

The Brussels-Capital Region's participation in Horizon Europe

9th EU Framework Programme
for Research and Innovation

1st Statistical report



Colophon

Study by hub.brussels

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Introduction

The post-crisis recovery, the green and digital transitions and global issues such as the Sustainable Development Goals (SDG) for 2030 are central to Horizon Europe. Using the Union's investments in research and innovation (R&I), this programme is designed to deliver a positive impact at a scientific, technological, economic and societal level.

Its general objective is to enhance the European Union's scientific and technological bases and foster its competitiveness across all Member States including in its industry. It aims to deliver on its strategic priorities, contribute to the achievement of its objectives and strategic policies, tackle global challenges, including the SDGs by following the principles of the 2030 Agenda and the Paris Agreement and strengthen the European research area.

The purpose of this report, conducted by the National Contact Point of Brussels (NCP Brussels), which is responsible for supporting Brussels-based companies seeking European funding and the BU Research of hub.brussels, is to analyse the involvement of actors from the Brussels-Capital Region in the programme. This includes the number of actors who have accessed European Union funding, their profile, the amount of funding obtained, international collaborations, etc. This report also contains testimonials from Brussels-based companies that, with the support of NCP Brussels, have obtained significant funding under the Horizon Europe programme.

The methodology used for processing these data is the result of a collaboration with NCP Wallonia (AKT), NCP FNRS - Fund for Scientific Research, NCP Flanders - Fonds Wetenschappelijk Onderzoek (FWO), Flanders Innovation & Entrepreneurship (VLAIO), the Economy, Science and Innovation Department of the Flemish government (EWI), NCP Federal and Belspo. The methodology and glossary are presented at the end of this report.

This report therefore reflects the mid-term situation of Brussels' performance in the programme. It will be followed by further reports intended to monitor the evolution of the cumulative results of Brussels-based actors until the final report.

1. Horizon Europe Framework Programme

Horizon Europe is the key funding programme of the European Union (EU) for research and innovation and runs from 2021 to 2027. It has a budget (as an indication) of €93.5 billion. As was the case for its predecessor Horizon 2020, Horizon Europe actions are delivered through open and competitive calls for proposals. Only the most qualitative are funded.

The programme is structured around **three key pillars** corresponding to the programme's three priorities: Excellent Science, Global Challenges and European Industrial Competitiveness and finally, Innovative Europe. Each pillar is broken down into a series of specific objectives. A **fourth, cross-cutting pillar** also includes two specific objectives: "Spreading Excellence and Widening Participation" and "Reforming and Enhancing the European R&I System".

The first pillar, "Excellent Science", aims to facilitate exploratory approaches for teams of researchers, provide them with new knowledge through mobility and training and develop global research infrastructures.

The second pillar, "Global Challenges and European Industrial Competitiveness", aims to improve key technologies and solutions incurred by EU policies and the Sustainable Development Goals. It does so within six clusters: Health; Culture, Creativity and Inclusive Society; Civil Security for the Digital Society; Industry and Space; Climate, Energy and Mobility; Food, Bioeconomy, Natural Resources, Agriculture and Environment.

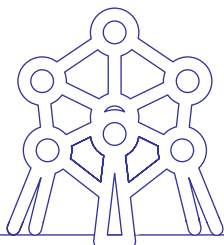
The third pillar "Innovative Europe" aims to stimulate market-creating breakthroughs and ecosystems conducive to innovation by providing support to innovations with a revolutionary and commercial potential, connecting with regional and national innovation actors and bringing key actors (research, education and business) together around common objectives.

Lastly, in order to provide cross-cutting support to these three pillars, the role of the **part "Widening Participation and Strengthening the European Research Area (ERA)"** is to involve a growing number of actors through collaborations and twinning operations, to facilitate the circulation of researchers and develop the activities of the national contact points. It is also intended to reform and enhance the European research and innovation system through prospecting activities, supporting policy-makers to develop this part, ensuring open science and gender equality, supporting international cooperation, etc.

Compared to its predecessor, Horizon 2020, Horizon Europe is not a revolution but an evolution. Several new elements have therefore been introduced, including the European Innovation Council (the EIC, piloted under H2020, is now fully deployed), the Missions¹ and a new approach to European Partnerships.

¹ See appendix 2 for more detail

2. Key participation figures for Brussels-based organisations in Horizon Europe (2021-2024)



The Brussels-Capital Region is the region with the 4th highest

amount of funding obtained through signed after Paris, Munchen and London²

10,112 applications

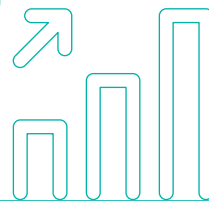
of which 43% Belgian applications

€140 million in funding obtained by SMEs,

which is 12% of the total, compared with 9% for Horizon 2020

Which is 77% of the amount awarded to the private sector (SMEs and large enterprises)

111 SME Beneficiaries



A success rate for proposals of 24%,

compared with 20% for the entire Horizon 2020 programme

681 beneficiaries, including 49% Belgian beneficiaries

€1.2 billion in funding

€823 million funded for priority themes,

of which 25% for the Climate, Energy, Mobility theme



² The nomenclature used is level NUTS3. It should also be noted that the Netherlands has a larger number of participations, but does not specify the region concerned.

3. Horizon Europe and the Brussels-Capital Region

Requests for funding and funding obtained in the BCR

Requests for funding: proposals and applications

Since the programme's launch, **Belgian** applicants have submitted 23,336 requests for funding (applications) and have been involved in 15,006 proposals (Figure 1).

With a share of 43% of Belgian applications, applicants from the **Brussels-Capital Region**³ have been particularly active, submitting **10,112 applications**, corresponding to **7,716 funding proposals** (51% of Belgian proposals).

Of these Brussels-based applications, only 30% were eventually "rejected". 26% were approved in the list of projects to be funded and 11% were included on the reserve list pending a possible funding solution. 34% of them, although they received a positive assessment, could not be funded due to an insufficient budget for certain calls.

After deducting applications submitted by international organisations (IO), Brussels-based applicants submitted 4,701 applications for funding, i.e. 27% of all Belgian applications (excluding IO), corresponding to 4,081 proposals for research or innovation projects (34% of all Belgian propositions, excluding IO).

Key concepts

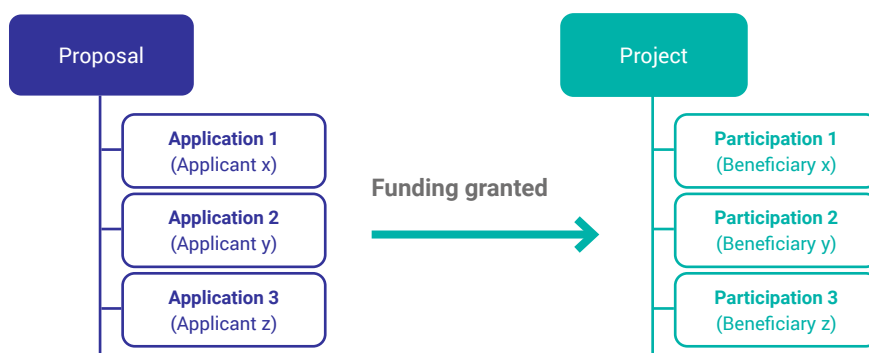


A **proposal** is a request for funding for a research or innovation project that is submitted by one or more applicants.

Each applicant may submit one or more requests for funding, known as an **application**, either in the form of a "common" proposal submitted jointly by several applicants or, more rarely, in the form of an "individual" proposal submitted by a single applicant.

If the funding of a proposal is approved it becomes a **project**, executed by one or more beneficiaries. The various requests for funding from applicants that receive funding are called participations.

A project can therefore concern more than one region if the Belgian applicants for the same proposal are located in different regions (see Appendix 1 - Glossary).



³ The 26 applications from Sirris and Centexbel in which no region has been specified have been included in the Belgian statistics, but not the statistics by region (see methodology, "undetermined" region).

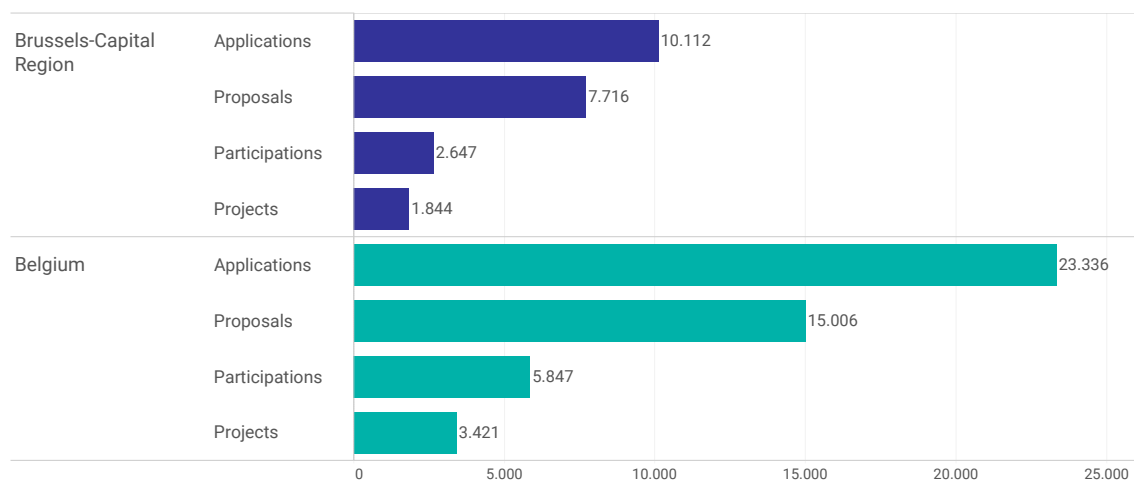
Funding obtained: participations and projects

Out of the **3,421 projects** that involved Belgian applicants, **1,844** featured one or more applicants from the Brussels-Capital Region, i.e. 54% of all projects that involved Belgians. After excluding applications from international organisations, the European Commission approved funding for 933 projects that featured Brussels-based applicants (35% of all Belgian projects).

1,717 projects involving Brussels-based organisations reached the signed contract stage, which is 93% of Brussels projects participating in the programme.

Finally, **2,647 requests for funding** submitted by Brussels-based organisations **were approved (45% of all Belgian participations⁴)**, 1,121 of which were not related to international organisations, i.e. 27% of all Belgian participations (excluding international organisations).

Figure 1. Applications, proposals, participations and projects, Brussels-Capital Region and Belgium



Source : eCORDA, 01/2025, hub.brussels calculations

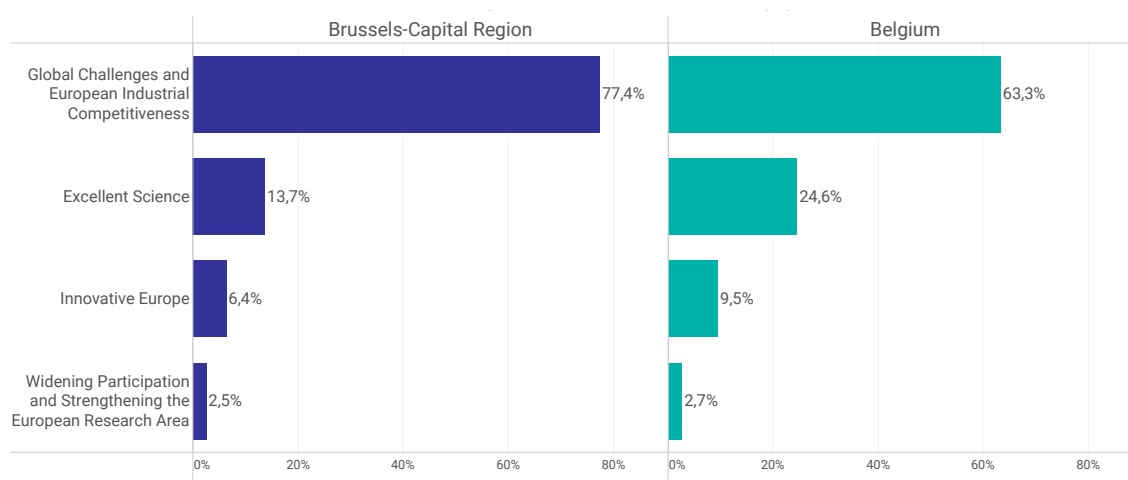
Breakdown of proposals for each Horizon Europe theme

In the Brussels-Capital Region, most of the proposals submitted (77%) relate to pillar 2 "**Global Challenges and Industrial competitiveness**". The two other key pillars "Excellent Science" (14%) and "Innovative Europe" (8%) therefore represent 22% of the Brussels-based proposals while the remaining few percentage points concern the part "Widening Participation and Strengthening the European Research Area".

The breakdown of proposals according to the key Horizon Europe pillars differs to that of Belgium as a whole: "Excellent Science" represents just below 25% of Belgian proposals while "Innovative Europe" is closer to 10%. So, although it still largely accounts for most proposals, the "Global Challenges and Industrial Competitiveness" pillar "only" represents 63% of Belgian proposals.

4 Throughout the report, the term "Belgian proposal" refers to a proposition which features at least one Belgian applicant

Figure 2. Breakdown of proposals for each pillar, Brussels-Capital Region and Belgium



Source : eCORDA, 01/2025, hub.brussels calculations

Within pillar 2, most Brussels proposals relate to **"Climate, Energy and Mobility"** actions (19%), ahead of **"Digital, Industry and Space"** (15%), **"Health"** (13%), **"Food, Bioeconomy, Natural Resources, Agriculture and Environment"** (12%) and **"Culture, Creativity and Inclusive Society"** (9%) actions.

In terms of Belgium as a whole, the leading theme is that related to **"Fundamental research"** with 23% of proposals. Then, while the percentages change, the same themes complete the top places, **"Climate, Energy and Mobility"** with 14%, the same as **"Digital, Industry and Space"**, followed by **"Health"** (12%) and **"Food, Bioeconomy, Natural Resources, Agriculture and Environment"** (11%). However, compared to the Brussels-Capital Region, there are more Belgian proposals in the **"Innovative Europe"** pillar (10%) than those under the pillar 2 theme of **"Culture, Creativity and Inclusive Society"** (6%).

Figure 3. Proposals for each pillar and theme (%), Brussels-Capital Region and Belgium



Source : eCORDA, 01/2025, hub.brussels calculations

Success rate

Overall success rate

The **success rate for proposals**⁵ submitted by applicants from the Brussels-Capital Region⁶ is **24%**, a rate similar to that of the Flemish Region and slightly higher than the rate for the Walloon Region (21%) and the EU countries (20%)⁷. This success rate for Brussels-based proposals is slightly lower after deducting applications submitted by international organisations (23%).

Figure 4. Success rate of proposals (%), Brussels-Capital Region and Belgium

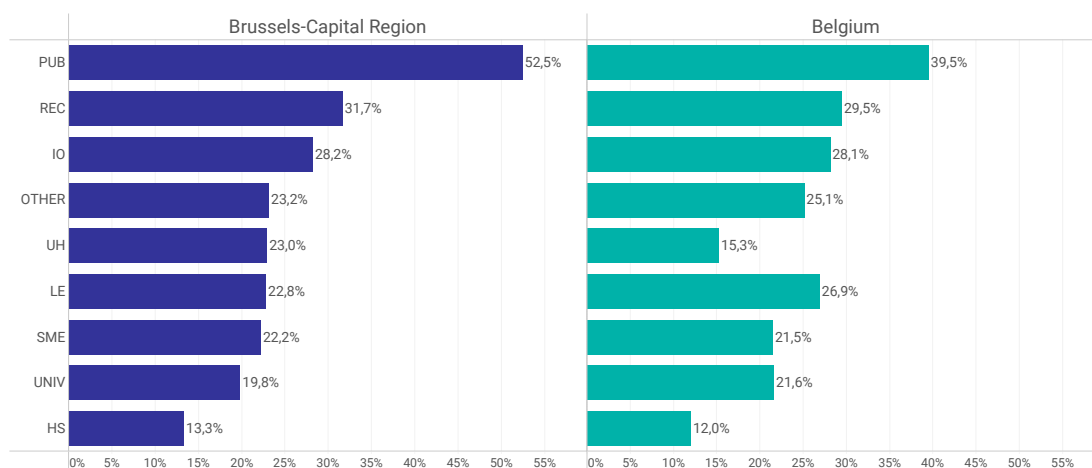


Source : eCORDA, 01/2025, hub.brussels calculations

Success rate by type of actor

The very high success rate of public bodies in Brussels and, to a lesser extent, across Belgium should be noted, for which 53% of Brussels-based applications and 40% of Belgian applications were approved. Brussels-based research centres also enjoy a high success rate (32% compared with 30% across Belgium), similarly to international organisations, although to a lesser extent (28% as across Belgium). The success rate for non-profit organisations, university hospitals, SMEs, large enterprises and universities falls within a fairly narrow bracket of between 20% and 23%. The difference between these different categories of actor is greater across Belgium, with success rates varying between 15 and 25%

Figure 5. Success rate by type of actor, Brussels-Capital Region and Belgium



Source : eCORDA, 01/2025, hub.brussels calculations

⁵ This rate corresponds to the conventional success rate, in terms of eligible proposals, from the European Commission

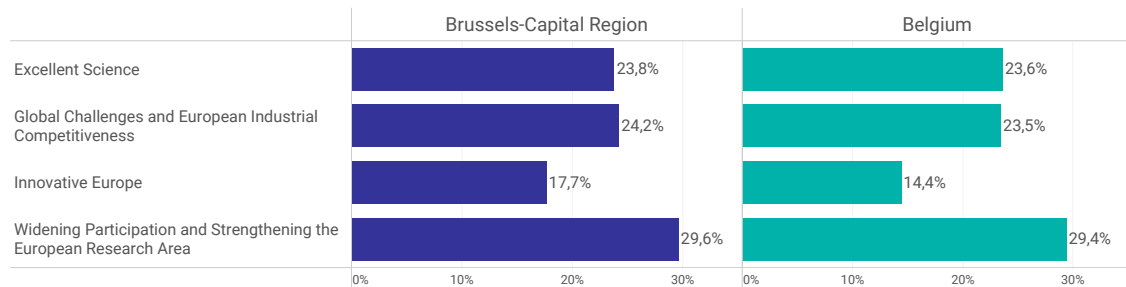
⁶ "Brussels-based" proposals include at least one applicant from Brussels

⁷ Proposals include at least one applicant from Wallonia for the Walloon Region/from Flanders for the Flemish Region

Success rate for each pillar and topic

The success rates for the proposals vary greatly depending on the pillar and topic. Among the key **pillars** ("Global Challenges and Industrial Competitiveness", "Excellent Science" and "Innovative Europe"), the pillar with the lowest average success rate is "Innovative Europe": 18% of proposals for this pillar involving Brussels-based organisations and 14% involving Belgians were approved by the Commission. This is compared with an overall success rate of 24% for all Brussels-based proposals and 23% for Belgian proposals.

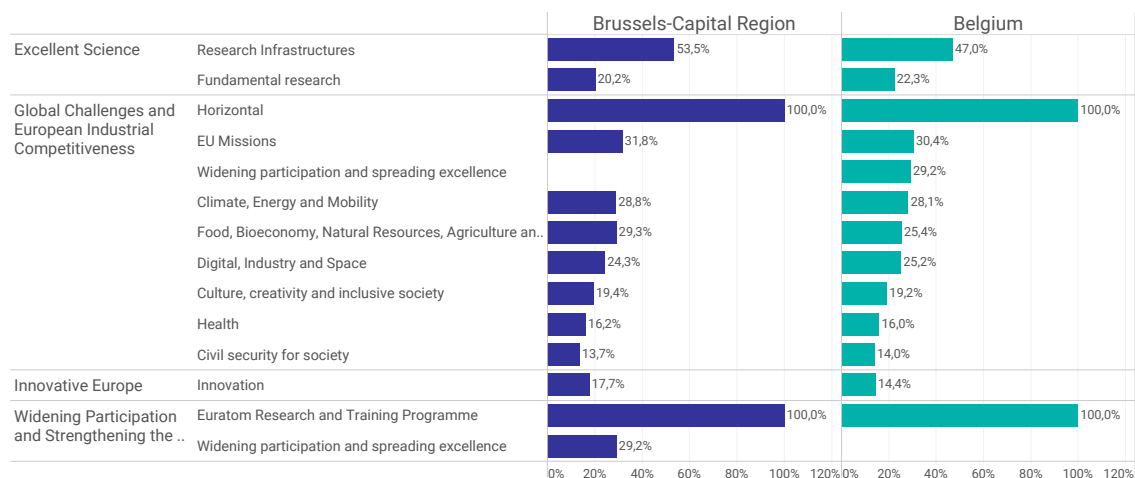
Figure 6. Success rate of proposals for each pillar (%), Brussels-Capital Region and Belgium



Source : eCORDA, 01/2025, hub.brussels calculations

In addition, with the exception of the "Fundamental Research", "Digital, Industry and Space" and "Civil Security" themes, the success rate of Brussels-based organisations was higher than that of Belgium as a whole. It should also be noted that the "Research Infrastructures" theme (53%) was ahead of the "EU Missions" (32%), "Food, Bioeconomy, Natural Resources, Agriculture and Environment" (29%) and "Climate, Energy and Mobility" (29%) themes.

Figure 7. Success rate of proposals by theme (%), Brussels-Capital Region and Belgium

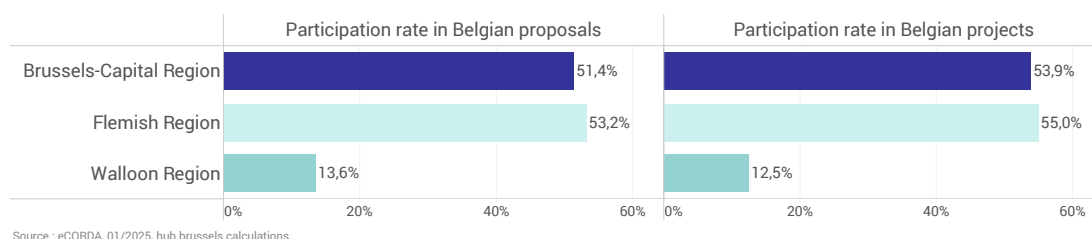


Source : eCORDA, 01/2025, hub.brussels calculations

Participation of the regions in Belgian proposals

With regard to the proposals submitted by Belgian applicants, 51% of them featured applicants from Brussels, 53% included applicants from Flanders and 14% from Wallonia. After excluding applications submitted by international organisations, 34% of Belgian proposals involved Brussels-based organisations. The percentages are almost the same when the participation of the regions in Belgian projects that have obtained funding are taken into account.

Figure 8. Participation rate of the regions in Belgian proposals and projects (%)



83% of proposals including Belgian actors relate to just **a single region** of Belgium, 16% of proposals include actors from two regions and 1% of proposals involved organisations from all three regions.

With regard to **proposals submitted by just Brussels-based applicants**, 70% of them relate to just Brussels-based organisations; 23% involve Flemish organisations; 4% involve Walloon organisations and 3% feature applicants from all three regions

Figure 9. Breakdown of Belgian proposals by the region(s) concerned

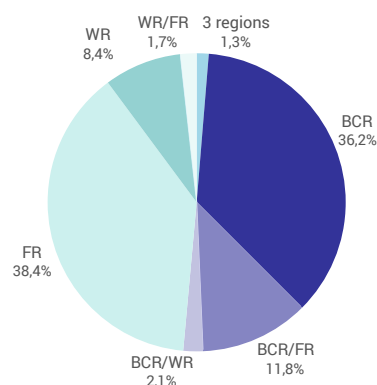
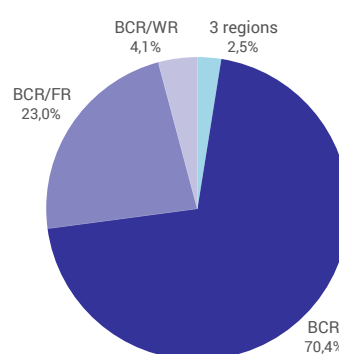


Figure 10. Breakdown of proposals involving Brussels-based actors by the region(s) concerned



Brussels-based applicants and beneficiaries

Role played by the applicants

Brussels-based applications featured significantly more partners than coordinators. Consequently, **90%** of applications from Brussels-based organisations were submitted by applicants whose role was a **partner** in a proposal for a research or innovation project, a relatively higher percentage than the rate for Belgium (84%) and the EU (81%).

Key concept

An **applicant** is a legal entity that has submitted a project proposal in response to a call for proposals.

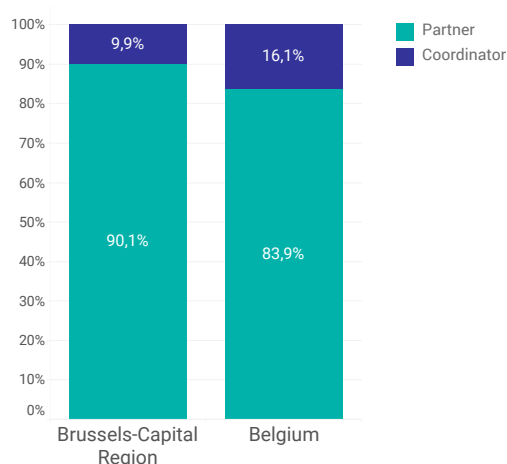


Success Story

A Brussels-based company working with artificial intelligence in the health sector, **Kantify**, together with I-Stem, a French company, co-coordinated a project entitled "The DREAMS" (Drug REpurposing and Artificial intelligence for Muscular disorders). The project aims to explore unique ways to discover new medications for rare diseases. This project was conducted with 9 partners from 6 countries. With the support of NCP Brussels, Kantify benefited from funding of €1.6 million (out of a total of €6.9 million for the entire project).



Figure 11. Breakdown of applications by the role played by the applicant, Brussels-Capital Region and Belgium



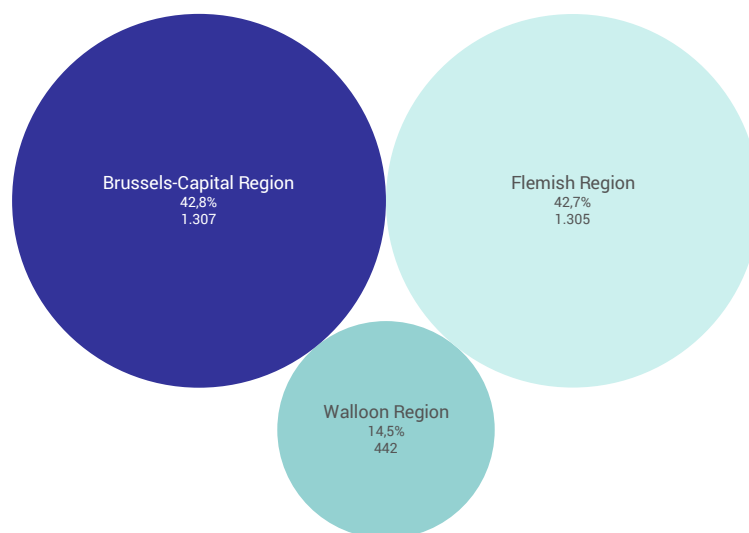
Source : eCORDA, 01/2025, hub.brussels calculations

Number and percentage of Brussels-based applicants

In total, 3,054 Belgian organisations⁸, of which **1,307** were Brussels-based, have submitted one or more requests for funding since the launch of the Horizon Europe Framework Programme. In Belgium, **86%** of the applicants are located in the **Brussels-Capital Region** or in the **Flemish Region** (43% respectively) whereas nearly 15% are located in the Walloon Region.

After excluding international organisations, the Flemish Region accounts for slightly more than half of Belgian applicants (55.0%). Although the Brussels-Capital Region share drops by just over 16% in this scenario, it still accounts for 27% of Belgian applicants, compared with 19% for the Walloon Region.

Figure 12. Breakdown of applicants by region (%)

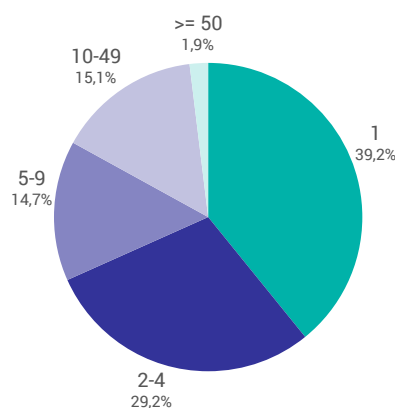


Source : eCORDA, 01/2025, hub.brussels calculations

⁸ Sirris and Centexbel are only counted once at the Belgian level. Regionally, they are counted in each of the regions in which they have research activities (see methodology).

With regard to the number of applications submitted by Brussels-based organisations, just under **61%** of them submitted **at least two requests for funding**, 29% submitted 2 to 4 requests, 15% submitted 5 to 9, 15% 10 to 49 and 2% submitted at least 50 requests. Relatively more Brussels-based organisations submitted over 10 funding requests: 17% of Brussels actors were observed in this case compared with 11% at the Belgium level.

Figure 13. Breakdown of applicants by number of applications (%), Brussels-Capital Region



Source : eCORDA, 01/2025, hub.brussels calculations

Number and percentage of Brussels-based beneficiaries

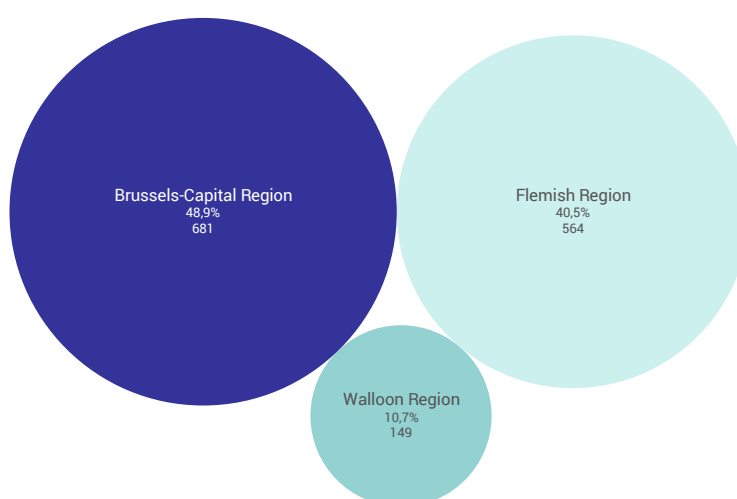
Of the 1,394 Brussels-based beneficiaries of the programme, **681** are **Brussels-based organisations** which is a **49%** share of the Belgian total⁹. After excluding international organisations, the number of Brussels-based beneficiaries is 259, which is a share of 28%, representing a significant part of Brussels-based beneficiaries excluding international organisations.



Key concept

A **beneficiary** is a legal entity carrying out an action or part of an action relating to the Horizon Europe Framework Programme¹⁰. It has rights and obligations with regard to the EU or another funding body based on the rules for participation in Horizon Europe.

Figure 14. Breakdown of beneficiaries by region (%)



Source : eCORDA, 01/2025, hub.brussels calculations

⁹ Sirris and Centexbel are only counted once at the Belgian level. Regionally, they are counted in each of the regions in which they have research activities (see methodology).

¹⁰ Under Regulation (EU) 2021/695

Funding granted

The Brussels Region obtained €1.2 billion which is 35% of the funding allocated to Belgian entities (Table 1). By way of comparison, the Brussels-Capital Region represents 13% of gross domestic expenditure on R&D¹¹. With such expenditure amounting to €2.4 billion in 2022, the amount obtained via Horizon Europe by Brussels-based organisations corresponds to 12% on average of gross domestic expenditure on R&D¹².

It should be noted that the average amount of funding awarded to Brussels-based participations¹³ (€459,343) was significantly lower than the amount received by Flemish actors (€741,090) and that awarded to Walloon participants (€527,569). However, it was higher than the average amount for participants of the Horizon Europe programme as a whole (€432,468)¹⁴.

The amount of funding awarded to Brussels-based organisations amounts, on average, to 68% of the total budget for projects, a percentage also lower than the rate recorded in Flanders (83%), the Walloon Region (77%) and for the programme overall (80%).

Table 1. Total amounts of funding granted to Belgian beneficiaries (all types of actors, including IO), total budget of the participations, percentage of funding in relation to the total budget for the participations and number of participations

		BCR	FR	WR	Belgium	Horizon Europe
Funding	Total amount €	1,215,881,055	2,004,648,728	260,091,457	3,481,640,177	47,002,306,226
	Share/Belgium (%)	34.9%	57.6%	7.5%	100%	
	Share/Horizon Europe (%)	2.6%	4.3%	0.6%	7.4%	100%
	Average amount €	459,343	741,090	527,569	595,458	432,468
Budget	Total amount €	1,792,246,354	2,424,177,707	336,917,209	4,554,360,207	58,928,634,893
	Average amount €	677,086	896,184	683,402	778,923	542,202
F/B	Funding/Budget (%)	67.8%	82.7%	77.2%	76.4%	79.8%
Particip.	Participations	2,647	2,705	493	5,847	108,684
	Share/Belgium (%)	45.3%	46.3%	8.4%	100%	
	Share/Horizon Europe (%)	2.4%	2.5%	0.5%	5.4%	100%

After excluding international organisations that have a strong presence in the Brussels-Capital Region, the BCR share of the funding obtained by Belgium becomes 18%, whereas Belgium's share of the overall funding from the EU is reduced from 7.4% to 5.3%. Excluding international organisations, the share of European funding in the budget for Brussels-based actors increases significantly (up 10 percentage points to 78%), a rate similar to the average for Belgium (81%).

¹¹ BISA-Belspo, 2022, provisional data.

¹² The average funding amount obtained by BCR through Horizon Europe is approximately €304 million annually (hub.brussels calculations).

¹³ The average funding amount per participation is obtained by dividing the total amount of funding obtained by the number of participations in the programme.

¹⁴ hub.brussels calculations

Table 2. Total amounts of funding granted to Belgian beneficiaries excluding International Organisations, total budget of the participations, percentage of funding in relation to the total budget for the participations and number of participations

		BCR	FR	WR	Belgium	Horizon Europe*
Funding	Total amount €	453,881,174	1,776,524,146	253,887,369	2,485,311,627	47,002,306,226
	Share/Belgium (%)	18.3%	71.5%	10.2%	100.0%	
	Share/Horizon Europe (%)	1.0%	3.8%	0.5%	5.3%	100%
	Average amount €	404,890	681,705	539,039	591,741	432,468
Budget	Total amount €	582,951,353	2,153,016,295	330,713,122	3,067,699,707	58,928,634,893
	Average amount €	520,028	826,177	702,151	730,405	542,202
F/B	Funding/Budget (%)	77.9%	82.5%	76.8%	81.0%	79.8%
Particip.	Participations	1,121	2,606	471	4,200	108,684
	Share/Belgium (%)	26.7%	62.0%	11.2%	100%	
	Share/Horizon Europe (%)	1.0%	2.4%	0.4%	3.9%	100%

*: including international organisations

The main Brussels-based participants

Table 3 presents the 50 main Brussels participants based on the amount obtained under the contracts signed.

In terms of funding, COST (European Cooperation in Science and Technology) received the largest amount. This is an international NPO under Belgian law working to fund research and innovation networks¹⁵.

With funding of 147 million euros and 237 participations in the programme, the two Brussels universities, VUB and ULB, are in the top 3 of the most awarded participants. The VUB's performance should be highlighted as it has benefited from nearly 70% of the amount and participated in nearly twice as many projects as the ULB.

Just after these two universities comes EIT Digital, one of the Knowledge and Innovation Communities (KICs) of the EIT, which is one of the large-scale European partnerships of the European Institute of Innovation & Technology. An international NPO under Belgian law in the BRC, it focuses on digital issues. It can directly support innovations across the entire Union and also contributes to developing and enhancing innovation ecosystems¹⁶.

Among the companies, the participation of the SMEs Avesta Battery & Energy Engineering, White Research, Innovation in Research & Engineering Solutions, Time.Lex and Ubitech Energy, Seascope Belgium, Zabala Brussels, Synergist Services and Beeodiversity should also be noted.

Success Story



Beeodiversity is a Brussels-based company that aims to develop projects scientifically so as to help to regenerate biodiversity. Its projects BeeOimpact and BeeOmetrics, solutions based on the bee ecosystem to obtain measurements and data about biodiversity, have benefited from not just one, but two grants through Horizon Europe. The first in 2022 via the "EIC Accelerator" and a second in 2024 via "EIC Transition" for a total amount of €4.2 million.

¹⁵ The legal and financial framework of its operations is set out in a Framework Partnership Agreement (FPA) and Specific Grant Agreements (SGA). The FPA defines an action plan for the entire duration of the Horizon Europe period. The amount of the SGA was 153 million euros for the 1st (36 months from 1 November 2021 to 31 October 2024) and 120 million euros for the second (SGA2 - 24 months from 1 November 2024 to 31 October 2026).

¹⁶ Thus, the EIT Digital does not solely benefit from Horizon Europe funding for projects dedicated to KICs. The organisation is also a partner in several project consortia under pillar II (Cluster 3 "Civil Security for Society" and Cluster 4 (Digital, Industry and Space), and pillar III (EIE – European Innovation Ecosystems). In addition, the EIT Digital partners projects funded by the Digital Europe, Erasmus 2027 and Single Market Programmes.

Table 3. Name, number of participations and funding for the top 50 beneficiaries based on the amount obtained and contracts signed, Brussels-Capital Region.

Name	Number of participations	Funding
Cost Association	3	273,000,000
Vrije Universiteit Brussel	156	101,356,901
Université Libre de Bruxelles	81	45,758,326
Eit Digital Ivzw	21	41,140,621
Avesta Battery & Energy Engineering	22	19,391,007
European Organisation For Research And Treatment Of Cancer INPO	7	16,876,967
European Road Transport Telematics Implementation Coordination Organisation - Intelligent Transport	29	13,801,911
Arcelormittal Belgium Nv	6	13.142.314
Eurocities NPO	15	13,001,267
European Research Infrastructure On Highly Pathogenic Agents	8	12,507,210
Sciensano	28	12,323,348
White Research Sprl	30	11,816,127
Ebrains	10	10,369,838
Fonds Voor Wetenschappelijk Onderzoek-Vlaanderen	11	8,870,149
The Lisbon Council For Economic Competitiveness NPO	22	8,760,212
Innovation In Research & Engineering Solutions	22	7,226,625
Revolve Water	19	7,001,000
Brussels Research And Innovation Center For Green Technologies	5	6,982,438
Association D'eureka	2	6,749,438
Polis Promotion Of Operational Links With Integrated Services INPO	25	6,391,381
Royal Belgian Institute of Natural Sciences	22	6,298,619
Union Internationale Des Transports Publics	13	6,291,135
Time.lex	26	6,093,644
Ubitech Energy	14	6,017,963
Open Access In The European Area Through Scholarly Communication	10	5,893,355
Eigen Vermogen Van Het Instituut Voor Natuur- En Bosonderzoek	13	5,446,738
European Food Information Council	16	5,419,550
Centre De Recherches Métallurgiques NPO (Crm Group)	6	5,029,445
Fonds De La Recherche Scientifique- FNRS	15	4,966,511
Seascope Belgium	11	4,927,579
Alliance For Logistics Innovation Through Collaboration In Europe	19	4,863,124
Centre For European Policy Studies (Ceps)	16	4,768,496
European Network Of Living Labs Ivzw	15	4,634,813
Zabala Brussels	19	4,632,539
Organisation Of European Cancer Institutes	3	4,486,425
Synergist Services	2	4,433,606
European Association for Innovation in Local Development	12	4,294,843
Beeodiversity	2	4,232,043
Federal Public Planning Service Science Policy (Belspo)	10	4,226,185
The Democratic Society INPO	7	4,167,063
Solvay Sa	3	4,060,285
Gerg Le Groupe Europeen De Recherches Gazieres	8	4,048,268
Institut Jules Bordet	6	3,962,984
Greenovate! Europe	16	3,881,175

Open & Agile Smart Cities Vzw	8	3,798,083
European Digital Sme Alliance	7	3,782,906
Toyota Motor Europe Nv	16	3,538,828
Innoviris	7	3,515,369
Water Europe	19	3,459,364
European Federation For Welding Joining And Cutting	12	3,354,555



4. Results for the BCR by type of actor

Applications and participations

Applications

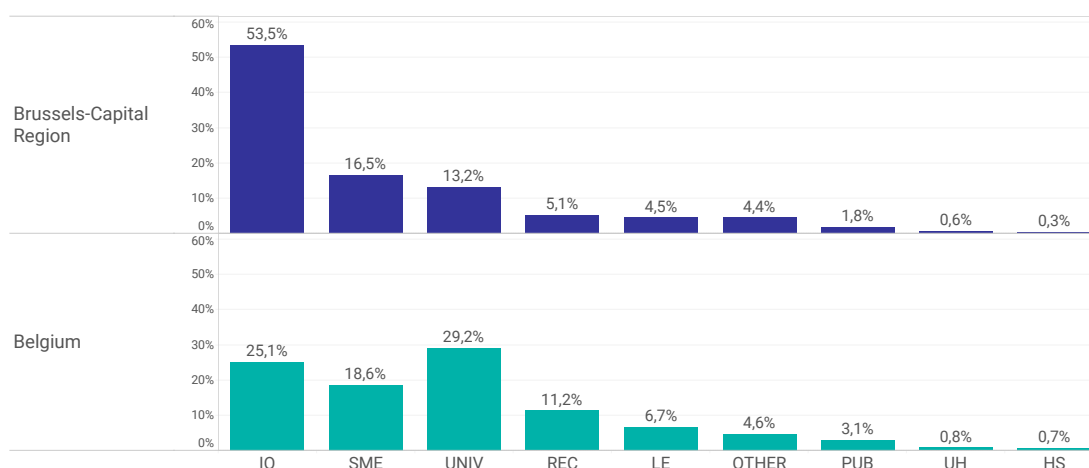
The breakdown of the applications submitted by each type of actor varies greatly from region to region. Although universities submitted the largest number of requests for funding for Belgium as a whole (29%), **international organisations** submitted the most within the Brussels-Capital Region (53%). With a share of 17% (BRC) of requests for funding, **SMEs** occupy second place in terms of the number of applications submitted, followed by **universities** (13%).

Furthermore, in terms of gross figures, since the launch of this programme, international organisations located in Brussels have submitted 5,411 requests, Brussels-based SMEs 1,671 and universities 1,336. Research centres, Brussels-based large enterprises and (other) associations have submitted 515, 456 and 449 funding applications for research or innovation projects respectively.

Across Belgium as a whole, international organisations (25%) and SMEs (19%) are in second and third place.

The Brussels-Capital Region plays a significant role in Belgian applications of international organisations (92% come from the BRC), "(Other) associations" (42%), SMEs (39%), university hospitals (32%) and large enterprises (29%).

Figure 15. Breakdown of applications by type of actor (%), Brussels-Capital Region and Belgium



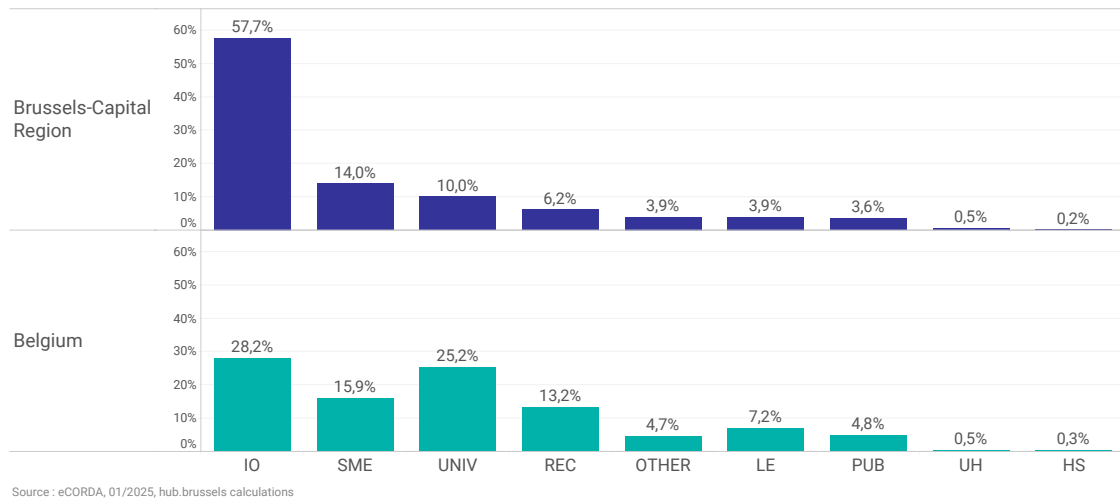
Source : eCORDA, 01/2025, hub.brussels calculations

Participations

Over half of the applications submitted by Brussels-based organisations that received funding are requests from **international organisations** (58%). **SMEs** occupy second place, with a 14% share of all participations, while universities (10%), research centres (6%) and large enterprises (4%) hold the subsequent positions in terms of Brussels-based organisations that received funding. The public sector is close behind with just under 4% of participations in the Horizon Europe Framework Programme.

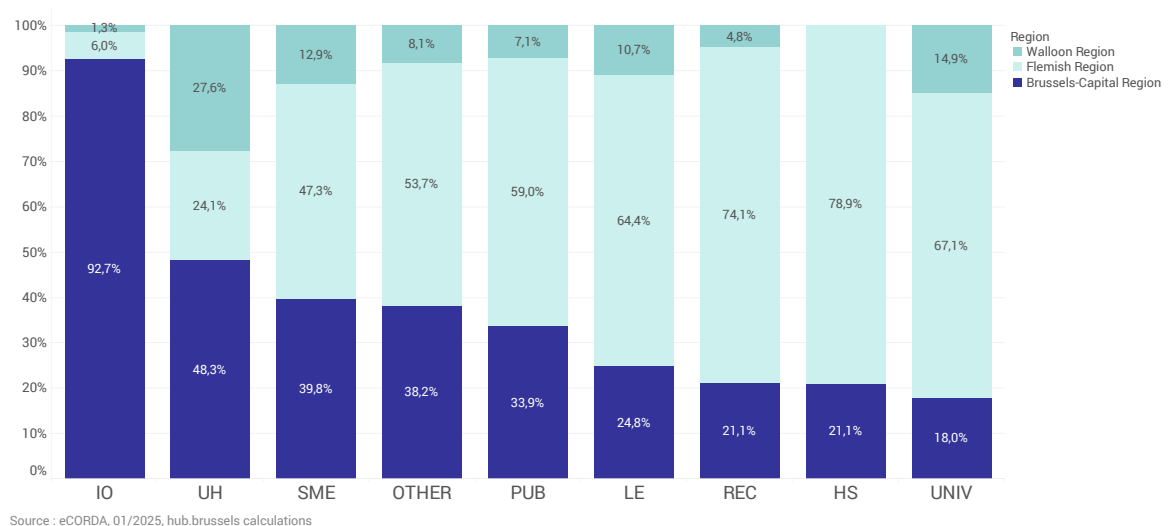
In terms of gross participation figures, this gives the following results: 1,526 requests for funding granted to international organisations, 371 to SMEs, 265 to universities, 163 to research centres and 104 to large enterprises.

Figure 16. Breakdown of participations by type of actor (%), Brussels-Capital Region and Belgium



The presence of many international organisations in Brussels is reflected in the participations in the Horizon Europe Framework Programme: almost all (93%) of the requests submitted by Belgian international organisations that obtained funding from the European Commission were from international organisations in the Brussels-Capital Region. It should be noted that Brussels university hospitals and SMEs account for a significant number of participations with a share of 48% and 40% in their respective categories at the Belgian level.

Figure 17. Regional share of participations by type of actor (%)



Applicants and beneficiaries

Applicants

Although international organisations account for over half (54%) of all applicants in the Brussels-Capital Region, SMEs are the leading applicant organisation for Belgium as a whole with a 38% share. In Brussels, just over 1 in 5 of all applicants is an SME and 1 in 16 is a large enterprise. Finally, 1 in 10 applicants are in the "Associations (other)" category which mainly includes non-profit associations.

As a percentage of all Belgian applicants, the Brussels-Capital Region accounts for a very large majority of the total figure for international organisations (89%), 50% of university hospitals and research organisations, 41% of associations (other), 35% of universities and 27% of public bodies. Moreover, almost a quarter of SMEs and one fifth of Belgian large enterprises that submitted a request for funding in the context of the Horizon Europe Framework Programme are Brussels-based.

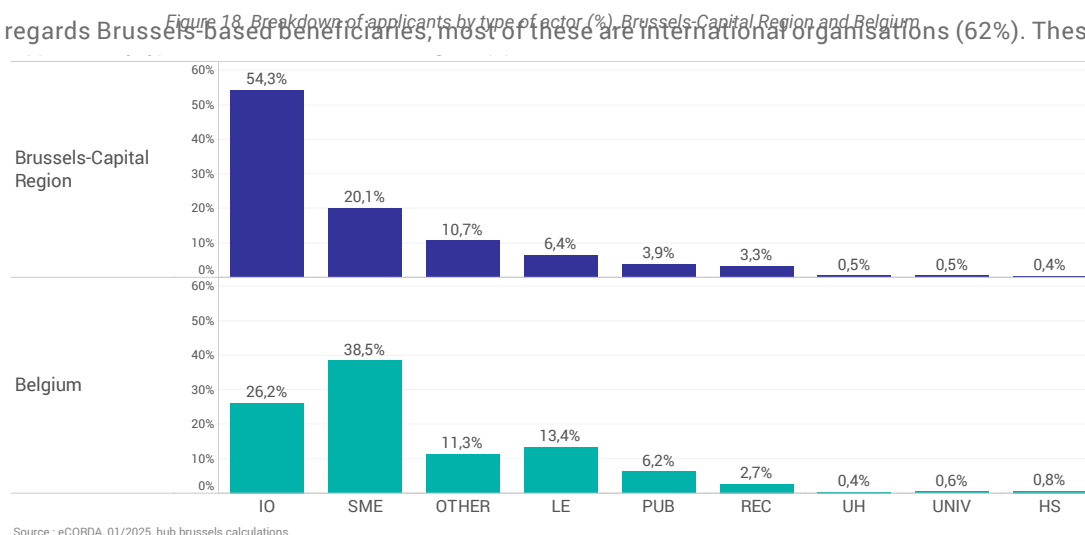
Success Story



The SME **VoxelSensors**, based in Brussels, is a company working at the forefront of physics, computing and augmented reality. Its SPAES project provides a revolutionary sensor architecture for creating 3D images using laser beam scanning. The company responded to the call for proposals opened by the EIC Accelerator (with 803 other companies). It was selected, along with 70 other businesses to benefit from support (totalling €2.5 million) to accelerate the deployment of this new technology on the market.

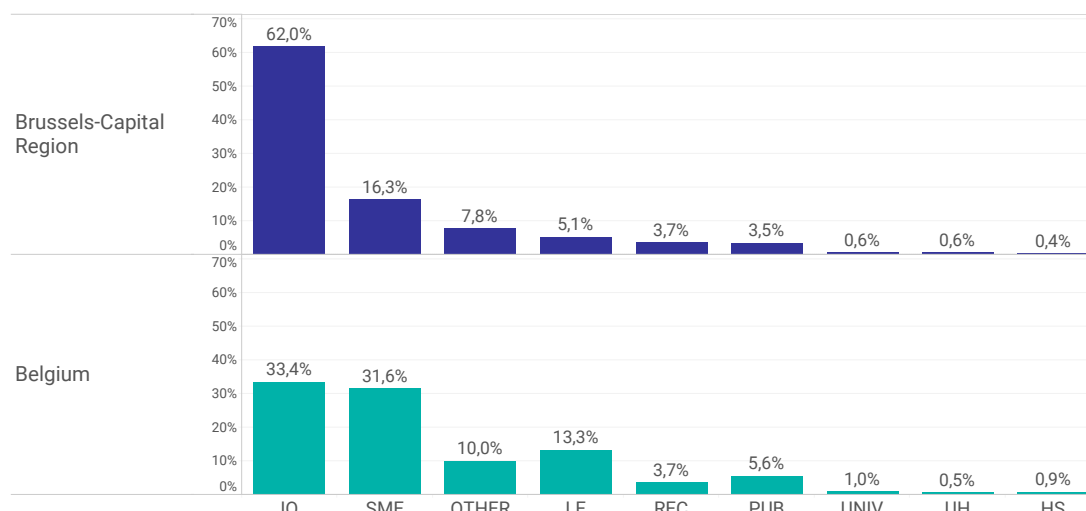
Beneficiaries

With regards Brussels-based beneficiaries, most of these are international organisations (62%). These



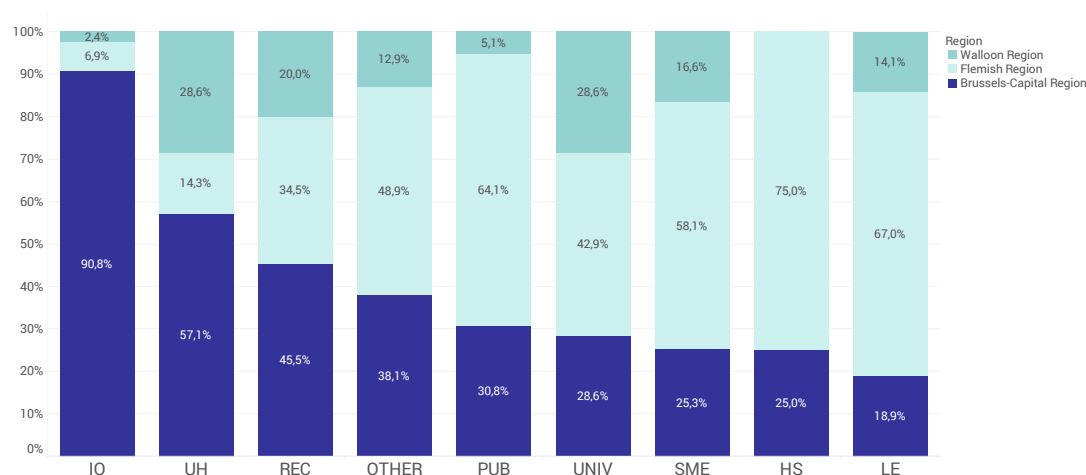
are followed by SMEs (16%) "Associations (other)" (8%), large enterprises (5%), research centres (4%) and public bodies (4%). Universities, university hospitals and higher education institutions all represent less than 1% of beneficiaries. Across Belgium, the figures vary greatly because "only" 33% of beneficiaries take the form of an international institution, just ahead of SMEs (32%) and large enterprises (13%). With regards the other types of actors, these fall in the same order of magnitude as the Brussels Region with variations ranging from 0.5% to 1%.

Figure 19. Breakdown of beneficiaries by type of actor (%), Brussels-Capital Region and Belgium



Logically, these figures are reflected in the share held by each of the regions by actor type. Thus, the Brussels-Capital Region is primarily represented within international organisations (91%) and university hospitals (57%). It is then within research centres (46%), under the "Associations (other)" category (38%), public bodies (31%), universities (29%), SMEs (25%), higher schools (25%) and large enterprises (19%) that the highest rates of Brussels-based participants is found.

Figure 20. Regional share of beneficiaries by type of actor (%)



Source : eCORDA, 01/2025, hub.brussels calculations

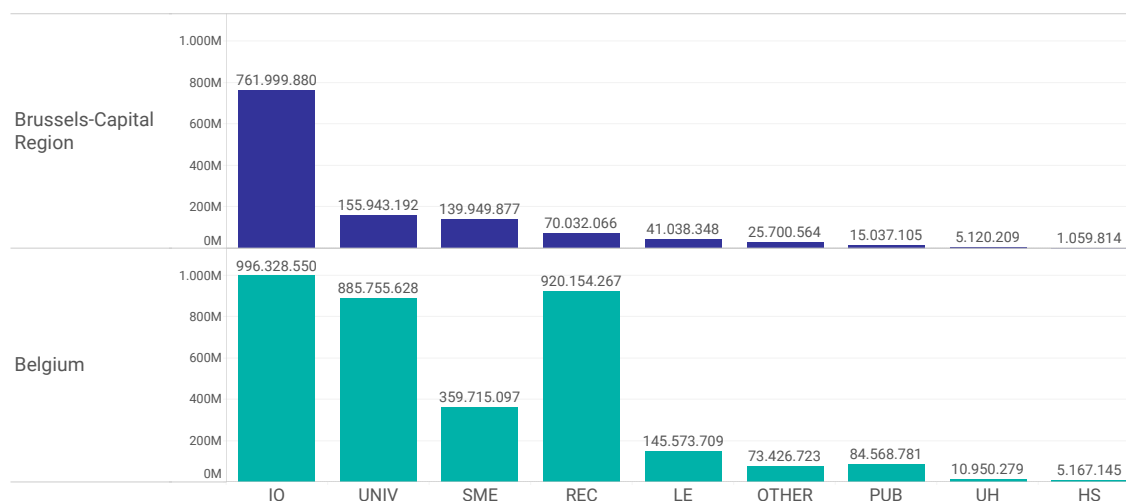
Funding granted

Of the €1,216 billion allocated to Brussels-based research or innovation projects, international organisations received €762 million, i.e. 63% of the total amount. **Universities** are in **second place** with a share of 13%, followed by SMEs and research centres with a share of 12% and 6%. Large enterprises and the public sector obtained 3% and 1% respectively of the European funding awarded to Brussels-based organisations.

SMEs also managed to secure 77% of the funding awarded to the private sector in the Brussels-Capital Region, encompassing Brussels SMEs and large enterprises.

For Belgium as a whole, international organisations (29%), research centres (26%) and universities (25%) obtained the highest financial contributions.

Figure 21. Amount of funding obtained by type of actor, Brussels-Capital Region and Belgium (€)



Success Story

A supplier of energy storage solutions using recycled batteries, the SME **Octave** benefited from support from the "EIC Accelerator" as part of the development of a new technology providing improved battery and energy management and, ultimately, an extended lifespan, enhanced monitoring and predictive maintenance. Through its participation in the Horizon Europe programme, the SME benefited from a grant of over €1 million.



5. BCR and non-Belgian collaborations

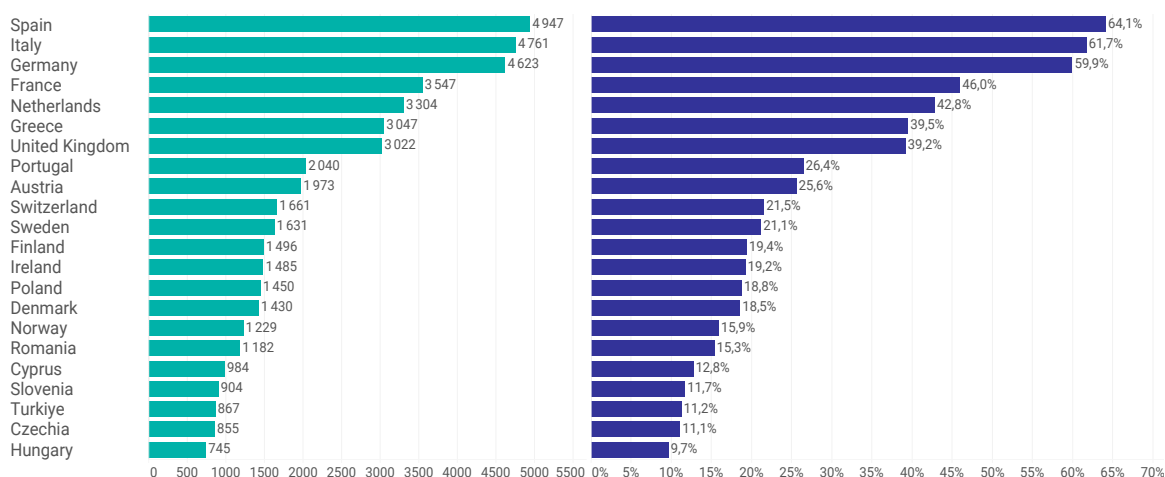
Brussels actors collaborated with 156 countries as part of the proposals with which they were associated.

The three leading countries were: Spain (64%) Italy (62%) and Germany (60%). Each of these countries is therefore involved in 6 out of 10 proposals involving Brussels-based organisations.

In total, one German, Italian or Spanish partner or coordinator is found in 90% of Brussels-based proposals.

Four other countries also stand out: France (46%), the Netherlands (43%), Greece (40%) and the United Kingdom (39%)

Figure 22. Participation of countries in proposals submitted by Brussels-based organisations - in terms of number and as a percentage (minimum share of 10% in Brussels-based proposals)



Source : eCORDA, 01/2025, hub.brussels calculations

Success Story



The **Center for Sustainable Entrepreneurship (CenSE)** of the Brussels Odisee university worked in partnership with the University of Antwerp (coordinator) and Italian and Polish participants on the « SMART-AGE » (Sustainable Mobility and Accessibility for Resilient Transport in AGing urban Environments) project. This project aims to improve urban mobility for older people (65+) by tackling the obstacles to mobility encountered by this target group and promoting a universal design for accessible spaces and urban services. This project was awarded €0.9 million.

6. Priority themes for the BCR and NCP Brussels targets

BCR priorities and NCP Brussels targets: applications and participations

Of the 10,112 **applications** submitted by Brussels-based applicants, **9,014** fall within the themes covered by the **mandate of NCP Brussels** (89%) and **8,633** are in one of the **priority themes** for the Brussels-Capital Region (85%).

With regard to funded applications, the percentage of **participations** aligned with NCP Brussels targets is 91%, with 86% of the participations corresponding to the region's priority themes.

After excluding the theme of civil security and space, the applications and participations corresponding to priority themes account for 82% and 83% respectively of the totals for the region. Over 80% of the applications that received funding are research or innovation projects whose themes are included in the more limited list of BCR priorities.

Out of the 1,671 requests for funding submitted by Brussels-based SMEs, 93% of them correspond to the BCR's priority themes. 371 applications from SMEs obtained funding, 89% of which are projects in a field of priority for the Region.

Finally, of the 1,844 Brussels-based **projects** funded within the framework of the Horizon Europe programme, **1,549** relate to one of the Region's **priority themes**, corresponding to a rate of 84%.

Table 4. Number of applications/participations in one of the themes covered by NCP Brussels, number of applications/participations in the BCR's priority themes and percentage compared with the number of applications/participations in the BCR. Total, excluding IO and SMEs.

	Applications			Participations		
	Total	Excluding IO	SME	Total	Excluding IO	SME
BCR	10,112	4,701	1,671	2,647	1,121	371
NCP Scope	9,014	3,869	1,609	2,415	955	359
NCP Scope (%)	89%	82%	96%	91%	85%	97%
BCR Priorities excluding Civil Security and Space*	8,259	3,496	1,479	2,207	858	321
BCR Priorities excluding Civil Security and Space* (%)	82%	74%	89%	83%	77%	87%
BCR priorities	8,633	3,698	1,555	2,264	891	332
BCR priorities (%)	85%	79%	93%	86%	79%	89%

*Protection and security, Cybersecurity, Space

BCR priorities: funding by theme

Since the start of the programme, the EU has granted €823 million to Brussels-based research or innovation projects covering priority themes for the Region, which corresponds to **68% of the amount granted to all Brussels-based participations**. Excluding civil security, Brussels-based organisations obtained €808.2 million of funding for projects corresponding to the Region's priority themes.

"Climate, Energy and Mobility", "Digital, Industry and Space", "Food, Bioeconomy, Natural Resources, Agriculture and Environment" and "Innovation" are the key themes with a total share of 67% of the funding granted to participations covering the BRC's priority themes. Each of these different categories represents 13% to 25% of funding granted to projects covering priority themes for Brussels. With a share of 11% and 10% "Health" and "EU Missions" are positioned between the first group and a second group that has secured relatively less funding: "Culture, Creativity and Inclusive Society", "Research Infrastructures" and "Civil Security".

However, "EU Missions", "Culture, Creativity and Inclusive Society", "Research Infrastructures" and "Civil Security" secured the highest funding rate, i.e. the share of the funding amount in the total planned budget (95% minimum compared with 59% on average for priority projects).

Table 5. Funding amounts and percentages awarded to BCR beneficiaries and budgets for projects involving BCR beneficiaries for the Region's priority themes

	Funding €	Budget €	Funding/Budget (%)	Funding (%)	Budget (%)
Climate, Energy and Mobility	204,482,007	328,457,830	62.3%	24.8%	23.6%
Digital, Industry and Space	126,392,384	169,518,256	74.6%	15.4%	12.2%
Food, Bioeconomy, Natural Resources, Agriculture and Environment	116,714,283	149,306,872	78.2%	14.2%	10.7%
Innovation	106,343,576	437,038,743	24.3%	12.9%	31.4%
Health	89,857,856	122,950,370	73.1%	10.9%	8.8%
EU Missions	83,991,571	86,649,147	96.9%	10.2%	6.2%
Culture, creativity and inclusive society	52,564,273	54,656,709	96.2%	6.4%	3.9%
Research Infrastructures	31,040,357	32,385,903	95.8%	3.8%	2.3%
Civil security for society	11,623,199	12,289,895	94.6%	1.4%	0.9%
Sub-total - BRC Priorities excluding Civil Security and Space	808,160,123	1,289,703,150	62.7%	98.2%	92.6%
Total	823,009,505	1,393,253,725	59.1%	100.0%	100.0%

Appendices



Appendix 1 - Methodology and glossary

Methodology



Important note

The results provided in this report have been established based on a data processing methodology that refines the data extracted directly from the European Commission's database. Consequently, some figures, such as the success rate for submitted proposals, may differ slightly from that published by the European Commission.

The statistics analysed in this report come from the databases published in January 2025¹⁷ by eCORDA, covering the calls for proposals closed since the Horizon Europe programme was launched. The data relating to participation in the programme (participations and projects funded) are based on the data in the eCORDA files relating to grants¹⁸.

The methodology used to process the data relating to this programme was largely inspired by the methodology developed for FP7 and Horizon 2020.

The processing of the data consists in:

- searching for Belgian applicants whose location has been provided incorrectly and eliminating foreign applicants attributed to Belgium;
- eliminating any duplicates;
- grouping the same entities under a single identification code;
- ensuring that the data in the databases relating to funded participations corresponds to the applications (a participation shall be included as an application if it does not appear in this database);
- attributing a type of organisation as per the nomenclature developed (refer to the glossary);
- searching for applicants/participations and proposals/projects that are in line with the priorities and targets of NCP Brussels;
- assigning a region to Belgian actors; whether this is the Walloon Region, the Brussels-Capital Region or the Flemish Region is determined based on the location of the legal entity which submitted the proposal (postcode). The exceptions to this rule are:
 - Sirris (the collective centre of the technological industry) and Centexbel (the scientific and technical centre of the Belgian textile industry): every application and participation has been allocated to the BRC, the WR or the FR respectively, depending on the location of the lead researcher. Since it has not received more specific information from these organisations through its partners, NCP Brussels has opted to use the location of the research department given in the Commission's databases. Where the location was not clear (reference made to either no department or several departments), the region is considered as "Undetermined";
 - Université Catholique de Louvain (UCL): all the participations are allocated to WR, even those of research centres located in BCR (e.g. health at Woluwe Saint Lambert);

¹⁷ eCORDA reference date: 12/01/2025

¹⁸ The eCORDA data are presented in two separate files, "Proposals" and "Grants".

- Université Libre de Bruxelles (ULB): all the participations are allocated to BCR, even those of research centres located in WR (e.g. Biopark in WR);
- the Flemish and Walloon public institutions located in Brussels are allocated to FR and WR respectively.

The analysis presented in this report is primarily focussed on the results for the Brussels-Capital Region.

The online Horizon Europe publication on the analytics.brussels data visualisation platform provides more detailed statistics by region.

In this statistical report, specific analyses have been performed for:

- **the themes covered by the NCP Brussels mandate** corresponding to the official NCP appointments of their advisors who, together, deal with 14 of the 19 functions of the common structure of the NCP systems under Horizon Europe, including:
 - NCP Coordinator, Legal and Financial aspects;
 - in pillar I, Research Infrastructures;
 - in pillar II, the six clusters including associated partnerships (1) Health, (2) Culture, Creativity and Inclusive Society, (3) Civil Security for Society, (4) Digital, Industry and Space, (5) Climate, Energy and Mobility (6) Food, Bioeconomy, Natural Resources, Agriculture and Environment, as well as EU Missions and the New European Bauhaus R&I;
 - in pillar III, the European Innovation Council (EIC) and European Innovation Ecosystems and the European Institute of Innovation and Technology (EIT);
 - and in the horizontal pillar, Widening Participation and ERA.

The following five NCP functions are not covered by NCP Brussels: European Research Council (ERC), Marie Skłodowska-Curie Actions (MSCA), Fission, Fusion and Joint Research Centre;

- **the BRC's priorities and strategic innovation areas¹⁹** as defined in the Regional Innovation Plan are closely linked to the sectoral themes of Horizon Europe (i.e. the large clusters of pillar II) and to innovation with a focus on SMEs.

¹⁹ A cross-cutting strategic innovation area, "Advanced Digital Technologies & Services" and 5 thematic SIAs "Climate: Resilient Buildings & Infrastructures"; "Optimal Use of Resources"; "Efficient and Sustainable Urban Flows for Inclusive Urban Space Management"; "Health & Personalised and Integrated Care"; "Social Innovation, Public Innovation and Social Inclusion".

Glossary

The terminology used in this report is consistent with the key concepts used by the European Commission in its published report of statistics relating to the Horizon Europe Framework Programme. The official terms have also been used when referring to the structure and themes of this programme.

Key concepts

Table 6. Acronym, name and definition of key concepts, as defined by the EC

Acronym/name	Full name	Definition/comment
Beneficiary	"Beneficiary" as defined by the EC	Legal entity carrying out an action or part of an action under Regulation (EU) 2021/695 [Horizon Europe] and having rights and obligations with regard to the Union or another funding body based on the rules for participation in Horizon Europe (Regulation 2021/695).
Legal entity	"Legal entity"	A natural person, or a legal person recognised as such under Union, national or international law, which has legal personality and can act in its own name, exercise rights and be subject to obligations.
Budget	"Total Costs" as defined by the EC	Amount invested in the project, either in total or per participating organisation. It includes the EU's contribution and other project costs not covered by the EU funding. It is expressed in euros.
EC	European Commission	
Funding	"Net-EU-Contribution" as defined by the EC	Sum received by the participant (project beneficiary), with a deduction of the EU's contribution to an entity affiliated with this beneficiary. A project net contribution amount is equal to the grant amount.
FP7		The European Union's 7 th framework programme for funding research
H2020	Horizon 2020	The EU's 8 th framework programme for funding Research and Innovation for the period 2014 to 2020
Horizon Europe	Horizon Europe	The EU's 9 th framework programme for funding Research and Innovation for the period 2021 to 2027
NCP Brussels Scope		The set of themes covering the functions of the NCP Brussels team and for which advisors are officially appointed
Participation	"Participation" as defined by the EC	Participation of a legal entity in a project. The same participant can be involved in several projects.
NCP Brussels priority		The various themes designated as priorities for the NCP Brussels (as declared in the agreement, in line with the Region's strategic priorities, etc.)
Project	"Project" as defined by the EC (eCORDA)	A proposal for a research or innovation project that is selected to receive funding
Proposal	"Proposal" as defined by the EC (eCORDA)	A proposal for a research or innovation project submitted by one or more applicants
BCR	Brussels-Capital Region	
FR	Flemish Region	
WR	Walloon Region	

Application	"Application" as defined by the EC	Participation of a legal entity in a proposal. The same applicant can submit several requests for funding under different proposals. The same proposal can include several organisations and, consequently, several requests for funding.
Applicant	"Applicant" as defined by the EC	Legal entity submitting a project proposal in response to a call for proposals.
Success rate		Share of proposals selected to receive funding out of the total number of eligible proposals, expressed as a percentage (Proposals funded/ Eligible proposals * 100).

Types of actor

Table 7. Acronym, name and definition of types of actor

Acronym	Full name	Definition/comment
OTHER	Other	A type of applicant other than a REC, LE, HS, UH, IO, SME, PUB or UNIV
REC	Research centre	A research organisation (not including universities) is a non-profit organisation whose primary objective is scientific or technological research. This aspect of the organisation must appear in the organisation's articles of association
LE	Large enterprise	Large enterprise, as defined by the EC
HS	Higher school	Post-secondary school
UH	University hospital	University Hospital
IO	International organisation	International organisations include, in addition to intergovernmental organisations, European or international associations and federations, ²⁰ i.e. international non-profit associations, EEIG and non-profit associations whose title and purpose incorporates a European/international dimension
SME	Small and medium enterprises	SME, as defined by the EC
PUB	Public entity	A public body is a legal entity established as a public body by national law or an international organisation
UNIV	University	University

²⁰ This definition does not correspond to the definition used by the European Commission (EC). The latter is more restrictive and does not include intergovernmental organisations or specialised agencies set up by such organisations.

Themes

- The "Fundamental Research" theme covers the actions of the ERC (European Research Council) and MSCA, the Marie-Skłodowska Curie Actions of Horizon Europe - Pillar I
- The "Health" theme corresponds to Cluster 1 of Horizon Europe - Pillar II
- The "Culture, Creativity and Inclusive Society" theme corresponds to Cluster 2 of Horizon Europe - Pillar II
- The "Civil Security for Society" theme corresponds to Cluster 3 of Horizon Europe - Pillar II
- The "Digital, Industry and space" theme corresponds to Cluster 4 of Horizon Europe - Pillar II
- The "Climate, Energy and Mobility" theme corresponds to Cluster 5 of Horizon Europe - Pillar II
- The "Food, Bioeconomy, Natural Resources, Agriculture and Environment" theme corresponds to Cluster 6 of Horizon Europe - Pillar II
- The "Innovation" theme covers the EIC, EIT and EIE (European Innovation Ecosystems) category of Horizon Europe - Pillar III
- The "EU Missions" theme covers the five key R&I missions of the EU. These are high-ambition, wide-scale initiatives, organised within Pillar II of Horizon Europe:²¹
 - adaptation to climate change: help at least 150 European regions and communities to become climate resilient by 2030;
 - cancer: work with the European Cancer plan to improve the lives of more than 3 million people by 2030, through prevention, cure and solutions for those affected by cancer to live longer and better.
 - restore our oceans and waters by 2030;
 - 100 climate-neutral and smart cities by 2030;
 - a soil deal for Europe: 100 living labs and lighthouses to deliver the transition to healthy soils by 2030.

The EU's R&I Missions should enable the programme to achieve a transformative and systemic impact for society in support of the Sustainable Development Goals.

The theme also covers the actions of the NEB – New European Bauhaus. The New European Bauhaus (NEB) is a political and funding initiative for the green transition in the built environment. The initiative promises solutions that are not only sustainable but also inclusive and aesthetic, while respecting the diversity of the places, traditions and cultures of Europe and beyond.

²¹ See appendix 2 for more detail

Appendix 2 - The pillars and components of the Horizon Europe Framework Programme

The pillars of the Framework Programme

Like Horizon 2020, the 8th Framework Programme for R&I, Horizon Europe's structure is based on 3 major pillars and a horizontal part:

- The **1st pillar** "Excellent Science" promotes scientific excellence: with the ERC (European Research Council), the Marie Skłodowska-Curie Actions which encourage the mobility of researchers and investment in world-class research infrastructures.
- The **2nd pillar** "Global Challenges and European industrial Competitiveness" supports R&I which addresses societal issues and strengthens the Union's technological and industrial capacities.

In this part, the R&I activities are implemented in and across "clusters"; each cluster contributing to the achievement of several Sustainable Development Goals (SDG) and many SDG being supported by more than one cluster:

Cluster 1 "Health";

Cluster 2 « Culture, Creativity and Inclusive Society";

Cluster 3 "Civil Security for Society";

Cluster 4 "Digital, Industry and Space";

Cluster 5 "Climate, Energy and Mobility";

Cluster 6 "Food, Bioeconomy, Natural Resources, Agriculture and Environment";

The social sciences and humanities are fully integrated across all clusters which individually and together incentivise interdisciplinary, cross-sectoral, cross-policy, cross-border and international cooperation.

Pillar II of the programme covers activities from a broad range of technology readiness levels (TRLs), including lower TRLs. It also covers non-nuclear direct actions of the Joint Research Centre (JRC).

- The **3rd pillar** "Innovative Europe" fosters all forms of innovation, including non-technological innovation, primarily within SMEs including start-ups, by facilitating technological development, demonstration and knowledge transfer, and strengthens deployment of innovative solutions. It supports market-creating innovation with the EIC, the European Innovation Council. It also helps to develop the European innovation landscape with the EIE (European Innovation Ecosystems) and the EIT (European Institute of Innovation and Technology), now rooted in Horizon Europe to encourage the integration of business-research-teaching and entrepreneurship.
- **The horizontal part** "Widening Participation and Strengthening the ERA (European Research Area)" supports access to excellence for researchers across Europe so as to enhance participation and collaboration, promote gender equality, open access and open science, the integrity of R&I and ethics. It encourages an ERA where researchers, scientific and technological knowledge can circulate freely.

The instruments and areas of intervention of the Framework Programme

Pillar 1 "Excellent Science"

This pillar aims to promote scientific excellence, attract the best talent to Europe, provide appropriate support to early-stage researchers and support the creation and diffusion of scientific excellence, high-quality knowledge, methodologies and skills, technologies and solutions to global social, environmental and economic challenges and contribute to the other specific objectives of the programme. Its different components have the following aims:

- **ERC – European Research Council**: providing attractive and flexible funding to enable talented and creative individual researchers, with an emphasis on early stage researchers, and their teams to pursue the most promising avenues at the frontier of science, regardless of their nationality and country of origin and on the basis of Union-wide competition based solely on the criterion of excellence.
 - Area of intervention: frontier science.
- **MSCA – Marie Skłodowska-Curie Actions**: equipping researchers with new knowledge and skills through mobility and exposure across borders, sectors and disciplines, enhancing training and career development systems as well as structuring and improving institutional and national recruitment, taking into account the European Charter for Researchers and the Code of Conduct for the recruitment of researchers; in so doing, the MSCA help to lay the foundations of Europe's excellent research landscape across the whole of Europe, contributing to boosting jobs, growth, and investment, and solving current and future societal challenges.
 - Areas of intervention: nurturing excellence through the mobility of researchers across borders, sectors and disciplines; fostering new skills through the excellent training of researchers; strengthening human resources and skills development across the European Research Area (ERA); improving and facilitating synergies; promoting public outreach.
- **Research infrastructures**: endowing Europe with world-class sustainable research infrastructures which are open and accessible to the best researchers from Europe and beyond. Encouraging the use of existing research infrastructures, including those financed from funds under Union Cohesion Policy. In so doing, enhancing the potential of the research infrastructure to support scientific advance and innovation, and to enable open and excellent science in accordance with the FAIR (Findable, Accessible, Interoperable and Reusable) principles, alongside activities related to Union policies and international cooperation.
 - Areas of intervention: consolidating and developing the landscape of European research infrastructures; opening, integrating and interconnecting research infrastructures; supporting the innovation potential of European research infrastructures and activities for innovation and training; reinforcing European research infrastructure policy and international cooperation.

Pillar II "Global Challenges and European Industrial Competitiveness"

This pillar supports the creation and better diffusion of high-quality new knowledge, technologies and sustainable solutions, reinforces the European industrial competitiveness, strengthens the impact of R&I in developing, supporting and implementing Union policies, and supports the uptake of innovative solutions in industry, in particular in SMEs and start-ups, and society to address global challenges. It also contributes to the other specific objectives of the programme.

The Clusters

To maximise impact, flexibility and synergies, R&I activities are organised in six clusters, interconnected through pan-European research infrastructures, which individually and together incentivise interdisciplinary, cross-sectoral, cross-policy, cross-border and international cooperation.

The social sciences and humanities are fully integrated across all clusters. Pillar II of the programme covers activities from a broad range of technology readiness levels (TRLs), including lower TRLs. Each cluster contributes towards several SDGs and many SDGs are supported by more than one cluster.

The R&I activities shall be implemented in and across the following clusters: Their objectives are as follows:

- **Cluster 1 "Health"**: improving and protecting the health and well-being of citizens of all ages by generating new knowledge, developing innovative solutions, ensuring to integrate, where relevant, a gender perspective to prevent, diagnose, monitor, treat and cure diseases, and developing health technologies; mitigating health risks; protecting populations and promoting good health and well-being, also in the workplace; making public health systems more cost-effective, equitable and sustainable; preventing and tackling poverty-related diseases; and supporting and enabling patients' participation and self-management.
 - Areas of intervention: health throughout the life course; environmental and social health determinants; non-communicable and rare diseases; infectious diseases, including poverty-related and neglected diseases; tools, technologies and digital solutions for health and care, including personalised medicine; health care systems.
- **Cluster 2 "Culture, Creativity and Inclusive Society"**: strengthening democratic values, including rule of law and fundamental rights; safeguarding our cultural heritage; exploring the potential of cultural and creative sectors, and promoting socio-economic transformations that contribute to inclusion and growth, including migration management and integration of migrants.
 - Areas of intervention: democracy and governance; culture, cultural heritage and creativity; social and economic transformations.
- **Cluster 3 "Civil Security for Society"**: responding to the challenges arising from persistent security threats, including cybercrime, as well as natural and man-made disasters.
 - Areas of intervention: disaster-resilient societies; protection and security; cybersecurity.
- **Cluster 4 "Digital, Industry and Space"**: reinforcing capacities and securing Europe's sovereignty in key enabling technologies for digitisation and production, and in space technology, all along the value chain; to build a competitive, digital, low-carbon and circular industry; ensure a sustainable supply of raw materials; develop advanced materials and provide the basis for advances and innovation in global societal challenges.
 - Areas of intervention: manufacturing technologies; key digital technologies, including quantum technologies; emerging enabling technologies; advanced materials; artificial intelligence and robotics; next generation internet; advanced computing and Big Data; circular industries; low carbon and clean industries; space, including earth observation.
- **Cluster 5 "Climate, Energy and Mobility"**: fighting climate change by better understanding its causes, evolution, risks, impacts and opportunities, by making the energy and transport sectors more climate and environment-friendly, more efficient and competitive, smarter, safer and more

resilient, promote the use of renewable energy sources and energy efficiency, improve the resilience of the Union to external shocks and adapt social behaviour in view of the SDGs.

- Areas of intervention: climate science and solutions; energy supply; energy systems and grids; buildings and industrial facilities in energy transition; communities and cities; industrial competitiveness in transport; clean, safe and accessible transport and mobility; smart mobility; energy storage.
- **Cluster 6 "Food, Bioeconomy, Natural Resources, Agriculture and Environment"**: protecting the environment, restoring, sustainably managing and using natural and biological resources from land, inland waters and sea to stop biodiversity erosion, to address food and nutrition security for all and the transition to a low carbon, resource efficient and circular economy and sustainable bioeconomy.
 - Areas of intervention: environmental observation; biodiversity and natural resources; agriculture, forestry and rural areas; seas, oceans and inland waters; food systems; bio-based innovation systems in the Union's bioeconomy; circular systems.
- **Non-nuclear direct actions of the Joint Research Centre (JRC)**: generating high-quality scientific evidence for efficient and affordable good public policies. New initiatives and proposals for Union legal acts need transparent, comprehensive and balanced evidence to be sensibly designed, whereas implementation of policies needs evidence to be measured and monitored. The JRC provides Union policies with independent scientific evidence and technical support throughout the policy cycle. The JRC focuses its research on Union policy priorities.
 - Areas of intervention: strengthening the knowledge base for policy making; global challenges (health; culture, creativity and inclusive society; civil security for society; digital, industry and space; climate, energy and mobility; food, bioeconomy, natural resources, agriculture and environment); innovation, economic development, and competitiveness; scientific excellence; territorial development and support for Member States and regions.

EU Missions

EU Missions are a new way to bring practical solutions to some of our greatest challenges. They have ambitious goals and will deliver tangible results by 2030.

The five EU missions are:

- **adaptation to climate change: help at least 150 European regions and communities to become climate resilient by 2030;**
- **cancer: work with the European Cancer plan to improve the lives of more than 3 million people by 2030, through prevention, cure and solutions for those affected by cancer to live longer and better.**
- **restore our oceans and waters by 2030;**
- **100 climate-neutral and smart cities by 2030;**
- **a soil deal for Europe: 100 living labs and lighthouses to deliver the transition to healthy soils by 2030.**

They put research and innovation into a new role, combined with new forms of governance and collaboration, as well as engaging citizens.

EU Missions are a new feature of the Horizon Europe research and innovation programme for the 2021-2027 period.

They support Commission priorities, such as the [European Green Deal](#), [Europe fit for the Digital Age](#), [Beating Cancer](#) and the [New European Bauhaus](#). For instance, Mission Climate is a tangible element of the new [Climate Adaptation Strategy](#), Mission Cancer relates to Europe's [Beating Cancer Plan](#) and Mission Soil is a flagship initiative of the [Long-term Vision for the EU's Rural Areas](#).

EU Missions are a coordinated effort by the Commission designed to pool the necessary resources in terms of policies and regulations, as well as other activities. They also aim to mobilise public and private actors, such as EU Member States, regional and local authorities, research institutes, farmers and land managers, entrepreneurs and investors in order to create real and lasting impact. The EU Missions engage with citizens to boost societal uptake of new solutions and approaches.

The EU Missions support Europe's transformation into a greener, healthier, more inclusive and resilient continent. They aim to bring tangible benefits to people in Europe and engage Europeans in their design, implementation and monitoring.

Each mission operates as a portfolio of actions – such as research projects, policy measures and even legislative initiatives - to achieve a measurable goal that could not be achieved through individual actions.

Pillar III "Innovative Europe"

This fosters all forms of innovation, including non-technological innovation, primarily within SMEs and start-ups, by facilitating technological development, demonstration and knowledge transfer, and strengthens deployment of innovative solutions. It also contributes to the other specific objectives of the programme. The EIC (European Innovation Council) is implemented primarily through two instruments, the Pathfinder, implemented mainly through collaborative research, and the Accelerator.

- **EIC – European Innovation Council** : focusing mainly on breakthrough and disruptive innovation, targeting especially market-creating innovation, while also supporting all types of innovation, including incremental innovation.
 - Areas of intervention: Pathfinder for advanced research, supporting future and emerging breakthrough, market-creating and/or deep tech technologies; the Accelerator, bridging the financing gap between late stages of R&I activities and market take-up, to effectively deploy breakthrough, market-creating innovation and scale up companies where the market does not provide viable financing; additional EIC activities such as prizes and fellowships, and business added-value services.
- **European innovation ecosystems (EIE)**
 - Areas of intervention: activities including in particular connecting, where relevant in cooperation with the EIT, with national and regional innovation actors and supporting the implementation of joint cross-border innovation programmes by Member States, Regions and associated countries, from the exchange of practice and knowledge on innovation regulation to the enhancement of soft skills for innovation to research and innovation activities, including open or user-led innovation, to boost the effectiveness of the European innovation system. This should be implemented in synergy with, among others, the ERDF support for innovation eco-systems and interregional partnerships around smart specialisation themes.
- **The European Institute of Innovation and Technology (EIT)**
 - Areas of intervention: sustainable innovation ecosystems across Europe; innovation and entrepreneurial skills in a lifelong learning perspective, including increasing capacities of higher education institutions across Europe; new solutions to market to address global challenges; synergies and value added within the programme.

Part "Widening Participation and Strengthening the ERA"

While underpinning the entire Programme, this part supports activities that contribute to attracting talent, fostering brain circulation and preventing brain drain, a more knowledge-based and innovative and gender-equal Europe, at the front edge of global competition, fostering transnational cooperation and thereby optimising national strengths and potential across the whole Europe in a well-performing ERA, where knowledge and a highly skilled workforce circulate freely in a balanced manner, where the results of R&I are widely disseminated to as well as understood and trusted by informed citizens and

benefit society as a whole, and where Union policy, in particular R&I policy, is based on high quality scientific evidence.

This Part also supports activities aimed at improving the quality of proposals from legal entities from low R&I performing countries, such as professional pre-proposal checks and advice, and boosting the activities of National Contact Points to support international networking, as well as activities aimed at supporting legal entities from low R&I performing countries joining already selected collaborative projects in which legal entities from such countries are not participating.

- Areas of intervention: widening participation and spreading excellence, including through teaming, twinning, ERA-Chairs, European Cooperation in Science and Technology (COST), excellence initiatives and activities to foster brain circulation; reforming and enhancing the European R&I system, including through for example supporting national R&I policy reform, providing attractive career environments, and supporting gender and citizen science.

