

# Status of the top sectors in 2014

English summary

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# Summary

## Background

In 2010, the Cabinet, led by Mark Rutte in his first term as Prime Minister, announced the top sector policy. The policy has now been in place for a number of years, resulting in a range of experiences that we can learn from. The Minister of Economic Affairs, acting on behalf of the State Secretary of Education, Culture and Science, has therefore asked the Dutch Advisory council for science, technology and innovation (AWTI) to take stock of the status of the top sectors in 2014 in a report entitled '*Balans van de topsectoren 2014*'. It is still too early to measure tangible effects, but we can certainly examine the top sector policy at the meta-level. The purpose of this status report is to provide input for effective adjustments to the top sector policy.

## Top sector policy: a change of systems

The top sector policy involves government support in nine key economic areas (the top sectors) through a combination of generic (i.e. financial) instruments and a focused emphasis on achieving optimum cooperation in the 'golden triangle' formed by companies, research institutions and government. A lead team for each top sector creates a mutual vision, which then serves as the basis for a strategic agenda with associated activities. This strategic agenda integrates research and development (innovation), links to education and the labour market (human capital), economic diplomacy (internationalization), legislation, and other factors. The main reasons for introducing the top sector policy were:

- ▶ The desire to leverage fiscal policy as a replacement for subsidies and grants;
- ▶ The desire to use regular financing to encourage public-private partnerships;
- ▶ The desire to reduce fragmentation in innovation policy;
- ▶ The desire to increase the involvement of government ministries (other than Economic Affairs).

The introduction of the top sector policy in 2010 meant a major change to the overall system. There are two aspects to this change: the first aspect involves the sector-based and integrated approach, while the second has to do with a new way of financing and organizing public-private partnerships with a greater emphasis on demand-driven aspects. The introduction of this sector-based and integrated approach has been accompanied by the loss of financing for knowledge and innovation from the Economic Structure Enhancing Fund (FES). Furthermore, funding for existing institutes and programmes is being phased out. At the same time, fiscal instruments are being

expanded. Each top sector must now devise a new form of organization and financing for public-private partnerships. The government's role and management philosophy has also changed: from management-by-subsidy to network management. These changes to the system are far-reaching and profound, particularly due to the concurrent combination of these aspects in times of budgetary constraints.

## **Objective: strengthen public-private partnerships**

The only policy objective that has been set specifically for the top sector policy is that public and private parties should participate in the Top Consortia for Knowledge and Innovation (TKIs) for an amount of at least €500 million by 2015. By specifying this objective, the government is indicating that the top sector policy is aimed primarily at strengthening public-private partnerships in a number of key areas. The top sector policy is intended to contribute to strengthening the Dutch economy and to solving societal challenges, which are often related to economic performance. The formal objective set for the top sector policy is that it should contribute to "a stronger innovative capacity in the Dutch economy." This policy objective applies to all of trade and industry (thus including the top sector policy), and features the following sub-objectives:

- ▶ The Netherlands will be ranked among the top five knowledge economies worldwide by 2020;
- ▶ As part of the Europe 2020 strategy, the Netherlands aims to spend 2.5% of GDP on R&D by 2020;
- ▶ A further objective of policy on trade and industry is that public and private parties should participate in the Top Consortia for Knowledge and Innovation for an amount of at least €500 million by 2015, 40% of which should be financed by trade and industry.

## **Positive effect of the top sector policy: new dynamism**

The top sector policy has given rise to substantial new dynamism in the Dutch economy. Many parties have entered into dialogue; this is the first time for some, while others are returning to the table. The top sectors are also demonstrating a greater capacity for self-organization. Some top sectors are better organized than others, although there has been progress across the board. With regard to research and innovation, joint involvement is more robust as concerns the agendas (innovation contracts) drawn up by the top sectors. The Netherlands Organization for Scientific Research (NWO), the universities and the institutes for applied research ('TO2 institutes') refer to the top sector agendas more and more often when drawing up their own agendas. They are also coordinating their agendas among themselves through innovation contracts in which they are involved as partners providing expertise. The TO2 institutes are engaging in joint activities more than previously. If we compare the introduction of the top sector policy to throwing a stone into

a pond, we see ripples spreading far in all directions, for example in education (the Technology Pact, Centres of Expertise, Centres for Innovative Craftmanship in the top sectors, etc.) and economic diplomacy (in particular the travel itineraries of the government ministers and state secretaries involved and activities in the area of 'Holland branding').

## **Points for improvement: shared vision, administrative burden and engagement of multiple actors**

The following three aspects of the top sector policy need to be improved if we are to ensure the sustainability of the dynamics discussed above:

- ▶ The vision behind the top sector policy has not yet been universally acknowledged in the field, and it is not shared by all relevant parties in the 'golden triangle'. Too many actors in the field still regard the top sector policy as financial support for the established order, disguised cutbacks, or as a drain on the coffers of the NWO. In addition, the substantive focus of the top sector policy in terms of innovation has shifted more to devising solutions for global societal challenges, whereas this had initially only been mentioned as an aside in early policy discussions. Taken together, these factors have caused unnecessary confusion and have delayed the creation of a shared vision.
- ▶ Those directly involved experience a significant administrative burden. Over the past few years the top sectors have primarily been occupied with their internal organization and their agendas. The burden experienced has been caused by cumulative levels of complexity due to the integrated approach: the top sectors are required to arrange their affairs with many parties in a new setting (i.e. new rules), while the innovation domain has now been cast against the backdrop of heavily modified subsidy schemes and fiscal policies (the phase-out of the Economic Structure Enhancing Fund (FES) and the new Top Consortia for Knowledge and Innovation (TKI) scheme). Another cause has to do with the large number of TKIs, each with its own roadmap. The top sectors' pronounced penchant for navel-gazing has meant that precious few valuable experiences and best practices are available to be shared that would otherwise lead to greater harmonization, transparency and unambiguous communication with actors in the field. Parties that are involved in several top sectors (e.g. universities or companies that operate in several sectors) notice significant differences between the top sectors as a result of customization, for example when it comes to the use of NWO funding; this can be somewhat bewildering to those who are not thoroughly familiar with the funding mechanisms.
- ▶ A number of key parties also do not share links. The top sector policy has currently resulted in strong links between larger companies and leading SMEs, universities, TO2 institutes and the national government. Other parties in the 'golden triangle' such as mainstream, innovative SMEs (including start-ups and SME growth-drivers), universities of applied sciences, regional authorities and line ministries do not feel

sufficiently connected to the policy for a number of reasons. When they ask ‘what’s in it for me?’, the answers they receive leave them feeling unconvinced. There is a lot of energy present among these parties, and forging a stronger link between them and the top sector policy will result in fresh dynamism.

## Recommendations

The Council has three recommendations for the Minister of Economic Affairs based on the observations outlined above. These recommendations – which form a coherent whole – are:

- ▶ Ensure a shared vision;
- ▶ Improve governance;
- ▶ Forge links between all parties in the ‘golden triangle’.

### Ensure a shared vision

The top sector policy is intended to contribute to strengthening the Dutch economy and to solving societal challenges, which are often related to economic performance. The top sector policy’s contribution consists of bolstering public-private partnerships in a number of key areas that are crucial for the Dutch economy and society. This message has been consistently expressed by the Minister of Economic Affairs of late, but it has not yet taken root among all stakeholders. The Council recommends continuing to communicate this vision clearly and unambiguously along with the secondary objectives, especially among mainstream, innovative SMEs (including start-ups and SME growth-drivers), universities of applied sciences, regional authorities and line ministries. It is advisable to engage these actors in dialogue to create a shared and well-articulated vision. In and of itself, this will not result directly in improvements to the top sector policy, but it is a necessary step towards a more positive national mindset and greater commitment on the part of the key players in the top sector policy.

### Improve governance

The government’s role changed with the introduction of the top sector policy. Now more than ever, the government, in this case the Ministry of Economic Affairs, must take on a proactive and facilitating role with the aim of reducing the administrative burden experienced in the field. The desired and necessary adjustments will then rapidly come to pass. The trick is to execute this role in such a way that it does not result in micromanagement, additional duties and a greater administrative burden for the top sectors. Each top sector should be dealt with separately in this regard.

The range of innovation instruments should also be re-examined. Should additional funding become available from the national government, then the budget for the MIT scheme and/or the TKI scheme can be significantly increased. This will increase the MIT scheme’s likelihood of success, and it will improve the balance between the perceived

costs and benefits of the TKI scheme. If no additional funding becomes available, then the TKI scheme should be simplified by interpreting the equity principle behind the scheme more loosely.

### **Forge links between all parties in the 'golden triangle'**

The Council advises implementing the substantive visions and strategic agendas of the top sectors with regard to the societal challenges in the full realization that these challenges can only be effectively addressed by taking a cross-sectoral approach. These substantive visions can be an excellent means to unite a variety of actors in the top sector policy. The other relevant players mentioned above will then likely feel more connected and the top sectors will then also be more likely to identify new cross-sectoral potential for collaboration. Furthermore, it will be easier to join international networks working on the Horizon 2020 societal challenges. It is also crucial that new players feel adequately represented in top sector governance. Consider adding a member to the top team from the universities of applied sciences, regional authorities and/or start-ups and SME growth-drivers. Also consider positioning universities of applied sciences in the TKIs by adding professors to the TKI programme boards, for example.

Furthermore, additional instruments will be needed to forge these links, especially when it comes to facilitating collaboration between different types of actors. Such collaboration may be between large companies and SMEs, and it may take the form of joint projects between universities of applied sciences, senior secondary vocational education, research universities and companies. This will be difficult to achieve using the existing range of instruments, and it is also at odds with the wish of both the national and regional governments to implement a range of instruments with a revolving character wherever possible. Our recommendation is therefore to be prepared to implement other types of instruments than fiscal or revolving instruments.

### **A look ahead**

The top sector policy must be given time to prove its worth. Innovation policy will benefit from continuity and consistency over a period of at least a decade. Nevertheless, improvements are needed in the top sector policy in order to truly achieve success. The Council believes that the recommendations in this 'Status of the top sectors' report will contribute to the necessary improvements, and that they will thus serve to strengthen the Dutch economy and society in general.

The Council's work programme for 2015 calls for us to continue to monitor the top sector policy. In this regard, we will work together with those parties seeking our advice. As the years progress, it will be possible to evaluate results of the top sector policy at a more substantive level. It may also be useful to examine top sectors individually or to zoom in on new links between various top sectors.