

## Survey response for Belgium

### OECD database of governance of public research policy

This document contains detailed responses for Belgium to the survey on governance of public research policy across the OECD. It provides additional background information to the OECD database of governance of public research policy as described in Borowiecki, M. and C. Paunov (2018), "How is research policy across the OECD organised? Insights from a new policy database", *OECD Science, Technology and Industry Policy Papers*, No. 55, OECD Publishing, Paris, <https://doi.org/10.1787/235c9806-en>. The data was compiled by the OECD Working Party on Innovation and Technology Policy (TIP). Data quality was validated by delegates to OECD TIP Working Party the in the period between March 2017 and May 2018. Additional references that were used to fill out the questionnaire are indicated.

The data is made freely available online for download at <https://stip.oecd.org/resgov>.

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## Abbreviations and acronyms

AEI	Agence pour l'Entreprise et l'Innovation Agency for Entrepreneurship and Innovation
AO	Agentschap Ondernemen Enterprise Flanders
ASE	Agence de Stimulation Économique Economic Development Agency
AST	Agence de Stimulation Technologique Technology Development Agency
BEL-BC	Brussels-Capital Region
BEL-FA	Flanders Region
BEL-FL	Flemish Community
BEL-FR	French Community
BEL-WA	Walloon Region
BELSPO	Politique scientifique fédérale Federaal Wetenschapsbeleid Federal Science Policy Office
BOF	Bijzonder Onderzoeksfonds Special Research Fund
CPS	Conseil de la Politique Scientifique de Wallonie Walloon Council of Science Policy
CSP	Conseil de la Politique Scientifique Région de Bruxelles-Capitale Council of Science Policy of the Brussels-Capital Region
DGENORS	Direction générale de l'Enseignement non obligatoire et de la Recherche scientifique Directorate-General for Non-Compulsory Education and Scientific Research
DG03	Directorate-General for Agriculture, Natural Resources and Environment Direction Générale Opérationnelle Agriculture, Ressources naturelles et Environnement
DG06	Direction générale opérationnelle de l'Économie, de l'Emploi & de la Recherche Operational Directorate-General for the Economy, Employment and Research
ERC	European Research Council
ESA	European Space Agency
EWI	Departement Economie, Wetenschap en Innovatie Flanders Department Economy, Science and Innovation
FNRS	Fonds de la Recherche Scientifique en Fédération Wallonie-Bruxelles Fund for Scientific Research in the Wallonia-Brussels Federation
FRWB	Conseil fédéral de la Politique scientifique Federaal Wetenschapsbeleid Federal Council for Science Policy
FWO	Fonds Wetenschappelijk Onderzoek Research Foundation Flanders
HEIs	Higher Education Institutions
H2020	Horizon 2020
Innoviris	Institut Bruxellois pour la Recherche et l'Innovation Brussels Instituut voor onderzoek en innovatie Brussels Institute for the Encouragement of Scientific Research and Innovation
IOF	Industrieel Onderzoeksfonds Industry Research Fund
IMEC	Interuniversity Microelectronics Centre
IWT	Agentschap voor Innovatie door Wetenschap en Technologie Agency for Innovation by Science and Technology
LV	Departement Landbouw en Visserij Department for Agriculture and Fisheries
OV	Departement Onderwijs en Vorming Flanders Department for Education and Training
PRIs	Public Research Institutes
VARIO	Vlaamse adviesraad voor Innoveren en Ondernemen Flemish Advisory Council for Innovation and Enterprise
VLAIO	Agentschap Innoveren & Ondernemen Flanders' Innovation and Entrepreneurship
VRWI	Vlaamse Raad voor Wetenschap en Innovatie Council for Science and Innovation of Flanders

## Survey of public research policy

### Topic 1: Institutions in charge of priority setting, funding and evaluations

**Table 1. Questions on institutions in charge of priority setting, funding and evaluations of universities and PRIs**

Question	Response
<p><b>Q.1.1. Who mainly decides on the scientific, sectoral and/or thematic priorities of budget allocations for a) HEIs and b) PRIs?</b></p> <p>c) Which are the main mechanisms in place to decide on <b>scientific, sectoral and/or thematic priorities of national importance</b>, e.g. digital transition, sustainability? Please describe who is involved and who decides on the priorities (e.g., government, research and innovation councils, sector-specific platforms including industry and science, etc.).</p> <p><i>(This question does not refer to who sets overall science, technology and industry priorities. This is usually done by parliaments and government. The question refers to decisions taken after budgets to different ministries/agencies have been approved. Scientific priorities refer to scientific disciplines, e.g. biotechnology; sectoral priorities refer to industries, e.g. pharmaceuticals; and thematic priorities refer to broader social themes, e.g. digital transition, sustainability, etc.)</i></p> <p>d) From 2005-16, were any significant changes introduced as to how decisions on scientific, sectoral and/or thematic orientation of major programmes are taken (e.g. establishment of agencies that decide on content of programmes)?</p>	<p><i>Federal Government</i></p> <p>a and b) The Federal science policy office (BELSPO) sets priorities for federal PRIs, community and regional ministries and agencies set priorities for community PRIs and regional institutions</p> <p>c) Belgium is a Federal country composed of three communities (Flemish, French, and German-speaking Community) and three regions (Brussels-Capital Region, Flanders, and Wallonia). The Federal Government has competence for the ten Federal PRIs and intellectual property (IP) law, taxation, employment legislation and social security. There is no hierarchy of powers between the federal government and the other authorities. The communities are responsible for fundamental research policy including higher education institutions (HEIs) and the Community scientific institutes, and the regions are responsible for applied research, innovation and business R&amp;D policies, as well as for public research institutes (PRIs), e.g. applied research and knowledge transfer policies.</p> <p><i>Brussels-Capital Region</i></p> <p>a and b) In the Brussels-Capital Region (BEL-BC), the Institute for the Encouragement of Scientific Research and Innovation of Brussels (Innoviris) sets budget and strategic priorities for applied research and innovation at HEIs and PRIs in the Brussels-Capital Region.</p> <p><i>Flemish Region and Flemish Community</i></p> <p>a and b) The Flemish Region and the Flemish Community merged their institutions in 1980. For the Flemish Community and the Flemish Region (BEL-FL), the department EWI sets priorities for research and innovation policy (EC/OECD STI Policy Survey 2016 for Belgium, responses B4 and B7; EC, 2015, p. 6).</p> <p><i>French Community and Walloon Region</i></p> <p>a and b) Since mid-2017, there is one ministry in charge of higher education and fundamental research in the French Community of Belgium, and another distinct ministry in charge of industry, research and innovation for the Walloon Region. For the French Community (BEL-FR), the Directorate General for Non-Compulsory Education and Scientific Research (DGENORS) sets priorities for research policy (EC/OECD STI Policy Survey 2016 for Belgium, responses B4 and B7). In the Walloon Region (BEL-FR), the Operational Directorate General for the Economy, Employment and Research (DGO6) sets budget and strategic priorities for applied research and innovation.</p> <p><i>German Community</i></p> <p>The German-speaking Community does not have its own research policy.</p>

*References:*

EC/OECD STI Policy Survey 2016 for Belgium. Responses B4 and B7.

**Q.1.2.** Who allocates **institutional block funding** to a) HEIs and b) PRIs?

*(Institutional block funds (or to general university funds) support institutions and are usually transferred directly from the government budget.)*

c) Who allocates **project-based funding** of research and/or innovation for HEIs and PRIs?

*(Project-based funding provides support for research and innovation activities on the basis of competitive bids.)*

d) Is there a transnational body that provides funding to HEIs and PRIs (e.g. the European Research Council)?

e) What is the importance of such funding relative to national funding support?

f) From 2005-16, were any changes made to way programmes are developed and funding is allocated to HEIs and PRIs (e.g. merger of agencies, devolution of programme management from ministries to agencies)?

*Brussels-Capital Region*

a to c) Innoviris allocates competitive, project-based funding for applied research and innovation in the Brussels-Capital Region.

*Flemish Region*

a and b) The department EWI allocates institutional funding to HEIs and PRIs (strategic research centres) in the Flemish Community. The department Education and Training (OV) allocates the first pillar of basic funding for the universities of the Flemish Community.

c) With regard to project-based funding, FWO develops competitive programmes supporting research at HEIs and PRIs and allocates budget to them: Flanders Innovation and Entrepreneurship (VLAIO) does the same for innovation.

*Changes over 2005-2016*

f) In 2016, IWT merged with Enterprise Flanders (AO) into the new Flanders Innovation and Entrepreneurship (VLAIO). The objective of the reforms was to establish VLAIO as a one-stop-shop for business and FWO as a one-stop-shop for researchers (EC/OECD STI Policy Survey 2016, responses B4 and B7). In 2016, the research infrastructure support entity Hercules Foundation became a part of FWO. FWO also assumed responsibility for biomedical research and strategic basic research programmes of the former Agency for Innovation Science and Technology (IWT).

*French Community and Walloon Region*

a and b) DGENORS allocates institutional funding to HEIs in the French Community.

c) Project-based funds for research projects are allocated by the National Scientific Research Fund (FNRS) (French Community BEL-FR), while funds for innovation projects are allocated by the Agency for Entrepreneurship and Innovation (AEI) (Walloon Region).

*Changes over 2005-2016*

f) In 2015, the Economic Stimulation Agency (ASE) and the Technological Stimulation Agency (AST) merged into AEI in the Walloon Region (EC/OECD STI Policy Survey 2016, responses B4 and B7).

d) In Belgium, HEIs and PRIs are eligible for additional funding from the European Research Council, as well as from other EU-related programmes such as for example Marie Curie.

e) For the Flemish Region, EU funds correspond to around 15% of public R&D expenditures. Missing answer for the other Regions.

f) See above for Changes in the Regions and Communities over the period 2005-2016.

*References:*

EC/OECD STI Policy Survey 2016 for Belgium. Responses B4 and B7.

<p><b>Q.1.3. Do performance contracts determine funding of a) HEIs?</b></p>	<p>a to f) There are no performance contracts in place.</p>
<p><i>Institutional block funds can be partly or wholly distributed based on performance. (Performance contracts define goals agreed between ministry/agency and HEIs/PRIs and link it to future block funding of HEIs and PRIs.)</i></p>	<p>g) <i>Flemish Region</i> Funding of HEIs is not based on performance agreements. In Flanders, there are multi-annual contracts in place between the Flemish Government and Flemish PRIs.</p>
<p>b) What is the share of HEI budget subject to performance contract?</p>	<p>HEIs receive funding from the Special Research Fund (Bijzonder Onderzoeksfonds, BOF) and the Industry Research Fund (Industrieel Onderzoeksfonds, IOF) that are allocated to universities based on a distribution key. The BOF-distribution key is based on 6 criteria that have been refined or adjusted several times. The criteria for distributing the BOF-budget amongst the HEI are defined in the "Government of Flanders Order of 21st December 2012 regarding the Special Research Funds which was modified in 2014 and 2015.</p>
<p>c) Do performance contracts include quantitative indicators for monitoring and evaluation?</p>	<p>The BOF-criteria are: Number of Bachelor and Master students, Bachelor and Master degrees obtained ('degrees parameter'); number of PhD Doctor graduates (' PhD parameter'); number of female researchers in postdoc and Full professor level ('diversity parameter') degrees obtained; number of publications in international scientific literature; number of publications in the Flemish Academic Bibliography for the Social Sciences and Humanities; and number of citations. The last 3 criteria increased their share to 40% in 2016.</p>
<p>d) What are the main indicators used in performance contracts? Which, if any, performance aside from research and education is set out in performance contracts?</p>	<p>IOF funding is distributed using the following indicators:</p> <ul style="list-style-type: none"> <li>• Income from industry contracts</li> <li>• Income from EU-Framework programmes</li> <li>• Number of patents</li> <li>• Number of spin-offs</li> </ul>
<p>e) Do HEIs participate in the formulation of main priorities and criteria used in performance contracts?</p>	<p>Regarding funding of Flemish PRIs, there are multi-annual contracts in place between Flemish Government and PRIs. The contract with the research institute IMEC (Interuniversity Microelectronics Centre), for instance, aims to support research excellence, regional impact and leverage research for economic and social impact. The performance agreements include a list of indicators of monitoring institutional performance:</p> <ul style="list-style-type: none"> <li>• Number of peer reviewed publications</li> <li>• Number of 1st time applications for patents</li> <li>• Number of PhD students</li> <li>• Number of spin-offs</li> <li>• Number of incubator operations</li> <li>• Income of co-operations with regional companies</li> <li>• Partnerships with organisations in the region</li> <li>• Income from international programmes</li> </ul>
<p>f) Do the same priorities and criteria set in performance contracts apply to all HEIs?</p>	<p><i>French Community and Walloon Region</i> In the French Community, the allocation of institutional funds to HEIs is based on the number of Bachelor, Master and doctoral students enrolled and on the number doctoral degrees obtained. The research part of basic funding is 25% of total university institutional funding.</p>
<p>g) Are any other mechanisms in place to allocate funding to HEIs and PRIs?</p>	<p>f) No major changes made.</p>
<p>h) From 2005-16, were any changes made to funding of HEIs and PRIs?</p>	<p>(In case performance contracts are in place that bind funding of PRIs, please provide information about them.)</p>

*References:*

Claeys, A.-L., and Estermann, T. (2015), Performance-based funding of universities in Europe, Define Thematic Report, p. 28, European University Association, Brussels, Available at: [http://www.eua.be/Libraries/publications-homepage-list/define-thematic-report\\_-\\_pbf\\_final-version](http://www.eua.be/Libraries/publications-homepage-list/define-thematic-report_-_pbf_final-version) (Accessed 25 January 2017).

Codex Vlaanderen, Besluit van de Vlaamse Regering betreffende de financiering van de Bijzondere Onderzoeksfondsen aan de universiteiten in de Vlaamse Gemeenschap (21/12/2012).

EC/OECD STI Policy Survey 2016 for Belgium. Response C6.

**Q.1.4.** Who decides on the following key **evaluation** criteria of HEIs and PRIs?

Who is responsible for setting criteria to use when evaluating performance of a) HEIs? Who is responsible for b) evaluating and c) monitoring HEIs' performance?

Who is responsible for setting criteria to use when evaluating performance of d) PRIs? Who is responsible for e) evaluating and f) monitoring PRIs' performance?

h) From 2005-16, was any institution created for evaluating HEIs and PRIs or were any changes made to criteria applied for evaluations of HEIs and PRIs?

*Flemish Region*

a) For the Flemish Community, the department EWI defines criteria to be used for institutional evaluations of HEIs.

b and c) The department EWI also conducts evaluations and monitors performance of HEIs in the field of research (teaching is a competence of the Education and Training department).

d to f) The department EWI also defines criteria to be used for institutional evaluations of its Flemish PRIs and the knowledge centres (EC/OECD STI Policy Survey 2016 for Belgium, response B12).

*French Community and Walloon Region*

a to c) Since 2012, institutional funding of HEIs is conditional to a quality evaluation process by the French Community. The independent AEQES conducts the evaluations. New standards for the assessment of higher education institutions have been published in June 2015 (EC/OECD STI Policy Survey 2016 for Belgium, response B12).

*Federal Government*

d to f) Regarding Federal PRIs, BELSPO is responsible for evaluations (EC/OECD STI Policy Survey 2016 for Belgium, response B12).

*References:*

EC/OECD STI Policy Survey 2016 for Belgium. Response B12.

**Q.1.5.** Which **recent reforms** to institutions that are in charge of priority setting, budget allocations, and evaluations of HEIs and PRIs were particularly important?

*Flemish Region*

In Flanders, the funding agency VLAIO was established as a one-stop shop for businesses in 2016. It was established as a merger of the business-support agencies IWT and AO. The FWO was reorganised as a one-stop shop for researchers in 2016: The research infrastructure funding agency Hercules Foundation became a part of FWO in 2016 and FWO also assumed responsibility for biomedical research and strategic basic research programmes of the former IWT (EC/OECD STI Policy Survey 2016, responses B4 and B7).

*French Community and Walloon Region*

In the Walloon Region, ASE and AST merged to become AEI that administers competitive funding for science and industry in 2015 (EC/OECD STI Policy Survey 2016, responses B4 and B7).

In 2013, the Academy of Research and Higher Education was created in order to better coordinate Belgian French-speaking higher education institutions. Its role is to ensure the overall coordination of their activities, including research, and to encourage the development of collaborations among them.

*References:*

EC/OECD STI Policy Survey 2016 for Belgium. Responses B4 and B7.

## Topic 2: Policy co-ordination mechanisms

**Table 2. Questions on research and innovation councils**

Question	Response
<p><b>Q.2.1. a)</b> Is there a <b>Research and Innovation Council</b>, i.e. non-temporary public body that takes decisions concerning HEI and PRI policy, and that has explicit mandates by law or in its statutes to either?</p> <ul style="list-style-type: none"> <li>– provide policy advice (i.e. produce reports);</li> <li>– and/or oversee policy evaluation;</li> <li>– and/or coordinate policy areas relevant to public research (e.g. across ministries and agencies);</li> <li>– and/or set policy priorities (i.e. strategy development, policy guidelines);</li> <li>– and/or joint policy planning (e.g. joint cross-ministry preparation of budgetary allocations)?</li> </ul> <p>b) What is the name of the main research and/or innovation Council/Committee? Are there any other research Councils/Committees?</p> <p>c) Are there any other research Councils/Committees?</p>	<p>a and b) <i>Federal Government</i></p> <p>At the federal level, there is the Federal Science Policy Council (FRWB). It was created in 1997. The council discusses federal science policy competences with view to R&amp;D tax issues, federal research institutes and federal research programs (e.g. space).</p> <p><i>Brussels-Capital Region</i></p> <p>In the Brussels-Capital Region, the Regional Council of Science Policy (CPS/RWB) fulfils the role of a main research and innovation council.</p> <p><i>Flemish Region</i></p> <p>In Flanders, the Flemish Advisory Council for Innovation and Enterprise (Vlaamse Adviesraad voor Innoveren en Ondernemen or VARIO) is the main research and innovation council. It resulted out of the merger between the Flemish Council for Science and Innovation (VRWI) and the States-General of Industry.</p> <p><i>French Community and Walloon Region</i></p> <p>The Walloon Council of Science Policy (Conseil de la Politique Scientifique, CPS) is the main research and innovation council in Wallonia. Since 2017, it is called the « Pôle Politique scientifique » (Science Policy Pole)</p> <p>c) There are no other research and innovation councils.</p>
<p><i>References:</i></p> <p>EC/OECD STI Policy Survey 2016 for Belgium. Response B12.</p>	

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**Q.2.2.** With reference to Q.2.1, does the Council's **mandate** explicitly include a) policy coordination; b) preparation of strategic priorities; c) decision-making on budgetary allocations; d) evaluation of policies' implementation (including their enforcement); e) and provision of policy advice?

a to e) The mandate of the Federal Science Policy Council includes the evaluation of policy implementation and policy advice. The mandates of the Brussels Regional Council of Science Policy, Walloon Council of Science Policy, and the Flemish Advisory Council for Innovation and Enterprise include preparation of policy advice, strategic priority setting and evaluation of policy implementation.

*Federal Government*

The mandate of the Federal Science Policy Council includes the evaluation of policy implementation and policy advice.

*Brussels-Capital Region*

In the Brussels-Capital Region, the CPS/RWB is in charge of the evaluation of research and innovation policies; it is also involved in strategic priority setting. The advice of the CPS/RWB must legally be sought prior to any legislative or (important) executive policy decision. For instance, the Council was actively involved in the formulation of the new Regional Innovation Plans in 2012 and 2016 (EC/OECD STI Policy Survey 2016, response B12).

*Flemish Region*

In Flanders, the VARIO mandate includes the preparation of strategic priority setting, policy advice and policy evaluations. It makes proposals to the Flemish government which is legally bound to consult the Council prior to the adoption of all Flemish parliament acts and resolutions concerning matters relevant to science and innovation policies. The VARIO analyses and discusses the Flemish budgetary allocations for science and technology on a yearly basis and submits its recommendations to the government. It publishes recommendations and reports on its own initiative. Recent policy reports analyse the proposed Flemish cluster policy, the strategic new long term vision 2050 of the Flemish government, and the restructuring of the EWI policy domain (EC/OECD STI Policy Survey 2016, response B12).

*French Community and Walloon Region*

In Wallonia, the CPS's mandate includes policy advice and evaluation of policy implementation. It advises and makes recommendations to the government of the Walloon Region on R&D policies, on its own initiative or by request of the government. The CPS is in charge of conducting a biannual evaluation of innovation policies of the Walloon Region. The most recent review was carried out in 2012-2013 and examined the appeal of studies and professions in scientific and technical areas (EC/OECD STI Policy Survey 2016, response B12).

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**Q.2.3.** With reference to Q.2.1, **who formally participates** in the Council? a) Head of State, b) ministers, c) government officials (civil servants and other representatives of ministries, agencies and implementing bodies), d) funding agency representatives, e) local and regional government representatives, f) HEI representatives, g) PRI representatives, h) private sector, i) civil society, and/or j) foreign experts

a to j) *Federal Government*

In the Federal Science Policy Council, science policy experts participate in their own capacity as experts. They are from universities, industry and policy circles.

*Brussels-Capital Region*

The CPS/RWB in Brussels has 22 voting members, including representatives from HEIs (among others, Université Libre de Bruxelles, Vrije Universiteit Brussel, Catholic University of Louvain and Saint-Louis University Brussels), large firms (Solvay), business chambers (Agoria, UCM, Pharma.be, Essencia), and trade unions. Representatives of PRIs (BBRI, SIRRI) and the Regional ministers' offices participate without voting rights.

*Flemish Region*

In Flanders, the Flemish Advisory Council for Innovation and Enterprise VARIO has 10 members. The chairman and nine members of the VARIO take part in their personal capacity; they no longer represent an organisation, although they are usually connected to a company, PRI, HEI, etc. As a group, the members of VARIO bring together knowledge covering the entire innovation chain, ranging from basic research, via innovation and intellectual property, towards research valorisation. The minister allows VARIO complete freedom as regards the topics it chooses to address and with respect to the operational organisation of the council. VARIO had its first meeting on January 31st 2017.

*French Community and Walloon Region*

In Wallonia, 28 members constitute the CPS, including 14 members from trade unions and business, eight members from HEIs, two members from PRIs, and four members from the government of Wallonia.

*References:*

Conseil de la Politique Scientifique Région de Bruxelles-Capitale (2017) Composition, Available at: <http://www.innoviris.be/fr/conseil-de-la-politique-scientifique/decouvrir-cps-rbc/composition> (accessed 13 February 2017)  
 Conseil Économique et Social de Wallonie (2017), Conseil de la Politique scientifique, website (French), Available at: <http://www.cesw.be/index.php?page=detail-2&alias=Conseil-de-la-Politique-scientifique-CPS> (accessed 13 February 2017)  
 Flemish Advisory Council for Innovation and Enterprise, VARIO, available at <http://www.vario.be/en/about-us/council-members> (accessed 13 February 2017)

**Q.2.4.** With reference to Q.2.1.b., does the Council have its own a) **staff** and/or its own b) **budget**? If so, please indicate the number of staff and the amount of annual budget available.

c) From 2005-16, were any **reforms** made to the mandate of the Council, its functions, the composition of the Council, the budget and/or the Council's secretariat? Was the Council created during the time period?

a and b) *Federal Government*

Missing answer.

*Brussels-Capital Region*

The Brussels CPS/RWB is staffed by secondment from Innoviris, while the federal council is supported by civil servants of the administration.

*Flemish Region*

The Flemish VARIO has a staff of eight, and the CPS in Wallonia has a staff of two.

*French Community and Walloon Region*

Missing answer.

c) *Flemish Region*

In Flanders, the council VRWB (Vlaamse Raad voor Wetenschapsbeleid) existed from 1985 to 2009. It became the VRWI (Vlaamse Raad voor Wetenschap en Innovatie) in 2010 and its mandate included policy advice for science and innovation-related aspects. The Flemish Governing agreement 2014-2019 announced the abolishment of the VRWI. As of 2017, the new VARIO was established following a merger between the VRWI and the States-General of Industry. The VRWI transformed to the VARIO and its first meeting was held on January 31st 2017.

- The composition of the members of the council changed completely compared to the situation in VRWI. The chairman and nine members of the VARIO take part in a personal capacity; they no longer represent a research institution. With this measure the minister wants VARIO council members to be more independent also with regard to the topics they choose to address.
- The previous VRWI advisory council was limited to science and innovation; the scope of the advice has been enlarged for VARIO to include knowledge valorisation and business. Members of VARIO have been selected to reflect knowledge covering the entire innovation chain, ranging from basic research, via innovation and intellectual property, towards valorisation and business settings.
- VARIO staff belongs now to the department EWI. The council's overhead budget for salaries, accommodation etc. was transferred to the budget of EWI. The remaining VARIO-budget is entirely used for policy analysis and evaluations.

*References:*

Conseil de la Politique Scientifique Région de Bruxelles-Capitale (2017) Fonctionnement, Available at:

<http://www.innoviris.be/fr/conseil-de-la-politique-scientifique/decouvrir-cps-rbc/fonctionnement> (accessed 13 February 2017)

Conseil Économique et Social de Wallonie (2017), Conseil de la Politique scientifique, website (French), Available at:

<http://www.cesw.be/index.php?page=detail-2&alias=Conseil-de-la-Politique-scientifique-CPS> (accessed 13 February 2017)

Flemish Advisory Council for Innovation and Enterprise VARIO, see URL: <http://www.vario.be/en/about-us/staff> (accessed 13 February 2017)

**Table 3. Questions on national STI strategies**

Question	Response
<p><b>Q.2.5.</b> a) Is there a national non-sectoral <b>STI strategy</b> or plan?</p> <p>b) What is the name of the main national STI strategy or plan?</p>	<p>a and b) <i>Federal Government</i> At the federal level there is no such plan or strategy. There are, however, policy notes that ministers are presenting in parliament as well the government agreement between all parties.</p> <p><i>The Brussels-Capital Region</i> Regional Innovation Plan (2016-2020)</p> <p><i>Flemish Region</i> Flanders Reform Programme EU 2020, Flanders Pact 2020 (2008-2020)</p> <p><i>French Community and Walloon Region</i> Wallonia Marshal Plan 4.0 (2015-2019) (EC/OECD STI Policy Survey 2016, responses A2 and B1).</p>
<p><i>References:</i> EC/OECD STI Policy Survey 2016 for Belgium. Responses A2 and B1.</p>	
<p><b>Q.2.6.</b> Does the national STI strategy or plan address any of the following priorities?</p> <p>a) Specific themes and/or <b>societal challenges</b> (e.g. Industry 4.0; "green innovation"; health; environment; demographic change and wellbeing; efficient energy; climate action) - Which of the following themes and/or societal challenges are addressed?</p> <ul style="list-style-type: none"> <li>- Demographic change (i.e. ageing populations, etc.)</li> <li>- Digital economy (e.g. big data, digitalisation, industry 4.0)</li> <li>- Green economy (e.g. natural reReferences, energy, environment, climate change)</li> <li>- Health (e.g. Bioeconomy, life science)</li> <li>- Mobility (e.g. transport, smart integrated transport systems, e-mobility)</li> <li>- Smart cities (e.g. sustainable urban systems urban development)</li> </ul> <p>b) Specific <b>scientific disciplines and technologies</b> (e.g. ICT; nanotechnologies; biotechnology) - Which of the following scientific research, technologies and economic fields are addressed?</p> <ul style="list-style-type: none"> <li>- Agriculture and agricultural technologies</li> <li>- Energy and energy technologies (e.g. energy storage, environmental technologies)</li> <li>- Health and life sciences (e.g. biotechnology, medical technologies)</li> <li>- ICT (e.g. artificial intelligence, digital platforms, data privacy)</li> <li>- Nanotechnology and advanced manufacturing (e.g. robotics, autonomous systems)</li> </ul> <p>c) Specific <b>regions</b> (e.g. smart specialisation strategies)</p> <p>d) <b>Supranational</b> or transnational objectives set by transnational institutions (for instance related to European Horizon 2020)</p> <p>e) <b>Quantitative targets</b> for monitoring and evaluation (e.g. setting as targets a certain level of R&amp;D spending for public research etc.)</p> <p>f) From 2005-16, was any STI strategy introduced or were any changes made existing STI strategies?</p>	<p>A to f) <i>Federal Government</i> a and b) The Federal level mainly targets the space sector; more than EUR 200 million a year go to the European Space Agency (EC/OECD STI Policy Survey 2016, responses A2 and B1). c) See below for Regional Strategies and Plans d) Missing answer. e) Regarding quantitative targets, the federal level, the regional levels and the community levels are committed to spend 3% of their GDP on R&amp;D according to the Lisbon agreement (EC/OECD STI Policy Survey 2016, responses A2 and B1).</p> <p><i>Brussels-Capital Region</i> a and b) The priority sectors identified in the new Brussels-Capital Region Innovation Plan are ICT (digital economy), health care (personalised medicine) and environment (green economy). Funding schemes have been prepared along with a cluster initiative to foster growth and critical mass in these fields. The Innovation Plan is aligned both with the EU's Strategy 2020 and with the region's smart specialisation strategy (EC/OECD STI Policy Survey 2016, responses A2 and B1). d) Missing answer. e) Regarding quantitative targets, the federal level, the regional levels and the community levels are committed to spend 3% of their GDP on R&amp;D according to the Lisbon agreement. f) The Regional Innovation Plan was introduced in 2016.</p> <p><i>For responses for the Flemish Region and the French Community and the Walloon Region see next page.</i></p>

**Q.2.6.** Does the national STI strategy or plan address any of the following priorities?

a) Specific themes and/or **societal challenges** (e.g. Industry 4.0; “green innovation”; health; environment; demographic change and wellbeing; efficient energy; climate action) - Which of the following themes and/or societal challenges are addressed?

- Demographic change (i.e. ageing populations, etc.)
- Digital economy (e.g. big data, digitalisation, industry 4.0)
- Green economy (e.g. natural reReferences, energy, environment, climate change)
- Health (e.g. Bioeconomy, life science)
- Mobility (e.g. transport, smart integrated transport systems, e-mobility)
- Smart cities (e.g. sustainable urban systems urban development)

b) Specific **scientific disciplines and technologies** (e.g. ICT; nanotechnologies; biotechnology) - Which of the following scientific research, technologies and economic fields are addressed?

- Agriculture and agricultural technologies
- Energy and energy technologies (e.g. energy storage, environmental technologies)
- Health and life sciences (e.g. biotechnology, medical technologies)
- ICT (e.g. artificial intelligence, digital platforms, data privacy)
- Nanotechnology and advanced manufacturing (e.g. robotics, autonomous systems)

c) Specific **regions** (e.g. smart specialisation strategies)

d) **Supranational** or transnational objectives set by transnational institutions (for instance related to European Horizon 2020)

e) **Quantitative targets** for monitoring and evaluation (e.g. setting as targets a certain level of R&D spending for public research etc.)

f) From 2005-16, was any STI strategy introduced or were any changes made existing STI strategies?

*References:*

EC/OECD STI Policy Survey 2016 for Belgium. Responses A2, B1 and C5.

**Q.2.7.** What **reforms** to policy co-ordination regarding STI strategies and plans have had particular impact on public research policy?

*Flemish Region*

a and b) Flanders targets specific sectors and technologies in its policy Note 2014-2019 for Work, Economy, Science and Innovation: ‘Internet of Things’, ‘Big Data’, ‘Cloud’ and other Industry 4.0. However, these are not mentioned in the field of STI, but in the context of the topic ‘new industrial entrepreneurship’. Part of the budget increase for research and innovation of the past years were allocated to grand challenges, i.e. energy, care, and social innovation (EC/OECD STI Policy Survey 2016, response C5).

d) Missing answer.

e) Regarding quantitative targets, the federal level, the regional levels and the community levels are committed to spend 3% of their GDP on R&D according to the Lisbon agreement.

f) The Flanders Pact 2020 was introduced in 2008.

*French Community and Walloon Region*

a and b) Wallonia identifies priorities linked to societal challenges and created six sector-oriented clusters (pôles de compétitivité) to raise competitiveness and stimulate innovation: health, aeronautics and spatial applications, agrofood, transport and logistics, mechanical engineering, and green technologies.

Cluster policy is also the backbone of Wallonia’s smart specialisation strategy, which focuses on innovation and creativity, greening, internationalisation, and SMEs (EC/OECD STI Policy Survey 2016, responses A2 and B1).

d) Missing answer.

e) Regarding quantitative targets, the federal level, the regional levels and the community levels are committed to spend 3% of their GDP on R&D according to the Lisbon agreement.

f) The Wallonia Marshal Plan 4.0 was introduced in 2015.

*Flemish Region*

In Flanders, the creation of one-stop-shop agencies for researchers and business streamlined coordination processes in 2016. Also in 2016, a new Innovation Public Procurement Action Plan was launched in Flanders. The first call for projects was in spring 2017 and had a budget of 5 million EUR.

**Table 4. Questions on inter-agency programming and role of agencies**

Question	Response
<p><b>Q.2.8.</b> Does <b>inter-agency joint programming</b> contribute to the co-ordination of HEI and PRI policy?</p> <p><i>(Inter-agency joint programming refers to formal arrangements that result in joint action by implementing agencies, such as e.g. sectoral funding programmes or other joint policy instrument initiatives between funding agencies.)</i></p>	<p>Flemish and French Community agencies cooperate together in financing Inter-University Attraction Poles (IUAP) that conduct fundamental research (IUAP). Funding for IUAPs was transferred from the federal authority to the Communities in 2017.</p> <p>The Excellence of Science programme (EOS) promotes joint research between researchers in the Flemish and French-speaking community by funding joint fundamental research projects in any scientific discipline. Major characteristics of the EOS programme are: Calls for fundamental research projects in all domains every 4 years; project duration of 4 years, budget available for staff, consumables, and small research equipment.</p> <p>The three Regions jointly run a programme titled BEL-SME for innovation projects proposed by SMEs.</p>
<p><i>References:</i> EC/OECD STI Policy Survey 2016 for Belgium. Response B6.</p>	
<p><b>Q.2.9.</b> a) Is co-ordination within the <b>mandate of agencies</b>?</p> <p>b) From 2005-16, were any changes made to the mandates of agencies tasked with regards to inter-agency programming? Were new agencies created with the task to coordinate programming during the time period?</p>	<p>a) <i>Federal Government</i> The Federal Science Policy Office (BELSPO) is responsible for organising the coordination of science policies considering international and national topics. BELSPO is running the secretariat of the different coordination bodies. However it cannot impose any coordination.</p> <p><i>Flemish Region</i> In Flanders, EWI chairs an EU-platform to co-ordinate the Flemish stakeholders with view to EU-programmes.</p> <p><i>French Community and Walloon Region</i> In the French Community, an EU-platform was put in place to co-ordinate stakeholders with regard to EU programmes (GSEER, Groupe de Suivi de l'Espace européen de la recherche en Fédération Wallonie-Bruxelles).</p> <p>b) No major changes made.</p>
<p><b>Q.2.10.</b> What <b>reforms</b> of the institutional context have had impacts on public research policy?</p>	<p><i>Federal Government</i> At the federal level, BELSPO is expected to become part of EWI in the coming years (decision by the new government, though not implemented yet).</p> <p><i>Flemish Region</i> In Flanders, the creation of one-stop-shop agencies for researchers and business streamlined coordination processes in 2016.</p> <p><i>French Community and Walloon Region</i> At the French Community level, the creation of the ARES has led to better coordination between the higher education institutions with more emphasis on the teaching and learning.</p>

### Topic 3: Stakeholders consultation and institutional autonomy

**Table 5. Questions on stakeholder consultation**

Question	Response
<p><b>Q.3.1. a) Do the following stakeholders participate as formal members in <b>Research and Innovation Councils</b>? (i.e. Formal membership as provided by statutes of Council)</b></p> <ul style="list-style-type: none"> <li>– Private Sector</li> <li>– Civil society (citizens/ NGOs/ foundations)</li> <li>– HEIs/PRIs and/or their associations</li> </ul> <p><b>b) Do stakeholders participate as formal members in <b>council/governing boards of HEIs</b>? (i.e. Formal membership as provided by statutes of Council)</b></p> <ul style="list-style-type: none"> <li>– Private Sector</li> <li>– Civil society (citizens/ NGOs/ foundations)</li> </ul>	<p><i>Federal Government</i></p> <p>a) The Federal Council for Science Policy (FRWB) does comprise stakeholder members, though in their personal capacity.</p> <p><i>Brussels-Capital Region</i></p> <p>a) In Brussels, the Council of Science Policy (CSP/RWB) includes representatives from HEIs, PRIs, as well as employers' (large firms and business chambers) and employees' (trade unions) representatives. The CPS in Brussels has 22 members, including representatives from HEIs (among others, Université Libre de Bruxelles, Vrije Universiteit Brussel, Catholic University of Louvain and Saint-Louis University Brussels), large firms (Solvay), business chambers (Agoria, UCM, Pharma.be, Essencia), and trade unions. Representatives of PRIs (BBRI, SIRRIS) and the Regional ministers' offices participate without voting rights.</p> <p><i>Flemish Region</i></p> <p>a) In Flanders, The Flemish Advisory Council for Innovation and Enterprise (VARIO) has 10 council members take part in their personal capacity; they no longer represent an organisation.</p> <p>b) In Flanders, universities must include external members. Members of the university board are put forward at the political level and appointed by the HEIs. The situation differs for the so-called free universities, which may choose non-university representatives without external interference.</p> <p><i>French Community and Walloon Region</i></p> <p>a) In Wallonia, the Conseil de la Politique Scientifique (CPS) has 28 members, including 14 members from trade unions and business, eight members from HEIs, two members from PRIs, and four members from the government of Wallonia.</p> <p>b) Missing answer.</p>

*References:*

- Conseil de la Politique Scientifique Région de Bruxelles-Capitale (2017) Composition, Available at: <http://www.innoviris.be/fr/conseil-de-la-politique-scientifique/decouvrir-cps-rbc/composition> (accessed 13 February 2017).
- Conseil Économique et Social de Wallonie (2017), Conseil de la Politique scientifique, website (French), Available at: <http://www.cesw.be/index.php?page=detail-2&alias=Conseil-de-la-Politique-scientifique-CPS> (accessed 13 February 2017).
- European University Association (2016), University Autonomy in Europe, Flanders, webpage, Available at: <http://www.university-autonomy.eu/countries/flanders/> (accessed 24 January 2016).
- Flemish Advisory Council for Innovation and Enterprise VARIO, website (English) available at <http://www.vario.be/en/about-us/council-members> (accessed 13 February 2017).
- KU Leuven (2017) Board of Governors, Available at: <https://admin.kuleuven.be/raden/en/board-of-governors> (accessed 13 February 2017).
- U Hasselt Board of Governors, Available at <http://www.uhasselt.be/UH/OverUHasselt/beleid/beleidsorganen-en-raden.html> (accessed 13 February 2017).

<p><b>Q.3.2.</b> a) Are there <b>online consultation</b> platforms in place to request inputs regarding HEI and PRI policy? b) Which aspects do these online platforms address (e.g. e.g. open data, open science)?</p>	<p><i>Flemish Region</i> a and b) VARIO will start in 2017 with an online platform to communicate with their local board members.</p>
<p>c) From 2005-16, were any reforms made to widen inclusion of stakeholders and/or to improve consultations, including online platforms?</p>	<p>c) Missing answer. <i>French Community and Walloon Region</i> a to c) Missing answer.</p>
<p><b>Q.3.3.</b> Which <b>reforms</b> to consultation processes have proven particularly important?</p>	<p><i>Flemish Region</i> The department EWI organises on a regular basis gatherings to discuss specific topics with stakeholders. For example, ERA-roadmap of Flanders was drafted in such a consultative process in 2016.</p> <p>It's is too early to evaluate the independence of board members of VARIO. The EU-platform has proven to be valuable.</p> <p><i>French Community and Walloon Region</i> In Wallonia-Brussels Federation it is too early to assess the impact of the GSEER (Groupe de suivi de l'Espace européen de la recherche en Fédération Wallonie-Bruxelles) but the aim is to empower this group in the future, i.e. by creating dedicated task forces (e.g. on Open Science).</p>

**Table 6. Questions on autonomy of universities and PRIs**

Question	Response
<p><b>Q.3.4.</b> Who decides about <b>allocations of institutional block funding</b> for teaching, research and innovation activities at a) HEIs and b) PRIs?  <i>(National/regional level: If HEIs face national constraints on using block funds, i.e. funds cannot be moved between categories such as teaching, research, infrastructure, operational costs, etc. This option also applies if the ministry pre-allocates budgets for universities to cost items, and HEIs are unable to distribute their funds between these.</i>  <i>Institutions themselves: If HEIs are entirely free to use their block grants.)</i></p> <p>References:  Data on institutional autonomy is based on a survey conducted by the European University Association between 2010 and 2011 across 26 European countries. The answers were provided by Secretaries General of national rectors' conferences and can be found in the report by the European University Association (Estermann et al., 2015).  Estermann, T., Nokkala, T., and Steinel, M. (2015). University Autonomy in Europe II The Scorecard. Brussels: European University Association. Retrieved from <a href="http://www.eua.be/Libraries/publications/University_Autonomy_in_Europe_II_-_The_Scorecard.pdf?sfvrsn=2">http://www.eua.be/Libraries/publications/University_Autonomy_in_Europe_II_-_The_Scorecard.pdf?sfvrsn=2</a>, accessed 19.09.2016.  European University Association (2016). University Autonomy in Europe (Webpage). Retrieved from <a href="http://www.university-autonomy.eu/">http://www.university-autonomy.eu/</a>, accessed 19.09.2016.</p>	<p><i>Flemish Region</i></p> <p>a) HEIs of the Flemish Community and the French Community receive their public funding as a block grant. The funds are allocated using a formula. There are no constraints regarding the internal allocation of funds within each category.</p> <p>b) PRIs decide themselves about internal allocations.</p> <p><i>French Community and Walloon Region</i></p> <p>a) In the Wallonia-Brussels Federation (French Community), it is considered that 25% of the institutional block funding is dedicated to research activities.</p>
<p><b>Q.3.5.</b> Who decides about <b>recruitment</b> of academic staff at a) HEIs and b) PRIs?  <i>(National/regional level: If recruitment needs to be confirmed by an external national/regional authority; if the number of posts is regulated by an external authority; or if candidates require prior accreditation. This option also applies if there are national/regional laws or guidelines regarding the selection procedure or basic qualifications for senior academic staff.</i>  <i>Institutions themselves: If HEIs are free to hire academic staff. This option also applies to cases where laws or guidelines require the institutions to publish open positions or the composition of the selection committees which are not a constraint on the hiring decision itself.)</i></p> <p>Who decides about <b>salaries</b> of academic staff at c) HEIs and d) PRIs?  <i>(National/regional level: If salary bands are negotiated with other parties, if national civil servant or public sector status/law applies; or if external authority sets salary bands.</i>  <i>Institutions themselves: If HEIs are free to set salaries, except minimum wage.)</i></p> <p>Who decides about <b>reassignments and promotions</b> of academic staff at e) HEIs and f) PRIs?  <i>(National/regional level: If promotions are only possible in case of an open post at a higher level; if a promotion committee whose composition is regulated by law has to approve the promotion; if there are requirements on minimum years of service in academia; if automatic promotions apply after certain years in office, or if there are promotion quotas.</i>  <i>Institutions themselves: If HEIs can promote and reassign staff freely.)</i></p>	<p>a and b) Flemish and French speaking universities and PRIs are free to hire academic and administrative employees.</p> <p>c and d) Salary restrictions apply for staff members hired on the block grant. Regarding salaries, the Federal level has competence for employment legislation, social security and sets salary bands.</p> <p>e and f) Flemish and French speaking universities and PRIs are free to promote academic and administrative employees.</p>



**Q.3.6.** Who decides about the **creation of academic departments** (such as research centres in specific fields) and functional units (e.g. **technology transfer offices**) at a) HEIs and b) PRIs?

*(National/regional level: If there are national guidelines or laws on the competencies, names, or governing bodies of internal structures, such as departments or if prior accreditation is required for the opening, closure, restructuring of departments, faculties, technology offices, etc.*

*Institutions themselves: If HEIs are free to determine internal structures, including the opening, closure, restructuring of departments, faculties, technology offices, etc.)*

Who decides about the creation of legal entities (e.g. **spin-offs**) and **industry partnerships** at c) HEIs and d) PRIs?

*(National/regional level: If there are restrictions on legal entities, including opening, closure, and restructuring thereof; if restrictions apply on profit and scope of activity of non-profit organisations, for-profit spin-offs, joint R&D, etc.*

*Institutions themselves: If HEIs are free to create non-profit organisations, for-profit spin-offs, joint R&D, etc.)*

**Q.3.7.** Who earns what **share of revenues** stemming from IP (patents, trademarks, design rights, etc.) created from publicly funded research at a) HEIs and b) PRIs?

- HEI
- Research unit / laboratory within HEI
- Researchers

c) From 2005-16, were any reforms introduced that affected the institutional autonomy of HEIs and PRIs?

a and b) Flemish and French speaking HEIs and PRIs themselves decide about internal academic structures, such as the creation of departments and technological transfer offices.

c and d) With regard to the creation of legal entities and industry partnerships, HEIs and PRIs are free to create non-profit and for-profit organisations (e.g. spin-offs) as well as joint R&D units.

a and b) Researcher and their research groups receive roughly 30% of revenues while HEIs receive around 60%. 10% are transferred to a valorisation fund.

*c) Flemish Region*

In Flanders, there was a merger of HEIs (universities and university colleges) into 5 University Associations in 2005. The reforms aim to create more critical mass and better integrate university training and research with university colleges via University Associations and cooperation agreements. In one University Association, a university is associated with several other universities and colleges. 5 university associations resulted from the reforms (universities are in parentheses):

- Antwerpen (Universiteit Antwerpen),
- Brussel (Vrije Universiteit Brussel, VUB),
- Gent (Universiteit Gent),
- Leuven (KU Leuven),
- and Limburg (Universiteit Hasselt, UHasselt).

These five universities represent about 90% of total scientific output in the Flemish Community (EC/OECD STI Policy Survey 2016, response C4).

Regarding reforms of PRIs, multi-annual contracts between PRIs and the Flemish Government have changed the conditions for the public support to PRIs. Moreover, the institute iMinds was integrated into the institute Imec in 2016. In 2014, Flanders Make was established after merging the innovation platforms FMTC and Flanders' DRIVE with research laboratories of 5 Flemish Universities.

*For response for the French Community and the Walloon Region see next page.*

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*French Community and Walloon Region*

In the French Community, universities were merged starting in 2004 and PRIs starting in 2013. In 2004, 7 universities of the French Community were merged into 3 university networks or so-called "Académies":

- Louvain,
- Wallonia-Europe,
- and Wallonia-Brussels.

The decree of 7 November 2013 introduces the new notion of "pôle académique" (academic pole) which replaces the concept of "Académies". A "pôle académique" is a non-profit association whose members are institutions of higher education, including at least one university, based on their geographical proximity. Any higher education institution of the Wallonia-Brussels Federation (French Community) belongs to one or more academic poles, depending on the location of its establishments. The aim is to better coordinate French speaking Belgian institutions of higher education.

The number of universities of the French Community is expected to be further reduced to 4. The reforms aim to provide better services related to teaching and research by taking advantage of synergies (EC/OECD STI Policy Survey 2016, response C4).

Regarding PRIs, the French Community launched a reform in 2013 to merge the 22 institutes with the aim to reduce their number to 7. The objective is to create significant critical mass at the European level and greater capacity and visibility (EC/OECD STI Policy Survey 2016, response C4).

**Q.3.8.** Which reforms to institutional autonomy have been important to enhance the impacts of public research?

University reforms in 2004/2005 (see response to question 3.7.c)