AF KIM SEIR

Det skal være meget lettere at få lavet aftaler mellem forskning og erhvervsliv – dertil kræves der tillid og mere faste rammer.

„Når der skal indgås aftaler mellem forskningsinstitutioner og erhvervsliv er der flere tilgange. Man kan benytte sig af en mægler, der aktivt forsøger at finde ud af, hvem der passer sammen, man kan anvende databaser og internet til at søge partnere, og man kan også hver for sig tage kontakt til parter, man tror, kan være relevante. I alle tilfælde handler det om, at der skal skabes tillid mellem parterne, og at der skabes aftaler, der er til fordel for begge parter“, siger Jon Wulf Petersen, direktør for konsulent-virksomheden Tech Trans Office.

Jon Wulf Petersen peger på, at vejledende modelaftaler som er undervejs i samarbejde mellem Forsknings- og Innovationsstyrelsen og erhvervslivets organisatio-

ner kan blive et effektivt redskab, når det gælder om indgå aftale om patentrettigheder.

En undersøgelse foretaget af EU-Kommissionen viser, at syv ud af ti universiteter og virksomheder finder det vanskeligt eller meget vanskeligt at afstemme forventningerne til hinanden.

„Hvis der kan blive lavet nogle modelaftaler, som gør det lettere for parterne at finde sammen, så kommer vi et stort skridt nærmere om at styrke målsætningen om, at vi skal blandt de bedste til at omsætte forskningsresultater til teknologier og produkter, der kan anvendes i industrien“, siger Jon Wulf Petersen.

Et udvalg under ledelse af advokat Johan Schlüter skal til næste år præsentere en række modelaftaler, som parterne kan bruge, når de samarbejder om forskning.

Sæt virksomhedens værdier til kritisk revision

Strategisk IP-Audit skal sikre virksomhedernes evne til at skabe forretning ud af den særlige viden de rummer.

AF KIM SEIR

Når en virksomhed investerer i nyt produktionsudstyr eller i nye markeder, fokuseres der ofte på afkastet af denne investering (Return On Investment- ROI) – men hvordan vurderer man afkastet på viden, varemærker og patenter? Svaret er bl.a. Strategisk IP-Audit.

„Med en Strategisk IP-Audit går man ind og ser på virksomhedens evne til at have øje for de værdier, der er i virksomheden. Det er ikke et spørgsmål om at sætte tal på de nuværende værdier i virksomheden, men snarere en kritisk gennemgang af de processer der skal til for at udnytte virksomhedens viden til at skabe mere forretning“, siger Bent Warrer-Madsen fra Patent- og Varemærkestyrelsen.

Hvad enten man er helt ny inden for IPR eller global aktør med masser af erfaring, kan der ifølge Bent Warrer-Madsen være behov for at blive udsat for et kritisk serviceeftersyn på dette område. Målet er at få konstateret om virksomheden arbejder systematisk nok med at udnytte sin viden – strategisk og kommercielt.

Europæisk styringsmodel

Patent- og Varemærkestyrelsen har udviklet et særligt værktøj til at kunne gennemføre en Strategisk IP-Audit. Med udgangspunkt i EFQM Excellence-modellen, en europæisk styringsmodel, er der udviklet en spørgeguide og rapport i samarbejde med virksomheder og IP-rådgivere.

„Siden vi startede har over 60 virksomheder taget imod tilbuddet om et IP-serviceeftersyn, der indtil videre er gratis frem til april næste år. Det er et projekt der først og fremmest henvender sig til innovative mindre og mellemstore virk-

somheder, men også enkelte større virksomheder har været med“, oplyser Bent Warrer-Madsen.

Projektet er finansieret af Den Europæiske Socialfond. Patent- og Varemærkestyrelsen er desuden i gang med at udvikle en internetbaseret „IP Audit Light“, hvor en virksomhed let og hurtigt kan få en fornemmelse af, hvor den kan forbedre sit IP-arbejde.

Ledelsesopgave

„IP Audit er et velegnet værktøj, som kan sætte fokus på, hvordan en virksomhed håndterer sine IP rettigheder, men man bør også være opmærksom på, om virksomheden har sine IP rettigheder på den rigtige måde, f.eks. for de rigtige tekniske egenskaber ved virksomhedens produkt eller for de relevante markeder“, udtaler Hanne Weywardt, partner hos advokatkontoret MAQS Law Firm.

IP Audit kan ifølge Hanne Weywardt åbne øjnene op for, i hvilket omfang arbejdet med IP i virksomheden er organiseret og på hvilket fagligt og ledelsesmæssigt niveau.

„Det er nemlig vigtigt at betragte IP rettigheder som et ledelsesanliggende. Det gælder i store såvel som små virksomheder, og det gælder uanset branche. Den konkrete organisering af arbejdet med virksomhedens IP skal så naturligvis afstemmes ift. virksomhedens størrelse, ressourcer osv. Det handler egentlig blot om allokering af ansvar på rette niveau og fastlæggelse af forretningsgange. Derefter må de ansvarlige så i samarbejde

... Det er vigtigt at betragte IP rettigheder som et ledelsesanliggende. Det gælder i store såvel som små virksomheder, og det gælder uanset branche ...

med interne eller eksterne professionelle rådgivere fastlægge den relevante strategi for virksomhedens beskyttelse og håndhævelse af IP rettighederne“, siger Hanne Weywardt.

Strategisk IP-Audit

Strategisk IP-Audit består af tre elementer:

Interview: Auditørerne interviewer systematisk de relevante ledelsesrepræsentanter om virksomhedens IPR-arbejde.

Rapport: Auditørerne udarbejder en skriftlig rapport – en slags „karakterbog“ med en score på hvert af de ni hovedområder, auditoren omfatter.

Evaluering: Rapporten præsenteres på et møde på virksomheden. Her drøfter auditørerne og ledelsen nogle af de IP-problestillinger, virksomheden eventuelt kan arbejde videre med.

Auditoren er ikke en konkret vurdering af virksomhedens eksisterende eller fremtidige IPR-aktiver.

Nordisk videndeling

AF KIM SEIR

Nordic Technology Transfer Network – et nordisk samarbejde for forskerparker, universiteter og mindre og mellemstore virksomheder i Norden.

„Det er gratis at være med hvilket har gjort at vi allerede inden start har en meget stor deltagerskare“, oplyser Gert Balling, som er en af initiativtagerne bag projektet.

Samarbejdet har været under opbygning de seneste måneder og sidste nordiske intramøde holdes 23. november i Reykjavik. Netværket er opstartet af bl.a. det nationale netværk for teknologioverførsel i Danmark og er finansieret af Nordisk Innovationscenter. Se mere på www.techtrans.dk

„Der er tale om netværkssamarbejde der går ud på at overføre vigtig viden til de, der har behov for det. Systemet har stor succes i England og bygger på at deltagere hos hinanden kan søge direkte og præcist efter enten specifikke teknologiske løsninger eller forskningsmæssig ekspertise. Simpelt og effektivt.“



Internationalt Patent-Bureau

Hvordan håndhæver jeg mit patent?

Gå-hjem-møde den 28. november 2007

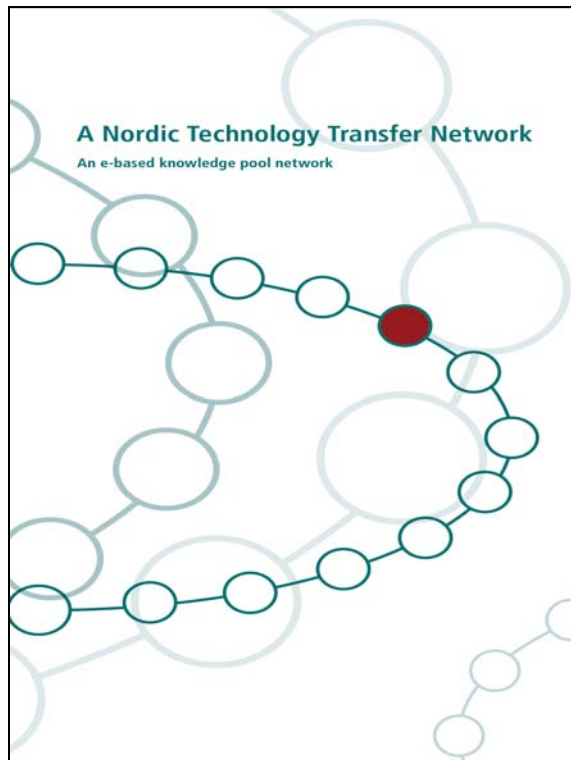
Når man har investeret ressourcer i kommercialiseringen og patenteringen af en opfindelse, skal man være opmærksom på at sikre den hermed etablerede markedsposition bedst muligt. Et forsvar af egne patentrettigheder er et vigtigt led i denne proces. Onsdag den 28. november sætter IPB fokus på krænkelse af patenter, og hvordan man bedst håndhæver egne patentrettigheder.

Mødet afholdes hos IPB, Rigsgade 11, København fra kl. 15.00 - 17.00.

Deltagelse er gratis. Tilmelding til jba@ipb.dk

Gå-hjem-mødet vil på et senere tidspunkt også blive afholdt i Horsens.

Appendix 3 – Introductory Brochure



A Nordic Technology Transfer Network

An e-based knowledge pool network

The Nordic technology transfer network aims to create a network of small and big businesses, science parks and universities in the Nordic Region. The network concept is based on an e-tool developed by the Manchester University tech trans unit.

E-tool

The e-tool is a simple e-mail based system with a great technology-sharing potential for all actors involved. The tool gives industry, technology-seekers, universities and science parks an effective means for transferring and exploiting much-needed technology from and with peers across the Nordic Region.

The network allows members to easily 'tap' into the network in search of relevant technology, with very little effort involved.

In sum

- A simple, cost free e-mail network
- Discretionary participation level
- Anyone can ask a question to the entire network
- Answers go directly and exclusively to the questioner
- Attracts all players in the field – no market/technology sector bias
- It helps and benefits:
 - Anyone seeking technology
 - Anyone licensing or commercializing technology

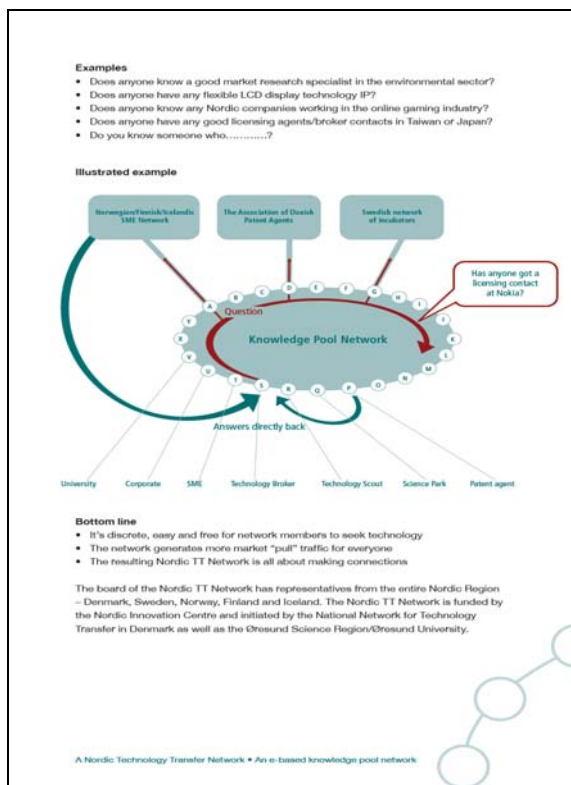
How does the system work?

The e-tool requires very little time and effort, and is aimed directly at allowing members to dip into a pool of diverse knowledge – the network's knowledge pool. Any member signed up to the system is able to send out a simple e-mail to the whole group containing a specific technology or information request.

Due to demand for simple and readable questions, it is only allowed to write one sentence. It is therefore easy to pose a request and fast to go through the daily technology – or research requests – only picking up on those with special interest to you.

Replies to the questions are only to be sent directly to the questioning part, securing privacy while saving network members excessive inbox feed.

A Nordic Technology Transfer Network • An e-based knowledge pool network



Appendix 4 - Manual

Manual

Nordic Technology Transfer Network A Knowledge Pool System

Getting started

As a member of the Nordic Technology Transfer Network, you are now able to write and/or answer questions, or just 'tap' onto the network's flow of information. You can begin using the system right away. All you have to do is email

NordicTT@googlegroups.com

Your question will then go directly out to all respondents and be posted at the network-forum. Remember, however, that if you wish to *answer* a posed question, please do this directly and only to the person asking the question - their email address will be visible with their question.

Ground rules summary

- You are only allowed to write **one sentence**.
- The sentence **must be** a question (other than including an email signature of course).
- If you know the answer to a question, and are able to disclose that information, **only** reply to the person asking the question.
- No commercial advertising or offering of services, or offering of technologies.
- From time to time we will renew the list of participants on our homepage. It is therefore necessary for you to accept, that your name and email will be shown on the list.
- There are some Terms and Conditions to use the service, stated below. By using the service it is assumed that you have read and accept them.

The single sentence question

We have found the more specific the question, the better the result and also the more likely the question will be forwarded on by people. Broad questions are interpreted by people differently. It may be that you **are** seeking very broad inputs – if this is the case it is best to state that clearly, and prepare for many answers to follow up on. We have found that with such a large number of participants on the network, even the most precise/narrow questions receive high quality answers. Feedback from users has been that writing a single sentence request is easier than it sounds, even for quite precise/complex questions.

The easiest way to structure the sentence is to ask “what you are seeking” first, followed by any “why/context” info if it adds value. Some examples are below:

“Has anyone got any contacts in the medical imaging software sector, as we have a new imaging method and are seeking industry views on its commercial value?”

“Does anyone have any market research information or expertise in the Danish plastics recycling sector, as we have a technology that has significant advantages in processing PVC”

Worded this way round, means the reader can usually recognize half way through the sentence, that one does not need to read any further and can therefore skip the e-mail.

At the bottom of this document is a table showing some of the first questions that were received at the UK-network.

A few real-life examples from the UK-network

Contact seeking

- o Does anyone have any contacts at UK companies working in the online gaming industry?
- o Does anyone know any CEO/Chairman candidates who have strong medical imaging background?
- o Does anyone know of a market researcher who has done some work in the medical devices market?

Technology seeking

- o Does anyone have any flexible LCD display technology IP or knows of research projects in this area with strong commercial potential?

- o Does anyone know of any novel molecular / chemical / polymer technology to change the way moisture, vapour and other solutions are transported through a range of textiles?

Technology bundling

- o Does anyone have any IP for protein manufacture as we have some IP we are looking to strengthen or bundle with?

Peer group knowledge and inspiration

- o Can anyone suggest who might want a technology that allows electronics and electroluminescent features to be woven into cloth and fabric as we have run out of inspiration!?
- o Does anyone know of any industry/market that would have need of a technology that can make polystyrene fluoresce under different lighting conditions?
- o Does anyone have any market data or market trend information on the blood glucose testing market?

Frequently asked questions

SPAM? The system will not generate any Google generated SPAM of any sort. The only non-project emails might be occasional announcements such as new members or requests seeking feedback from people regarding the process etc.

Unsubscribing is easy, through a link in the email footers. Alternatively, just e-mail NordicTT-unsubscribe@googlegroups.com

Confidentiality? Any questions posted are public/open to the group, so if you do not feel comfortable disclosing what information or knowledge you **seek**, then do not do so. Answers in response are entirely at the discretion of the knowledge holder, and even then should only be disclosed to the person seeking the question.

What happens if the traffic levels become too high? It is expected as each of the groups/communities grow, and the traffic levels rise, that they may gradually be split up into more specific sub groups. Please see below for information on how to customize your e-mail flow.

What happens if someone breaks or abuses the rules? They are contacted by a moderator and reminded of the rules – this happens infrequently.

Some practical points

- The answers to requests on the system are not shown or recorded anywhere as they are private. To our knowledge, very few questions have had zero replies.

- The online archive of postings is often useful to new users to identify people who have synergies with them can contact that person to find out what answer they had back.
- We welcome feedback including suggestions for improvements. Kindly inform us if you feel that other members are abusing the system in any way.
- The system will be subject to changes in 2007 including a shift away from the Google system to a bespoke system that will give users a more sophisticated system
- As a relatively new system it is still evolving in terms of its use and scope, and so is potentially subject to changes in the future

Customizing your membership of the NTTN

When visiting <http://groups.google.com/group/NordicTT?hl=en>, you have the option to change your personal settings such as your profile and to customize the way you receive the flow of questions asked to the network. Under "Edit my membership", you can chose to receive one mail per asked question, daily summary e-mails or e-mails that bundle up to 25 questions at a time. You can also choose not to receive questions by e-mail, and instead participate or monitor the traffic when logged on to the Nordic TT Google Group homepage, address shown above.

If you have any questions, need anything clarified or have any ideas for improving the process or refining the ground rules, please contact network coordinator Daniel Direktor at daniel@oresundinnovation.org or at Tel: +(45) 35324084.

Appendix 5 – List of Public Nordic TT offices/units

Denmark

Aarhus University

Patent and Contract Department

<http://www.au.dk/da/adm/led/pke>

E-mail: pke@au.dk

Tel: +45 89426884

Aalborg University

Patent and Contract Department

<http://patent.aau.dk/>

E-mail: [patent\(at\)adm.aau.dk](mailto:patent(at)adm.aau.dk)

Tel: +45 96359904

University of Copenhagen

Tech-Trans Unit

<http://www.tt.ku.dk/>

E-mail: [techtrans\(at\)adm.ku.dk](mailto:techtrans(at)adm.ku.dk)

Tel: +45 35326336

IT-University of Copenhagen

Prorektor, Jørgen Staunstrup

E-mail: [jst\(at\)itu.dk](mailto:jst(at)itu.dk)

Tel: +45 72185307

The Technical University of Denmark

Department of Research and Innovation

Søren Hellener, Head of Department

E-mail: [afi\(at\)adm.dtu.dk](mailto:afi(at)adm.dtu.dk)

Tel: +45 45251006

University of Southern Denmark

Research Service

Peter Fobian Jensen, Head of Secretariate

E-mail: [pfi\(at\)adm.sdu.dk](mailto:pfi(at)adm.sdu.dk)

Roskilde University Center

www.ruc.dk

Legal Advisor, Dorthe Seidelin Iversen

E-mail: seide@ruc.dk

The Serum Institute

www.ssi.dk

Patent Consultant, Lars Toft

E-mail: ltt@ssi.dk

National Geological Research center for Denmark and Greenland

www.geus.dk

[Legal and Techtrans department](#)

Legal Advisor, Marianne Simonsen

E-mail: msi@geus.dk

Copenhagen Business School

www.cbs.dk

Head of Department, Mette Reebirk

E-mail: mnr.info@cbs.dk

Odense University Hospital

www.ouh.dk/wm122679

Senior Advisor, Mogens Theodorsen

E-mail: mogens.theodorsen@ouh.regionssyddanmark.dk

The Capital Region/Tectra

University Hospitals in Copenhagen

Regionens teknologioverførselsenhed Tectra

www.regionh.dk/menu/regionalUdvikling/Opfindelser+og+forskningssamarbejder/Tectra/

Director for Tectra, Trine Winterø

E-mail: trine.winteroe@regionh.dk

The Region of middle Jutland

Aarhus University Hospital

www.regionmidtjylland.dk/

Advisor, Ole Bertram Andersen

E-mail: ole.andersen@stab.rm.dk

Aalborg Hospital

www.aalborg-sygehus.dk

Finland

University of Helsinki

Department for Strategic Planning and Development

<http://www.helsinki.fi/kehittamisosasto/english/index.htm>

E-mail: Mr. Tuomas Mennola, [tuomas.mennola\(at\)helsinki.fi](mailto:tuomas.mennola(at)helsinki.fi)

Tel: +358 9 191 22935

University of Vaasa

Research and Innovation Services

<http://www.uwasa.fi/tutkimuspalvelut/english/>

E-mail: Head of Research and Innovation Services Mr. Mari Niemelä, marita.niemela@uwasa.fi

Tel: +358 6324 8136

University of Joensuu

Research Liaison Office

<http://www.joensuu.fi/research/index.html>

Tel: Jari Ratilainen, Head of Research Liaison Office: +358 13251 4574

Helsinki University of Technology

Otaniemi International Innovation Centre

<http://oiic.tkk.fi/index.html>

E-mail: Mr. Antti Aarnio, antti.aarnio@tkk.fi

Tel: +358 9 451 2989

University of Jyväskylä

Research and Innovation Office

<http://www.jyu.fi/hallinto/tutkimuspalvelut/en/>

E-mail: ture@jyu.fi

University of Turku

Research and Industrial Services

http://www.utu.fi/en/research/research_services.html

E-mail: [researchservices\(at\)utu.fi](mailto:researchservices(at)utu.fi)

Tel: Mr. Mauno Kangasaho, Innovation Manager: +358 02 333 3554

University of Oulu

Research and Innovations Services

<http://www.oulu.fi/tupa/english/html/contacts.html>

E-mail: Director, Leila Risteli

E-mail: [leila.risteli\(at\)oulu.fi](mailto:leila.risteli(at)oulu.fi)

Tel: +358 08-553 3974

Tampere University of Technology

Research and Innovation Services

Director, Janne Virtapohja

E-mail: [janne.virtapohja\(at\)tut.fi](mailto:janne.virtapohja(at)tut.fi)

VTT Technical Research Centre of Finland

<http://www.vtt.fi/business/index.jsp>

E-mail: [info\(at\)vtt.fi](mailto:info(at)vtt.fi)

Ventures: Tapio Koivu, tel: +358 20 722 6943

Innovations: Petri Kalliokoski, tel: +358 20722 4767

Lappeenranta University of Technology

Research and Innovation Services

Research Liaison Officer, Tanja Grönlund

E-mail: [tanja.gronlund\(at\)lut.fi](mailto:tanja.gronlund@lut.fi)

University of Kuopio

Research and Innovation Services

Head of Innovation and Research Services, Jaana Backman

E-mail: [jaana.backman\(at\)uku.fi](mailto:jaana.backman@uku.fi)

Iceland

University of Iceland

Research Liaison Office

<http://www.rthj.hi.is/id/1000616>

E-mail: [rthj\(at\)hi.is](mailto:rthj@hi.is)

Contacts:

Ásta Sif Erlingsdóttir, [astasif\(at\)hi.is](mailto:astasif@hi.is)

Tel: + 354 525 4920

Reykjavik University

Research Services

<http://ru.is/?PageID=723>

Contact:

Kristján Kristjánsson, [kk\(at\)ru.is](mailto:kk@ru.is)

Tel: + 354 599 6372

University of Akureyri

Research & Development Centre

<http://rha.is/?mod=forsida&sport=frontpage&lang=eng>

Contact:

Gudrun Rosa Thorsteinsdottir, Director, [gudrunth\(at\)unak.is](mailto:gudrunth@unak.is)

Tel: + 354 460 8900

Innovation Center Iceland

<http://www.nmi.is/english/>

Contacts:

Brynja Sigurðardóttir - [brynjasig\(at\)nmi.is](mailto:brynjasig@nmi.is)

Kristján Óskarsson [kro\(at\)nmi.is](mailto:kro@nmi.is)

Tel: +354 522 9000

Klak – Nýsköpunarmiðstöð atvinnulífsins

Contact:

Dr. Eyþór Ívar Jónsson,
[eythor\(at\)klak.is](mailto:eythor@klak.is)

Tel: +354 578 7755

Innovit

<http://www.innovit.is>

Andri Heiðar Kristinsson – [andr\(at\)innovit.is](mailto:andr@innovit.is)

Tel: +354 552 5151

Norway

Oslo University

Birkeland Innovation, Tech-Trans Office

<http://www.birkelandinnovasjon.no/>

E-mail: [post\(at\)birkeland.uio.no](mailto:post@birkeland.uio.no)

Tel: +47 22 84 00 80

University of Bergen

Bergen Teknologioverføring A/S

<http://www.bergento.no>

E-mail: [post\(at\)bergento.no](mailto:post@bergento.no)

Tel: +47 5558 3050

University of Stavanger

Prekubator Technology Transfer Office

<http://www.prekubator.no/>

E-mail: [post\(at\)prekubator.no](mailto:post@prekubator.no)

Tel: +47 51 87 40 00

University of Tromsø

TTO Nord A/S

www.ttonord.no

E-mail: [webmaster\(at\)ttonord.no](mailto:webmaster@ttonord.no)

Tel: +47 776 29555

The Norwegian University of Science and Technology (NTNU)

NTNU Technology Transfer A/S

<http://www.tto.ntnu.no/>

E-mail: [contact\(at\)tto.ntnu.no](mailto:contact(at)tto.ntnu.no)

Tel: +47 73 55 11 79

Bio-Medisinsk Innovasjon AS

<http://www.bmioslo.no/>

E-mail: [trygve\(at\)bmioslo.no](mailto:trygve(at)bmioslo.no)

Tel: +47 22 95 81 91

Bioparken AS

<http://www.bioparken.no>

E-mail: [bioparken\(at\)bioparken.no](mailto:bioparken(at)bioparken.no)

Tel: +47 64 94 84 30

Campus Kjeller AS

<http://www.campuskjeller.no>

E-mail: [tl\(at\)campuskjeller.no](mailto:tl(at)campuskjeller.no)

Tel: +47 64 84 43 00

Forskningsparken AS

<http://www.forskningsparken.no>

E-mail: [bjorn.lillekjendlie\(at\)forskningsparken.no](mailto:bjorn.lillekjendlie(at)forskningsparken.no)

Tel: +47 22 95 85 04

Leiv Eiriksson Nyskaping AS

<http://www.len.no>

E-mail: [firmapost\(at\)len.no](mailto:firmapost(at)len.no)

Tel: +47 73 54 51 00

Medinnova SF

www.medinnova.no

E-mail: [post\(at\)medinnova.no](mailto:post(at)medinnova.no)

Tel: +47 23 07 55 00

NorInnova AS

<http://www.norinnova.no>

E-mail: [post\(at\)norinnova.no](mailto:post(at)norinnova.no)

Tel: +47 77 67 97 60

Simula Innovation

<http://www.simula.no/innovation.php>

E-mail: [post\(at\)simula.no](mailto:post(at)simula.no)

Tel: +47 67 82 83 40

Sinvent AS

http://www.sintef.no/content/page1_3072.aspx

Email: [Kare.Herje\(at\)sintef.no](mailto:Kare.Herje(at)sintef.no)

Tel: +47 73 59 26 13

Sørlandets Teknologisenter AS

<http://www.sts.no>

Email: [ks\(at\)sts.no](mailto:ks(at)sts.no)

Tel: +47 37 29 51 90

Sweden

Lund University

[LU Innovation](#)

<http://www.luinnovation.lu.se/>

E-mail: [info\(at\)luinnovation.lu.se](mailto:info(at)luinnovation.lu.se)

Tel: +46 46222 11 11

Luleå University of Technology

[LTU Innovation](#)

Head of LTU Innovation, Jan Marcusson

Tel: +46 920 49 30 75

E-mail: [jan.marcusson\(at\)ltu.se](mailto:jan.marcusson(at)ltu.se)

Stockholm University

[SU Holding AB](#)

<http://www.holding.su.se>

E-mail: [info\(at\)holding.su.se](mailto:info(at)holding.su.se)

Tel: +46 8 6747026

Uppsala University

Uppsala University Holding Company

<http://www.uuab.uu.se/default.php?lang=eng>

E-mail: lars.jonsson@uuab.uu.se

Tel: +46 1 847 11842

University of Gothenburg

Research and Innovation Services

<http://www.externarelationer.adm.gu.se/forskninginnovation>

Director , Claes Jansson

E-mail: claes.jansson@gu.se

Tel: +46 3 17861016

Karolinska Institute

Karolinska Institute Innovations AB

<http://www.karolinskainnovations.ki.se/>

Tel: +46 8 524 86084

Umeå University

Näringsliv och samhälle

<http://www.umu.se/stodfunktioner/personalkatalog/?page=ViewOrgUnit&umuSeLIN=4254969798371912198>

Head of Unit, Ingrid Fängmark

E-mail: ens@umu.se

Linköping University

LiU Innovation

<http://www.liu.se/insidan/innovation>

Jan Axelsson

E-mail: jan.axelsson(at)liu.se

Karlstad University

External Relations Unit

<http://www.samverkan.kau.se/>

Head of Unit, Lennart Blomquist

E-mail: lennart.blomquist(at)kau.se

Växjö University

Samverkanskansliet

http://www.vxu.se/tredje/kontakt_1/index.xml

Per Brolin

E-mail: per.brolin(at)vxu.se

Swedish University of Agricultural Sciences

SLU Holding

<http://www.sluholding.slu.se/>

Johannes Dyring

E-mail: johannes.dyring(at)sluholding.slu.se

Chalmers University of Technology

Chalmers Innovation

www.chalmersinnovation.com

Olle Stenberg

E-mail: ollestenberg(at)chalmersinnovation.com

Appendix 6 – External Communication

Matrix of external communication activities

NICe project 07051 – “Nordic TT for Regional Innovation”

Responsible	Date	Venue	Presentation
Mr. Janne Virtapohja	September 13th, 2007	Lappeenranta University of Technology, Finland: ”Annual Meeting for Finnish Research and Innovation Services Personnel”.	<i>“Networks of Research and Innovation Services”</i>
Mr. Gert Balling	September 27th, 2007	Innovative Management of Technology Transfer (China-EU symposium) Beijing, China.	<i>”The Nordic Approach to Technology Transfer – patent exchange and knowledge pools”</i>
Mr. Gert Balling	October 12th, 2007	AURIL (Association for University Research and Industry Links) annual meeting, Cork, Ireland.	<i>”Building the Nordic Regional Technology Transfer Network”</i>
Mrs. Asta Sif Erlingsdottir	October 18-19th, 2007	Swerea-IVF & Chalmers University: IRE (Innovative Regions of Europe) Knowledge Transfer working group	The role of EU and regional networks in supporting cross border knowledge transfer.
Mr. Gert Balling	November 2007	Danish National Technology Transfer Network - <i>Monthly Newsletter</i> .	Presentation of the Nordic Technology Transfer Network project.
Mr. Gert Balling	November 2007	Joint event between Danish Industry, National Tech-Trans Network & The Ministry of Science, Technology & Innovation. Holckenhavn Castle, Nyborg.	Cooperation between public research and industry.
Mr. Gert Balling	November 15th, 2007	Insert in Danish daily <i>Børsen</i>	<i>”Nordisk Videndeling”</i>
Mr. Noel Brings Jacobsen	November 29-30th, 2007	”New Trends in Nordic Innovation - Nordic Innovation Conference 2007” Oulu, Finland.	Presentation of the Nordic Technology Transfer Network project.
Mr. Gert Balling	January 30th – February 1st, 2008	ProTon Europe Fifth Annual Conference: ”Building Successful Partnership”. Turin, Italy.	<i>”Danish Techtrans and Innovative Experiments”</i>

Appendix 7 - Minutes

This appendix contains all the minutes and summaries taken during meetings related to the project in chronological order. These include external meetings (i.e. Nordic workshops) as well as internal (steering group meetings).

Minutes of the 1st Nordic Technology Transfer Network (NTTN) Steering Group meeting

Present:

Per-Olof Hegg (Lund University)	PH
Rosalind Russel (Prekubator/University of Stavanger)	RR
Janne Virtapohja (Tampere University of Technology)	JV
Ásta Sif Erlingsdóttir (University of Iceland)	AE
Gert Balling (Technical University of Denmark)	GB
Noel Brings Jacobsen (Øresund Innovation)	NJ
Daniel Direktor (keeper of the minutes, Øresund Innovation).	DD

Venue: Technical University of Denmark, Lyngby.

Time: 12.30, September 14th 2007.

Agenda:

- a) 12.30 – 13.15 DTU Faculty Club (restaurant)
- b) 13.15 – 13.45 Presentation of the Steering group members
- c) 13.45 – 14.15 Presentation of NTTN; motivation, milestones, deliverables
(Gert and Noel)
- d) 14.15 – 14.45 Setting up National Workshops (Gert and Noel)
- e) 14.45 – 15.00 BREAK
- f) 15.00 – 16.30 Sharing responsibility: Deliverables – who will take care of what?

g) 16.30 – 16.45 Local Entertainment: Danish National Network (Gert)

c)

Visual Power-Point presentation of the NTTN incl. objectives and prospects by GB.

Presentation of the Manchester University “Knowledge Pool System”, the need for national workshops, and a brief description of the involved benefits for prospective

network members. AE asked how the network looks at present; 40+ institutions/businesses have said yes to an active sign-up (GB).

JV stated that an e-mail based system is a good idea, since it doesn't involve easily forgettable passwords etc. NJ said that e-mail groups are simple and the key to success.

RR asked about the posting of questions with regards to levels of secrecy/privacy; communication is closed after the initial open question (GB). He added that each question had received approx. 6 answers in the UK-based tech-trans network.

d)

With regards to the national workshops, GB and NJ will arrange/create the content and conduct the workshops. Workshops will approx. last 3 hours. An initial success criterion is a 50 people show-up, with an ‘acceptable’ show up of 20 people (GB).

NJ added that with regards to workshops and general project implementation, there will be another steering group meeting in Stavanger, around March 1st (exact date pending).

GB mentioned that the NTTN-project will not be able to pay/reimburse the transportation costs faced by workshop participants. AE added that teleconference might be an option. GB concluded that workshop dates are finalized, but open to changes if necessary.

RR stated that she is considering contacting the relevant regional actors in the Stavanger area regarding the workshop there; SME's, TTO's, Statoil perhaps. She reported quite a big project interest in Norway.

NJ mentioned the need of a memo list – anything special needed for advertising the workshop locally?

RR requested a short NTTN-‘teaser’, perhaps just one page, with success stories, examples of network questions etc. It was agreed upon, that the teaser will be written/created quickly by DD, preferably within 2 weeks and sent out to the steering group members.

RR asked weather there were any costs involved with the NTTN; no costs initially reported GB. However approx. 10.000 € will at some point in time be paid to programme developer Mark

Thompson. This payment is made when and if Mark Thompson incorporates changes or special demands from the NTTN into the software he has developed. GB stated furthermore, that there might be a small maintenance-fee after project run-out (1 year), but the costs involved would be practically negligible.

GB stated that with regards to advertising and general information, a sub-site will soon be made at www.techtrans.dk, including the following: names of participants/players, a listing of who is where (made simple), the teaser described above, and a general explanation of the NTTN system.

RR asked what the main objectives with the NTTN are. GB said that a knowledge pool for industry and academia is a clear objective; ultimately it will have a business-focus. JV added that on a personal note, he saw possibilities of industry mergers and projects, together with general 'big business opportunities', as a potential outcome.

PH asked how many network members an institution should or could have. GB stated that at least 1 network member per institution is desirable. This was backed by JV, who noted that in case of absence/travel, it is advisable to have more than 1 network contact per institution/company.

GB and NJ clarified how they saw the function and role of the network 'contact person' at each member institution/company. The responsible person checks incoming mails on a daily basis, and picks out questions of relevance to his or her institution/company. The contact person is also responsible for posing questions to the network, and supplying answers to posed questions of relevance for his/her entity.

With regard to the general maintenance of the entire NTTN e-mail system and database, 1 person will be responsible for system maintenance, including mail address consistency and possible check up on addresses and the current TT-responsible people within the network. During the 1st year of the project, DD will be responsible for this task.

f)

With regards to project deliverables, it was stated by GB and NJ that there will be no definite and specific final product. We are however required to write a final project report – the responsibility of composing and completing the report rests with GB, NJ and DD.

NJ noted the expectations to each of the workshop hosts:

- Inviting people i.e. workshop participants
- Organizing the practicalities involved with the undertaking of workshops
- Presenting the NTTN project to local peers/contacts
- Helping the project with running adjustments or advice (ad hoc)

It was further added, that the deliverable dates were strict and binding, i.e. workshop dates, e-mail system implementation date, status reports etc.

Finally, the topic of reimbursement for travel expenses concerning the present meeting was addressed. NJ agreed to send an e-mail to steering group members explaining exactly what should be included in the invoices for reimbursement, i.e. ticket/boarding card copies, bank account numbers etc.

The meeting was adjourned at approx. 15.45.

Minutes of the Nordic Technology Transfer Network Denmark/Sweden (kick-off) meeting

Venue: SAS Royal Hotel, Hammerichsgade 1, Copenhagen.

Time: 14.00 – 16.30, October 16th.

Agenda:

14.00-14.20 Background and rationale for a Nordic Network for Technology Transfer - Gert Balling and Noel Brings Jacobsen

14.20-15.20 Experiences from the UK; an e-based Technology Transfer Network in practice - Mark Thompson, University of Manchester Intellectual Property Ltd.

15.20-15.45 Coffee Break

15.45-16.30 Questions, discussion and further actions

14.00-14.15

Round of introduction by all workshop participants.

The workshop was opened with an introductory presentation by Gert Balling, Secretary General of the National Network for Technology Transfer (Denmark). Gert gave a brief history of the idea behind the project. It was explained that funding to the current project was given by NICE (Nordic Innovation Council). The idea behind this network is that, unlike previously seen networks, it is primarily needs driven. The specific conditions under which Nordic technology transfer people operate were described as work in isolation, lack of information between the Nordic TT offices, little collaboration etc. The objectives of the Nordic Technology Transfer Network (NTTN) are to enhance innovation among TT actors, as well as bringing the Nordic TT Community closer together. Our hopes are to successfully cross-fertilize the Nordic TT network with an e-based infrastructure.

14.15 Presentation by Mark Thompson, University of Manchester Intellectual Property Ltd: “*The Knowledge Pool – A new type of needs driven network*”.

The Knowledge Pool system was developed due to the sometimes hard conditions in the Technology Transfer (TT) world: hard to get funding, difficult to find relevant technology – life in the TT sector being difficult in general. The new Knowledge Pool system, on which the Nordic

Technology Transfer Network will be based, is the e-mail equivalent of word-to-mouth. The key characteristics and features of the novel system are:

- A simple e-mail system that connects technology providers, technology-seekers and people commercializing technology
- Anyone can write an e-mail to the entire group
- Quality of replies are, from experience, generally very high. Usually between 8-15 replies per posed question.
- The system has an ‘unconventional’ part that distinguishes it from other e-mail groups; a few rules regarding the formulation and length of questions must be observed to keep the network traffic simple and flowing.
- Replies to questions are sent directly to the questioning part securing privacy and relevance..

Experience from the UK knowledge pool shows that the network is a valuable tool for corporates, technology brokers and university business development teams as well. The network offers possibilities of finding and providing technology, company contacts, experience and market knowledge as well as investor-seeking. There are plans of setting up networks in different parts of the world, including South-East Asia and Australia. Eventually it will be possible to tap onto the information flow of these networks or even join them.

The network will be easy to use since it is based on the Google-groups technology. It is thereby free of charge, fast and simple. It requires very little effort to join the network. Anyone in the technology commercialization community is welcome to join.

14.45 - Coffee break.

14.55 - Open discussion and questions

Several questions were asked regarding the function of the network and the concept of a Nordic Technology Transfer Network in general. The questions and answers will here be summarized in short. The questions were answered by Mark Thompson, Gert Balling and Noel Jacobsen.

How do we achieve the critical mass of members needed for a functioning network?

- a critical mass of about 40 members is necessary to generate a usable flow of questions and answers. The UK network had a slow start – there is a psychological barrier to cross when posing the first question to the entire network.

How does one sign up to the network?

- We add you to the network. Send a mail to the project coordinator Daniel Direktor (for e-mail address please see above or, if convenient, at the back of the folder/brochure that was given at the

workshop), and you will be added to the network. We will contact you shortly and present you with the minutes from the workshop and simultaneously ask if you would like to be signed up.

Are there any other terms and rules, except from the few outlined in the previous presentation, to bear in mind when joining and asking questions to the network?

- No. Using the network is simple and straightforward.

Why not sectorize the network? Say I am interested in life sciences, but I still get questions on Information Technology?

- The knowledge pool networks might be split up into sectors dealing with different areas of technology. But this should be an option if the networks get too big, which has not been a problem as of yet. It is, however, always a possibility to unilaterally set up a network concerning one's own field of concern, since the system technology from Google is free of charge.

How do we get the addresses/contact information of the other regional networks?

- Shortly, the Nordic Technology Transfer Network will have its own website. We will inform all participants about this site as soon as it is up and running. In a few months it should be possible to visit another website with information on the other regional networks – again, we will inform you of this site when it is operational.

Any thoughts of limiting the network size, so the quality of the information flow will be secured?

- Every network has a local administrator that makes sure the system is used in a proper manner. The quality of the traffic is essentially up to people using it responsibly. The administrator includes members selectively in order to avoid unwanted members or even spam. Doing this, the network will grow slowly due to focus on the quality of members/answers and not quantity.

Gert Balling rounded off by making clear that the Nordic Technology Transfer Network will have English as working language. This makes it possible for members of other regional networks to 'tap' into the Nordic network for information and inspiration. It was emphasized that the project responsible (Gert Balling, Noel Jacobsen and Daniel Direktor) would contact the workshop attendees with additional information. At the same time we would inquire about whether or not you would like to join the upcoming network. The Nordic Technology Transfer Network is due to be launched December 2007.

The meeting was then adjourned at 15.30

Present:

- Åsa Lundgren – Medeon (S)
- Jan Marcusson - LTU Innovation / Luleå University (S)
- Kathrine Myhre - Birkeland Innovasjon (N)
- Lars-Eric Larsson - UU Innovation / Uppsala universitet (S)
- Cecilia Ohlsén Börjesson - Karolinska Institutet Innovations AB (S)
- Kasper Birkholm Munk - Chas. Hude A/S (DK)
- Morten Dalgaard Andersen - Chas. Hude A/S (DK)
- Lars Toft - Statens Serum Institut (DK)
- Lena Emmersen - KU, Farma (DK)
- Eva Lessél - KU, Farma (DK)
- Samireh Kristensen – Zacco (DK)
- Lisbeth Bjerger – Zacco (DK)
- Per Hjulskov Andersen – Zacco (DK)
- Uno Thörnberg – Zacco (DK)
- Britta Gavnholt - Plougmann & Vingtoft (DK)
- Nicka Kirstejn Johansen - Plougmann & Vingtoft (DK)
- Lars Stigel - Østjysk Innovation A/S (DK)

As organizers

- Gert Balling, Danish National Network for Technology Transfer
- Noel Brings Jacobsen, Øresund Science Region/Øresund University
- Daniel Direktor, (Project Coordinator) Øresund Science Region/Øresund University
e-mail: daniel@oresundinnovation.org

Minutes of the Nordic Technology Transfer Network Finland meeting

Venue: Tampere University of Technology, Korkeakoulunkatu 10, Tampere.

Time: 13.00 – 15.00, November 1st, 2007.

Agenda:

13.15-13.45 Background and rationale for a Nordic network for technology transfer – Case: Denmark. By Gert Balling.

14.10-14.30 The Nordic Technology Transfer Network – a needs driven knowledge pool. By Gert Balling.

14.30-15.00 Questions, discussion and further actions

13.15: Presentation by Gert Balling: *”Denmark – The National Network for Technology Transfer”*

The workshop was opened with an introductory presentation by Gert Balling, Secretary General of the National Network for Technology Transfer (Denmark). Mr. Balling presented a brief history of the idea behind the project. It was explained that funding to the current project was given by NICE (Nordic Innovation Council). The idea behind the Nordic Technology Transfer Network is that, unlike previously seen networks, it is primarily needs driven. The specific conditions under which Nordic technology transfer people operate were described as work in isolation, lack of information between the Nordic TT offices, little collaboration etc.

The objectives of Nordic Technology Transfer Network (NTTN) are to enhance innovation among TT actors, as well as bringing the Nordic TT Community closer together. Our hopes are to successfully cross-fertilize the Nordic TT network with an e-based infrastructure.

13.45-14.10 - Break.

14.10: Presentation of the NTTN by Gert Balling:

“The Knowledge Pool: A new type of needs driven network”

The new Knowledge Pool system, on which the Nordic Technology Transfer Network will be based, is the e-mail equivalent of word-to-mouth. The key characteristics and features of the novel system can be split into a *conventional* and an *unconventional* part.

Conventional part:

- A simple e-mail system that connects technology providers, technology-seekers and people commercializing technology
- Anyone can write an e-mail to the entire group
- Qualities of replies are, from experience, generally very high. Usually between 8-15 replies per posed question.

Unconventional part:

- Distinguished from other e-mail groups, a few rules regarding the formulation and length of questions must be observed to keep the network traffic simple and flowing.
- All queries must be formulated as questions and should not be more than one sentence only
- Replies to questions are sent directly to the questioning part securing privacy and relevance.
- Offers and advertizing are not allowed.

Experience from the UK knowledge pool shows that the network is a valuable tool for corporates, technology brokers and science park business development teams as well. The network offers possibilities of finding and providing technology, company contacts, experience and market knowledge as well as investor-seeking. There are plans of setting up networks in different parts of the world, including South-East Asia and Australia. Eventually it will be possible to tap onto the information flow of these networks or even join them.

The network will be easy to use since it is based on the Google-groups technology. It is thereby free of charge, fast and simple. It requires very little effort to join the network. Anyone in the technology commercialization community is welcome to join.

14.30 : Open discussion and questions

Several questions were asked regarding the function of the network and the concept of a Nordic Technology Transfer Network in general. The questions and answers will here be summarized in short. The questions were answered by Gert Balling.

What is your project implementation plan?

Introductory meetings presenting the NTTN and the perspectives involved are held across the Greater Nordic Region this month (i.e. Norway and Iceland – a joint Danish/Swedish workshop was held in Copenhagen, October 16th). In December, we launch the project on a pilot basis, and it will then be possible to view the full list of network members. In January/February we will do an evaluation of the NTTN, and see if and how the network members found it useful. We will then

accordingly readjust and fine-tune the system. The Nordic Technology Transfer Network will, however, run continuously all along the readjustment process. After the evaluation we will send out information to everyone involved about the results and/or system adjustments. The system is basically driven by the needs of its members. If people use it, it will be sustained. In Denmark, the NTTN has the support of the Danish National Tech-Trans Network and will continue to have so.

What is thought about the usage of the network; could it lead to new research collaboration between universities or between universities and businesses?

It can be used for a wide range of relations-networking. Industry usually doesn't know who to contact at the universities. But this system facilitates the process of search-and-finding. It is fast, simple and does not take up much of your time. The regional aspect will be accelerated, if we ask the University tech-trans units to bring their corporate contacts into the network with them. Companies will basically find this system very useful. If they already have a contact at a university, they will be more prone to join. We need a good mix of science parks, companies, SME's, universities etc. All the players in the tech-trans field - this is what we label "the important critical mass".

What type of questions are posed by industry professionals? How specific or broad are these?

Usually the questioner wants to know who is doing research in a specific field. As I recall it, most are somewhere in between very wide questions and specific field-related questions. There will be questions that will not fit the categories, e.g. from university peer to university peer. The aim however, is to connect the universities with corporates/businesses.

Are you anonymous when posing a question to the entire NTTN network?

No. When asking a question, you will be visible to others, since they have to know to whom they should reply. After the pilot-period, we could discuss and evaluate this specific setting. Are there many people that will only join the network if they can remain anonymous, we will naturally reconsider.

Is the list of network members displayed anywhere?

The first year we will maintain a public list of members. The network is new, and people want to see who the other members are. Secondly, it is important to show that the network is fast-growing. With regards to NICE (Nordic Innovation Council), it is also required of us to keep a track record of the network membership development. So the list will be visible to all network members, at least during the first year of the project.

Are there already functioning networks in other places?

The UK network is fully functional at present. The Nordic will be the second biggest network when launched, as the other regional networks are still in the seminal phase.

What happens if you, say, ask two questions instead of just the one allowed?

We will have local moderators that will then contact you by mail, and remind you of the rules. We will also do this if you, by mistake or else wise, formulate your questions in a way that does not comply with the network regulations.

Where will moderating responsibility be placed in the Nordic Network, and do the questions or answers pass thru the moderator?

There will most likely be a local moderator in each country, monitoring the network traffic and securing that the simple rules are being followed. These local 'gate-keepers' can also help make the questions more specific, if required.

The questions and answers do not pass thru the local moderator. The moderator will interfere only afterwards if needed. The answers are strictly private. Due to demand of secrecy, nobody screens the answers, as they only concern the questioner and the answering part.

Eventually, if network members repeatedly and intentionally break the rules, they will be banned from using the NTTN.

Any restrictions on what kind of e-mail-address (e.g. @hotmail.com) you can use to join the network?*

**The question remained unanswered at the meeting. We have since, however, contacted network developer Mark Thompson (University of Manchester, Intellectual Property Ltd.) and presented him with the question. The answer to the question is yes, it is possible to use whichever e-mail address is preferred. As long as the network organizers can confirm, that the e-mail address indeed belongs to an eligible tech-trans professional, any e-mail address can be used.*

Will questions posted to the Nordic Technology Transfer Network be shown at other networks?

No. Being a member, however, of this network will allow you to contact other networks. You can then ask the question to the whole range of local networks. But being a member of the Nordic Knowledge Pool serves as your entry portal to the international knowledge pool community.

Have you considered sectorizing the network into specific fields of interest?

No. At the moment, members in the UK are happy about all questions going to everybody. It shows that the system actually works. In time, it will be easy and free for everyone to sectorize the Knowledge Pool system.

Gert Balling rounded off by making clear that the Nordic Technology Transfer Network will have English as working language. This makes it possible for members of other regional networks to 'tap' into the Nordic network for information and inspiration. It was emphasized that the project responsible (Gert Balling, Noel Jacobsen and Daniel Direktor) would contact the workshop

attendees shortly, with additional information. At the same occasion we will inquire about whether or not you would like to join the upcoming network. The Nordic Technology Transfer Network is due to be launched December 2007.

The meeting was then adjourned at 15.00.

Present:

- Tuomas Mennola - Helsinki University of Technology
- Jari Rantala - University of Helsinki
- Hannu Juuso - Tekes, The Finnish Funding Agency for Technology and Innovation
- Tuire Tuominen - Tampere University of Technology
- Mikko Nieminen - Tampere University of Technology
- Hannu Jyllila - Tampere University of Technology
- Mari Villikari - Tampere University of Technology
- Katja Ayres - Tampere University of Technology
- Reijo Itkonen - Finn-Medi Research Ltd.

As organizers

- Gert Balling, Danish National Network for Technology Transfer
- Janne Virtapohja - Tampere University of Technology
- Daniel Direktor, (Project Coordinator) Øresund Science Region/Øresund University
e-mail: daniel@oresundinnovation.org

Minutes of the Nordic Technology Transfer Network Norway meeting

Venue: University of Stavanger, T-401 Arne Rettedals Hus, 4036 Stavanger.

Time: 14.00 – 16.30, November 15th, 2007.

Agenda:

14.00-14.20

Background and rationale of a Nordic network for technology transfer.

- *By Gert Balling*

14.20-15.20

The Nordic Technology Transfer Network – a needs driven knowledge pool.

- *By Gert Balling*

15.20-

Questions, discussion and further actions.

14.00: Presentation by Gert Balling:

”Denmark – The National Network for Technology Transfer”

The workshop was opened with an introductory presentation by Gert Balling, Secretary General of the National Network for Technology Transfer (Denmark). Mr. Balling presented a brief history of the idea behind the project. It was explained that funding to the current project was given by NICE (Nordic Innovation Centre).

The idea behind the Nordic Technology Transfer Network is that, unlike previously seen networks, it is primarily needs driven. The specific conditions under which Nordic technology transfer people operate were described as work in isolation, lack of information between the Nordic TT offices, little collaboration etc.

The objectives of this novel Nordic Technology Transfer Network (NTTN) are to enhance innovation among TT actors, as well as bringing the Nordic TT Community closer together. Our hopes are to successfully cross-fertilize the Nordic TT network with an e-based infrastructure.

14.20: Presentation of the NTTN by Gert Balling:

“The Knowledge Pool: A new type of needs driven network”

The Knowledge Pool system was developed by Mark Thompson (*University of Manchester Intellectual Property Ltd.*), due to the sometimes hard conditions in the Technology Transfer world. It is generally hard to get funding, there is little or no collaboration between the regional innovation systems and a lack of information flow between tech-trans offices pervades; this holds for the Nordic tech-trans sector as well. The new Knowledge Pool system, on which the Nordic Technology Transfer Network will be based, is the e-mail equivalent of word-to-mouth. The key characteristics and features of the novel system can be split into a *conventional* and an *unconventional* part.

Conventional part:

- A simple e-mail system that connects technology providers, technology-seekers and people commercializing technology
- Anyone can write an e-mail to the entire group
- Qualities of replies are, from experience, generally very high. Usually between 8-15 replies per posed question.

Unconventional part:

- Distinguished from other e-mail groups, a few rules regarding the formulation and length of questions must be observed to keep the network traffic simple and flowing.
- All queries must be formulated as questions and should not be more than one sentence only
- Replies to questions are sent directly to the questioning part securing privacy and relevance.
- Offers and advertizing are not allowed.

Experience from the UK knowledge pool shows that the network is a valuable tool for corporates, technology brokers and university business development teams as well. The network offers possibilities of finding and providing technology, company contacts, experience and market knowledge as well as investor-seeking. There are plans of setting up networks in different parts of the world, including South-East Asia and Australia. Eventually it will be possible to tap onto the information flow of these networks or even join them.

The network will be easy to use since it is based on the Google-groups technology. It is thereby free of charge, fast and simple. It requires very little effort to join the network. Anyone in the technology commercialization community is welcome to join.

14.50: Questions:

Several questions were asked regarding the function of the network and the concept of a Nordic Technology Transfer Network in general. The questions and answers will here be summarized in short. The questions were answered by Gert Balling.

Is it possible to include technology offers, patent offers etc. when asking a question?

One is not allowed to say: “I have this patent – who wants it” since this would qualify as advertizing. But it is possible to formulate your question in order seek out people who would be interested e.g. “Does anyone know of a person/company/office that would be interested in...?”

What if one would like to see the answer to a question?

Due to concerns of spamming, answers are sent directly to the questioning part. If there are several people that could benefit from the answer, they would have to contact the initial questioner and inquire about the answers he or she received. Alternatively, they can formulate a similar question of their own.

Who is in the Network’s Steering Group?

The steering group members are geographically located in each of the five Nordic countries: Asta Sif Erlingsdottir (IS), Per-Oloff Hegg (S), Rosalind Russell (NO), Janne Virtapohja (FI), Noel Brings Jacobsen (DK) and Gert Balling (DK – Chairman).

You said that there will be one contact-person from each business/institution?

Yes, this contact person will be cleared to send and receive questions and e-mails. This is the only real investment one makes – someone needs to use a little time to go through the incoming questions and, hopefully, answer some of them. This ‘gate-keeper’ will distribute the questions and answers throughout his/hers workplace. They know to whom and where to forward questions to. It is up to each and every institution/company to select the person most suited for maintaining network membership.

How do you define one sentence questions? Dealing with patents myself, I know that patent names and explanations take up more than one sentence.

The rule of thumb is one sentence questions. You have to be able to pose your question in one or two lines. If it is interesting, it should be easy for network members to tell. Experience from the UK

shows that it is surprising how dense and simple one can formulate even advanced technology requests, patents and technology inquiries.

With industry partners and companies, there is often a certain paranoia within their field. Posting a question to a group containing competitors might give away clues of what a company is planning or doing research in. How do you deal with this problem?

We have discussed the idea of anonymity. We will draw on UK experiences. Initially we will not have anonymity, unless several network members insist. It might then be possible for companies to pose questions through a third party or through their university contacts. Bottom line though is this: if you do not wish to give away clues of what you are doing due to secrecy, it might be better not to pose the question at all.

How and why would industry use this? What are their incentives?

They will use the network if they want to find research groups dealing with areas they are interested in. Industry can focus on whatever areas they wish within the network of members. Eventually, they are able to get any contact they want, without spending money and too much energy.

Have you considered sectorizing the network into specific fields of interest?

No. At the moment, all members of the UK network are happy about all questions going to everybody. It shows that the system actually works. In time, it will be easy and free for everyone to sectorize the Knowledge Pool system on their own.

What about the quality of the answers received - have you checked it?

Checking the incoming answers is difficult due to privacy concerns. UK user surveys proved that most answers, by far, were indeed of high quality.

Is one expected to answer back when receiving an answer to a posed question?

That is entirely up the individual.

Do you post questions through the website or through one's own e-mail? And what about answers?

You ask questions through your own e-mail address. All questions asked to the network are sent to a single e-mail address, namely NordicTT@googlegroups.com. Answers will be sent directly to your own e-mail address, provided that the answerer remembers to reply to you only and not the entire network.

Have you cleared everything regarding the use of the system for this (network) purpose with Google? - Especially with regards to the legal rights, licenses, terms of use etc. that Google has?

We do not have any concerns in this direction. We are not using the Google system in a commercial way, i.e. we are not charging money for membership. The Googlegroup system is intended to be free for people to use, the way we are using it.

The meeting was then adjourned at 15.15.

Present:

- Gunnar Baustad - Universitetet i Stavanger
- Fredrik Feyling- Stavanger Universitetssjukehus
- Brage Wårheim Johansen - StatoilHydro New Energy
- Helga Idsøe Kloster – Skape
- Mikal Nordbø - Prekubator AS
- Odd Skjæveland - Hamsø Patentbyrå
- Kristel Skorge - Universitetet i Stavanger
- Anne Solheim - Rogaland Fylkeskommune
- Katrine Vetlesen - Prekubator AS
- Petter Westnes - IRIS Forskningsinvest AS
- Anne Cathrin Østebø - Prekubator AS

As organizers

- Gert Balling, Danish National Network for Technology Transfer
- Rosalind Russell - Prekubator AS
- Daniel Direktor, (Project Coordinator) Øresund Science Region/Øresund University
E-mail: daniel@oresundinnovation.org

Minutes of the Nordic Technology Transfer Network Iceland meeting

Venue: University of Iceland, Tæknigarði, Dunhaga 5.

Time: 09.00 – 11.00, November 23^d, 2007.

Agenda:

09.00-09.30 Welcome & Breakfast

09.30-10.00 “Denmark – *The National Network for Technology Transfer* “.

- By Gert Balling.

10.00-10.30 “*The Nordic Technology Transfer Network – a needs driven knowledge pool*”.

- By Gert Balling.

10.00-11.00 Questions, discussion and further actions

09.30: Presentation by Gert Balling: “*Denmark – The National Network for Technology Transfer*”

The workshop was opened with an introductory presentation by Gert Balling, Secretary General of the National Network for Technology Transfer (Denmark). Mr. Balling presented a brief history of the idea behind the project. It was explained that funding to the current project was given by NICE (Nordic Innovation Council). The idea behind the Nordic Technology Transfer Network is that, unlike previously seen networks, it is primarily needs driven. The specific conditions under which Nordic technology transfer people operate were described as work in isolation, lack of information between the Nordic TT offices, little collaboration etc.

The objectives of Nordic Technology Transfer Network (NTTN) are to enhance innovation among TT actors, as well as bringing the Nordic TT Community closer together. Our hopes are to successfully cross-fertilize the Nordic TT network with an e-based infrastructure.

10.00 Presentation by Gert Balling:

“The Nordic Technology Transfer Network: A new type of needs driven network”

The new Knowledge Pool system, on which the Nordic Technology Transfer Network will be based, is the e-mail equivalent of word-to-mouth. The key characteristics and features of the novel system can be split into a *conventional* and an *unconventional* part.

Conventional part:

- A simple e-mail system that connects technology providers, technology-seekers and people commercializing technology
- Anyone can write an e-mail to the entire group
- Qualities of replies are, from experience, generally very high. Usually between 8-15 replies per posed question.

Unconventional part:

- Distinguished from other e-mail groups, a few rules regarding the formulation and length of questions must be observed to keep the network traffic simple and flowing.
- All queries must be formulated as questions and should not be more than one sentence only
- Replies to questions are sent directly to the questioning part securing privacy and relevance.
- Offers and advertizing are not allowed.

Experience from the UK knowledge pool shows that the network is a valuable tool for corporates, technology brokers and science park business development teams as well. The network offers possibilities of finding and providing technology, company contacts, experience and market knowledge as well as investor-seeking. There are plans of setting up networks in different parts of the world, including South-East Asia and Australia. Eventually it will be possible to tap onto the information flow of these networks or even join them.

The network will be easy to use since it is based on the Google-groups technology. It is thereby free of charge, fast and simple. It requires very little effort to join the network. Anyone in the technology commercialization community is welcome to join.

10.40 : Open discussion and questions

A few suggestions/comments were made regarding the function of the network and the concept of a Nordic Technology Transfer Network in general. The comments and answers will here be summarized in short.

Ágúst H. Ingþórsson initially opened by stating that The University of Iceland will join the Nordic Technology Transfer Network, even though he has not used the existing UK knowledge pool a lot. It is often very specific, but definitely interesting to see tech-trans in action, and especially to get people thinking in tech-trans terms. Listening to ‘traffic’ is very giving, and it does not take much effort.

Mr. Ingþórsson explained that Icelandic technology transfer is in its nascent phase. It is difficult to continuously try to compete and catch up with other tech-trans professionals that know more, and have much longer experience. Icelandic technology transfer has potential, but needs to be ‘pushed’ in the right direction, something the Nordic Technology Transfer Network might facilitate.

Mr. Ingþórsson said that membership of the network would be a very useful internal exercise. It could help develop competence and knowledge levels within the Icelandic academy, research institutions and industry.

Gert Balling said that Mr. Ingþórsson's idea is very similar to one that was brought forward when we held an introduction meeting in Stavanger, Norway; one purpose of connecting all the Nordic tech-trans-forums could be to develop competences and exchange tech-trans experiences in a Nordic context.

Noel Brings Jacobsen added that the critical point now, is to get investors and businesses to join the Nordic Technology Transfer Network. Businesses are needed 1)- as a counterpart to the many public/private research institutions involved, and 2)- to join in with posing and answering questions. This is indeed one of the big challenges facing the pilot phase of the project.

Mr. Jacobsen said that after the test/pilot period, we (the initiators) will evaluate the Nordic Technology Transfer Network in terms of what worked, what did not, what was good and what was bad. The next step is then to improve the system, test it once again, and end up with a conclusion of the system's usage that we will share with all of you. Afterwards, based on the results of the pilot and the reactions from NICE (Nordic Innovation Council, funders) we will see what the future of this Nordic network will be like.

Basically, said Mr. Jacobsen, one of the main missions behind this project is simply to line up a “who's who” in the Nordic technology transfer sector.

The meeting was then adjourned at 11.00.

Present:

- Andri Heiðar Kristinsson – Innovit
- Ágúst H. Ingþórsson - Rannsóknafjónusta H.Í.
- Ásta Valdimarsdóttir – Einkaleyfastofu

- Elfa Íshólm Ólafsdóttir – Einkaleyfastofu
- Elín Ragnhildur Jónsdóttir – Einkaleyfastofu
- Ester Ósk Traustadóttir - Rannsóknþjónusta H.Í.
- Jón Óskar Pétursson - Samtök sveitarfélaga á Norðurlandi vestra
- Kristín Halldórsdóttir - Evrópumíðstöð Impru
- Kristján Kristjánsson - Háskólinn í Reykjavík
- Magnús Már Einarsson – Innovit
- Ragnheiður Héðinsdóttir - Samtök iðnaðarins
- Sigurður Guðmundsson - Rannsóknþjónusta H.Í.
- Viðar Helgason - Rannsóknþjónusta H.Í.
- Vilmundur Guðnason – Hjartavernd
- Þórarinn Sólmundarson – Byggðastofnun
- Þórdís Kristmundsdóttir - Hugverkanefnd

As organizers

- Gert Balling, Danish National Network for Technology Transfer
- Ásta Sif Erlingsdóttir – University of Iceland
- Noel Brings Jacobsen, Øresund University/Øresund Science Region
- Daniel Direktor, (Project Coordinator) Øresund Science Region/Øresund University
E-mail: daniel@oresundinnovation.org

2nd NTTN Steering Group meeting

Öresundshuset in Lund - Tuesday, April 1st 2008. 12.00-16.00.

Minutes

Agenda

- **12.00-13.00 Lunch**
- **13.00-13.30 Recapturing the status of the project**
- **13.30-14.00 Administrative reporting and milestone deliveries, NTTN finances and organization (co-financing, spent hours etc.)**
- **14.00-15.30 Implementation of the new Knowledge Pool system including mobilization of old and new peers/members, securing continuity in the question flow as well as tech-trans information on each Nordic country for final reporting**
- **15.30-16.00 Further discussion and any other business**

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- **13.00: Recapturing the status of the project**

Gert Balling opened the meeting with a brief description of the general development. All workshops have been held and the Nordic Technology Transfer Network has approx. 100 network members at present.

The all-important question is how to make members use the Network and to make more people join the network.

Janne Virtapohja mentioned the uncertainty of network contribution outcome as a possible hindrance to more/new members. It is problematic that a member does not know if a contact has been established after one has given out the name of an acquaintance. It was then agreed among the steering committee, that all questions asked within the NTTN should be regarded as non-confidential for all involved parties.

The next point of discussion was the current NTTN manual.

It was generally agreed upon that the manual is too long and too comprehensive.

It is unnecessary with such a long manual, when it is fairly easy to learn how to use the simple e-system.

Gert Balling said that we (Gert, Noel and Daniel) will produce a ‘quick-guide’ to the NTTN system. This will likely take the form of a three-step instruction that will be added to all the e-mail footers of mails sent/received by NTTN members. This way, by looking at the mails sent out through the network, members will know how to formulate questions and where to send them.

The ‘old’ manual will be renamed and stored as “Manual – long version” alongside the “quick-guide”

- **13.30: Administrative reporting and milestone deliveries, NTTN finances and organization**

Noel Jacobsen spoke of the final project report. It is important that all steering committee members agree on the content of the final report, as all members will sign the document and be listed as co-authors.

Steering committee members are to supply Daniel with information on their country and its tech-trans status. Daniel should be pinpointed in the right direction with regards to relevant information, data, reports, presentations etc. Initially, anything goes – all information will be warmly received. We will make a template of the questions/topics to be included in the final report section on each Nordic country and send it to all steering committee members for approval.

The final report should include approx. 2-3 pages of information on each Nordic country.

A draft of a two-page feature article describing the NTTN-project and its current status has been submitted to all steering committee members for approval. The feature article is well suited to be distributed through local newsletters and serves to generally raise awareness of the NTTN. The current wording of the feature article, especially the section describing local tech-trans circumstances, is open for contributions/changes. Any such changes or rewritings can be sent to Daniel. Deadline for optional contribution to/changing of feature article: April 10th (for the remainder of the agreed deadlines, please see end of document).

Noel Jacobsen said that with regards to reimbursement of expenses and spent work hours, all steering committee members need to hand in a signed document stating that he/she has spent all of the assigned work-hours. Noel Jacobsen would make a template of the document that each member needs to fill out stating working hours, travel, time and expenses. This document will then be distributed to the steering committee for completion.

- **14.00: Mobilization of old and new peers and the securing of continuity in the question flow.**

Gert Balling asked the steering committee how we should get new members to join the NTTN as well as securing a continuation of network traffic.

Rosalind Russell stated that more questions flowing through the NTTN would be required to enhance the visibly functioning system and to make it more attractive to new members.

Janne Virtapohja said that his mobilization of new members was mainly due to him knowing people working for tech-trans offices or the industry. Janne said it was fairly easy to get people involved, since the system enables people to capture new technologies, while the philosophy being “This might be a good system, so why not try?” Much is owed to having personal networks, though. Janne said it would be difficult to suggest membership of the NTTN to a person within a company that one does not know. It is simply a matter of connections and a matter of trust.

After a short discussion on the subject, it was agreed that individual members of science parks should be allowed to sign up to the NTTN. Small companies and science park tenants with few employees are welcome as they can also contribute with questions and answers. These small companies should also be approached for membership and the NTTN flyer/folder could be used for this purpose.

Gert Balling said that the next few months are critical when it comes to securing network traffic and keeping the current network members up to the mark. The steering committee then agreed, in unison, to ask more questions to the network. Each steering committee member commits him or herself to ask 10+ questions to the network over the next two months. Hopes are that this will act as an effective ‘saline injection’ to the NTTN.

As the last topic of discussion, the idea of applying NICE for funding to have a meeting/conference of all registered NTTN members (possibly in October) was debated. Possible arguments could be the need for further cooperation as well as enhancing personal relations between network members and, equally important, identification of the NTTN users’ needs. Fact is that there is not and never has been a Nordic conference on regional technology transfer. It was decided to go on with the idea of a Nordic TT-conference. A suggestion was to have each steering committee member write approx. five lines on why they deem such a conference relevant and what they would like the conference to contain. We will then further submit this idea of a Nordic technology transfer conference to NICE.

The meeting was then adjourned at 15.30.

Below, a summary of the different deadlines agreed upon at the meeting.

April 10th: Deadline for adding and/or contributing to the wording of the feature-article.

April 10th: Distribution of a preliminary template, containing 5-10 questions that should be answered and act as the basis of the “national profile reporting” part of the final project report.

April 15th: Deadline for adding of questions and/or items to the above described questions template.

April 16th: Distribution of the final set of questions to be used in national profile reporting.

May 1st: Deadline for submitting the final information on local conditions/answers to questions.

May 15th: Distribution of a first draft with the national report part of every Nordic country.

June 1st: Deadline for approval of the national profile chapters by all steering committee members.

Present:

Gert Balling (The National Network for Technology Transfer, Denmark)

Ásta Sif Erlingsdóttir (University of Iceland)

Per-Olof Hegg (Lund University)

Noel Brings Jacobsen (Øresund University)

Rosalind Russell (Prekubator Tech-Trans Office)

Janne Virtapohja (Tampere University of Technology)

Daniel Direktor (keeper of the minutes, Øresund University).

Final NTTN Steering Group meeting

Tynnyrintekijä meeting room, Helsinki. Tuesday, August 12th 2008.

09.00-12.00 a.m.

The overall purpose of the final steering group meeting was to decide on the future of the Nordic Technology Transfer Network. The meeting enabled the project steering group to jointly formulate the future ‘policy recommendations’ as well as the ‘target group specific recommendations’ required by the Nordic Innovation Centre. Furthermore, the steering group assembled in order to go through and approve the final project report and its specific content.

Minutes

The meeting began with an examination of the project report. Steering group members offered their suggestions and corrections regarding specific content and formulations. These were, when generally accepted and agreed upon, written into the final project report. The following sums up the main points agreed upon during the meeting as well as the most important decisions regarding immediate action.

- Rosalind Russell offered to proofread the report and its text, an offer that was warmly welcomed by all. It was agreed that Daniel Direktor would send Rosalind Russell the final draft for proofreading as soon as possible.
- Regarding the new Knowledge Vine platform, it was jointly decided that all steering group members will be given moderating abilities in the system’s Nordic Technology Transfer Network group. They will then be able to ‘clear’ questions and requests for membership, as moderators are responsible for members/prospective members from their own countries. The steering group takes a joint responsibility for attracting new network members from their respective countries. In case a non-Nordic institution/business wishes to join the network, Gert Balling will contact them and handle their membership process.
- The steering group will see to that the list of public Nordic TT offices/units will be extended and elaborated on. Each steering group member is responsible for the country they represent within the group. The list is at present incomplete, and when adding names and other relevant information, the existing template should be used. The deadline for submission of new offices/units to the list is Monday, August 18th.
- Regarding the report’s national profile chapters, steering group members are ultimately responsible for their content and approval. All corrections and additions should be sent ASAP to Daniel.

- The steering group will update the member list and, through personal contacts, attempt to get as many "old" Google-members as possible to move to the new Knowledge Vine system. It was emphasized as being important for the survival of the network, that members from the business community especially are assisted when switching system.

The main item of discussion, and the most time consuming part of the meeting, was the formulation of project specific policy recommendations, intended to be a main part of the project report and its conclusion. The specific content and wording of these recommendations and conclusions can be found in the final project report.

Present:

Gert Balling (The National Network for Technology Transfer, Denmark)

Ásta Sif Erlingsdóttir (University of Iceland)

Rosalind Russell (Prekubator Tech-Trans Office)

Janne Virtapohja (Tampere University of Technology)

Daniel Direktor (keeper of the minutes, Øresund University).

Not present:

Johan Drott (Lund University)

Appendix 8 – Feature Article

The Nordic Technology Transfer Network

Oh no, not another network?

Project purpose

In December 2007, the Nordic Technology Transfer Network (NTTN) was launched, counting members from different sectors including public research institutions and industry. But how does this network differ from other tech-trans networks and, more relevant, what does it have to offer?

The NTTN is based on a few simple facts about Nordic technology transfer as it looks today. Technology transfer professionals are generally isolated and unaware of relevant knowledge held by peers across the Nordic Region. When one is dependent on self-found information and technology only, the possibility of benefiting from easily obtained and free-for-all technology guidance is missed. Tech-trans professionals often operate in new market and technology areas; supporting knowledge, information and experience is therefore much valued. The Nordic Technology Transfer Network aims to give all players within the tech-trans field a tool to easily ‘dip’ into a large pool of knowledge. Needing knowledge and technology, and being willing to share the same, is known to public tech-trans offices, industry and technology brokers alike. By providing an easy-to-use and free e-tool, the NTTN seeks to cross-fertilize the Nordic innovation sector. This being the aim, the Øresund University and the National Danish Network for Technology Transfer applied for and was granted a 1-year project funding from the Nordic Innovation Council (Project no. 07051). We initiated the project by conducting a round of introductory workshops, one in each Nordic country. At these workshops we presented the network idea to local tech-trans representatives from all interested sectors of society. The idea was to start off with a pilot phase. During this, the network members would become familiar with the network idea and the simple e-based infrastructure that makes up the backbone of the network. After the initial pilot phase, improvements based on observation and user-evaluation would lead to a new and improved networking tool.

What did we discover?

The general conclusions from the local NTTN-workshops held in Copenhagen, Tampere, Stavanger and Reykjavik pointed in two directions: firstly, a great and sincere interest in entering a Nordic tech-trans network was evident. The participating Nordic tech-trans professionals acknowledged that the NTTN enters a vacant spot, namely providing a much needed link between Nordic tech-trans peers. Participants simultaneously emphasized the lack of a “who’s who?” within Nordic tech-trans as a main concern – one of the desired effects of the NTTN. Secondly, the experiences from the conducted workshops present an image of a highly diverse and differentiated region tech-trans wise. Workshop discussions and testimonials implied a substantial difference in the maturity

of the regional tech-trans environments in terms of experience, legislation and the level of organization. Preliminary indications pointed towards the following national differences across the Nordic Region: the Finnish tech-trans environment was organized at university level with a high degree of informal knowledge exchange between roughly a hundred technology transfer professionals. The Norwegian model has developed from the financing support of the Research Council of Norway in individually organized regional hubs. The model is evolving through regional associations such as TTO Norge, whose aim is to strengthen bonds and competence and create an outward facing 'single voice'. Strategic groups are focusing on common policies for IP and TTO models. The Swedish tech-trans environment was more fragmented because of the professors' privilege that opens up a broader range of channels and stakeholders for commercialization of inventions.

The Icelandic tech-trans representatives depicted an emerging dynamic and motivated environment still in search of a critical mass of tech-trans activity. Denmark was the only country to have an existing formalized national tech-trans network enabling its members to take part in specialized and educational courses/seminars on knowledge sharing and technology transfer. The yearly commercialization survey for Danish universities, university hospitals and national laboratories has shown extraordinary development rates the latest years, making the year 2005-2006 the first ever where revenues from commercialization exceeded costs.

The most forward looking discovery across the region was, however, the identification of a demand amongst Nordic tech-trans professionals for enhanced Nordic cooperation and an outline of the Nordic tech-trans sector.

What are the perspectives then?

The future of a collaborative Nordic tech-trans sector remains, to a wide extent, a wild card. A real interest in cooperation across the Nordic Region is evident from our workshops and the discussions that followed. The Nordic Technology Transfer Network addresses these demands by offering a means of strengthening the informal contacts between the Nordic tech-trans environments. By paving the way for an easy sharing of knowledge through a simple e-infrastructure, the NTTN mobilizes the unearthed demands of Nordic tech-trans professionals.

Even though the NTTN provides concrete ways of addressing the questions and challenges relating to Nordic technology transfer, our experiences generate further questions themselves: will it be possible and even desired to seek a formalization of this user driven network, i.e. regular conferences? Are there other, perhaps more efficient ways of strengthening Nordic technology transfer than the e-based infrastructure we have chosen as our tool? What is the potential, and equally important, the viability of a Nordic tech-trans network after the end of our pilot phase? The questions generated by our project are as important as the approximated answers we seek to give, through the experiences of the Nordic Technology Transfer Network's pilot phase.

Pinpointing the barriers faced by Nordic tech-trans professionals while offering a new way to increase the accessibility of technology, has been some of the valuable results. By setting a Nordic tech-trans agenda, the NTTN-project has created a national agenda in each of the Nordic countries, thereby stimulating thoughts on regional technology transfer. Doing this, the Nordic Technology Transfer Network has brought forth a viable and practical tool that addresses the Nordic tech-trans challenge; a novelty that could, in the long run, benefit the entire region and its inhabitants.

To join the Nordic Technology Transfer Network please go to www.techtrans.dk/nttn

At the website you will be able to read more about the network, its development and its progress. At present, the Nordic Technology Transfer Network has 90 members across the Nordic Region representing a total of 64 businesses, public research institutions and technology/licensing companies. The Nordic Technology Transfer Network is free of charge.

The Nordic Technology Transfer Network is led jointly by [The National Danish Network for Technology Transfer](#) and [Øresund University/Øresund Science Region](#). The Nordic Technology Transfer Network is funded by the [Nordic Innovation Council](#) (Project 07051).

Appendix 9 – Project Milestone Plan

Project Milestone Plan

Item	Activity	Due date	Responsibility
1.	Project start-up	01.09.2007	Project owner
2.	Project start-up meeting/kick-off	30.05.2007	NICe
3.	Steering group in place	01.09.2007	Project owner
4.	Steering group meeting	14.09.2007	Project owner
5.	Communication plan finalized	01.10.2007	Project owner
6.	Workshop I. Denmark and Sweden (Copenhagen). Presentation of the project and setting up the regional/national moderator. Present pilot manual/brochure on the network/system	16.10.2007	Project owner
7.	Workshop II. Finland (Helsinki/Tampere). Presentation of the project and setting up the regional/national moderator. Present pilot manual/brochure on the network/system	01.11.2007	Project owner
8.	Workshop III. Norway (Stavanger). Presentation of the project and setting up the regional/national moderator. Present pilot manual/brochure on the network/system	15.11.2007	Project owner
9.	Workshop II. Iceland (Reykjavik). Presentation of the project and setting up the regional/national moderator. Present pilot manual/brochure on the network/system	30.11.2007	Project owner
10.	Implement the knowledge pool system through an evaluation of functionality and usability	1.12.2007	Project owner
11.	Status report	15.01 2008	Project owner
12.	Steering group meeting. Revise and adjust the knowledge pool system based on feed back on functionality and usability	01.03.2008	Project owner
13.	Revised manual/brochure	15.03.2008	Project owner
14.	Finalize knowledge pool subsite under techtrans.dk with manual/brochure information as well as data on public research institutions techtrans offices	01.04.2008	Project owner
15.	All members will be approached and asked to pinpoint potential new members for the Nordic Regional TT Network. Success criteria is 100 members in all before 01.09.2008.	01.04.2008	Project owner
16.	Each month (May – August) we will collect comments on the functionality and usability of the system from the regional/national moderators. Adjustments that would further ease the use of the system will be added to the final administrative report.	01.05.2008 01.06.2008 01.07.2008 01.08.2008	Project owner
17.	Project finalization meeting	To be decided	NICe
18.	Final administrative report	01.09 2008	Project owner
19.	Project end date	01.09 2008	Project owner



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Nordic Innovation Centre

Nordic Innovation Centre

The Nordic Innovation Centre initiates and finances activities that enhance innovation collaboration and develop and maintain a smoothly functioning market in the Nordic region.

The Centre works primarily with small and medium-sized companies (SMEs) in the Nordic countries. Other important partners are those most closely involved with innovation and market surveillance, such as industrial organisations and interest groups, research institutions and public authorities.

The Nordic Innovation Centre is an institution under the Nordic Council of Ministers. Its secretariat is in Oslo.

For more information: www.nordicinnovation.net