IKED ROUNDTABLE

Towards Designing and Implementing Governance Mechanisms for Innovation Policy: Nordic Experiences and Challenges

IKED
International Organisation for
Knowledge Economy and Enterprise Development

On the intensifying challenge of innovation policy

Accelerating scientific and technical progress together with the declining costs of diffusing and accessing information bring a hugely increased supply of new knowledge as well as capacity to articulate the demand for better solutions to compelling problems. In this interface between supply and demand, the scope for innovation is magnified. The innovative performance of society hinges on a range of enabling conditions, however, including education and learning systems, entrepreneurship, venture capital, and organisational change. An effective policy response requires a systemic approach that cuts across a spectrum of domains and ministerial responsibilities. While each country is confronted with its specific challenges, there is scope for learning and inspiration from the experience of others.

Towards Designing and Implementing Governance Mechanisms for Innovation Policy: Nordic Eperiences and Challenges
Conclusions of IKED Roundtable

In the past years, several of the Nordic countries have intensified their efforts to put in place policies and conditions which would allow their firms and individuals to make better use of research and knowledge for innovations and economic growth The Nordic countries all have strenths in this area. At the same time however, they are confronted with weaknesses in their institutions and framework conditions which limit the economic and social benefits they derive from their innovative capacities.

Against this backdrop, on November 12, 2003, at IKED headquarters in Malmö, fifteen policymakers and experts met to address innovation issues in Nordic countries. The purpose was to exchange experience on ongoing policy reforms and to examine what key factors may enable a strengthening of governance mechanisms for innovation policy. Special attention was paid to cross-border issues, including the potential for integration in the Öresund region.[1] Several clear-cut conclusions were derived. This brief document elaborates the main lessons, as interpreted by IKED:[2]

- Designing and implementing an effective innovation policy requires horizontal cooperation across several important policy domains, and a shared commitment to free up room for creativity and entrepreneurship among firms and individuals broadly in society.

- Knowledge flows are becoming increasingly international. Whereas innovation processes and industrial restructuring commonly need to take on a cross-border dimension, institutional frameworks and policies fostering innovation remain basically national in nature. The continued dominance of purely national funding and network initiatives, for instance, severely limits the opportunities for integration and shared growth effects between neighbouring countries, as in the case of the Öresund region.

- Whereas long-term cooperation in the development and the use of new technologies and other forms of knowledge can provide benefits for all parties, such potentially valuable networking often does not occur spontaneously. As a result, public strategies for inducement of networks may be motivated. Again, existing strategies of that sort are mainly national today.

- The Nordic countries are characterized by networks that are fairly homogeneous and stagnant, with too little openness to "other" kinds of competence. Again, this limits the potential for innovation and calls for rethinking existing platforms for the promotion of cross-border synergies. Efforts should be made to promote more diverse and dynamic networks, and to make them more action-oriented by connecting them to concrete cooperative ventures.

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[1] The "Öresund region" includes the Danish capital of Copenhagen and neighbouring municipalities on the Danish side of the Öresund straight, as well as Malmö, Lund, Helsingborg and several smaller municipalities on the Swedish side. Altogether, the Öresund region may be counted to include 3,5 million inhabitants, which accounts for the largest concentration of population in the Nordic countries.

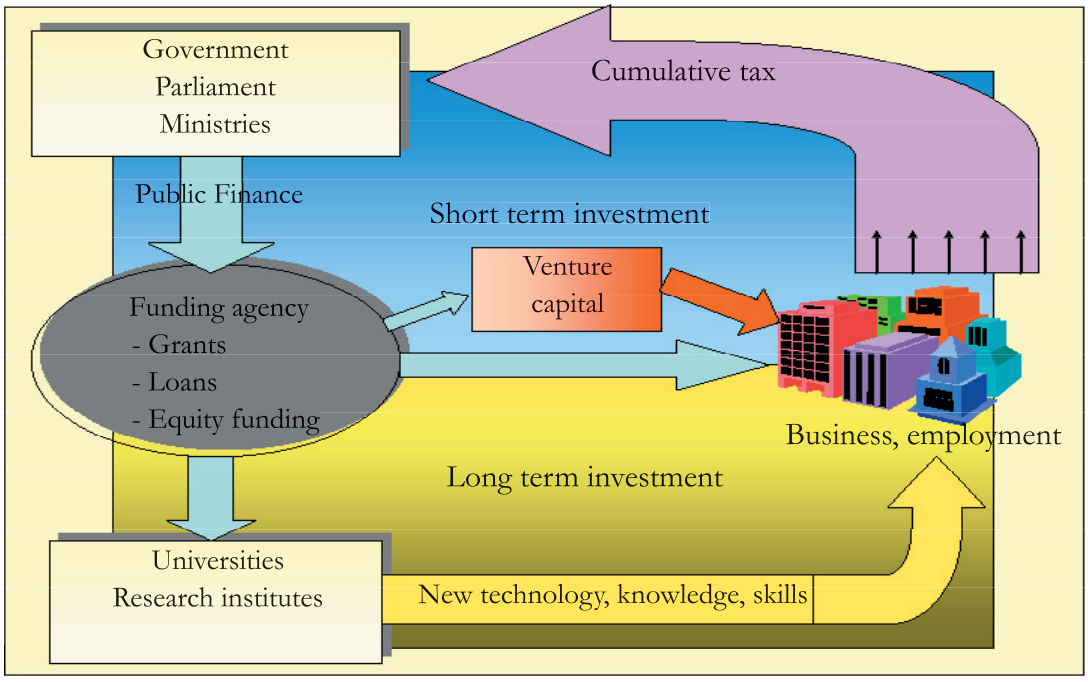
[2] The summary has been produced primarily by Johan Kind, IKED, assisted by colleagues. The participants are not to be held accountable for any statements in this document. Any errors or omissions are the responsibility of the authors alone.

Summary of main presentations and interventions

The Nordic countries tend to rank very highly in scientific and technological performance, innovative ability, indicators of the information society, etc. In many respects, these countries are widely regarded as world leaders in these fields, which is reflected in their top positions in international benchmarking exercises such as those undertaken by the European Commission, the OECD, the World Competitiveness Institute, among others. At the same time, however, they face challenges when it comes to economic growth, and to securing the stability and viability of their social welfare systems in years ahead. Against this background, the following points were made at the IKED roundtable:

Introducing the discussion, Thomas Andersson, President of IKED, underlined the economic strength and innovation capabilities of the Nordic countries, but also the fact that their potential does not seem fully fulfilled at present. Despite globalisation, national policy frameworks continue to matter crucially. The scope for national policy reforms is limited, however, by the resistance of vested interests, including from bureaucracies not traditionally designed with a view to promoting innovation, and by the lack of common understanding of innovation as the result of efforts undertaken by actors in the form of, e.g., firms, research institutions, and individuals. For such reasons, in many cases it is difficult for countries to address those weaknesses that limit innovative capabilities most severely. International cooperation can help. It was underlined that the Nordic countries are currently engaged in more or less intensive efforts to upgrade their domestic efforts in the area, but that they may become more successful if able to also embark on more successful joint efforts in the area.

Figure 1: Multiplication of public money in the innovation system

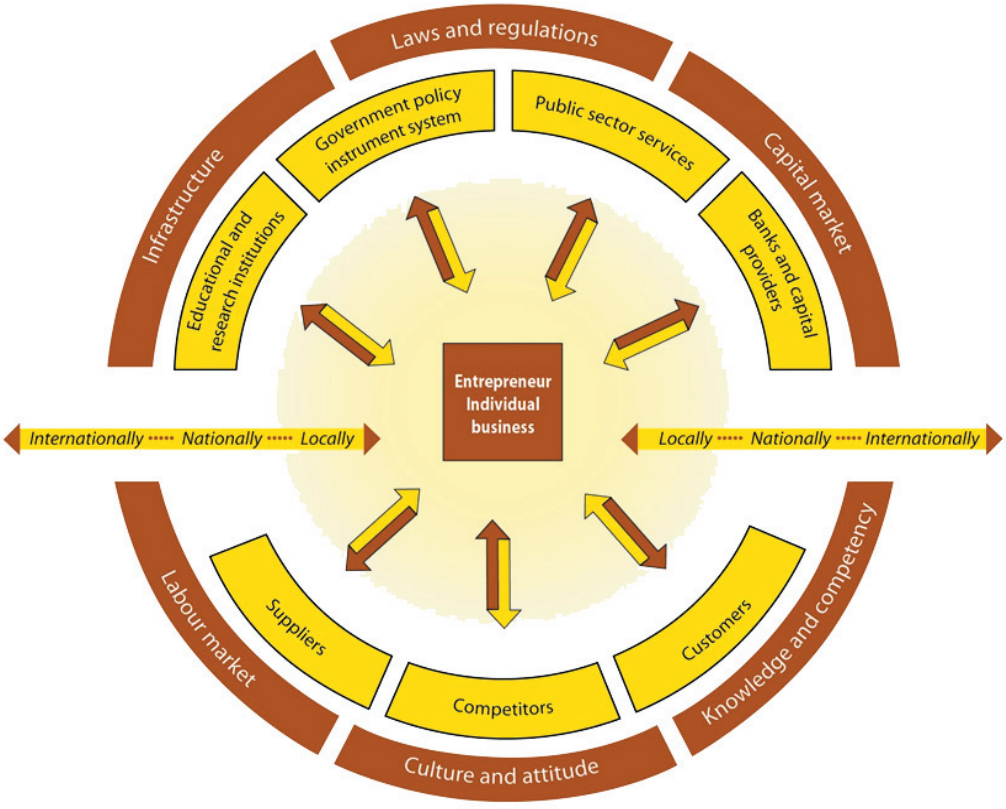


Source: TEKES

Following Mr. Andersson's introductory remarks, Heikki Kotilainen, Deputy Director at TEKES – the National Technology Agency of Finland, provided an overview of the Finnish innovation system and, in particular, the role of the national policy in fostering its development. The Finnish policy approach to innovation is widely regarded as one of the most impressive in the world so far. In particular, Mr. Kotilainen identified the keys to success but also underlined the presence of remaining challenges. There is no optimal state of affairs rather policy must evolve continuously and complacency would be the beginning of decline.

Emphasizing the importance of adopting a systemic perspective, Mr. Kotilainen referred to estimates that public money invested in the innovation system may result in a twentyfold return to society through cumulative growth and increased tax revenues. Figure 1 illustrates mechanisms for multiplication effects. It was also stressed that, although networking and long-term cooperation between individual firms can be highly beneficial, within a framework of competitive markets, it does not evolve spontaneously in many cases. This calls for a deliberate policy by the government to provide incentives for networking, especially in dynamic rapidly evolving areas.

Figure 2: Policy areas that influence innovation



Source: Norweigan Ministry of Trade and Industry

Picking up the themes from Mr. Kotilainen's presentation, Kjerstin Spjøtvoll, Assistant Director General from the Norwegian Ministry of Trade and Industry, summarized the milestones in the ongoing Norwegian initiative of developing a holistic innovation policy in Norway. The ongoing effort engaged five different government ministries over the past year. For the coming year, the scheme has been extended to embrace nine ministries. Figure 2 illustrates the complexity of the innovation policy agenda. The prevalence of contrasting views and ways of working in different ministries, and the challenges that arise in shaping consistent institutions and incentives, underlines the importance of inducing that a wide range of key actors upgrade the priority given to the subject of innovation.

Commenting on the presentations by Mr. Kotilainen and Ms. Spjøtvoll, Birgit Kjølby, from the Danish Ministry of Science, Technology and Innovation, remarked on the need to clarify the distinction between innovation policy and growth policy. Ms. Kjølby explained that, in contrast to Norway, Denmark had adopted a project-based approach to innovation policy, focusing on key areas such as interaction between research and the business sector. In this context, the Danish Government recently published a plan of action entitled New ways of interaction between research and industry – turning science into business. Ms. Kjølby further emphasised the importance of Nordic cooperation on innovation policy.

Therese Kühn, from the Danish Ministry of Economic and Business Affairs, highlighted the underdeveloped state of mechanisms for integrating venture capital markets on the Danish and Swedish sides of the Öresund straight, in turn limiting the potential for entrepreneurship and restructuring in the region. There is a need of a common understanding and vision of the problems of cross-border cooperation in the Öresund region, creating a need for further analysis on what the main issues are and how they can be overcome. The Danish government is currently examining what measures could help strengthen cross-border venture capital activities.

Lars Eklund, Director of the Actors Division in VINNOVA, the Swedish publish authority in charge of innovation systems, emphasised the growing significance of clusters of economic activities and their ability to evolve across national boundaries. He also noted that most financing programmes are currently limited to national activities, but believed the time may have arrived for this state of affairs to start changing on a broader scale.

Vilhjálmur Lúðíksson, Secretary of the Icelandic Science and Technology Policy Council at the Ministry of Education, underlined the significance of innovation not only in high-tech sectors and the geographical core but also in more traditional industries and in peripheral regions. Iceland, although sparsely populated and located remotely from major markets, has worked hard to foster a favourable environment for innovation which has helped upgrade efficiency in traditional industries such as fishing. At the same time, he noted the value of exchange of experience

with other countries, particularly which offer conditions that allow for relevant comparisons. He emphasised the potential benefits of Nordic initiatives in the field of innovation policy and pointed to the fact that the Nordic resources are not used to their full extent today.

Bengt Streijffert, Director of the Öresund Science Region, questioned the relevance of innovation systems at national level and underlined the significance of cross-border processes of innovation and restructuring. In the Öresund region, for instance, there is a strong presence of research capabilities. When it comes to commercializing innovations, however, it may be most effective for a company to do so in the United States rather than Denmark or Sweden. This is natural, but more effective co-operation could open up more opportunities for local exploitation. Barriers to cross-border co-operation do remain and national networks on the two sides still fail to connect effectively to each other, resulting in failure to achieve critical mass. He noted that that the introduction of common "platforms" for policy-initiatives in the region has helped articulated the demand for upgraded co-operation on concrete projects, but that more is needed in that direction.

The presentations and comments illustrate that, in designing and implementing innovation strategies, countries are faced with rapidly changing conditions and need to reflect on their opportunities in an international context. There are no easy solutions, but generally the discussion underlined the importance of leadership from public authorities at high level in paving the way for bottom-up strategies and project-based activities that can facilitate consistent, horizontal reforms. Overall, the following key policy messages/issues were identified during the presentations and the ensuing deliberations:

- Importance of bottom-up approaches and demand-driven processes: In designing and implementing governance mechanisms for innovation policy, governments need to take the lead but, at the samt time, put priority on identifying bottom-up approaches, and ensure that policies, programmes, and projects are demand- rather than supply-driven. Private sector representatives and labour unions must become actively engaged in the process. In the Nordic countries, some unions have belonged to the first to understand and appreciate the advantages of innovation systems, but the pressures and opportunities that lead towards greater flexibility, mobility, new ways of learning, and entrepreneurship, require reflection and dialogue in industrial relations on a much broader scale.

- Governments/policymakers as 'facilitators': Having emphasized the importance of demand-driven processes, there is great scope for governments to help out in the process by acting as an "invisible facilitator". Thus, rather than rely on direct subsidies, governments should focus on encouraging involvement and the ownership of processes and initiatives by other stakeholders. Governments can promote more open, diversified and creative networks.

- Importance of 'signalling' the importance of innovation policy for an effective policy process: Governments play a key role in signalling to society – and to key actors – that a well-functioning innovation system is essential for achieving economic growth and welfare. At the same time, mere talk will not do it, incentives and playing rules are decisive. The Finnish government adopted a framework for consistent reforms years ago. More recently, the governmental initiative in Norway to start a process and dialogue on these issues appears greatly significant. In Norway, the wealth created by oil revenues could put concerns for economic growth and innovation systems off the prime agenda for decades. The earlier the issue can be addressed, however, the greater the chance that Norway will capitalise on its present strengths for the long term and avoid a major backlash.

- Governing cross-border innovation, e.g., in the Öresund region: The cross-border aspect adds to the complex naure of the innovation system. This is due to a number of differences in legislation, and that a spectrum of institutional conditions carry strong national characteristics which complicate joint initiatives across borders. As one consequence, it is often difficult to make use of public funds in support of cross-border projects where some work is carried out by an organisation based in another country. For instance, as of today, it is not really possible for the Danish Ministry of Economic and Business Affairs to support innovation-enhancing projects in Sweden, and vice versa for corresponding Swedish institutions. This fact further strengthens the dominance of nationally focused networks and attitudes, and hampers the opportunities for the development of sprawling cross-corder clusters in the Öresund region. Connected to this is the question of how to govern the interplay between national and regional innovation systems, where the latter cross national jurisdictions.

- Balancing simplicity and flexibility in institutional structures : On the one hand, the number of administrative bodies should be kept reasonably low. On the other hand, the time is gone when public monoliths could and should rule for ages - there is need for lighter, more flexible structures with a healthy state of institutional competition, also in the allocation of public funding for various purposes. To move in that direction, countries must be able to consolidate and bridge between conflicting interests, overcome vested interests, and make serious efforts to put in place sufficiently influential governance support of genuine innovation processes.

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Iceland is presently leading the way in the next phase of Nordic co-operation, as the country recently assumed the Chairmanship of the Nordic Council of Ministers. Moreover, the Nordic Industrial Fund and Nordtest have been merged to form the newly established Nordic Innovation Center, which aims to add value to national innovation policies, in part through the backing of joint Nordic initiatives. An additional dimension has to do with the position of the Nordic countries within the broader context of the European Union and its imminent expansion eastward. The Nordic Community is in a way placed "in between" the considerably larger economies of Germany, Poland and Russia, which in many respects are looking in other directions for establishing strategic partnerships. In the area of innovation, however, the Nordic region belongs to the global forerunners, and partnerships in that area with the Nordic family, if attainable, can be attractive for any country outside the region.

At a time when all Nordic countries are increasing their efforts at home, and other countries are in early phases of pursuing similar strategies, and the innovation processes are increasingly attaining a cross-border dimension, it might be time for Nordic co-operation to enter a more dynamic stage.

"TOWARDS DESIGNING AND IMPLEMENTING GOVERNANCE MECHANISMS FOR INNOVATION POLICY: Nordic Experiences and Challenges"

Programme:

Introductory remarks:

Andersson, Thomas,	President, IKED	SWEDEN

Finland's innovation policy: the key to success and remaining challenges:

Kotilainen, Heikki	Deputy Director General, TEKES	FINLAND

Norway's new initiative: towards a comprehensive innovation policy:

Spjøtvoll, Kjerstin	Assistant Director General, Ministry of Trade and Industry, Main secretary for the preparation of a comprehensive innovation policy	NORWAY

Roundtable Discussion Participants:

Benner, Mats	Chef, Forskningspolitiska Insitutet, Lunds Universitet	SWEDEN
Eklund, Lars	Director of Division Innovation Actors, VINNOVA	SWEDEN
Frykfors, Carl Otto	Handläggare, VINNOVA	SWEDEN
Kind, Johan	Programme Officer, IKED	SWEDEN
Kjølby, Birgit	Kontorschef, Ministeriet for Videnskab Teknologi og Udvikling	DENMARK
Kühn, Therese	Fuldmægtig, Økonomi- og Erhvervsministeriet	DENMARK
Lúðíksson, Vilhjálmur	Secretary of the Science and Technology Policy Council, Ministry of Education	ICELAND
Möller, Christian	Manager of Business Relations, IKED	SWEDEN
Olofsson, Birger	Director of the Öresund Committee	SWEDEN
Schwaag-Serger, Sylvia	Director, IKED	SWEDEN
Streijffert, Bengt	Director of the Öresund Science Region	SWEDEN
Yngvesson, Monika	Regiondirektör, Region Skåne	SWEDEN

ON IKED ACTIVITIES RELATED TO INNOVATION

IKED is engaged in several projects examining the conditions required for building innovative, creative and entrepreneurial societies. Bridging between research and analysis on the one hand, and concrete policy work and action on the other, IKED serves as a source of inspiration and partner in concrete reform efforts. The following are some of IKED's current ongoing activities related to innovation.

The impact of innovation systems

In 2002, IKED chaired the Innovation Policy Expert Group (IPE) established by the Swedish government to assess the strengths and weaknesses of the Swedish innovation system. Its final report "The Impact of Innovation Systems: Challenges for Society and Policymakers", provides recommendations for reforms that are needed if Sweden is to fulfil the potential benefits of its strengths in knowledge-creation.

Action plan for a Norwegian innovation policy

In 2002, the Norwegian Prime Minister initiated a cross-ministerial process with the aim to present an action plan for launching a comprehensive innovation policy. The Minister of Trade and Industry was assigned the principal responsibility for the group, which recently was expanded to encompass nine ministers. IKED was invited to provide substantive input to the process by assessing major strengths and weaknesses of the Norwegian innovation system from an "outsider's perspective". IKED's findings are published in the report "Towards a New Growth and Innovation Policy in Norway". Among other things, IKED recommends Norway to abandon its traditional policy target and for the government in co-operation with other stakeholders to work out an operational objective of a holistic innovation policy.

Review of Strategies by the Private Sector on commercialisation of Research

Not only governments but also other stakeholders have an interest in promoting commercialisation of research results. This includes the private sector which has vital knowledge of reforms needed to boost innovative performance. Jointly with the Confederation of Swedish industry, IKED recently published recommendations for action in this area by private sector representatives relative universities and research institutes as well as policymakers.

The Cluster Initiative Whitebook

"Clusters" entail interactions and learning processes between firms and other organisations which are vital for innovation and competitiveness. At the same time, the policy implications are often unclear. Following the 6th Global Conference of the Competitiveness Institute (TCI), held in Gothenburg, 17-19 September 2003 "Innovative Clusters - A New Challenge" , IKED was mandated by TCI and VINNOVA to prepare a "Whitebook" and Conference Proceedings on cluster policies.

Innovation and Enterprise Policy Reviews

IKED is assessing conditions for innovation, enterprise development, and/or conditions for use of ICT in a number of countries, including the Baltic countries, China, Cuba, Poland, and Turkey.

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