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GOVERNANCE OF THE RESEARCH AND INNOVATION SYSTEM: KEY CHALLENGES

Governance of innovation tells something about what roles the various actors in the innovation system play, how the rules of the game work, how decisions are taken and how changes in the overall innovation system come into being. The European Commission's definition of governance can also be applied to science, technology and innovation (STI): "'Governance' means rules, processes and behaviour that affect the way in which powers are exercised ….., particularly as regards openness, participation, accountability, effectiveness and coherence".

Innovation Governance attracts enormous interest among scholars and practitioners dealing with research and innovation policy. The drive for this renewed interest rests on questions such as: does the public governance of research and innovation really make a difference? Does the manner in which we organise our science and research affect our wealth creation? Despite the increasing internationalisation of science and technology, we see that national governance models are still very much dependent on historical patterns. There are many common challenges and issues in industrialised countries.

Innovation systems have over the years assumed an affective tool box for policy makers, as they present a perspective of the innovation process that is dynamic and systemic. Contrary to the first generation innovation policy, where basic research was disseminated through transfer mechanisms toward the market, the innovation systems approach assumes a great degree of interrelatedness and complexity that has to be influence through a more complex policy approach. Innovation governance has therefore received increasing attention by policy makers as a generic concept for managing and steering the innovation system and ensuring its viability.

Governance refers to the systems and practices that governments use to set policy priorities and agenda, implement policies and obtain knowledge about their impacts and effectiveness. These governance systems and practices are in a permanent state of flux reflecting the changes in the political and societal systems that the policies interact with. Science, technology and innovation (STI) policy is not an exception. These policies are in the middle of a transition period.

Although the countries are at different phases with respect to the urgency for implementing new structures and processes, the STI policies in all of the countries are facing similar major future challenges. Implications of globalization create pressure for innovation policy renewal. Innovations are seen in all of the countries as key elements ensuring growth and national competitiveness and as solutions for future societal challenges such as ageing, environmental challenges, and climate change. At the same time, the content of the notion of "innovation" has broadened from technology to cover wider social, systemic, organizational and service innovations.

The following STI policy options or choices were proposed by the European researches to be the most relevant for future governance (see Figure 1). These options are a continuum of issues among which there always needs to be found a right balance.
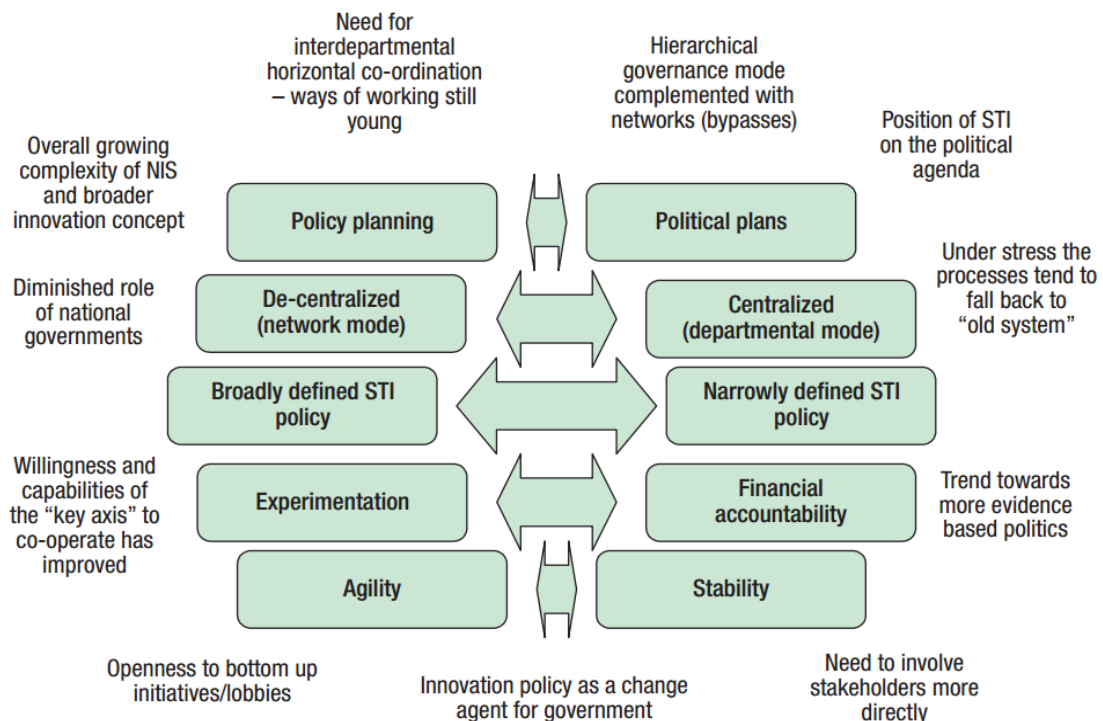

Fig. 1. Major future pressures affecting innovation policy governance.
Source: Major challenges for the governance of national research and innovation policies in small European countries. Tekes Review. 236/2008. Helsinki 2008. P. 42.

• *Broad vs. narrow STI policy.*
Although there is a pressure towards broadening the content of STI policies, the countries can make clear choices to define the policy boundaries and further define the supporting governance structures and processes to support these choices.

• *De-centralized vs. centralized governance structures.*
Sectoral and centralized innovation policy based on the hierarchical departmental mode of governance seems to be more and more complemented with a de-centralized and network based modes of governance.

• *Policy planning vs. political plans.*
A policy system that is dominated by political decision-making and surely if this is combined with a less stable political context, may results in constant changes in initiatives and lack of stability. A policy system that is overtaken by "rational" policy-makers can lead to organizational inertia or lack of wider societal support for STI policies and to policy priorities that are not necessarily supported by society.

• *Experimentation vs. financial accountability.*
There is a strong trend for evidence based policy making which aims to strengthen the knowledge base for improved decision making. Evidence based policy making calls both for improved impact assessments for policy actions as well as experimentation with new actions which would be carefully analyzed.

• *Agility vs. stability.*
New challenges, need for policy experiments, and networked mode of operations require high agility, adaptability and flexibility from the governance system. At the same time the policy system needs to be relatively stable.

All countries will and are being affected by the trends towards globalisation and broadening not in similar degrees. They all must find a proper balance on each of the five policy options. In the light of the substantial differences we found between national innovation governance styles, the particular choices made will (and should still) be different for each country.

References

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