

## EXECUTIVE SUMMARY

Mari Hjelt, Wolfgang Polt and Svend Otto Remøe

### Background: the MONIT project

The OECD's project on National Innovation Systems (NIS) was initiated in 1995. Under the Working Party on Technology and Innovation Policy (TIP) it set out to explore the requirements for redirecting innovation policy in OECD countries, taking into account new insights into the innovation process that arose from the research on innovation at that time. While many accepted that the linear model of innovation did not capture the realities of the innovation process, it was acknowledged that public policy still relied upon the linear model and its implications for policy. Hence, the OECD NIS project became an important collaborative mechanism for generating new data based on the interactive model of innovation and for developing a set of recommendations for public policy.

Formally, the OECD NIS project was concluded in 2001. It generated several publications on industrial clusters, networks, human mobility, synthesis reports on the renewal of innovation policy, and it also fed into other OECD work. However, the concluding work (OECD, 2002) raised a critical question that was the starting point for the current MONIT project. If the developed economies are becoming more innovation-oriented and dynamic, can national governments and their policy-making modes remain largely unaffected? More precisely, given the changes needed in policy, how can or should governments change their structures and processes to better accommodate the dynamism in their environments?

To explore these issues, the OECD and its Working Party on Technology and Innovation Policy (TIP) endorsed in 2002 a new collaborative study called MONIT (monitoring and implementing national innovation policies). The project was organised in two work packages: one studied the main innovation governance issues in each country and the other studied selected policy areas with characteristics relevant to innovation policy. Volume 2 contains the results of the first of these packages and this volume contains the results of the second.

MONIT's basic assumption was that innovation policy and its governance require significant changes. While the linear and systemic models of innovation can be seen as the first and second generations of innovation, MONIT set out to explore the foundations of the third generation which views policy making as a process, along with its institutional, structural and political characteristics. Seen from the point of view of a firm, this model represents a nexus in which policies interact and produce innovation outcomes. Achieving coherence of innovation policy across ministerial boundaries is therefore seen as key to successful governance.

## Learning from horizontal policy areas

Innovation policy has typically been seen as an extension of R&D policy involving a number of instruments and policies that stimulate the innovation process, such as science-industry relationships, intellectual property rights, and industrial networks and clusters. However, as economic development has become more dependent on innovation and as growth patterns worldwide become more volatile and dynamic, innovation and growth may need broader stimulus from governments than has generally been the case. Hence, innovation policy may increasingly need to be redefined and expanded to encompass a wider set of policy domains.

This raises at least two key issues. First, governments will need to develop capabilities for broader or more horizontal governance spanning ministerial and other institutional boundaries. This requires learning from policy domains with such characteristics. The MONIT project therefore included the study of policies on the information society and sustainable development as well as transport and regional policy.

Second, it raises the issue of the relationship between innovation policy and other areas. These relationships may be supportive or unsupportive, creating challenges for balancing the links between them. Governments will also need to learn more about options and barriers to integrating diverse policy areas and thereby develop a policy environment that is coherent and conducive to innovation in the economy.

## A guide to the volume

In the MONIT project, the study of policies for the information society was a core activity, as most countries have given priority to national initiatives to promote development with the support of information and communication technologies (ICT). Further, several countries studied linkages between innovation policy and policies for sustainable development, as the latter have been given importance as a principle under which to subsume other policy areas and priorities. These topics are therefore at the heart of this volume.

The chapters are typically shorter versions of the studies conducted. Lessons derived from the studies are treated in Volume 1, the synthesis report, which also contains summary analytical reports on the information society and sustainable development (OECD, 2005a).

### *Part 1: Governance and the information society*

In Chapter 1, Wolfgang Polt and Julia Schindler describe how Austria has failed twice to produce an overall strategy for information society policy, but has nevertheless succeeded in promoting ICT diffusion and use in various fields, such as e-government. They also describe obstacles and failures in specific policy domains and provide examples of policy learning from successes and failures.

In Chapter 2, Juha Oksanen analyses Finnish policy for the information society and the vital links with innovation policy. He argues that a principal driving force for both the information society and innovation policy have been concerns about countries' international competitiveness and wealth creation in the global economy. Also, innovation policy and development of the information society have many features in common. Both policy domains are based on a strong commitment and protection of consensus among major stakeholders representing the public and private sector.

In Chapter 3 Trond Einar Pedersen studies the Norwegian national plan for the information society and argues that the current governance situation represents a delicate policy dilemma. While overall economic policy takes a hands-off approach, with a lesser role for state involvement, the current organisation of eNorway (the term for the national policy) open possibilities for more hands-on implementation and co-ordination.

Chapter 4 contains an analysis by Paulina Ramirez, Murray Scott and Willie Golden of Ireland's information society policy and the missing linkages with innovation policy. They argue that an important reason for the lack of coherence between the two policy areas is the "science-push" character of Ireland's present STI policy which makes co-ordination with other policy domains difficult.

In Chapter 5 Pim den Hertog and Hilde de Groot present the Dutch information society, arguing that ICT has become an enabler of broad transformation processes in both industry and the public domain. However, most actors see ICT simply as an enabler in their primary processes and do not see a clear link to innovation. Thus, they do not develop an information society/ICT policy with a view to increasing innovation or developing a knowledge economy, and this impedes horizontal co-ordination.

In Chapter 6, Lena Tsipouri and Mona Papadakou study recent developments in Greece against a backdrop of inflexible hierarchies, low competitiveness and incomplete infrastructure. Innovation policy and information society policy had little in common, but Greece's introduction of an information society initiative highlighted governance gaps, and new governance structures were implemented to overcome the inherent weaknesses in horizontal co-ordination. If successful, this initiative may help to modernise Greek governance.

Chapter 7 by Kristina Larsen, Patrick Sandgren and Jennie Granat-Thorslund is an analysis of the governance challenges in Sweden. It highlights the high degree of decentralisation in the Swedish model which results in a high level of efficiency but also illustrates a need to improve horizontal co-ordination in the context of handling more substantial changes in policy agendas.

## ***Part 2: Governance in sustainable development***

In Chapter 8 Mari Hjelt, Sanna Ahvenharju, Mikko Halonen and Mikko Syrjanen study the need for integration between science, technology and industry policies and policies for sustainable development, and conclude that despite the challenges related to expanding science and technology (S&T) policy to a broader innovation policy, there is both a need and an opportunity, from the point of view of sustainable development, to broaden the policy scope. However, there are also several challenges and barriers. This suggests that policy integration requires basic changes in policy formulation and implementation to generate effective interfaces.

The issue of policy integration is also at the heart of Chapter 9. William Lafferty, Audun Ruud and Olav Mosvold Larsen develop a benchmark for assessing the integration between innovation and sustainable development policy as "green innovation policy". The findings indicate that Norway actively promotes vertical environmental policy integration, but that specific and direct efforts towards green innovation are practically non-existent.

Chapter 10 is a study by Ilse Dries, Peter van Humbeek and Jan Larosse of the linkages between policies for innovation and sustainable development. The focus is on the policy response to the industrial lock-in of the Flemish innovation system in material- and energy-intensive production systems. The way out in “system innovation” demands a long-term transition to a new, less resource-intensive and more knowledge-intensive economy.

In Chapter 11, Brigitte Ömer-Rieder and Katy Whitelegg illustrate the barriers to integration of innovation and sustainable development policies in Austria, and show that this partly hinges on the fact that sustainability policy is not an established policy field and that innovation policy is not recognised as an effective key driver for sustainable development.

In Chapter 12 Katy Whitelegg shows that even in cases where two policy areas are located in a single ministry, there are wide gaps between them. She highlights the importance for policy integration of lack of understanding of neighbouring policies and shows that perceived “missions” help to keep separate policies that might otherwise be more integrated.

## *References*

OECD (2002), *Dynamising National Innovation Systems*, OECD, Paris.

OECD (2005a), *Governance of Innovation Systems, Volume 1: Synthesis Report*, OECD, Paris.

OECD (2005b), *Governance of Innovation Systems, Volume 2: Case Studies in Innovation Policy*, OECD, Paris.