Science policy in Belgium: who does what?

Belgian Science and Technological Innovation (STI) policy is unparalleled in the European Union, with different governments responsible for different parts of this broad policy area. Which policy level should universities apply to for support for a scientific research project? And where can companies find help with developing an innovative idea? A snapshot of a complex landscape...





Responsibilities for scientific research in Belgium have - as a result of successive state reforms - been systematically transferred to the federated entities.³ Nowadays, most responsibility for STI lies with the communities and regions. This includes scientific research - both basic and applied - and technological innovation.

Communities and regions

The communities are responsible for scientific research in the field of education (including universities and institutes of higher education), science policy, culture, media, sport, youth, vocational training and matters relating to the individual such as health policy (prevention, care, health education) or assistance to persons (e.g. family policy, youth support, care for the elderly, ...). This covers both research on these subjects and research conducted by organisations in the sector concerned.

The *regions* are responsible for research relating to economic policy (economic support, industrial policy, innovation), energy policy (excepting the nuclear fuel cycle), public works, communication networks, environment and water policy, nature conservation, housing, transport, spatial planning, natural resources, town and country planning, development aid, agriculture, foreign trade and investment and some elements of employment policy.

Communities and regions are also res-

ponsible for their own institutions in the STI domain, namely scientific institutions and public research organisations.

Educational institutions are thus mainly funded via the communities, while support for company research and development is a regional responsibility. That means that the various universities and institutes of higher education in the bilingual Brussels-Capital Region receive support from either the Flemish or the French Community. By contrast, technology transfer and research valorisation from these institutions to local companies is regulated and supported by another authority: the Brussels-Capital Region.

What about the federal government?

As an exception to the general rule, the federal government remains responsible for a number of specific scientific fields and institutions, such as the National Botanic Garden⁴. In addition, it can organise scientific programmes to finance community or regional institutions. The collective research centres are also partly supported by the federal government.

The federal level has also retained responsibility for virtually all the framework conditions applying to STI policy in the broad sense. This includes matters relating to standardisation; intellectual property rights; accreditation; social security contributions of researchers operating in Belgium; certification; labour regulations for researchers who move between companies, (public) research institutions and authorities.

Finally, the federal government can also offer support to university research teams in conducting scientific projects, usually as part of specific programmes.

Policy implications

As a result of all this, Belgium's various governments each develop and implement their own STI policy. They do so within their own areas of responsibility, and using their own institutions and legal rules, independently of the other institutional players in the field. For instance, the federal government and each community government has its own minister or state secretary responsible for scientific research. Similarly, each regional government has a minister or state secretary responsible for technological innovation⁵. Each minister and government sets its own priorities for its own STI policy, the budget for which is submitted to the relevant parliament for approval. Each government has its own scientific research advisory body, which assists the parliament and/or government with policy preparation. Each government also has its own scientific institutions and/or research organisations, which may or may not operate in similar fields

Cooperation examined critically

The Interministerial Commission for Science Policy (IMCWB) was set up



Figure 2: Distribution of R&D funding in Belgium (2006)

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to promote cooperation between the various entities in the field of scientific research. It brings together the federal government, the communities and the regions.

At civil service level, the International Cooperation Commission (CIS) and the Federal Cooperation Commission (CFS) were set up in the early 1990s to provide forums for issues requiring a joint position, reporting or implementation at international or national policy level. Each commission consists of a number of thematic sub-commissions. One such is the CIS/COST, which coordinates Belgian participation in the international cooperation programme COST⁶. Note, however, that this is not an overarching participation by Belgium as a whole in a specific COST activity, but rather a form of participation whereby each government decides separately to take part in a specific COST activity, depending on the case and the level of potential interest.

In short, the level of coordination, cooperation and joint priority-setting among the various institutional entities is extremely limited, and virtually no attempt is made at policy "orchestration". Priorities and instruments are determined and implemented by a government within its field of competencies. The basic premises and philosophies may vary, and where there is cooperation it arises from the need for a common Belgian position or common Belgian reporting. Consequently it is more of a formal contrivance than an expression of genuine concerns, initiatives or pressing issues. That said, there are similarities between a number of instruments, measures, programmes and organisations associated with different governments. Conversely, there are also measures implemented by one government which its counterparts have not (or not yet) developed or for which there is little interest or need.

Let the figures do the talking

In 2006, the R&D budget for all of Belgium's governments combined was €1,929.9 million. In absolute terms, "Higher Education" took the biggest share of this €1.9 billion, with a budget of almost €460 million, followed by "Action programmes and organic systems for R&D", which accounted for €321.4 million. This latter figure illustrates the

strong variations in policy focus: while Flanders earmarked €62.1 million, the French Community and Walloon Region together set aside €187.3 million. Total R&D funding for Belgium in 2006 was divided up between the different governments as follows (see Figure 2): Flemish Community/Flemish Region: 50.25%; federal government: 26.56%; French Community: 12.73%, Walloon Region: 9.34%, Brussels-Capital Region: 1.12%; German-speaking Community: 0%.

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STI responsibilities in a nutshell

The communities are responsible for:

- scientific research; the various funding channels for their universities and institutes of higher education
- the international scientific cooperation of their institutions;
- cataloguing and reporting scientific potential;
 raising awareness of and promoting science among the general public;
- research into the ethical issues associated with specific aspects of science;
- scientific institutions and knowledge organisations at community level; - international scientific activities

The regions are responsible for:

- transfer of scientific and technical research;
- basic technological, industrial and economic oriented research;
- encouragement, dissemination, transfer and application of technology and innovation in the broad sense (including development of prototypes, new products and production processes); the (strategic) research institutions located on their territory, including
- research and public service activities.

The federal government is responsible for:

- the scientific research needed to carry out its own responsibilities, including scientific research conducted in accordance with international and supranational agreements. This is achieved through targeted programmes (on space, the information society, sustainable development, etc.);
- scientific research in a few specifically defined fields, such as research into nuclear energy and space travel in the context of international programmes;
- activities in areas falling within the remit of the communities or regions and which are related to either an international agreement or activities/ programmes that exceed the scope of a single community or region;
- activities requiring homogeneous implementation at national level or of international importance for the country (in collaboration with the
- communities and regions); maintaining an up-to-date inventory of national scientific potential;
- popularisation of the areas of science falling within the federal government's remit;
 - federal scientific institutions.
- More particularly, the communities and regions first acquired a degree of responsibility for (applied) scientific research under Article 6a of the special law on institutional reform (BWHI) of 8 August 1980. In 1988, the division of powers was altered (partly due to the transfer of responsibility for education to the communities). In 1993, this was revised once again under the Saint Michael agreements.

- European Co-operation in the field of Scientific and Technical Research. This is the longest run-ning joint European R&D programme (launched in 1971).