



Summary

Innovation structures in Flanders

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This study offers a comparative overview of the diversity of supporting innovation structures in Flanders. It contains information about the organizations, objectives, achievements, synergy and complementarity with respect to other innovation-supporting structures and the place of innovation structures in the Horizon 2020 innovation clusters. This is the fourth study conducted by the Foundation Innovation & Work on the theme of Flemish Innovation Policy, and once again, this information is being included in the recommendations on innovation by the Flanders Social and Economic Council.

The innovation structures are a part of the Flanders' Science, Technology and Innovation System (WTI). In this context, they have a 'separate' function of (more) specifically supporting innovation in companies. This task is also partially handled by the 'traditional' players in the WTI system. The difference lies in the fact that the innovation structures - supported by the Flemish government - explicitly make this a priority.

The various reports and studies on innovation policy and innovation structures in Flanders all argue for greater transparency. Among these, the Soete I and II reports are best known, but evaluations, impact analyses and other studies by relevant policy actors such as the Flemish Agency for Innovation by Science and Technology (IWT), the Department of Economy, Science and Innovation (EWI) and the Federal Public Service for Science Policy (Belspo), also point in the same direction. The need for transparency applies to innovation programmes, innovation grants/projects as well as innovation structures.

In the Science, Technology & Innovation Studies 'STI in Flanders', EWI charted the (entire) science, technology and innovation landscape. The publication provides a snapshot of STI policy and the leading institutions that help shape innovation: higher education, innovation-intensive companies, strategic research centres, collective and other knowledge organizations. It is a collection of information about science and innovation policy as contained in the indicator book by Ecom (The Centre for Research & Development Monitoring), the annual information guide of the EWI, and other follow-up reports. These publications contribute to greater insight (transparency and clarity) into the innovation support measures (EWI, 2013) (EWI, 2014).

The present study by the Foundation Innovation & Work is in line with the above-mentioned summaries, but focuses on the essence of Flemish innovation structures. It concerns the Strategic Research Centres (SOCs) iMinds, imec, VITO and Flanders Institute for Biotechnology (VIB); the Light Structures Flanders Inshape, Flanders' FOOD, Flanders Innovation Hub for Sustainable Chemistry (FISCH), Flanders' DRIVE, Flanders Synergy, the iMinds Media Innovation Centre (MiX), Strategic Initiative Materials (SIM) Flanders, the social innovation and entrepreneurship platform Sociale InnovatieFabriek, the Flemish Institute for Logistics (VIL), the Flemish sustainable mobility institute VIM, the Environmental and Energy Technology

Innovation Platform (MIP); the Technology Transfer Offices (TTOs); the Provincial Innovation Centres and Flanders DC.

Based on other research, (Borràs & Edquist, 2013) the following parameters were selected for this study to describe the accomplishments of the innovation structures. These parameters are (1) networking, (2) cooperation and (3) support of entrepreneurship.

Innovation structures usually have several goals/activities, and they combine networking with advice and organising cooperation. However, there usually is a focus on priority objectives.

Table 1: Priority objectives from innovation structures

| | | Networking: One-to-many | Cooperation research | in | To advise: One-to-one |
|-------------------------------|--------------------------|------------------------------------|---------------------------------|-----------|----------------------------------|
| SOC's* | | | | | |
| | iMinds | | X | | |
| | Imec | | X | | |
| | VITO | | X | | |
| | VIB | | X | | |
| Light Structures | | | | | |
| | Flanders' Inshape | | | | X |
| | Flanders' FOOD | | X | | |
| | FISCH | | X | | |
| | Flanders' DRIVE | | X | | |
| | Flanders Synergy | X | | | |
| | MiX | | X | | |
| | SIM | | X | | |
| | Sociale InnovatieFabriek | X | | | |
| | VIL | | X | | |
| | VIM | X | | | |
| | MIP | X | | | |
| TTO's | | | | | X |
| Provincial Innovation Centres | | | | | X |
| Flanders DC | | X | | | |

*SOC Maakindustrie (manufacturing) only recently founded

Networking

Some innovation structures target only networking and are meant to stimulate threshold reduction initiatives in innovation, the typical one-to-many activities. Flanders DC was created especially for this purpose, and a number of light structures have this task as main activity: Flanders Synergy, Sociale InnovatieFabriek, VIM and MIP. But the other light structures also organise one-to-many activities and often have hundreds of companies in their network.

TTOs and Provincial Innovation Centres that focus on supporting companies, and guiding them on the path to innovation and open innovation, also organise network events to make their services known at the companies. Provincial Innovation Centres organise information sessions such as the annual knowledge exchange fair. TTOs often participate in partnership with research groups or other organisations. TTOs (and by extension universities) and the Provincial Innovation Centres are also important actors in the VIN network, the Flemish innovation network coordinated by the IWT.

Each SOC has developed its own networking style. Examples include conferences, technology communities and participation in trade fairs. Some SOC focus on organising network events themselves (iMinds), others make use of (existing) nonprofits of which they may be a part (VIB).

Cooperation

Direct support of innovation in companies takes place in collaborative projects. The innovation structures in question, i.e. the SOC and some light structures such as FISCH, Flanders' DRIVE, Flanders' FOOD, MiX, SIM, VIL and VIM, as well as the traditional knowledge centres (attached to universities/colleges and economic sectors) are ready to assist companies in valorising their knowledge in innovations.

The four well-known SOC – with the recently established manufactured goods industry SOC as fifth – work at a different level of cooperation and innovation than the other innovation structures, since here the focus is on excellence and internationality. Their operations approximate the international work done by the Research Excellence Initiatives (REIs), certainly in the case of VIB and imec (this task is very prominent at these organizations). To the extent that research groups attached to universities are involved, they share in this international standard.

The international dimension is less obvious for the light structures, and in most cases still in an embryonic stage.

The TTOs occupy a special place, since they are not directly involved in the partnerships, but do take part in the negotiations – substantive and formal/legal – around the partnership. Involvement is significant, certainly concerning the wide-ranging TTOs (broader than the interface resources and the Industrial Research Fund budgets) since they (as part of a university) can contribute to the financing of collaborative projects.

Support for entrepreneurship

The innovation structures' support of entrepreneurship takes the form of giving personalised advice to companies in the area of innovation, and locating innovation partners or grants. The provincial innovation centres specialise in this, as do the TTOs and some light structures. This is the main activity for Flanders Inshape, for others, a side activity or extra service: Flanders' DRIVE, Flanders FOOD, Flanders Synergy, Sociale InnovatieFabriek and VIL.

For operational synergy, an examination is made of the extent to which the innovation structures work together with colleague innovation-supporting structures. In practice, there appears to be much cooperation, partially stimulated by the incentives provided for this purpose by the coordinating policy structures IWT and EWI. Cooperation is usually a condition for receiving basic funding and certainly for receiving project subsidies.

Horizon 2020 innovation clusters

The Horizon 2020 classification scheme was used to situate the innovation structures within the innovation clusters. Where possible, the innovation structures were assigned to a single domain, or assigned on a percentage basis to the seven themes. This classification was done based on a (very) raw indicator of the activities related to financial participation in the operations, the allocation of human resources, number of projects, etc. Hence, this classification is certainly open to discussion, and of course also only reflects the situation at a specific point in time. Research domains continually evolve depending on social and economic needs.

Table 2: Horizon 2020 clusters – Innovation structures Flanders

| Clusters | Estimate on basis of % important activities | Not cluster specific |
|---|--|---|
| 1. Health, Demographic Change and Wellbeing | | Provincial Innovation Centres Flanders DC TTO's Flanders' Inshape iMinds imec Mix |
| 2. Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research and the Bioeconomy | VIB Flanders' FOOD | |
| 3. Secure, Clean and Efficient Energy | | |
| 4. Smart, Green and Integrated Transport | Flanders' DRIVE VIL VIM | |
| 5. Climate Action, Environment, Resource Efficiency and Raw Materials | VITO FISCH SIM Flanders MIP | |
| 6. Europe in a changing world - Inclusive, innovative and reflective societies | Sociale InnovatieFabriek Flanders Synergy | |
| 7. Secure societies – Protecting freedom and security of Europe and its citizens | | |

*SOC Maakindustrie (manufacturing) only recently founded

Concerning 'inclusive, innovative and reflective societies (smart cities)', it must be said that many projects also intentionally strive for added value at societal level. This for that matter is explicitly mentioned in the objectives of the IWT subsidies.

Conclusion

Despite the wide variety of innovation structures, cooperation between such organizations is also sought, especially among organizations active in the same Horizon 2020 cluster.

This study was limited to a description of the innovation structures. For an impact analysis, we refer to the structural evaluations that these five types of innovation structures regularly undergo. These contain in-depth analyses, usually including a customer survey, that examine the impact of the innovation structures on the Flemish business community. The evaluations are based on agreed KPIs, which vary for the various innovation structures in question. In a following agreement, the KPIs will be adapted to include feasibility and the new needs of the innovation policy. These impact studies are commissioned by the IWT and the EWI, and are available on the respective websites. Hence, the diverse structures are followed up closely; all that is missing is a global impact assessment of the innovation structures as a whole. To this end, the impact assessments or evaluations should be available at the same time, and be given a second reading from the point of view of total support of the Flemish innovation policy in companies.

In addition to the types of innovation structures analysed, there is also a wide range of varying structures and project-based organizations that (at least partially) are subsidized by the Flemish government. As was said, the aim of this report was not to judge these initiatives based on their strengths and weaknesses or on their merits. Ignoring for the moment their mission, objectives and activities, this finding alone concerning their existence presents a picture of a complex system in which the diverse actors, including the government, sometimes no longer see the forest for the trees.

Borràs, S., & Edquist, C. (2013). The Choice of Innovation Policy Instruments. Technol. Forecast. Soc. Change.

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<http://www.serv.be/en/stichting> Summaries of research on open innovation in Flemish industry

Keywords: innovation policy, supporting innovation structures, research, valorisation, STI instruments, STI policy

Gert Verdonck (2014), Innovatiestructuren in Vlaanderen, StIA/SERV, Brussels, October 2014