



Mission-oriented Innovation Policy and the influence of its predecessors

A case study on the evolution of policy

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The 21st century is characterized by the need to respond to major social challenges. As a result, innovation policy is undergoing major changes: Economic growth is no longer the sole guidance for policy as emerging innovations should help solving these challenges. This requires a policy focus beyond technology alone. Consequently, mission-oriented innovation policy (MIP) has gained renewed interest. The shift in focus and policy objectives can be seen as paradigm change or changes in the shared model of reality that guides policy makers. As paradigms do not fully substitute their predecessor but add features to existing structures, it could be seen as layered upon without fully replacing earlier ones. This raises several questions: How to overcome legacies of the past? How to prevent failures of old policies in new designs? Or how to prevent vested interests in established policies from dominating agenda setting and decision-making processes? This policy brief elaborates on how the design of mission-oriented innovation policy in the Netherlands is influenced by predecessor’s innovation policies. A case study on the Dutch Top Sector policy was conducted to analyse the change from ‘old’ Top Sector policy to mission-oriented Top Sector policy.

The issue

Mission-oriented innovation policy (MIP) has considerably changed throughout the years. Compared to the traditional mission-led approach, the societal challenge-missions are more complex and require a focus beyond technology alone (Wanzenböck et al., 2020). The changes in the notion of MIP over the years can be characterised by a shift along three dimensions displayed in table 1. Shifts in policy objectives or changes in the shared model of reality that guides policy makers can be seen as paradigm changes (Carson et al., 2009). As policy paradigms do not fully substitute their predecessor but rather add features to existing structures, emerging ones could be seen as layered upon without fully replacing earlier paradigms (Schot & Steinmueller, 2018, Diercks et al., 2019). This raises questions about how to overcome legacies of the past to not repeat failures of old policies in new designs. Disregarding the need for change and transitions could lead to a policy that is ineffective in tackling the societal challenges as the influence of vested interests and the status-quo associated with established policies could dominate agenda setting and decision-making processes, and result in ineffective policy. This casts doubt on the extent to which MIP can be considered a new policy approach; is it actually new or rather old wine in new bottles?

At the core of this policy paper is the following question: *How is the design of mission-oriented innovation policy in the Netherlands influenced by predecessor’s innovation policies?* An exploratory case study, based on the analysis of policy reports, background documents, and 15 expert interviews, and related to the Dutch Top Sector policy and the new mission approach was conducted. The Top Sector Policy can be considered as a clear example of ‘traditional’ innovation or industrial policy to which new features have been added. The Netherlands formulated societal and economic missions in 2019. These missions were partly build on existing industrial innovation policy goals and structures of the Top Sector Policy, focused on bridging public and private research and increasing R&D in a range of key economic sectors (Janssen, 2019). Given that the Dutch MIP approach is rooted in the Top Sector policy, it provides an excellent case for investigating policy change and the influence of the heritage of old policy on mission designs in terms of the legitimation of policy, changes in policy priorities and the process of how these are set (Table 1).

Dimensions	Meaning
<i>Rationale for the policy intervention</i>	Legitimation and reasoning for the (policy) intervention.
<i>Changes in the policy model and the process of priority setting</i>	Institutions embedded in actors, how policies are chosen and set.
<i>Changes in the policy priorities</i>	Actual priorities; specific targets of the policy

Table 1: dimensions of changes in innovation policy



Main findings

It was found that the main influence of the previous industry-oriented policy was the reliance on old policy networks, meaning actors and settings of previous policy, as well as their beliefs in terms of what is important, were still dominant in new policy designs. Likewise, there was a broader influence of related higher-level policy strategies, such as the climate agreement or Dutch energy agreement meaning that beliefs present in these policies had an influence on the mission agenda. This can be referred to as *path dependency*, of an idea or belief, which is rooted in other (older) policy and newer policy build on.

Moreover, the study shows that beliefs, for instance related to sustainability or stakeholder inclusion in policy making shifted over time. This can be attributed to *policy learning* associated with evaluation outcomes of the previous Top Sector policy. Shortcomings of the old policy, such as the lack of involvement of different types of stakeholders, were considered important input for the new policy design. Along with this, there was increasing recognition of individual policy makers concerning new rationales for STI policy intervention, from a policy aimed at optimizing collaborations or improving markets to a market shaping or guiding one. Hence, *new theoretical insights* in the STI policy domain induced an additional shift in the practical beliefs and thus policy priorities. Also, it was found that the *broader political environment* during policy change was influential in shaping and adapting the beliefs of involved actors.

Lastly, the study showed that the influence of different actors on the mission policy was substantial, but at the same time limited because of the specific policy setup. The policy is designed so that actors have to consult each other to formulate the missions in cooperation. Resulting from that is a culture of 'polderen' (consultation). As many of the actors knew each other, and were involved in both previous and new policy processes, the dominance of specific interests of one over the others was limited. Negotiation partners were familiar with each other's views which makes them able to prepare for the consultation sessions. The result was a general perception that the dominance of interests or beliefs was limited among the involved actors.

Implications

The study provides insights into how policy makers attempt to adjust policy designs, to solve shortcomings of older policies, to prevent the negative legacies from growing into new policy but also to inherit parts of old rationales or beliefs. Several insights revealed in this research may serve to further improve policy practice in formulating and implementing mission policies:

In the Netherlands, the shift to mission-driven policy practice took place in the context of new STI policy rationales and changing political environments. Even though existing networks and actors influenced new policy formulations, their beliefs have been shaped over time by experiences with existing policies and the outcomes of evaluations. At the moment the Dutch mission-oriented innovation policy approach is in a transition year, meaning that the implementation of missions started but yet without clear results or evaluations of innovation outcomes or broader societal impacts. By looking at the policy design process, we can still see a substantial influence of the predecessor, i.e. the industry-driven Top Sector policy, on the newer generation of mission-driven innovation policy. This is partly due to the fact that there seems to be no such thing of 'old' or 'new' policy. Rather, existing policy is transformed in the policy process, to suit new challenges or to address shortcomings of the past. The course of policy change is influenced by the interplay of 'old' networks, and the ambition to further develop and learn from previous policy experiences. Particularly the evaluation of previous policies appeared to be valuable to all involved stakeholders.

Further reading: This policy brief is based on a Master Thesis. Contact the author to request a copy: niko.borgers@gmail.com

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