Draft proposal for a European Partnership under Horizon Europe

European Partnership on Innovative SMEs

Version 25.05.2020¹

About this draft

In autumn 2019 the Commission services asked potential partners to further elaborate proposals for the candidate European Partnerships identified during the strategic planning of Horizon Europe. These proposals have been developed by potential partners based on common guidance and template, taking into account the initial concepts developed by the Commission and feedback received from Member States during early consultation². The Commission Services have guided revisions during drafting to facilitate alignment with the overall EU political ambition and compliance with the criteria for Partnerships.

This document is a stable draft of the partnership proposal, released for the purpose of ensuring transparency of information on the current status of preparation (including on the process for developing the Strategic Research and Innovation Agenda). As such, it aims to contribute to further collaboration, synergies and alignment between partnership candidates, as well as more broadly with related R&I stakeholders in the EU, and beyond where relevant.

This informal document does not reflect the final views of the Commission, nor pre-empt the formal decision-making (comitology or legislative procedure) on the establishment of European Partnerships.

In the next steps of preparations, the Commission Services will further assess these proposals against the selection criteria for European Partnerships. The final decision on launching a Partnership will depend on progress in their preparation (incl. compliance with selection criteria) and the formal decisions on European Partnerships (linked with the adoption of Strategic Plan, work programmes, and legislative procedures, depending on the form). Key precondition is the existence of an agreed Strategic Research and Innovation Agenda / Roadmap. The launch of a Partnership is also conditional to partners signing up to final, commonly agreed objectives and committing the resources and investments needed from their side to achieve them.

The remaining issues will be addressed in the context of the development of the Strategic Research and Innovation Agendas/ Roadmaps, and as part of the overall policy (notably in the respective legal frameworks). In particular, it is important that all Partnerships further develop their framework of objectives. All Partnerships need to have a well-developed logical framework with concrete objectives and targets and with a set of Key Performance Indicators to monitor achievement of objectives and the resources that are invested.

¹ Subject to the approval of Eureka governance

² https://www.era-learn.eu/documents/final report ms partnerships.pdf

Aspects related to implementation, programme design, monitoring and evaluation system will be streamlined and harmonised at a later stage across initiatives to ensure compliance with the implementation criteria, comparability across initiatives and to simplify the overall landscape.

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Summary

Eurostars-3 will be the largest funding programme in the European innovation landscape for international research & innovation collaboration by SMEs, executed in a partnership of 36 countries. A high economic impact is realised by innovative SMEs that collaborate in projects with a societal and environmental impact. An improved evaluation process will result in a six weeks faster time-to-approval. A joint and synchronised programme can only be realised at this scale in close cooperation with the European Commission to leverage the strengths of the national support systems.

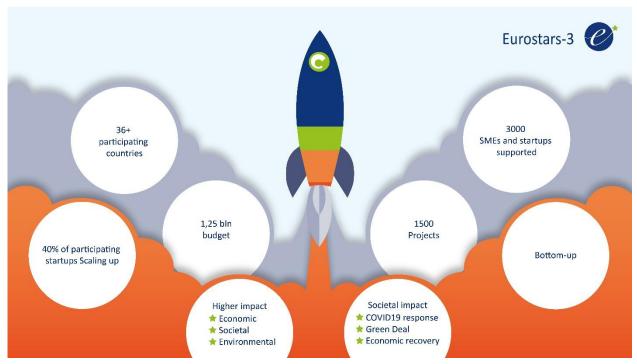


Figure 1. Eurostars-3 in a nutshell

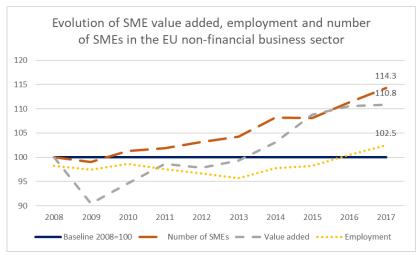
1. Context, objectives and expected impacts

2.1. The challenges of Europe's innovative SMEs

SMEs in Europe employ around 100 million people and account for more than half of Europe's GDP³. In 2018, SMEs accounted for 99.8% of all enterprises in the EU-28, generating 56.4% of value added and 66.6% of employment among the non-financial business sectors⁴. SMEs have proven to be the backbone of European economy and will continue to play a key role in the economic, societal and environmental challenges to come on climate change, digitalization, healthcare, circular economy and social cohesion across regions.

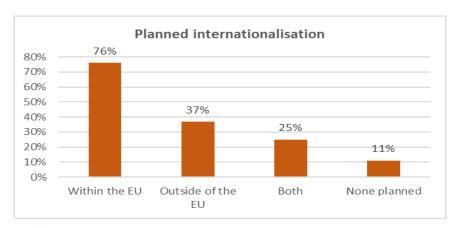
³ An SME Strategy for a sustainable and digital Europe. COM(2020) 103 Final

⁴Annual report on European SMEs 2018/2019. EASME/COSME/2017/03



Graph 1. Source Source European Commission(2018a), pg 35

Yet, SMEs in Europe face big obstacles to growth and development, barriers to enter new markets, access to finance, low R&D&I intensity, lack of skills and administrative burdens. Many of these problems stem from the lack of solid international partners⁵. Businesses around Europe report difficulties in obtaining information in order to develop or expand their activities abroad. This problem is particularly prominent among SMEs due to a lack of resources to do a proper evaluation of market risks and opportunities⁶. 31% of European SMEs have no exporting experience and 21% of this group identify the difficulty to find business partners in within the single market as a major obstacle to exporting⁷. Such barriers become even greater when the internationalisation efforts are addressed outside the European Union. Global markets are an important source of growth for SMEs. However, only 600,000 SMEs employing around 6 million people export goods outside the EU⁸.



Graph 2. Source: European Startup Monitor 2019

⁵ Business Journey on the Single Market. Practical Obstacles and Barriers. SWD(2020) 54 final

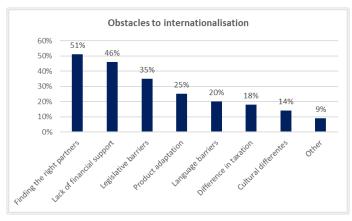
⁶ Hidden Treasures: Mapping Europe's competitive sources of competitive advantages in doing business. 2019. Centre for European Policy Studies.

⁷ ibid

⁸ An SME strategy for a sustainable and digital Europe. COM(103) final

Despite this fact, there is willingness to access foreign markets, which is especially prominent among start-ups. As shown by the *European Start-up Monitor 2019*, 89% of surveyed start-ups were planning to expand internationally within the next 12 months. Most of the internationalisation process were planned within the EU (76%).

Nevertheless, SMEs and start-ups report big obstacles to internationalisation. "Finding the right partners", "lack of financial support" and "legislative/regulatory barriers" were the obstacles most frequently reported.



Graph 3. Source: European Startup Monitor 2019

As displayed in graph 3, finding the right partners has been identified by start-ups in Europe as the main obstacle to access foreign markets. The vast majority of start-ups cooperate with various types of partners, being SMEs (41%) and large companies (29%) the two most searched kind of partners. Among the reasons for cooperating, the two most reported are gaining customer or market access and product or service development⁹.

Initiative at European level, such as Enterprise Europe Network, help companies to find the partners in Europe and beyond. These initiatives, however, need to be complemented with other actions to help SMEs overcoming the main barriers to internationalisation. Being innovative has been acknowledged by the European Commission (2018) as one of the key factors increasing the likelihood to export.

Barriers to innovation by European SMEs

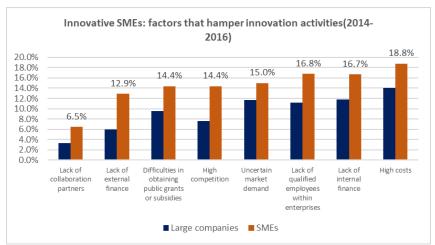
SMEs play a critical role in the innovation system. They introduce advances in products, methods and production and management processes by making breakthrough innovations themselves or by adopting incremental innovation generated by larger firms. Nevertheless, the share of SMEs present in industries with high or very high R&D&I intensity at EU-28 level is only 27.3%. Several obstacles to innovation can hinder their growth and have a negative impact on¹⁰:

⁹ Annual Report on European SMEs 2018/2019. EASME/COSME/2017/03. pg. 88

¹⁰ ibid

- Competitiveness and internationalisation: the small size of SMEs, with a consequent lack of financial and human resources is a strong barrier to entering new markets.
- Research and development capabilities: limited innovation in many enterprises make SME products less competitive in external markets.
- Company performance: in comparison to large enterprises SMEs perform worse in terms of turnover and value added.

As it is depicted in graph 4, on average, barriers to innovation have a higher incidence among SMEs compared to large companies. Moreover, R&D&I social benefits exceed private profits, as they account the diffusion of new knowledge and technology to other firms and society as a whole¹¹. SMEs rarely include these societal benefits into their analysis when considering investing in innovation¹². Thus, a combination of constraints in internal resources (usually related to size) and external resources (market failures) make necessary specific SMEs targeted R&D&I policies.



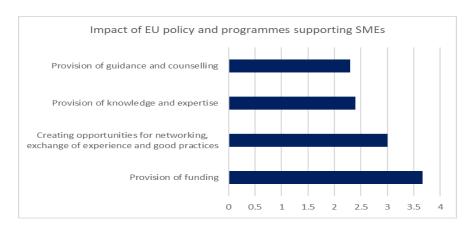
Graph 4. Source: Eurostat. Community Innovation Survey 2014-2016.

In order to stimulate innovation, there is a need for policies directly targeting SMEs, including those that currently do not plan any innovation activities. The *Annual Report on European SMEs 2018/2019* states that improvements in the overall innovation environment would have important spill-over effects and stimulate innovation by SMEs across the European Union. Difficult access to finance remains also as one of the key obstacles for European SMEs¹³. The provision of funding has been identified by Local and Regional Authorities as the instrument with the highest impact (see graph 5).

¹¹ Annual report on European SMEs 2018/2019. Background document.

¹² Annual report on European SMEs 2018/2019. Background document.

¹³ A renewed European Agenda for Research and Innovation – Europe's change to shape its future. COM(2018) 206 final



Graph 5. Source: LRAs survey key results. Q15. EU policy framework on SMEs. CoR.

While the EU is the most open research and innovation area in the world¹⁴, it is still experiencing an innovation deficit. The main problem to this regard is the lack of scale-up dynamics, and of diffusion, with innovation not always being translated into new market and growth opportunities¹⁵. Whereas the lack of finance is already immanent for SMEs in their early innovation stages, the Valley of Death for collaborative innovation projects with transnational partners is even bigger. Project partners are confronted with different innovation support schemes in every EU country and beyond.

Cross-country differences within the EU-28 are an important factor to consider when looking at the innovation landscape. There are profound differences between and within member States in the capacity of regions to innovate, according to the Regional Innovation Scoreboard. Within the EU, scientific excellence is rather concentrated, and EU funding from Horizon 2020 to low performing R&I countries has remained low¹⁶. SMEs represent most of the people employed and value added in most EU regions. Challenges that limit their capacity to grow and compete can therefore negatively affect the capacity of regional and local economies and make them more exposed to risks from globalisation and technological change¹⁷. There is therefore a growing need to strengthen the European Research Area and seek for a more balanced participation of Member States in the public R&D&I funding initiatives in order to close the innovation gap between regions.

Eurostars-3 will contribute to the EU strategic priorities on competiveness, open markets, world-leading research and technologies and a strong single market by bringing together SMEs and other organisations in the scope of international, innovation projects that aim to access the European and global market while bringing sustainable value to society.

¹⁴ ibid

¹⁵ ibid

¹⁶ European Commission (2017), Interim Evaluation of Horizon 2020, SWD(2017) 220, book, p. 119.

¹⁷ EU policy framework on SMEs: state of play and challenges (2019). *European Committee of the regions*

2.1.a. Eurostars-3 under Horizon Europe: problems drivers and solutions

The proposed Horizon Europe programme will build on its predecessor Horizon 2020 with new features and enhancements of existing elements in order to deliver excellence and greater impact in particular through the European Innovation Council (EIC).

In complement to the activities under the new Horizon Europe programme and in particular the EIC with its focus on deep-tech start-ups and scale-ups the proposed Partnership on Innovative SMEs will help to more fully address the challenges that European innovative SMEs and/or start-ups (deeply rooted in national and/or regional innovation ecosystems) are facing. As a complementarity action to what other elements of Horizon Europe can deliver, this new joint initiative between the EU and national innovation programmes, the "Partnership on Innovative SMEs" will address the following three important challenges:

- Turning the EU's substantial knowledge assets into sustainable smart innovation;
- Providing SMEs with high-growth potential early access to international markets;
- Strengthening the European Research Area (ERA).

The EU's substantial knowledge assets, notably in the field of key enabling technologies, need to be more effectively and quickly turned into innovations, particularly as innovative solutions for global challenges are increasingly research-intensive¹⁸. The international competition has intensified, and Europe needs to catch up. Stronger focus is needed on innovators working on new, breakthrough and market creating innovations – currently somewhat rare in Europe. This also corresponds to the finding of the Horizon 2020 Interim Evaluation that Europe suffers from a slow industrial transformation.

Innovation is not restricted to R&D performing SMEs¹⁹ but SMEs play a very important role in the European innovation eco-system. SMEs with innovations based on novel business models, designs or process improvements can create valuable products or services directed to new and even global markets. Eurostars-3 will be open to all innovative SMEs, including R&D performing SMEs, and those which may not be addressed by other European Commission programmes such as the EIC or EIT. The defining aspect of innovative SMEs in Eurostars-3 will be the will to cooperate internationally to develop innovative products and processes aimed for global markets²⁰.

While SME support programmes have been core components of regional and national R&D&I policies for a long time, their inherent national focus limits their impact and does not unleash their full potential within the European Research Area (ERA). With SMEs increasingly addressing global markets directly instead of slowly expanding their home markets, the need for public support programmes to align with the ambitions of businesses has never been greater, particularly as companies see access to national and international markets as one of the biggest barriers to being able to scale-up their business²¹. It is necessary therefore for countries to commonly help to eliminate those barriers and find the best ways to

¹⁸ Commission Staff working document. Impact Assessment. SWD(2018) 307 final part 1/3

¹⁹ https://www.eurostars-eureka.eu/content/what-eurostars-definition-rd-performing-sme

²⁰ Scaleup Institute Annual Scaleup Review 2018 http://www.scaleupinstitute.org.uk/scaleup-review-2018/

²¹ Business Journey on the Single Market. Practical Obstacles and Barriers. SWD(2020) 54 final

support the needs and ambitions of businesses in achieving global success. Boosting European competitiveness remains a key priority and it is vital that there is strong support for fast-growing, innovative companies.

Eurorstars-3 will leverage the national support measures at the home-base of the SMEs through a cooperative cross border funding program across Europe and beyond. The strong added value of Eurostars-3 derives from the additional private and public R&D&I investments on EU priorities (additionality and leverage), the alignment of these investments towards common objectives (directionality) based on Article 179.1 TFEU²², and the international character and the achievement of impacts that cannot be created by other Framework Programme actions or national actions alone.

In order to tackle the three abovementioned challenges, the partnership on Innovative SMEs will address three general objectives as described below in chapter 2.2.a.

Eurostars has proven to be an effective European instrument dedicated to supporting international cooperation between Research & Development (R&D) performing SMEs. It has contributed to the R&D&I efforts of more than 3800 organisations since 2008; led to higher public and private R&D&I spending; given access to the best available technological knowledge; linked valuable new business partners; opened new markets and value chains and increased the competitiveness of SMEs in Eurostars countries. It will establish stronger ties between the European Commission and the Ministries and National Funding Bodies (NFBs) of the Eurostars countries, building an effective programme that connects national policies and budgets to an international funding scheme, thereby contributing to the objectives of the European Research and Innovation Area (ERA) and providing high European added value.

The core activity of Eurostars-3 will remain the funding of bottom up R&D&I projects, with independent evaluations used to assess the quality and likely impact of the proposals. The 20,000 applications to the H2020 SME Instrument indicate the potential demand for such an open instrument²³. This change will ensure that the programme will remain relevant in an area where such strict R&D-related definitions struggle to reflect the complexity of innovation and will encourage more applications from currently less-active countries²⁴. The competition might become stronger, but the evaluation process²⁵ will ensure that only projects with the highest innovation level and true collaboration of mutual benefit for partners will be proposed for funding. The programme will allow the SMEs to accelerate commercialisation, help them to scale-up and reach a higher innovation growth path.

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²² Commission Staff working document. Impact Assessment. SWD(2018) 307 final part 1/3 pg 16

²³ https://www.h2020.md/en/statistics-sme-instrument. 19,320 proposals according to current data, which will exceed 20,000 by the end of H2020.

²⁴ http://www.eib.org/en/infocentre/publications/all/investment-report-2018-key-findings.htm

²⁵ See Annex C

2.1.b. The role of Eurostars-3 in Europe's economic recovery

Since the emergence of the COVID-19 pandemic, the World is experiencing its greatest financial challenge since the Great Depression of the 1930s. The EU is facing the biggest economic downturn since its foundation; significantly greater than the European sovereign debt crisis beginning at the end of the last decade. The immediate effects on our globalised society will be unprecedented and longer-term negative impact on jobs, income and health will remain for many years. EU GDP is forecast to contract by about 7,5% this year, and to rebound by only 6% in 2021²⁶. Challenges for post COVID19 economic recovery and the European health system require innovative solutions that will be sought in cooperation with institutes, SMEs and universities across the EU and beyond.

Eurostars has proven that it has a key role to play at such important moments. It has succeeded in supporting more than 3000 SMEs since 2008 in growing their business endeavours through innovation via collaborative projects bringing these innovations to the market. Eurostars lead to the creation of 18.000 jobs. By facilitating access to international markets and value chains, the programme has demonstrated significant impact, particularly in job creation, economic development and long-term transnational cooperation²⁷. 64% of the Eurostars participating companies entered new markets and 54% improved in their market share through the programme. These figures demonstrate that Eurostars is a clear driver for jobs and economic growth that is so urgently needed. The Eurostars programme has successfully established strong ties between the European Commission and the Ministries and National Funding Bodies (NFBs) of the Eurostars countries, building an effective programme that connects national policies and budgets to an international funding scheme, thereby contributing to the objectives of the European Research and Innovation Area (ERA) and providing high European added value.



²⁶ European Economic Forecast. Spring 2020. Institutional Paper 125.Directorate-General for Economic and Financial Affairs. European Commission.

The success of this type of programme to date has shown the strategic importance of having a stable innovation programme with long-term commitments from Eureka countries and the EU, meeting both the EU Framework Programme and national R&D&I objectives.

Already in recent years under the Eurostars-2 programme (H2020), 27% of the participants consisted of high-tech start-ups. 30% of them are on a higher innovation growth path and 41% can be labelled as a high-tech scale-ups. These companies are currently supported through the Eureka-European Commission Joint Investment Readiness Programme (JIRP). Future expectation is that companies involved in a Eurostars projects can feed into the Invest Horizon Acceleration programme soon before or after project completion. Eurostars-3 can act as the ultimate plug-in into the EIC Business Accelerating Services. The Eureka cluster programmes facilitate additional growth paths for start-ups by teaming up with larger industrial players in the innovation landscape, through open innovation and capital venture schemes.

Eurostars is a well-established instrument that can create, nurture and support the development of the European innovation ecosystems its new impact-oriented approach and its strong alignment with Horizon Europe breaks with the past and the previous framework programmes. As Europe's largest global innovation network, Eureka in charge of the Eurostars-3 implementation, will continue to make innovation happen, by bringing several key ingredients and aspects unique to Eureka – innovative small businesses across Europe and the world, with direct support and access to 46 national innovation programmes across 5 continents, in order to address global societal challenges ahead.

By bringing together NFBs to implement a joint programme with common criteria, central and independent evaluation and work alignment, Eurostars deepens cross-border collaboration within Europe and beyond. The Eureka network is well positioned, as the only network in the EU which merges the power of NFBs and Ministries to support innovation projects. It has proven stability and a broad membership beyond EU Member States. The network is flexible and can adapt and develop to meet the needs of the ERA and business. While the Eurostars-3 programme for innovative SMEs is designed as a bottom-up programme, it can as well act as a platform to set up focused promotion and calls to address new global challenges (Green Deal, COVID19) and aid the economic recovery. This will create the basis for strong complementarities between the EIC and Eurostars-3.

2.1.c. Lessons learned from Eurostars-2 and Horizon 2020

Internal and external evaluations of the performance of previous versions of Eurostars have identified key enhancements that will lead to positive improvements and generate higher impact of the new Eurostars-3 programme during Horizon Europe.

The mid-term evaluation panel of the Eurostars-2 looked at the programme as part of a range of instruments put in place for the benefit of SMEs in Europe. Eurostars-2 covers a specific niche that other EU, national and regional interventions do not as such address for the benefit of SMEs in Europe and therefore provides real additionality.

Eurostars-3 will build on its former success and continue to be a platform for transferring and exchanging knowledge and experiences not only between supported SMEs but also between administrative bodies involved in SME support. The bottom-up approach combined with close to market innovation of SMEs is a uniqueness in Europe.

One key improvement is that EU Member States have made huge efforts to alignment since the start of Eurostars-1 and we have reached a high level of integration. Several activities have been implemented in the past years to raise the participation of currently underrepresented countries which resulted in higher participation. Eureka will continue to help those countries and we hope that under Horizon Europe the use of ESIF will be regarded as national contribution which would significantly support the widening aspect. A higher and more balanced participation of all Eurostars participating countries will also support the complete use of EU funding which is in the interest of Eureka and the Commission as well.

The Eurostars activities have covered in the past about 50% of the tasks at the Eureka Association. Nowadays the ESE is implementing more additional activities like GlobalStars, Innowwide or Invest Horizon; the proportion (and therefore perceived risks) of Eurostars to the overall budget is lower. The implementation of Eurostars-3 will be enhanced which will also have impact on the administrative costs. The administration of the Eurostars budget will be part of the final decision on the type of the future partnership and the contract. Accordingly, the Eurostars governance structure will be adapted.

Sharing best practice has always been a major attribute of the Eureka network. In the future Eurostars will offer a unique opportunity for learning from best practices in implementation of the programme but also for other national R&D programmes for SMEs. Fast time to contract is important to be in the forefront of innovation. In the future the evaluation process will be reduces by 6 weeks which will have immediate impact on the time to contract. The evaluation itself will be strengthened and additional criteria like Economic, Environmental and Societal Impact will be included. Again, sharing best practice will countries to reduce their administrative burden, become faster and receive more applications of high quality.

It is not only in the interest of public authorities that the funding finally results in an innovation which is brought to the market. Also, companies who have invested in the projects aim for this e.g. to become more competitive, to achieve revenues and to grow. But sometimes project participants face problems after the development of a prototype. Therefore, more emphasis will be put on the monitoring and follow-up of project result. Eureka will help project participants to bring their innovations to the market and the link to other Eureka instruments like Clusters or Invest Horizon will support this as well as coaching and mentoring activities. Analysis of the results of funded projects and their timescale will be regularly performed in annual reports and other reports.

The development of a modern IT system for submission, evaluation, monitoring and data collection will allow easy application, fast and efficient administration. The new data collection system put in place will be aligned with the requirements to be integrated into CORDIS. Ex-ante, ex-post and ad hoc data collection will be implemented, following the Key Impact Indicators under Horizon Europe. The scope of the data collected will be expanded in order to provide insightful information on the impact delivered by Eurostars 3 including societal challenges and UN SDGs as well as European policy priorities around the Green Deal, and Europe for a Digital Age.

The mid-term evaluation panel of the Eurostars-2 shows that 68% of all Eurostars projects have two or three partners including one R&D performing SME as the project leader and in 80% of the projects at least

two SMEs are involved; the vast majority of projects are very small consortia. The project cost of Eurostars 2 and the SME instrument phase 2 projects are similar. These findings place the Eurostars-2 type of projects (small innovation projects with two or three SMEs) very closely to the initial SME instrument phase 2 of Horizon 2020. There are however significant divergences; the SME instrument is considered a mono-beneficiary programme whereas Eurostars is a collaborative programme. This makes the demonstration of international added value and cross border cooperation clearly demonstrable. The TRLs differ slightly. Eurostars has a broader global coverage, currently incorporating countries in Asia, Africa and North America (see section 2.4). While certainly similar, these differences ensure the complementary of the initiatives, with only a minimum overlap to ensure that SMEs cannot fall between a gap in the coverage of these instruments.

Eurostars has learned from the experiences in the past years and will further improve the tailored services to the needs of the innovative SMEs. Due to the design of the programme, a ranking list everybody must follow, the likelihood to be awarded funding is high²⁸. These are important elements for SMEs to know even before applying as they frequently do not have the time or resources to invest in applications – they need to maximise their chances of return.

One of the aims of the SME strategy is that the daily challenge for SMEs to cope with rules should become less of a burden. Eurostars-3 will be a leading example for minimal bureaucracy, improving access to finance and ultimately to the market. Eurostars-3 will be easily accessible with easy to understand rules, making it simple to form a consortium and apply²⁹. Specifically, for small SMEs and newcomer's national advice the support by the national authorities brings unique added value: support in the national language, national funding rules they are familiar with, local currency and accounting/audit principles are a key simplification for the end-user and are core features of Eurostars. Further efficiencies and optimisations in the whole process, be it evaluation or monitoring and faster funding decisions will be implemented in Eurostars-3³⁰.

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²⁸ Some of the new features that will improve the process are: automated eligibility check, new IEP model, better distribution of tasks between Eureka Association and NFBs. The evaluation and selection processed have been shortened by 6 weeks. For more information on the streamlined Eurostars-3 process, see Annex C and Eurostars-3 General Implementing Guidelines.

²⁹ ibid

³⁰ See Annex C

Key enhancements of Eurostars-3

Higher impact: Supporting projects of higher quality for higher impact. With dedicated budget from participating countries and the contribution from the European Commission for Eurostars-3, even more European SMEs can reach the market and achieve success⁷. Greater emphasis will be placed on robust evaluation, actively guiding and monitoring project outcomes and economic, societal and environmental impact.

Better services to beneficiaries: Streamlined administration. Faster time to contract. Simplified eligibility criteria. Eurostars-3 has the ambition of becoming a benchmark for an easily accessible international collaboration programmes.

Broader target group: The aim of Eurostars-3 is to support close to market innovation driven by innovative SMEs. The target group is made of the innovative SMEs coming from the participating countries with the ambition to collaborate on R&D&I with foreign partners to develop new products and processes aimed for European and transnational markets. The programme will be open to all innovative SMEs; however, the projects will remain focused on applied R&D&I (e.g. ~TRL 4-6).

Widening: Specific emphasis will be placed on the possible participation of SMEs from all Eureka countries, with targeted actions aimed at countries with lower R&D&I intensity and ensuring that national commitment of resources meets demand. Widening in Europe and beyond is important for the programme to reach critical mass and create even more impact. In addition, active participation from all Eurostars countries enables SMEs to collaborate with their preferred and the best partners.

Internationalisation: SMEs increasingly work on a global scale or are looking for possibilities to expand globally. Eurostars-3 is a key programme for innovative SMEs or start-ups to establish their value chain in the geographical borders of the EUREKA countries thus creating an added-value in a region, which builds on openness and cooperation. It will create a valid alternative to exit-strategies to regions, which build on protectionism and competition. Eurostars-3 will be executed in line with the Global Strategy of Eureka.

Synergy, Coherence and Alignment: Complementing Horizon Europe and the European Innovation Council to contribute to the wider innovation support landscape to meet the needs of innovative businesses to grow and scale-up. Identifying strategic alliances with other parts of the landscape. Aligning with all Eureka instruments. Working with NFBs to create synergies with other support instruments available at the national level.

Accompanying measures: Measures which will support SMEs innovation journey e.g. coaching, mentoring, investor readiness. Eurostars-3 will be embedded in a scheme of different support tools, through Eureka, the EU and national schemes for companies.

2.2. Common vision, objectives and expected impacts

2.2.a. Objectives of the Innovative SMEs partnership

The vision and general objectives for the Innovative SMEs partnership are:

To stimulate economic growth and job creation by enhancing the competitiveness of Innovative SMEs while contributing to deliver a positive economic, societal and environmental impact in Europe and beyond.

In order to address the abovementioned three challenges, the Innovative SMEs partnership has three general objectives:

- **Innovation:** To enable innovative SMEs to provide all forms of innovation, including breakthrough innovation, and strengthen market deployment of innovative solutions;
- Fostering the internationalisation of innovative SMEs;
- **ERA Connectiveness:** Connect MS programmes to unlock the potential of all partners this means there is a need for strengthening the EU innovation capacity of SMEs and its technological base and spreading the benefits within a strengthened European Research Area;

The mission and operational objectives of Innovative SMEs Partnerships are:

To support innovative SMEs to develop products, processes and services and bring them to the market through funding market-led, cross-border, R&D&I collaborative projects and connecting to accompanying measures.

In line with the abovementioned three general objectives (Innovation, Internationalisation, ERA) the following operational objectives will be addressed by the Innovative SMEs partnerships:

Innovation:

- Faster time to market (new ideas to be more effectively and quickly turned into innovations);
- Business growth and scale-up globally leading to increased employment and turnover;
- Contribution to de-risking SMEs finance through leveraging of private investment and public funding;
- Contribution to EU strategic priorities through technological, societal and environmental impact.

Internationalisation:

- Access to new knowledge globally leading to high quality collaborations and mutually beneficial outcomes;
- Access to new markets or value chains leading to improved market shares for Eurostars SMEs;
- Function as steppingstone to start and scale-up international cooperation.

ERA connectiveness:

- Higher European added value by fostering synchronisation and harmonisation of national supporting instruments (increased efficiencies at national level).
- Connection to national, Eureka and EU-wide innovation support schemes, avoiding unnecessary duplication leading to a simplified offer to beneficiaries.
- Achievement of a more balanced participation of Eureka countries (including EU Member States) in terms of budget and high-quality proposals.

In comparison to its predecessor programme Eurostars-2, the ambitions of this partnership have largely been raised as the general and the related operational objectives demonstrate. Furthermore, the complementarity with the overall Horizon Europe Pillar III "Innovative Europe" shows that this partnership becomes an important part of the overall European Innovation Ecosystem. With more directionality (Green Deal, Europe Fit for Digital Age or scaling up of start-ups/SMEs) and the possibilities for cooperation with other partnerships, the programme should contribute in the EU to the economic, innovative and sustainable systemic transitions, in particular for innovative SMEs and start-ups.

In the following page, an intervention logic is presented, linking the challenges currently faced by innovative SMEs in Europe to the general and operational objectives of this partnership.

Eurostars-3 Intervention logic

Challenges faced by innovative SMEs

- •Turning EU's substantial knowledge assets into sustainable smart innovation
- •SMEs with highgrowht potential require early access to international markets
- •There is a need to strengthen the European Research Area(ERA)

Eurostars vision and general objectives

- •To stimulate economic growth and job creation through sustainable smart innovation by enhancing the international competitiveness of Innovative SMEs while contributing to deliver a positive economic, societal and environmental impact in Europe and beyond.
- (i)Innovation: To enable enable innovative SMEs to privde all forms of innovation, including breakthrough innovation, and strengthen market deployment of innovative solutions.
- (ii)Fostering the internationsalisation of innovative SMEs
- (iii)ERA

Connectiveness:

Connect MS
programmes to unlick
the potential of all
partners – this means
there is a need for
strenthening the EU
innovation capacity of
SMEs and its
technological base and
spreading the benefits
within a strengthened
European Research Area

Eurostars 3 mission and specific objectives

 Support innovative SMEs to develop products, process and services and bring them to the market through funding-let, cross-border, R&D&I collaborative projects and coonecting them to accompanying measures:

• (i) Innovation:

- oFaster time to market (e.g. in the field of key enabling technologies, new ideas to be more effectively and quickly turned into innovations)
- oBusiness growth and scale-up globally leading to increased employment and turnover
- Contribution to de-risking SMEs finance through leveraging of private investment and public funding.
- Contribution to EU strategic priorities through societal and environmental impact

• (ii) Internationalisation

- Access to new knowledge globally leading to high quality collaborations and mutually beneficial outcomes;
- oAccess to new markets or value chains leading to improved market share and sales for Eurostars SMFs ·
- oFuction as stepping stone to start and scale-up international cooperation.

• (iii) ERA connectiveness:

- oHigher European added value by fostering synchronisation and harmonisation of national supporting instruments (increased efficiencies at national level)
- oConnection to national, Eureka and EU-wide innovation support schemes, avoiding unnecesary duplication leading to a simplified offer to beneficiaries.
- oAchievement of a more balanced participation of Eureka countries (including EU MSs) in terms of budget and high-quality proposals

Planned activities

- Funding near market collaborative R&D&I projects between innovative SMEs
- Strategic alignment
- Accompanying measures
- Increasing participation and regional focus
- •Globalisation and cooperation with countries not within Eureka.

In order to be able to monitor the achievement of the general and operational objectives of the proposed partnership, Key Performance Indicators (KPIs) have been introduced for each of the various operational objectives, which will allow for (SMART³¹) follow up. The first and third general objectives are fully in line with the Horizon Europe objectives³² (i.e. support to innovative solutions and a renewed ERA) while at the same time the EU policy objectives, such as the Green Deal and Europe Fit for Digital Age of the new European Commission, are also well reflected in the partnership objectives.

For each operational objective, we present below the potential outputs of the Partnership and its proposed Key Performance Indicators (KPIs). The further definition and elaboration of numerical targets and/or thresholds for KPIs will be set up and fine-tuned in each Annual Work Plan as the information on the transformational changes achieved is arriving from the partnership activities, and as agreed between Eureka and the Commission services on a year by year basis.

Key Performance Indicators

Innovation: Faster time to market (e.g. in the field of key enabling technologies, new ideas need to be more effectively and quickly turned into innovations).

KPI11a. Number of innovations commercialized successfully.

KPI11b. Number of patents registered stemming from the innovations developed under Eurostars-3 projects.

KPI11c. Number of peer-reviewed publications stemming from innovations developed under Eurostars-3 projects.

Innovation: Business growth and scale-up globally leading to increased employment and turnover;

KPI12a. Number of jobs generated during and after the implementation of the project.

KPI12b. Increase in the turnover of Eurostars-3 participating SMEs during and after the implementation of the project³³.

 Innovation: Contribution to de-risking SME innovation finance through leveraging of private investment and public funding

KPI13a. Number and volume of Eurostars-3 participants attracting funding from other EU or national public sources.

KPI13b. Number and volume of Eurostars-3 participants raising private investments³⁴

Innovation: Contribution to EU priorities through societal and environmental impact

KPI14a. Number and of projects contributing to the UN Sustainable Development Goals (SDGs).

KPI14b. Number of projects contributing the Green Deal and Fit for Digital Europe priorities³⁵.

³¹ Specific, Measurable, Achievable, Realistic, Time-based

³² Commission Staff Working Document Impact Assessment SWD (2018) 307 final PART 1/3

³³ To be measured against a control group

 $^{^{\}rm 34}$ Measured proportionally to participants baseline turnover levels.

³⁵ To be finetuned

 Internationalisation: Access to new knowledge globally leading to high quality collaborations and mutually beneficial outcomes;

KPI21a. Number of sustained partnerships after finalisation of Eurostars-3 project (projects developed between at least two Eurostars consortium members).

KPI21b. Number of funded projects with at least 1 member from a non-European country.

KPI21c. Number of funded projects with at least 1 member from a non-Eureka country.

Internationalisation: Access to new markets or value chains leading to improved market share and sales for Eurostars SMEs;

KPI22a. Number of Eurostars-3 SMEs commercializing their innovations in foreign markets (disaggregated by geographical area).

KPI22b. Volume of sales by Eurostars-3 SMEs in foreign markets.

Internationalisation: Steppingstone to start and scale-up international cooperation

KPI23a. Number of Eurostars-3 participants SMEs performing their first international cooperation project.

 ERA Connectiveness: Higher European added value by fostering potential for synchronisation and harmonisation of national supporting instruments (increasing efficiencies at national level);

KPI31a. Identification of nationwide R&I funding programmes with a pipeline to Eurostars-3

ERA Connectiveness: Connection to national, Eureka and EU-wide innovation support schemes, avoiding unnecessary duplication leading to a simplified offer to beneficiaries;

KPI32a. Number of projects funded in Eurostars-3 that have previously received national funding for an earlier stage of the product or service being developed.

KPI32b. Participation of funded projects in Eurostars-3 participants obtaining funding from other R&I initiatives after the end of Eurostars-3 projects.

 ERA Connectiveness: Achievement of a more balanced participation of Eureka countries (including EU MSs) in terms of budget and high-quality proposals.

KPI33a. Number of funded projects with at least one participant from a widening country.

KPI33b. Share of budget allocated to funded projects coming from widening countries.

KPI33c. Share of public funding over the total budget in widening countries.

Achieving these operational objectives will require a joint effort of the whole Eureka network; the Eureka Association (Dedicated Implementation Structure), the National Funding Bodies of member countries and the remaining internal and external stakeholders, and the European Commission. Eureka is well positioned

for this endeavour, as the only network in the EU which merges the power of NFBs and Ministries to support innovation projects. It has proven stability and a broad membership beyond EU Member States.

Implementation data collected from application forms and other post-project reports will be analysed and reported on regularly in order to track funding activities and report on short-term and medium-term outcomes. To that extent, existing forms and reports will be updated to ensure the monitoring activities are in line with the Horizon Europe Impact Pathways. The reporting will mainly incorporate data collected at the submission stage (application forms), project monitoring stage (Progress Reports or equivalent) the post-project monitoring stage (Final Reports and Impact reports³⁶). However, third-party sources can be incorporated to enable more accurate monitoring of beneficiary growth during and after the participation in the programme.

Eureka will work with the Commission Services in the standardization of the information collected and the provision of data on proposals, projects, results, outcomes and impact in a format defined by the EC for the integrations in the common IT tool.

The methodology will be based on a combination of quantitative and qualitative methods ("mixed methods" approach) to increase the reliability of results³⁷. Furthermore, a mixed methods approach will ensure the analysis captures different types of impacts and will help answer two distinct set of questions:

- 1. *Does the programme work?* The employment of quantitative methods will provide answers on whether a programme is effective,
- 2. Why does the programme work and how are the results achieved? The qualitative approach will illustrate how and why these effects are observed.

While the quantitative approach provides much needed factual results, the qualitative approach can help fill-in the gaps and identify the channels that facilitate the observed effects and answer why certain outcomes occur. This makes the mixed method approach particularly useful for identifying gaps in the intervention logic and find opportunities for improving future iterations of the programme. It is necessary to ensure Eurostars-3 is continuously being improved to meet the needs of different beneficiaries and stakeholders alike.

³⁶ In Eurostars-3, the Market Impact Report will change its name to Impact Report to reflect the broader scope that includes societal and environmental impact of the projects.

³⁷ Innovate UK, (2018): Evaluation Framework

2.2.b. Complementarity with the EIC

In the paragraphs below, it is described how Eureka intends to maximize the complementarity with the EIC. Both instruments aim to accelerate the process of bringing innovations to the market and to turn research knowledge into innovative products and services.

The EIC as well as Eurostars-3, together with other parts of pillar III of Horizon Europe, will stimulate all forms of innovation ranging from incremental to breakthrough and disruptive innovation targeting especially market-creating innovation. Through coherent and streamlined support, the EIC will fill the current vacuum in public support and private investment for breakthrough innovation.

In the future European innovation landscape, Eurostars-3 will be the only SME driven funding instrument with an international cooperative dimension. The proposed partnership will have a global span with 36 participating countries that reaches far beyond the borders of the European Union. Eurostars-3 also deepens the "European innovation ecosystem" to the national level.

With the current outline of the Pathfinder and Accelerator programmes, Eurostars-3 can encourage national and EC supported companies to further product and process development after completion of a national or a Pathfinder project. The combination of these tools presents an important offer to businesses to accelerate their innovation journey.

Article 7(a) of the regulation dealing with "The European Innovation Council" reads: The Commission shall establish a European Innovation Council (EIC) as a centrally managed "one stop shop" for implementing actions under Pillar III 'Innovative Europe' that relate to the EIC. The EIC shall mainly focus on breakthrough and disruptive innovation, targeting especially market-creating innovation, while also supporting all types of innovation, including incremental." This specific request strongly supports the objectives and complementarity of the Eurostars-3 programme which facilitates both incremental and disruptive innovation thanks to its bottom-up approach and its R&D&I focus on innovative SMEs (see section 2.4).

We expect the EIC as well as Eurostars-3 to operate according to the following principles: clear EU added value, autonomy, ability to take risk, efficiency, effectiveness, transparency and accountability.

The EIC as is designed, primarily supports the Pathfinder and the Accelerator, as well as the additional EIC activities, particularly connecting innovators to investors, partners and public buyers, coaching and mentoring services, providing innovators with access to international networks of potential partners, including industrial ones, organising challenges to help develop novel solutions to global challenges.

COMPLEMENTARITY EUROSTARS-3 WITH THE EUROPEAN INNOVATION LANDSCAPE

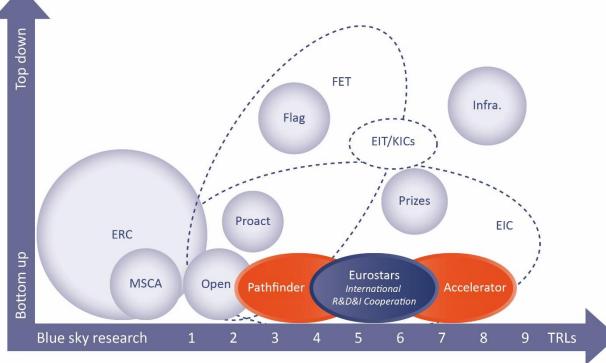


Figure 2. The complementarity of the Eurostars-3 programme to the future European Innovation ecosystem and EIC. Please note that the intention is not to be fully comprehensive covering all Horizon Europe or national programs

Eurostars-3 can contribute in an optimal way to the innovation landscape across the member states and to the EIC's mission to "provide support to innovations with breakthrough and disruptive nature and scale up potential". While Eurostars-3 focusses on innovative SMEs in general, the EIC addresses the fast-growing SMEs. Eurostars-3 will support collaborative R&D&I projects whereas the Pathfinder and the Accelerator of the EIC cover the full span between science mining to access to finance for scaling up. Eurostars-3 and EIC are highly complementary: on the way from the pre-commercial phase to scale-up phase innovative fast-growing companies will need R&D&I cooperation since most technologies are too complex to be mastered by a single business. Through Eurostars-3 these SMEs can unite with the necessary partners the cross-disciplinary know-how.

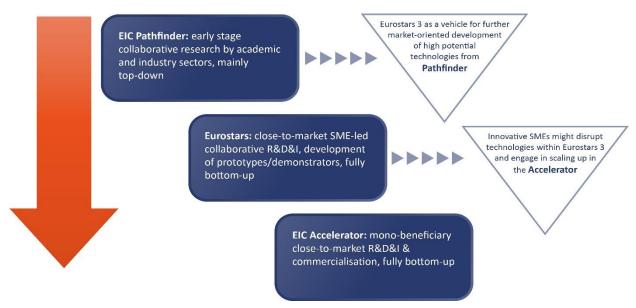


Figure 3. Complementarity between Eurostars-3 and EIC programmes

Eurostars-3 will generate a pool of exciting, innovative and growth-seeking business and therefore help to create qualified deal flow for the EIC Accelerator of companies with the potential to significantly scale. The combination of these tools presents an important offer to businesses to accelerate their innovation journey.

Through EIC blended finance, the Accelerator should bridge the "valley of death" between research, premass commercialisation and the scaling-up of companies. The Accelerator will provide support to operations presenting such technological or market risks that are not considered as bankable and cannot leverage significant investments from the market, hence complementing the InvestEU programme which should fund bankable scale-ups.

The European Commission has recently published the Industry and SME strategy which will be guiding documents for the future. Even though these strategies are focusing on the twin ecological and digital transition, Eurostars-3 as a bottom-up program will contribute to those major challenges but help other innovative SMEs to develop in different sectors which will also contribute to the challenges. Small and medium sized businesses (SMEs) account for over 99% of all European firms and are our economic and social backbone. Thus, SMEs are a core partner in achieving the EU's industrial strategy. They are an integral part of the accelerators and enablers of change and innovation. Currently Eurostars specifically addresses R&D performing SMEs but will expand the target group and address all innovative SMEs in Europe, thus contributing to the industrial innovation strategy for innovative SMEs.

The Green Deal proposal put forward by the European Commission set the stage for an era of increased ambition towards sustainable development. It aims to make Europe the world's first climate-neutral continent and leader in circular economy and clean technologies. Research and innovation will be a key supporting feature of such comprehensive strategy. Eurostars-3 specific Green Deal calls might be set up

to contribute to achieve the Green Deal goals through those innovations that fuel the societal transition towards sustainability while supporting EU's competitiveness and leadership in clean technologies.

The Eurostars-3 programme will promote actions related to the "Europe fit for Digital Age" priority of the new Commission. Furthermore, other innovative start-ups or SMEs in particular from the EIT Digital could be encouraged and invited for participation in Eurostars-3 calls to shape Europe's digital future. In addition, specific actions will be explored how Eurostars-3 funded innovators may benefit from the support of the EIT Innovation Communities.

The current Commission's Horizon Europe proposal states that the EIC will be the main instrument of the Union to support deep-tech based breakthrough market-creating innovation. It should attract innovative companies with potential for scaling up at international and at Union level and offer fast, flexible grants and blended financing. The position and complementary of the Innovative SMEs programme is elaborated both in Figure 3.

Against this background these EIC objectives are clearly complementary to Eurostars-3 objectives and vice versa. Eurostars-3 will support innovative small companies and start-ups through a mixture of grants, business services and access to external funding, including providing access to private investors, venture capital, co-investments and other funding sources at international level.

Considering that Eurostars-3 and the participating national programmes are fully embedded in the national and regional innovation systems they will be able to contribute to a pipeline of non-bankable innovations to the EIC (fast-track plugin).

Maintaining the unique added value of each instrument would mean that the EIC should directly finance individual innovators, potentially blended with private funds while the Eurostars-3 will connect them to regional or national innovation ecosystems to provide them with further support beyond the funding from the EIC. Each instrument would have its effective and complementary tools to select and support beneficiaries.

The positive experiences from the enhanced EIC pilot demonstrate the need to focus on continuous improvement, network, learning opportunities and facilitating access to business partners and investors. Being part of the EIC pilot programme offers a privileged access to business acceleration services (BAS).

Recent examples are Corporate Days and Investors Days, where highly innovative SMEs can take advantage of pitching and partnering opportunities with investors and corporates. These services are very similar and complementary to the cooperation under the Investment Readiness scheme Invest Horizon³⁸ jointly implemented between DG RTD and Eureka.

At the end of Eurostars-2, the European Commissions' Innowwide programme was introduced with several Eureka members participating and the Eureka Secretariat as the Executive agency. Through 'Viability Assessment Projects' the programme contributes to the early stages of cross border innovation

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³⁸ https://investhorizon.eu/

cooperation and supports aspects such as the technical feasibility, required business model and investment needed. Eureka, with over 45 members, is becoming the main European platform for the internationalisation and global collaborative R&I projects for innovative SMEs and start-ups. Small and non-bureaucratic funding support for small business will allow the testing of possible new innovative solutions, also in relation to the UN SDGs. The planned revisited Innovative SMEs partnership could consider the INNOWWIDE Viability Assessment Projects as an additional self-standing accompanying measure for start-ups and innovative SMEs to step up opportunities for global cooperation with non-Eureka member countries.

If an Innowwide-type action could be continued in Horizon Europe, the programme could contribute to better prepared and globally connected project plans for Pathfinder, Eurostars-3 and the EIC Accelerator.

2.2.c. Complementary with the EIT and other European Partnerships

Eureka will strengthen the links with the EIT and future Knowledge Innovation Communities (KICs) through those national and regional Innovation agencies involved in Eureka and EICs/KICs. Eurostars-3 will promote actively the participation of SMEs members of the EIT-KICs in all cases where specific thematic calls are envisaged. Eurostars-3, with a general bottom up approach, has the potential to nurture the KICs with innovative, successful SMEs looking for access to a broad innovation ecosystem that helps them to develop their full potential in certain thematic areas of the KICs. With a large share of young companies participating for the first time in an international project, successful Eurostars participants will find in the KICs a perfect ecosystem to thrive. In the same fashion, KIC member organisations will find in Eurostars-3 an opportunity to apply their acquired knowledge and access the funding they need to bring their innovation to the market. The complementarity of the future Eurostars-3 programme to the future European Innovation ecosystem and EIC is depicted in the Figure 2.

Especially for widening countries in Eurostars-3, there are strong potential links with the Structural Funds in Eurostars projects. Three Eureka members currently fund their Eurostars projects by accessing their Structural Funds. Some countries have the desire to support more projects through Eureka but lack national funding and find it very difficult to access or use the Structural Funds to support R&D&I projects. There may be some things which will help the situation considerably, such as Eureka being specifically mentioned in the regulation or guidelines for ESIF to ensure managing authorities consider it as an option rather than just shutting the door to the opportunity. Eureka has developed a practical guide towards joint structural funds Eurostars projects that has been distributed amongst the Eurostars-3 participating countries. It is also for the Eureka members to share more on experience and best practice. There is a big opportunity and it is important to find ways to overcome some of the current barriers and boost the participation of certain countries.

2.2.d. Investment foreseen and leverage effect from EU contribution

The total budget for the Eurostars-3 programme is expected to be up to 1,2 billion euro. Participating countries will contribute around 854 million euro and the European Commission is asked for a contribution of up to 366 million euro. The Union contribution can only be defined once there is political agreement on the Multiannual Financial Framework, and the allocation to Horizon Europe. From earlier analysis we know the historic leverage effect of every euro spent on Eurostars:

- 1 EUR of EU funds leverages 3 from the NFB and 4 from the participant (1:7 ratio).
- 3 EUR of NFB funds leverages 1 from the EU and 4 from the participant (3:5 ratio)

This would imply that the suggested EU contribution is expected to generate R&D&I projects with an overall investment of 2.5 bn euro. The results will be closely monitored and reported by an independent auditor. For more detailed information on resources needed, see section 3.2.

2.2.e. Eurostars-3 as a pipeline for transformational changes

The rise of new, fast-growing global economies and their powerful industries is apparent. The challenges facing our societies are increasingly global in nature, necessitating therefore global solutions. Research

and innovation have become a more global and trans-national collaborative endeavour. Businesses recognise that to grow and scale-up they need to access global markets and must be part of global value chains. Internationalisation of business activities is of key importance to the competitiveness of enterprises in particular of SMEs. Trends suggest that SMEs that develop international or global strategies can move quicker to take advantage of cross-border activities, which provide them with opportunities not only for company growth but also the exchange of knowledge and the enhancement of capabilities. Despite the common understanding of the importance of internationalisation, there are still many perceived barriers that impede the internationalisation of SMEs.

The advantage of Eureka implementing Eurostars-3 and being the largest global network of national innovation funding bodies (at least 36 countries expected to join the programme) working together in a joint programme with the European Commission, provides through a tremendous European opportunity to enable R&D&I collaborations between SMEs delivering innovative excellence and societal impact. Eurostars-3 will occupy a unique place in the landscape and will be *complementary* to national and regional programmes, other Eureka instruments and EU efforts to internationalise businesses and SMEs.

The programme provides an effective approach enabling R&D&I cooperation between SMEs to more easily open up global opportunities, whilst at the same time remaining rooted in national or regional SME support, ensuring easy access, help and local advice for applicants, which is an important factor for small businesses.

Eurostars-3 will provide a perfect steppingstone to enter into trans-national innovation cooperation projects to support especially young and small SMEs, which may typically become future "clients" of the EIC Accelerator and complement at the same time the EIC Pathfinder activities. The *unique cooperation in the form of a joint innovation programme* between Eureka as intergovernmental body with its members and the EU, stretches beyond Horizon Europe and provides a global critical mass of support to harness the innovation capacity of European SMEs and start-ups in order to support sustainable development of our society. Eurostars-3 it is the only European programme in close-to-market R&D&I industrial cooperation focusing on innovative SMEs.

The innovative SMEs participating in Eurostars-3, focusing in some cases on breakthrough but most probably mainly on incremental innovation cooperation with other project partners may face difficulties to participate Horizon Europe top-down collaborative projects.

The Eureka Network has shown great flexibility to adequately respond to global challenges that require fast track innovative solutions. Within two weeks, an emergency COVID19 call coordinated across seven participating countries was launched in April and closed on May the 15th. 65 project applications have been submitted. That same day, a second call was launched. With this agility of the Eureka Network, Eurostars-3 can act as platform to set up focused promotion and calls to address new and emerging global challenges and economic recovery. Already a large percentage (>60%) of the Eurostars projects are addressing innovations in the life sciences and health sector. Going forward, Eurostars-3 will become even more relevant to support SMEs in the post-lockdown economic rebuilding by sustaining the international cooperation to develop new collaborative R&D projects.

2.2.f. Exit strategy

Eurostars is a well-regarded and successful programme that has been running for over 10 years as part of the Eureka activities. Businesses like continuity and consistency, but also programme improvements, and the NFBs see considerable value in Eurostars. It is the intention to continue the programme long term, making changes to keep it relevant to businesses and to ensure coherence with changing market dynamics, national strategies and political priorities. It will be important to continuously learn lessons and evaluate the impact of Eurostars-3 to ensure the learning is transferred during the delivery of Eurostars-3 and to future programmes.

Should the partnership approach with partial funding from the European Commission 'phase-out' this could potentially mean the end to Eurostars in its current form, as the funding from the Commission helps incentivise and crowd in national funding. Eurostars could continue dependent upon national funding and political priorities but would need a level of national commitment to make it viable. In this case a pure funding support for all operational cost of the programme from the EU could be a viable alternative for the Eureka Network. It could be expected that several countries currently participating will not be part of the programme without the top-up contribution of the Commission, however, a more intensive use of structural funds as national/regional contributions could be also an alternative. It might also limit new widening countries to join the programme. Lack of funding from the EU would therefore limit the number of projects and SMEs that could be supported, reducing the total innovation support in the European ecosystem, investment in R&D&I and the long-term benefits for the economies of the participating countries. The European Commission involvement facilitates convergence and synergies between European, national and support programmes.

As an important part of the implementation process of the Innovative SMEs partnership and the more detailed elaboration of the Annual Work Plans, Eureka internal reflection on its strategy, priorities and achievements will take place to assess all possible future opportunities, national interests and strategic priorities. The results of such reflections will be discussed in the Eureka governance bodies, which include the European Commission as one of its funding members, to identify needs for action in an early stage in line with the R&D&I policy approach of the EU.

2.3 Necessity for a European Partnership

2.3.a. International cooperation and extended impact

The Eurostars-3 Innovative SMEs European Partnership is based on the principle of Union added value, transparency, openness, impact, leverage effect, long-term financial commitment from all parties, flexibility, coherence and complementarity with Union, local, regional national and international initiatives. It fits into the overall partnership landscape of Horizon Europe and contributes to optimal coherence between Framework Programme activities and other partnerships. The European Research Area and Innovation Committee (ERAC) considered public-to-public partnerships (e.g.; EUROSTARS-3)

essential for more coordinated implementation of national and EU R&D&I. All European Partnerships will benefit from improved coherence with Framework Programme's actions, as well as from cooperation among various partnership initiatives and provide for greater openness to international cooperation.

Eurostars-3 will offer a complementary and coherent support to innovative SMEs dedicated to the emergence of new incremental and breakthrough ideas, the development and deployment of market-creating innovations. These activities will be largely defined "bottom-up", being open to innovations from all fields of science, technology and applications in any sector, while also enabling focused approaches on emerging or breakthrough technologies of potential strategic significance. The EUROSTARS-3 programme should support and strengthen the coherence of the European innovation ecosystem, notably through cofunding from a large number of participating national innovation programmes.

Both the European Union and EUREKA have identified the support to the global connectedness of the SMEs as a key factor to build strong innovation ecosystems and to support the competitiveness of the European economy. To reach this goal, the cooperation amongst the participating countries and the European Commission is needed due to the positive results compared to what can be achieved by coordinated national programmes only (without the participation of the European Union) or by regular calls under Horizon Europe (excluding the participation of EUREKA):

- Enhanced visibility and acknowledgement of the programme, as a consequence of the participation of both the European Commission and EUREKA, the widest innovation network that goes even beyond the European Union borders.
- Enabled management of the programme both at national level and by the central implementing body, due to the agreement on a set of stable, comprehensive and already tested set of rules.
- Improved alignment with other European Commission Initiatives directed to SMEs and facilitation of the connections with other EU R&D&I programmes, by being part of the same European strategy and also by concentration of resources under the same European evaluation standards
- Increased availability of funding for the R&D&I projects led by Innovative SMEs. The national decision makers consider the EU support and the recovery of part of the investment (top-up) as very positive arguments when discuss to join and financially support a long-term programme such as EUROSTARS-3. On the Commission side, the top-up rate expected certainly will allow the funding of about 2.5 3 times more projects than in a regular call due to the mobilization of funds and human resources made available in the participant countries, with a clear leveraging effect on the Union's financial investments.

To sum up, the partnership will lead to a more visible, more efficiently managed, better connected and better funded programme compared to what could be achieved without the synergy between the European Commission and the EUREKA countries. Such a strengthened programme arising from this partnership will certainly be more beneficial for the target group of EUROSTARS-3, the Innovative SMEs, than a regular Horizon Europe call or a coordinated action amongst the participant countries.

2.3.b. The role of Member States in Eurostars-3

Eurostars' backbone is the close relationship with national governments and regions. As an SME focused program, it will support countries and regions to develop and test new solutions with SMEs and consumers, drawing on their local characteristics, strengths and specialisation. Eurostars-3 will unlock more diverse sources of funding for European businesses, especially SMEs by using national and regional funding and structural funds. The Eureka Network is expecting with interest the new regulations related to the use of structural funds.

Due to the de-centralization of the funding inherent to EUROSTARS-3, national funding programmes will be utilized or specifically developed in every participant country (Member States and Associated Countries) to financially support the execution of the Eurostars Projects. Furthermore, the links with other national and regional programmes supporting Innovative SMEs will be explored as well. Eureka has a well-established cooperation with the Enterprise Europe Network (EEN), which should continue. As the structure of the EEN is based at regional level, NFBs and regional actors could connect and work together with the established national structures to support and advise SMEs at local level. Eurostars-3 can be one of the partnerships in which Europe and Member States will pool their strengths to do collectively what no one can do alone.

To support SMEs in the best way we need to offer them at EU and national level a variety of instruments. Depending on the phase of development of the SMEs, they need different funding and support instruments. Eurostars-3 as dedicated SME instrument will play a vital role in this. Eurostars is already part of the innovation landscape for SMEs. It will continue offering improved tailored service to innovative SMEs at national level combining it with the strength of European support.

The Eureka clusters are another strong instrument of Eureka. They are industrially driven strategic initiatives which are supported by Public Authorities. They cover the full value chain to create innovative solutions and the projects are also created bottom-up and are close to the market. They help SMEs to scale up in consortia with large industry. SMEs present already on average 40% of the project participants but consortia involving end-users, labs and start-ups as well. Coaching throughout the lifecycle of a project of all participants is another key element for success in Clusters projects. SMEs value the sharing of risk and costs, to work in a trusted environment and getting access to the market faster. We will link SME's and start-ups who have successfully finished a Eurostars project to the relevant Clusters. They can take the next steps and develop their innovation further by initiating or participating in Cluster projects. Thus, they will have access to all services the Clusters provide which will help them to grow, bridge the "Valley of Death" and bring their products to the market.

2.4 Partner composition and target group

2.4.a. Partner composition

It needs the right conditions for entrepreneurs to turn their ideas into actions and for companies of all sizes to thrive and grow. In Eurostars projects different actors can be involved like SMEs, large industry, academia and universities and the consortia can be formed the way it is needed for a specific project following easy rules. By using the knowledge of SMEs, big companies, researchers and regions to help remove barriers to innovation and improve policy coherence Eurostars-3 will contribute to the industrial strategy. Eurostars-3 will incentivise SMEs and support them to innovate, establish their value chains, and bring ideas faster to market. Thus, it will become a clear pathway to market and allow scaling-up of innovative SMEs. The partnership is composed by Eureka Member countries, represented in the Eureka Governance Bodies by the National Funding Bodies, responsible for research and innovation programmes.



Figure 4. List of currently participating Member States and third countries. *Expression of interest from Singapore.

The Eureka Strategic Road Map has among its priorities to expand the outreach of the network and incorporate new member countries.



Figure 5. The Eureka Network

2.4.b. Eurostars-3 target group

The Eurostars-3 target group is made of the innovative SMEs coming from the participating countries with the ambition to collaborate on R&D&I with foreign partners to develop new products, processes and services aimed for European and global markets.

In the framework of this programme, the EU definition of SME will be followed to determine whether a company is an SME^{39.}

The Oslo Manual⁴⁰ definition for innovation will be applied: a business innovation is a new or improved product or business process (or combination thereof) that differs significantly from the firm's previous products or business processes and that has been introduced on the market or brought into use by the firm.

Collaboration with foreign partners brings the SMEs the opportunity to access knowledge, facilities and skills that fasten and widen the innovation process and reduces the risk of failure. In addition, international collaboration also allows SMEs to enlarge the markets and so to increase the creation of wealth.

Cooperation with third countries will grant SMEs easier access to foreign markets via their project partners. They can help and advise them e.g. how to enter the market. Due to the globalisation policy of Eureka based on the principle of openness and cooperation several countries like South Korea, Canada or South Africa joined the network and participate in Eurostars. Eureka has proven success in involving third countries willing to share knowledge and to cooperate on the principles of excellence and competition in specific calls which will be expanded to Eurostars-3. Thus, Eurostars-3 will contribute to the globalisation strategy of Europe. Often the barrier for SMEs to participate in European programs is the high competition and the lacking experience performing projects in international consortia. Eurostars has proven to be the first step to international cooperation and often SMEs seek to continue their innovation journey by submitting further projects at national or EU level afterwards. Having participated in a Eurostars project make SMEs more competitive and ready to participate in larger scale projects and programmes at European level.

Using previous calls as a reference for project budget (approximately 1.5M€) and number of participants (average 2.5 partners per project, 75% of which are SMEs) Eurostars-3 will support at least 1700 innovation projects involving over 3000 innovative SMEs.

 $^{^{39}}$ Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises notified under document number C(2003) 1422 Official Journal L 124 , 20/05/2003 P. 0036 – 0041

⁴⁰ OECD/Eurostat (2019), Oslo Manual 2018: Guidelines for Collecting, Reporting and Using Data on Innovation, 4th Edition, The Measurement of Scientific, Technological and Innovation Activities, OECD Publishing, Paris/Eurostat, Luxembourg

2. Planned implementation

3.1. Activities

3.1.a. Key actions towards the achievement of Eurostars-3 objectives

The Eurostars-3 programme will be structured around a portfolio of the following interrelated activities delivered over a 7-year time period (2021 – 2027):

- Funding near market collaborative R&D&I projects between innovative SMEs through regular bottom-up calls for proposals: Multi-partner transnational projects involving at least two different participants from different Eurostars countries will remain the main core activity, evidenced by the quality of projects funded under the Eurostars-1 and 2.
- Strategic alignment: Promotional actions for demand-driven (from both Eurostars beneficiaries and countries) ad-hoc thematic, sectoral, geographic or technology specific proposals targeted at specific cut off dates. These promotional actions will be agreed across Eurostars countries with, where relevant, the advice of industry and in line with other Eureka initiatives, such as the Clusters. This will enable Eurostars-3 to link to other Horizon Europe activities, including European Partnerships, and the wider landscape, to react agilely to the changing dynamics and demands of innovation support. These could be deployed to increase participation of less active countries. Clear communications around promotional activities will ensure applicants are aware that funding will not be prioritised for specific proposals but that the ranking order will be followed.
- Accompanying measures⁴¹: A recommendation of the recent EIB Investment report is to complement lending instruments and grant support with advisory services to tackle backlogs and to ensure that gaps are addressed in a comprehensive way⁴² Eureka will address these challenges by providing SMEs with access to a range of services, linking to other provision already available, such as mentoring, coaching, advisory services and the Eureka/European Commission Invest Horizon Programme. These measures will be available to Eurostars-3 projects through their lifecycle, notably in their preparation (pre-application support), during project implementation ('in-flight-services') and following completion (post project services). This will further strengthen both the quality of applications and the market penetration of the results stemming from Eurostars projects, by developing and connecting to tailored support for facilitating the roll-out of the results in the European and global markets.
- Increasing participation and new regional focus: Eurostars-3 will actively address the innovation divide in Europe by designing and implementing new measures to strengthen the absorptive capacity and innovation output of SMEs in low R&D performing regions that do not necessarily have the same

⁴¹ Accompanying measures will be developed for Eureka-wide use and do not form part of the European Partnership application.

 $^{^{42}\} EIB\ investment\ report\ 2018/2019\ http://www.eib.org/en/infocentre/publications/all/investment-report-2018.htm$

supportive innovation ecosystems as the highly R&D intensive regions, particular attention will be paid to pre-application support. A close cooperation with the European Structural and Investment Funds (ESIF), European Regional Development Fund smart specialisation strategies and the Regional Innovation Scheme of EIT will be sought⁴³. Eurostars fulfils the Smarter Europe objective of the new Cohesion policy framework⁴⁴. The aim is for Eurostars to become an attractive tool for participants from all member countries and draws proportionate funding from across the network. This includes the EU Widening Member States⁴⁵ and Associated Countries but also other Eureka Eurostars member countries which have seen participation fluctuate or decline in recent years. It is important to emphasise that Eurostars is open to participation to all Eureka's 45+ countries⁴⁶. Any barriers which have impeded Eureka member countries joining will be addressed for Eurostars-3 through wider Eureka strategies including the Strategic Roadmap 2020. EU13 countries have been consulted in the development of this.

Globalisation and cooperation with countries not within Eureka: The Eurostars programme will, building on the successful involvement of Canada, South Africa and South Korea, continue to support participation from international partners. This will link with Eureka's global strategy and alignment with national strategies/policies on bilateral and multilateral cooperation. Eurostars will complement the European Commission's internationalisation strategy by enabling innovative SMEs to establish their value chain in a region based on openness and cooperation and mitigate the risk of exit strategies to regions based on protectionism. Eurostars will help to take the first step to globalise by participating in market led R&D&I projects beyond the EU and its Framework Programme through collaboration with Eurostars non-European partners. It will also, given its flexible nature, create the possibilities to cooperate with organisations from non-Eureka countries where desirable (through the aforementioned strategic alignment). Eurostars will be complemented by Eureka's GlobalStars by providing a follow up mechanism for those third countries who have participated in GlobalStars and provide innovative SMEs with options to maximise their global opportunities. Future Eurostars countries (who are Eureka members), who wish to join Eurostars will follow the rules for participation, as per the implementation guidelines. The programme will be further detailed in (multi)Annual Work Plans. Communication and dissemination will be done by the Eureka association in co-ordination with the NFBs and the Commission.

⁴³ These activities will be further developed before commencement of the Programme but will include ensuring access to Eurostars is promoted and eligible.

⁴⁴ https://ec.europa.eu/commission/sites/beta-political/files/budget-may2018-new-framework-glance_en.pdf

⁴⁵ The MS currently eligible for Widening support are Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Luxembourg, Malta, Poland, Portugal, Romania, Slovakia and Slovenia

⁴⁶ Eureka countries: Austria, Belgium, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, republic of North Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, Malta, Monaco, Montenegro, the Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, San Marino, Serbia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, European Commission. Eureka NIPs: Albania (1991), Bosnia and Herzegovina (2009). Eureka Partner: Republic of Korea (2009), and Associated countries: Argentina (2019), Canada (2012), Chile (2017) and South Africa (2014) Any countries joining from the date of this proposal.

3.1.b. Achieving complementarity with the national and European Innovation Landscape

Eurostars-3 will remain a key part of the wider innovation ecosystem and ensure strong coherence and synergy to provide the best offer to funders and SMEs. This proposal for Eurostars-3 seeks synergies with national innovation support programmes, EU-level programmes and initiatives, in particular Horizon Europe (including Pillar 3 and the EIC) avoiding overlaps. It will rather seek to leverage existing activities and where possible ensure support is local to the business.

The main elements for ensuring coherence and complementarity with the broader innovation ecosystem are the following:

- Complementarity with national and EU-level innovation support programmes: Eurostars-3 as a 'kick-starter' for international cooperation of innovative SMEs: As Eurostars has a high success rate (29%) and lower barrier to entry, due to working directly through NFBs, it is good preparation for companies who want to go on to participate in larger EU collaborative programmes, helping to raise the participation of SMEs in the Framework Programme, as well as other international programmes. Additionally, national innovation support programmes do not usually promote international cooperation. Eureka-wide accompanying measures activities will be coordinated with EU funded activities such as those under Pillar III of Horizon Europe and the Enterprise Europe Network in the Single Market Programme, to avoid duplication and ensure effective support to European SMEs. Strategic alliances with specialised stakeholders, such as the European Business Network and European Investment Bank will also be sought.
- Eurostars-3 as a 'spoke' of Horizon Europe Pillar 3: Eurostars' focus on multi-country, multiparter, collaborative, near-market, SME innovation distinguishes itself from the EIC. Pathfinder, which will be mainly at a lower TRL level and the EIC Accelerator, with a sole focus on high TRL level monobeneficiary programmes (see section 2.2.a). Eurostars will generate a pool of exciting, innovative and growth-seeking business and therefore help to create qualified deal flow for the EIC Accelerator of companies with the potential to significantly scale. Eurostars can support innovative SMEs to collaborate globally, including outside of Europe with the intention to be more open to working with key countries globally. The EIC can significantly help SMEs to scale. The combination of the two presents an important offer to businesses to help accelerate their innovation journey and to do so globally.
- Eurostars-3 as a 'talent scout' across Eureka regions: To enhance participation of all countries, we will explore greater synergies with smart specialisation strategies, the EIT Regional Innovation Scheme (RIS) as well as other key initiatives, so that more promising SMEs will be motivated to engage in international collaboration and to raise the visibility of Eurostars as a mechanism to support economic growth.

3.1.c. Submission and evaluation of Eurostars-3 projects⁴⁷

Eurostars-3 will have a minimum of 2 calls per year. The submission on proposals will be done in the new Eureka IT platform (currently under development) which will allow consortium members to work collaboratively in the proposal. The application will be composed at least of:

- Objectives of the project and the expected results;
- Technological innovation (state-of-the-art, innovation, maturity);
- Assessment of the technological risk;
- Cooperation (added value of the cooperation, IPR);
- Expected economic impact, assessment of the market risk;
- Details on the subcontracting activities and parties;
- Execution and phasing of the project (approach, milestones, go/no-go decisions);
- For each applicant, legal and financial information for financing the project;
- Business and financial information for marketing project results;
- Information about the environmental and societal impact of the project;
- Ethics Self-Assessment.

The application form will also include the questions necessary to monitor the relevant KPIs presented in section 2.2. of this document. The eligibility check will be performed automatically by the system.

Eurostars-3 will have a 2 steps evaluation procedure⁴⁸, coordinated centrally by the Eureka Association (DIS). The evaluation of applications and approval of the ranking list will not exceed 13 weeks after the call deadline. In both steps of the evaluation, the proposals will be assessed on three criteria: Market and Impact, Excellence in Innovation and Quality and efficiency of the implementation.

In the 1st step of the evaluation, each proposal will be assigned to 5(3+2) experts from the Eureka Expert Database with relevant expertise. The proposals progression to the second step will be assessed by a panel of independent experts (IEP) which whose objective will be to create the ranking list. In parallel with the 1st step of the evaluation, National Funding Bodies will conduct the Legal and Financial Viability Check of their national applicants.

⁴⁷ For a detailed explanation of the submission, evaluation and funding procedures in Eurostars-3, see the General Implementing Guidelines.

⁴⁸ See Annex C

The selection of proposals to be funded will follow the ranking list. The specific new mechanisms introduced in Eurostars-3 will be discussed and decided before the start of the programme.

3.2. Resources

3.2.a. Draft indicative budget

To achieve the full potential for the SMEs and the consequential impact on the economies of the participating countries, the Eureka High Level Group considers that the total public budget for Eurostars-3 should be in the region of €1.2 billion, with an EU contribution of 30% of the total being used for the cofunding of projects as well as the administrative and evaluation costs for the Dedicated Implementation Structure (in this case the Eureka Association). National administrative and evaluation costs will be covered by Eurostars countries, providing further leverage of EU contribution.

[European Structural and Investment Funds are likely to be eligible for Eureka and Eurostars projects and would be considered a national contribution.]⁴⁹



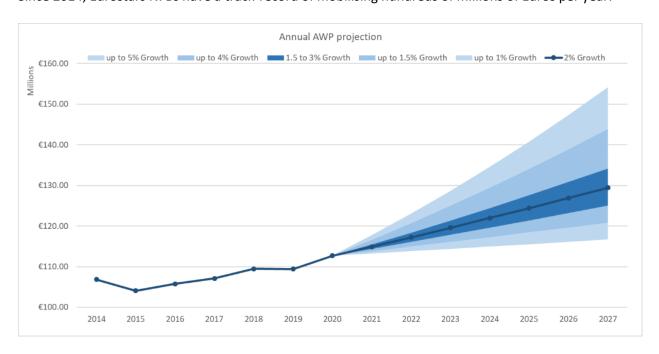


Figure 6: Annual national funding commitments from countries that are eligible for reimbursement from Horizon 2020. The figures are based on national funding only and do not include any EU contribution. Countries that are not eligible for receive Union contribution (e.g. South Korea) are not included. The real figures from the period covered by Eurostars-2 are extrapolated using with various growth rates until the end of the programme. Baseline figures are from grant funding programmes.

Taking real national commitments for projects for individual countries in the approved Eurostars-2 annual work plans shows a recent year on year growth rate of approximately +2%. Forward extrapolation from

⁴⁹ Pending Horizon Europe negotiations

2020 with different growth rates shows the potential financial scale of each annual work plan, with greater potential for divergence from the established base line growth estimate as time progresses.

Adding each individual annual work plan total together provides a first estimation of the NFB contribution to the programme budget.

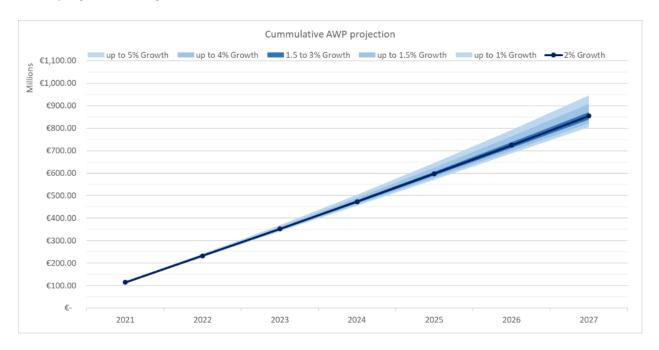


Figure 7. Annual national funding commitments from countries that are eligible for reimbursement from Horizon 2020 presented as a cumulative annual amount to demonstrate the overall national contribution to the funding programme (prior to any Union contribution).

Expectations, bases on a first survey amongst NFBs and current contributions, are that the national contribution will be between 804.5 M€ at the lower end, up to 963 M€ at the upper limit. The baseline estimation of 2% growth suggests a national contribution of approximately **854 M€**, made up of the estimated extrapolation for each member shown in table 1.

Table 1: Estimated contributions to the programme from countries currently known to be interested in participating to Eurostars-3. Yellow = contributions from MS and current AC, Blue = third countries, Green = Indicative programme budget (prior to Union contribution).

	Country	Cumulative contribution				Annual average		
	EU & Associated countries	€	8!	54,400,000.00	€	122,	100,000.00	
1	Austria		€	26,500,000.00		€	3,800,000.00	
2	Belgium		€	8,500,000.00		€	1,200,000.00	
3	Bulgaria		€	3,800,000.00		€	500,000.00	
4	Croatia		€	4,200,000.00		€	600,000.00	
5	Cyprus		€	3,000,000.00		€	400,000.00	
6	Czech Republic		€	7,600,000.00		€	1,100,000.00	
7	Denmark		€	37.900.000.00		€	5.400.000.00	

8	Estonia	:	€	12,600,000.00		€	1,800,000.00
9	Finland	:	€	30,300,000.00		€	4,300,000.00
10	France	:	€	75,800,000.00		€	10,800,000.00
11	Germany		€	113,700,000.00		€	16,200,000.00
12	Greece	•	€	<u>-</u>		€	-
13	Hungary		€	5,700,000.00		€	800,000.00
14	Iceland		€	3,800,000.00		€	500,000.00
15	Ireland		€	7,600,000.00		€	1,100,000.00
16	Israel	:	€	19,000,000.00		€	2,700,000.00
17	Italy		€	5,300,000.00		€	800,000.00
18	Latvia		€	3,000,000.00		€	400,000.00
19	Lithuania		€	3,000,000.00		€	400,000.00
20	Luxembourg		€	4,500,000.00		€	600,000.00
21	Malta		€	2,800,000.00		€	400,000.00
22	Norway	:	€	62,200,000.00		€	8,900,000.00
23	Poland	:	€	16,700,000.00		€	2,400,000.00
24	Portugal		€	3,800,000.00		€	500,000.00
25	Romania		€	7,600,000.00		€	1,100,000.00
26	Slovak Republic		€	3,200,000.00		€	500,000.00
27	Slovenia		€	3,400,000.00		€	500,000.00
28	Spain	:	€	63,700,000.00		€	9,100,000.00
29	Sweden	:	€	70,500,000.00		€	10,100,000.00
30	Switzerland	:	€	68,200,000.00		€	9,700,000.00
31	The Netherlands		€	104,200,000.00		€	14,900,000.00
32	Turkey	:	€	30,300,000.00		€	4,300,000.00
33	United Kingdom	:	€	41,700,000.00		€	6,000,000.00
	Third Countries	€		47,800,000.00	€	6,	,800,000.00
34	Canada	:	€	15,200,000.00		€	2,200,000.00
35	South Africa		€	2,300,000.00		€	300,000.00
36	South Korea	:	€	30,300,000.00		€	4,300,000.00
	TOTAL	€		902,200,000.00	€	128	,900,000.00

The financial contribution of the third countries is a vital element of the programme's global ambition, but within this chapter it is considered supplementary funding; they are significant strategically and in scale, and they will leverage the money of the other members, providing greater and more frequent opportunities for investment by all members, but the contributions in this context are additionalities as the EU budget is not contingent on them.

The potential for all existing Eureka members to join that have not previously done so (Monaco, Montenegro, North Macedonia, Russia, San Marino, Serbia, Ukraine, Argentina, Chile, Albania, Bosnia),

and the Globalisation strategy outlined in the Eureka Strategic Roadmap are fully expected to result in more countries participating and a significant increase in the dedicating financial resources.

3.2.b. Types of funding

Eureka funding principles are at the heart of Eurostars-3. The vast majority of the national budgets is reserved for grant funding and NFBs are encouraged to draw upon a variety of funding sources (national, regional or other) in order to increase the number of excellent innovation projects being financed. The blending of national and regional programmes has been witnessed in the past (Belgium) and this could be exploited to a greater potential should these alternative funding schemes be eligible for EU contribution.

Countries have utilised structural funds for financing national innovation programmes – including Eurostars (Estonia, Portugal). Previously such funding was ineligible for additional Community funding. Under Horizon Europe, European Structural and Investment Funds are likely to be eligible for Eureka and Eurostars projects and would be considered a national contribution, and thus eligible for receipt of co-funding with Community funds² - affording increased budget availability for the members to reinvest into future R&D&I projects.

A number of NFBs have experience in offering low (or no) risk loans that significantly de-risk the investments of both private and public stakeholders. NFBs look to exploit any funding potential that is fit for purpose for Eurostars, and there is anticipation that any funds that are not grant based might also benefit from additional EU contribution if the inherent added complexity is manageable.

While the majority of the programme will be dedicated to bottom-up calls, where Union contribution will be used to top-up the national funding, a number of other activities are being considered such as thematic calls and accompanying support measures. While variable geometry will be utilised to maximise the potential to meet national (and European) priorities, it may result in asymmetric funding where a number of countries may consume more of the EU contribution than would normally be foreseen, leaving a smaller budget available for the regular calls. Accordingly, variable funding rates or caps may be applied.

The specificities and modalities of these considerations will be discussed by the Eureka High Level Group regularly to maintain flexibility and relevance, and decisions will be detailed in each specific annual work plan.

3.2.c. Implementation

The central management of the evaluation process, monitoring and administration by the Dedicated Implementation Structure (the Eureka Secretariat) has been estimated using the extensive experience and knowledge gained by running the Eurostars-1 and Eurostars-2 programmes. The costs fall into two main categories; personnel costs and operational costs (direct costs for administration & evaluation, other direct costs, depreciation, ...). Personnel costs are significant and while there is some scaling to mirror demand in projects, it is not directly proportional (i.e. the marginal time/cost to process the nth+1 when n is already significant). Direct evaluations costs bear a closer correlation to the number of projects being processed at a given time.

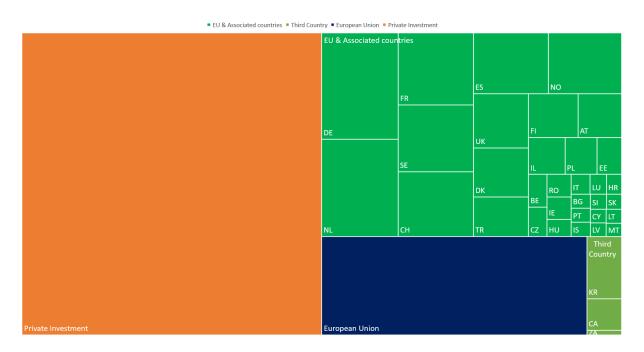
Initial estimates for the programme, based on projected funding availability, likely success rates, and process descriptions are in the region of 25M€ over the 12 years⁵⁰ that the projects are evaluated, monitored and funded.

3.2.d. Cofunding

Activity	Costs reported	Funding rate	Union contribution	Internal allocation	Required actual financial contribution	Resulting Internal funding rate
Coordination and management of the programme	€ 25,000,000	30%	€ 7,500,000	€ 25,000,000		100.00%
Funding of projects resulting from calls	€ 1,170,000,000	30%	€ 351,000,000	€ 316,000,000	€ 854,000,000	27.01%
Accompanying support measures ⁵¹	€ 25,000,000	30%	€ 7,500,000	€ 25,000,000		100.00%
Total	€ 1,220,000,000	30.%	€ 366,000,000	€ 366,000,000	€ 854,000,000	30.00%

3.2.e Leverage

Using the average national funding rate of 50%⁵² for the antecedent programmes, the combined effort of Eureka and the EU will likely realise **2.5 Billion Euros of European R&D&I investment** under Eurostars-3.



⁵⁰ Projects evaluated and approved in the second half of 2027 will be contracted in mid-way through 2028. Projects can run for 3 years (June 2028 June-2031). Final payments and reconciliation of expenditures and certification takes 6-9 months – Q1 2032.

⁵¹ Indicative budget for potential measures. Internal allocation is set to 100%, but this is variable. As the internal funding rate decreases, the in-kind/actual financial contribution of the members also reduces.

⁵² when calculated across all members, organisation types and eligible expenditures

Using previous calls as a reference for project budget (approximately 1.5M€) and number of participants (average 2.5 partners per project, 75% of which are SMEs) such budget availability would support 1700 innovation projects involving over 3000 SMEs.

3.3 Governance

3.3.a. Governance Bodies of Eurostars-3

Eurostars-3 will be managed by Eureka and implemented through the Eureka Association. Processes at both central and national level will improve administration of applications and contracts, building on the significant reduction in time to contract and contract standardisation already achieved. Removing unnecessary burdens and streamlining essentials will result in a best-in-class time to contract. Procedures for the application, evaluation and the consequent administration of approved projects will be detailed in specific implementing guidelines.

The governance system of the Eurostars-3 involves three main elements:

- The Eurostars-3 High Level Group (Eurostars-3 HLG) is a representation of the Ministerial component of Eureka and thus the highest-level authority on the implementation of Eurostars-3. Its role is to supervise the implementation of Eurostars-3, including the strategy and budget; ensuring coherence between the commitments of members and the availability of resources. It is comprised of the Eureka High Level Representatives of the Eurostars countries. The European Commission would attend as an observer.
- The Eureka Association shall act as the dedicated implementation structure of the Eurostars3 Programme. The Eureka Association will act as the legal representative of Eurostars-3 and is also responsible for the execution of the Programme. Ambitious targets will be set for the programme, and the steady, continuous progress will be monitored through KPIs and/or intermediate milestones on a range of activity domains from 2021 until the formal closure of the programme in 2033. The Eureka Association will act, in coordination with the Eureka Chair, as main contact point between Eureka and the European Commission to ensure effective communications channels and a follow up on the development and improvements of the programme. It will be the meeting point for all Participating States and will coordinate all relevant activities with internal and external stakeholders.
- National Funding Bodies (NFBs)/National Project Coordinators (NPCs) are responsible for the implementation of Eurostars-3 at national level, ensuring compliance with Eurostars-3 regulations, rules and procedures, while actively progressing towards greater synchronisation and harmonisation with other NFBs through the improvement and adaptation of those underlying programmes and procedures. NFBs/NPCs also have a role of promoting and communicating the opportunities provided through Eurostars to beneficiaries, in co-ordination with the Eureka Association.

The Eureka Strategic Roadmap is a key element of Eureka's governance system. It is a document based on consensus amongst Eureka members, providing strategic direction on general priorities of Eureka. In order to ensure strategic continuity of Eureka, the SRM provides guidance to subsequent Chairmanships of Eureka in the development of their priorities. The SRM covers the period 2021-2027 and will be regularly updated and adapted to the continuously changing global research and innovation landscape. Eurostars-3 as one of the main instruments of Eureka, is part of this SRM which will make sure that the proposed cooperation's amongst the different Eureka instruments (Clusters, InvestHorizon, GlobalStars) will be implemented. The Dedicated Implementation Structure (DIS) will be key for the governance of Eurostars-3.

3.3.b. The role of the European Commission

The European Commission is a member of Eureka and is represented in the High-Level Group. Next to that, The European Commission is participating in the Executive Group and fully involved in the discussions on the development of Eurostars-3. Several meetings on political level and technical level are and have been organised with the various units of DGRTD and Director-General Paquet. The Eureka Association reports its impact data for monitoring and (mid-term) impact assessment towards the Commission. The annual Work Plan will be discussed with the European Commission and shared on an annual basis. The High-Level Representatives through their programme Committee members contribute to the discussions about budget, priorities and Working programs. In Eurostars-3 decisions on changes in the budget and priorities, can only be taken in full consent of both the Commission and the Eureka High level Group. The European Commission is as well, involved in the Eurostars Governance Bodies.

3.4 Openness and transparency

3.4.a. An open and transparent partnership

The Eureka Network is international by nature. With 46 (associated and partner) countries and a global strategy among its strategic actions for the period 2021-2027, the openness and transparency of Eurostars-3 is ensured. As was done by its predecessor under Horizon 2020, Eurostar-3 will be a programme that will be open and will actively seek the incorporation of new countries in its scheme.

The bottom up character of Eurostars-3 will also ensure that no discrimination is taken towards specific R&D&I fields.

3.4.b. Accessibility of information and results

All elements related to implementation, monitoring and evaluation of the programme will be defined in detail prior and finetuned throughout the implementation of the Programme via the Work Plans.

Reporting will be based around the need to have an open, transparent programme where monitoring and impact data are freely available to funders including the European Commission. Clear measurable programme objectives and indicators (see section 2.2) will be fine-tuned, and Multi-Annual Work Plans will monitor the stages of their achievement. Detailed annual reports that document compliance with the requirements will be provided.

The results will be communicated through annual reports on the monitoring of programme activities, a mid-term and an ex-post assessment of the programme. Eureka will work with the Commission Services in the standardization of the information collected and the provision of data on proposals, projects, results, outcomes and impact in a format defined by the EC for the integrations in the common IT tool.

Risk management of the programme will be integrated into the Eureka Association risk management strategy. The scale of the activities within the Dedicated Implementation Structure ensure that Eurostars actions are routinely and regularly monitored by the various risk management bodies.

The reporting of key milestones at participant, project and programme levels set out in section 2.2 reflects the overall Key Impact Pathways approach envisaged for the wider Framework Programme and will be integrated into the overall monitoring system of Horizon Europe. The outcomes and impacts will be measured in the short, medium and long term and grouped in three impact pathways, namely:

- Scientific impacts incorporate information such as patent applications, effects on human capital, acquisition of new knowledge skill and publication of peer-reviewed articles
- Economic impacts refer to measures like company growth, job creation, internationalisation leveraging private finance and others
- Societal impacts focus on tracking of projects tackling EU priorities and Sustainable Development Goals.

3.4.c. Eureka and the road towards a Global Network

Eureka's Globalisation Strategy is included as a strategic action in the Eureka Strategic Roadmap for the period 2021-2027. It aims at expanding the reach of Eureka globally with an open and flexible approach to meet business' demands. Eurostars-3 will contribute to and benefit from the implementation of this action by attracting countries from outside Europe to the network.

Any Eureka member can become a Eurostars country through signing a Eurostars-3 Bilateral Agreement (or equivalent MOU) with the Eureka Association. Access to top-up funding for EU Member States and those associated to Horizon Europe from the European Commission would follow the rules for beneficiaries under Horizon Europe and would be regulated in a Eurostars-3 Bilateral Agreement. The participation of partners from other non-Eureka countries will be laid down in specific guidelines for participation.

Detailed eligibility criteria for project participants will be laid down in the specific guidelines for Eurostars-3. These will include:

- The main activity in Eurostars-3 consists of establishing a joint market-oriented programme for innovative SMEs established in the Eurostars-3 countries. Research organisations, universities, other SMEs, large companies and others can also participate in Eurostars-3 projects.
- Focus of the project must be innovative and can include R&D&I (e.g. TRL 4-6).
- SMEs involved should contribute at least 50 % of the total costs of the project.
- The activities will be implemented via multi-partner transnational projects involving at least two different participants from different Eurostars countries
- Focus on close to market-oriented R&D projects with a duration of up to three years and for which the capability exists to ensure a fast time-to-market.
- The project must be SME led.
- Projects can be in any field of business but must have a civilian purpose.

Evaluation criteria to ensure high quality and high impact proposals will include:

- **Excellence in innovation:** The project must aim to deliver as its outputs: innovative products, processes or services that have a civilian purpose. Excellence is the key measure, whether that is moving beyond the current technical state-of-the-art, or adapting existing technologies to fit into new markets in a disruptive way.
- Fast commercialisation: Outputs must be on the market in a short amount of time this is about companies profiting from the investments, not about fundamental research that is decades from the market.
- SME driven: Projects are led by SMEs that are legal entities in one of the Eurostars countries. SMEs must drive the results of the project and be responsible for most of the project costs, maximising their

in-house expertise while minimising the amount of 'extra-consortia' activities delivered by subcontractors.

- Collaborative across borders: To ensure true collaboration project budgets, work and results should be balanced, with maximum contributions by partner and country and associated mutual benefit. It should comprise of the right organisations for the right tasks. Each partner contributes to the project results and will have an impact generated in the project. Added value of the consortium and the cooperation.
- Legal and financial transparency: Organisations must be legal entities in their host countries. Declarations of ownership and links with other organisations will be required. Companies that cannot demonstrate their ability to self-sustain their participation will not be financed.
- Societal and environmental impact: The projects will explain and justify the societal and environmental impact delivered. The framework used will be the UN Sustainable Development Goals. The bottom-up approach of Eurostars will enable to cover a wide range of SDGs target and indicators.

Funding from national budgets and the EU contribution for selected Eurostars-3 projects strictly adhere to the quality assessments established through the evaluation process, via independent peer review, and approved by the Eurostars-3 HLG.

3.4.d. Implementation of Eurostars-3 through the Annual Work Programmes

The multiannual programme implementation activities and budget will be divided into annual work programmes (AWP) running in parallel from the beginning of the programme through to the discharge of the final obligations for payments and controls. Each AWP will cover several years of operations and expenditures (between 5-7 years each).

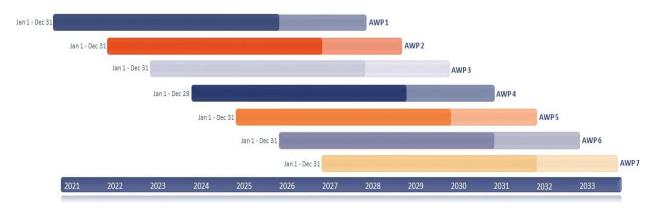


Figure 8: indicative concept for overlapping parallel workplans.

The AWP will describe key attributes of the programme's legal implementation, governance, budgeting and financial management particularly with respect to the Union financial contribution and its control, and administration including reporting obligations. It will specifically note the frequency and date of calls within the year that the AWP commences and outline the specificities (if applicable) of the individual calls and give indications of relevant operational timelines. The document will be an important basis for the initial estimation of programme expenditure and reservation.

Due to the importance of the document, open and transparent drafting, circulation and approval between all contributors is a necessity.

Participating countries and the European Commission will be consulted frequently through the various working groups and governance structures of Eureka about actions or improvements that are necessary for inclusion. The draft AWP text will be circulated to all participating countries. Each will be asked to explicitly confirm their financial contribution to the AWP. The EC will be asked to confirm their contribution to the programme implementation and to the funding of projects, either in EUR or as a percentage reimbursement.

Once all participating countries have confirmed their individual contributions, the final draft AWP will be circulated for approval by all parties in line with the processes of Eureka.

The formal drafting process for AWP in year n+1 will begin at the start of Q3 in year n, with approval expected at the end of Q3 of the same year.

Annex A: Data overview and impact

Eurostars has been running since 2008 and during that time has contributed to the R&D&I efforts of more than 3000 SMEs. This Annex sets out some of the impact achieved during the last 10 years.

Overview

Until now Eureka has funded 1984 projects through Eurostars-1 and Eurostars-2⁵³. The number of received applications has not fluctuated significantly between Eurostars-1 and Eurostars-2 cut-offs 1 and 22. However, between the two programmes the number of funded projects has risen by 15%. Overall around 25% of applications were successful in obtaining funding.

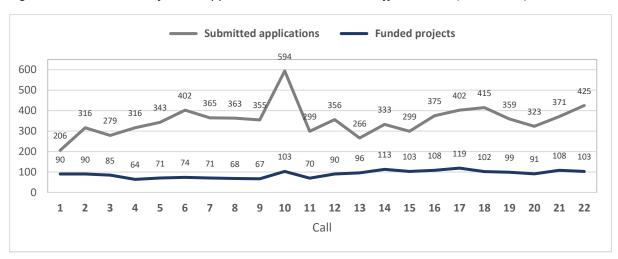


Figure A. Submitted and funded applications in Eurostars cut-offs 1 to 22⁵⁴ (2008-2019)

Source: Eureka/Eurostars database

In the past decade, the European commission has invested **over €290 mil** in Eurostars, leveraging over **€1 billion of national funding**:

- Eurostars-1 EU funding amounted to €107.8 mil,
- Eurostars-2 (including the first 12 calls) €187.5 mil
- The EU invested approximately €80 mil in projects that involved collaboration with at least on partner form either a Horizon2020 Associated country or a third country.

Since 2008 The National Funding Bodies (NFBs) have committed over **€880 mil** to funding Eurostars projects⁵⁵:

- €358.7 mil were committed in Eurostars-1
- **€643.7 mil** were committed in Eurostars-2 between 2014 and 2019

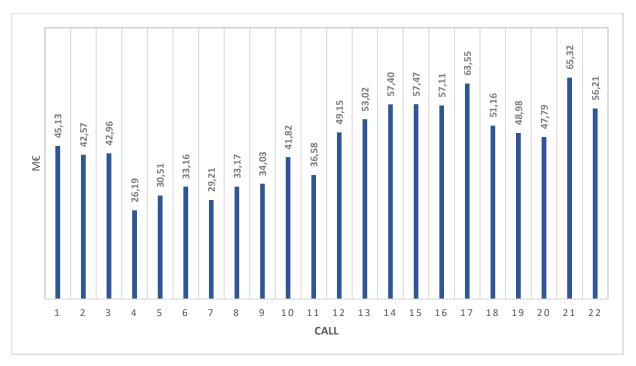
⁵³ All data for Eurostars-1 includes calls 1 to 10. Eurostars-2 calls are here denoted as calls 11-22.

⁵⁴ At the time of writing this document, the evaluation process of cut-off 23 was taking place. The final funding decision is expected by June 2020.

⁵⁵ All data for Eurostars-1 includes calls 1 to 10. Eurostars-2 calls are here denoted as calls 11-22.

- Over €1.2 billion was committed to Eurostars-1 and Eurostars-2 including the top-up from the European Commission
- Over €220 million was committed by H2020 associated countries and non-EU third countries

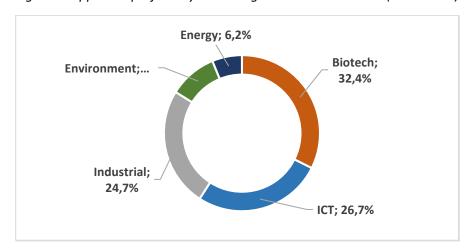
Figure B. National public funding in Eurostars (2008-2019)



Source: Eureka/Eurostars database

Technological and market sectors

Figure C. Approved projects by technological area in Eurostars (2008-2019)



Source: Eureka/Eurostars database (n = 1984)

The technological and market area distribution remained fairly constant between Eurostars-1 and Eurostars-2. The majority of projects focus on the Biotech, ICT and Industrial technological areas.⁵⁶

Medical and healthcare sectors remain the most common market areas for Eurostars projects, followed by Industrial, ICT and Consumer/services.

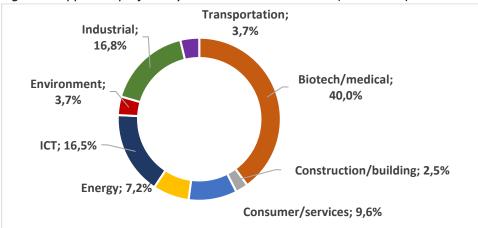
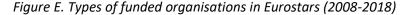
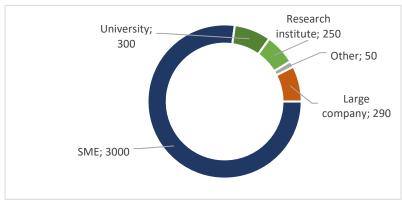


Figure D. Approved projects by market area in Eurostars (2008-2019)

Source: Eureka/Eurostars database (n= 1984)





SMEs constitute almost 80% of all organisations funded by both programmes. Out of 3000+ SMEs, around one fifth (approximately 700 SMEs) participated in the programme more than once.

Source: Eureka/Eurostars database

Country participation

In total **773 projects** contained at least one partner from an EU associated or third country, making up **around 40% of Eurostars projects** from 2008 until 2019. More specifically:

- 36% of total Eurostars projects involved at least one partner from a Horizon 2020 associated country, while
- 4,5% of total Eurostars projects were implemented in collaboration with at least one participant from a third country

⁵⁶ "Industrial" encompasses a wide area, from manufacturing to construction, chemicals to smart materials.

Table A. Total participation by Eurostars participating countries (2008-2019)

Hoi	rizon 2020 membe	er countries	Horizon 2020 associated and third countries				
Country	Projects	National funding (M€)	Country	Projects	National funding (M€)		
AT	186	36,91	CA	30	4,88		
BE	133	38,07	СН	392	92,95		
BG	14	1,92	IL	58	10,31		
CY	23	2,26	IS	18	3,87		
CZ	74	13,93	KR	43	22,26		
DE	590	152,30	NO	229	77,48		
DK	274	63,63	TR	52	11,18		
EE	16	0,00	ZA	4	0,62		
ES	329	67,69					
FI	86	15,84					
FR	421	85,55					
GR	39	4,19					
HR	7	0,81					
HU	39	5,64					
IE	20	2,46					
IT	125	19,29					
LT	45	7,99					
LU	9	1,49					
LV	12	1,24					
MT	1	0,00					
NL	451	106,57					
PL	54	9,12					
PT	62	7,32					
RO	37	4,90					
SE	342	80,37					
SI	38	5,21					
SK	16	1,70					
UK	324	55,04					

Furthermore, participation of non-EU countries increased in Eurostars-2 compared to Eurostars-1 as can be seen in *Graph g.* and *Graph h.* The significant increase can partially be contributed to certain countries – specifically Canada and South Korea - gaining a more prominent role in the Eureka Network which was reflected in the Governance of Eurostars-2.

This also indicates that active Eureka member countries coming from outside of the EU are also taking advantage of the services Eurostars provides, the most active being Canada, Norway, South Korea and Switzerland (also active in other Eureka initiatives). Taking this into account, as the Eureka Network grows

(recent association of Argentina and Chile and the requested association by Singapore), we can expect to see an increase in collaboration with third countries in Eurostars as well.

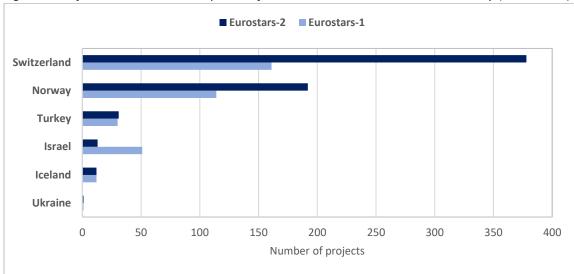


Figure F. Projects with at least one partner from a Horizon 2020 associated country (2008-2019)

Source: Eureka/Eurostars database

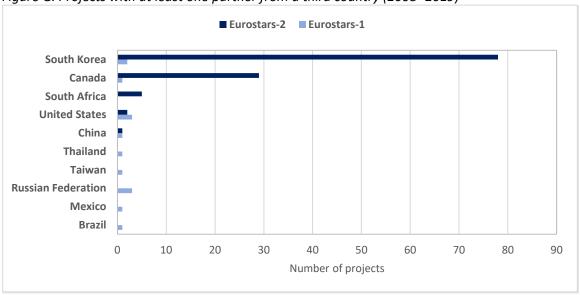


Figure G. Projects with at least one partner from a third country (2008- 2019)

Source: Eureka/Eurostars database

Societal results and impacts

Nevertheless, Eureka has made its own efforts to track areas of strategical importance for achieving wider societal goals. The current methodology divides the projects into four areas:

- Environment and clean energy
- AI, robotics, Internet-of-Things and other digital
- Health (cancer research, genetic engineering, rare diseases etc.)
- Other sustainable agriculture, mobility and security

The identification of strategical areas was based on desk research and text mining methodology that matches a set of pre-defined keywords with project descriptions.

According to the analysis, Eurostars has funded approximately 668 projects in the four strategic areas since 2008, which makes up **around 33% of total projects funded.** Further analysis also revealed there are no significant differences between Eurostars-1 and Eurosatars-2.

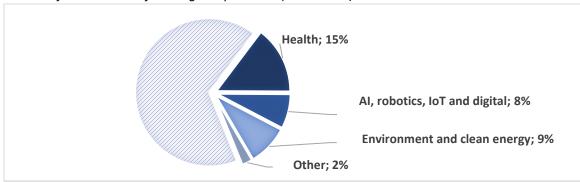


Figure H. Projects in areas of strategic importance (2008-2019)

Source: Eureka/Eurostars database (n = 668)

Given the growing importance of innovation in tackling current and future societal challenges, better monitoring of such projects is of utmost importance moving forward. The current methodology will be aligned with Horizon Europe and updated based on lessons learnt. Since ex-post matching has a number of limitations, the aim will be to identify applications at proposal stage.

Furthermore, considering the interdisciplinary nature of Eurostars projects and the fact the programme specializes in funding close-to market-innovation, it is important to examine the market application of the projects.

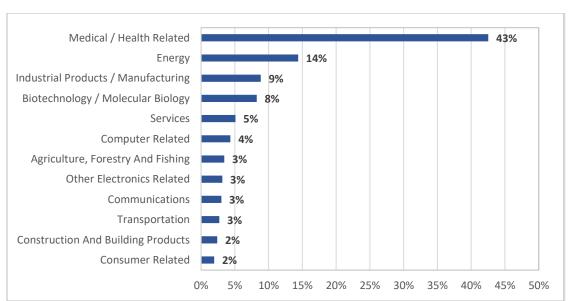


Figure I. Projects in areas of strategic importance by market sector (2008-2019)

As Figure I shows, Medical/Health Related and Energy are the most common market sectors. Also, *Table 2.* maps the relationship between the strategic areas with the market sectors. Naturally, most *'Health'* and *'Environment'* projects target the *'Medical/health'* market and *'Energy'* market respectively, however *'Digital'* projects are mainly aimed at the *'Medical/health'* sector.

Table B. Projects in strategic areas per target market (2008-2019)

Market area	Digital (AI, robotics, IoT)	Environment and clean energy	Health	Other
Agriculture, Forestry and Fishing	1	4	0	18
Biotechnology / Molecular Biology	3	1	45	6
Communications	15	1	1	3
Computer Related	27	0	2	0
Construction and Building Products	7	9	0	0
Consumer Related	4	3	4	2
Energy	4	91	0	1
Industrial Products / Manufacturing	26	27	1	5
Medical / Health Related	42	0	240	2
Other Electronics Related	7	13	0	1
Services	13	14	2	5
Transportation	2	14	0	2

Source: Eureka/Eurostars database (n = 668)

Since societal benefits are facilitated by market applications of technical developments, it would make sense to classify projects according to market areas rather than the technical aspects. Therefore, the current classification will be revised and adjusted in a way that will adequately and most accurately reflect the relationship between Eurostars funding and societal impacts/SDGs.

Economic results

In both iterations of the Eurostars programme project results have been monitored through the Eurostars post-projects monitoring framework:

- Final reports distributed to all participants at the end of the project, and
- Market Impact Reports distributed to each participant 1, 2 and 3 years after the project end.

A new, more robust and practical version of the report was developed for Eurostars-2, considering experiences in data collection from Eurostars-1. Given that the new reports are interactive and reduce the administrative workload for participants, a significant increase in response rate has been recorded compared to Eurostars-1 – a jump from 35% to approximately 70%.

However, since few projects have been required to fill out the first Market Impact Report, the collected data is limited but still provides some initial insights about the programme. Until now 683 Market Impact Reports have been distributed to Eurostars-2 participants who have finished their projects approximately a year ago.

Furthermore, a survey was launched to Eurostars-1 participants in 2017 as a part of the final impact assessment of the programme⁵⁷. In total 509 participants responded to the survey consisting of 411 SMEs and 98 research organizations (universities or research institutes).

Hence, to illustrate post-project results the analysis will be based on three main data sources:

- Eureka/Eurostars database collected at proposal stage,
- Final reports and Market Impact Reports distributed after the project end, and
- Eurostars-1 participant survey (2017)

Project results

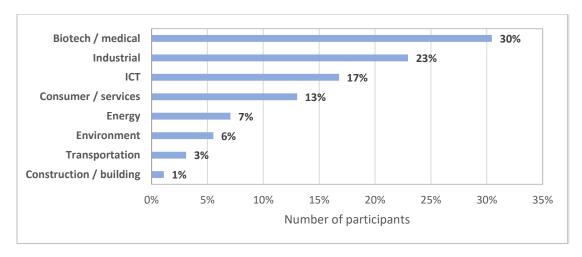
The analysis of post-project results was based on Eurostars-1 participant survey and Eurostars-2 Market Impact Reports due to a high degree of data compatibility between the two forms. The total sample of Eurostars-1 and Eurostars-2 participants consists of 982 observations.

According to the Final reports, 81% out of 2449 participants reported successfully achieving the project goals. Furthermore, from a sample of participants who intended to commercialise the project outputs (in total 632 participants⁵⁸), 73% reported successfully commercializing their results.

Figure J. Successfully commercialized results per market area (2008-2019)

⁵⁷ Eurostars Joint Programme Ex-post Impact Assessment (2017)

⁵⁸ Euorstars-1 participant survey (2017) and Eurostars-2 Market Impact Reports



Source: Eurostars-1 participant survey (2017) and Eurostars-2 Market Impact Reports (n = 453)

The survey results indicate that around half of Eurostars-1 participants managed to commercialise their result within two years after the project end. An additional 33% commercialised their results beyond the two-year threshold adding up to a total commercialisation rate of 80%.

For Eurostars-2, out of 221 participants who intended to commercialise their results, around **62% reported launching at least one of their project outcomes** on the market either during the project duration or one year after the project end. However, as the stipulated period of two years has not passed since the first projects ended, it is not possible to investigate whether the programme's criteria of commercialising results within two years of the project end has been achieved and to which extent.

Nevertheless, the preliminary results are promising and indicate improvements have been made between the two programmes.

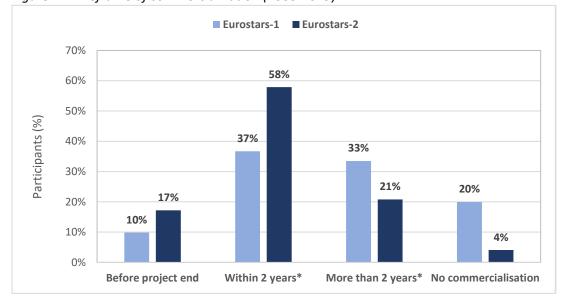


Figure K. Timeframe of commercialization (2008-2019)⁵⁹

Source: Eurostars-1 participant survey (2017) and Eurostars-2 Market Impact Reports (n = 627)

Impact and other results

Although currently no Eurostars-2 impact studies have been published, several econometric studies have examined the results of Eurostars-1. The Makarow report (2014)⁶⁰ found that due to participation in Eurostars-1:

- beneficiaries on average have an annual employment growth 3.1% higher compared to a control group, and
- funded companies on average applied for 3 patents more compared to a control group.

An ex-post analysis of Eurostars-1⁶¹ revealed that **87.5% of project leaders were successful in commercialising their results** and participants on average reported a **13.5% increase in turnover** as a result of participation³¹. Participants also claimed Eurostars-1 had a positive effect on internationalisation and collaboration:

- 78% reported a positive effect on strengthening international cooperation
- 76% believe participating positively reflected on their reputation and image

^{*} For Eurostars-2 the data are based on participants' forecasts

⁵⁹ For Eurostars-2 projects, commercialization within two years and beyond two years is based on an estimate provided by the participants since currently only data from projects that have ended approximately one year ago is available.

⁶⁰ Makarow et al. (2014): Final Evaluation of the Eurostars Joint Programme

⁶¹ Eurostars Joint Programme Ex-post Impact Assessment (2017)

 90% of SMEs reported collaboration with partners facilitated generation of new knowledge 87% of research organisations expressed an intent to continue collaboration with at least one of their project partners.

Furthermore, incorporating preliminary results form Eurostars-2 Market Impact Reports, other aspects of Eurostars participation can be observed in *Table 3*.

Table C. Other results reported by Eurostars participants (2008-2019)

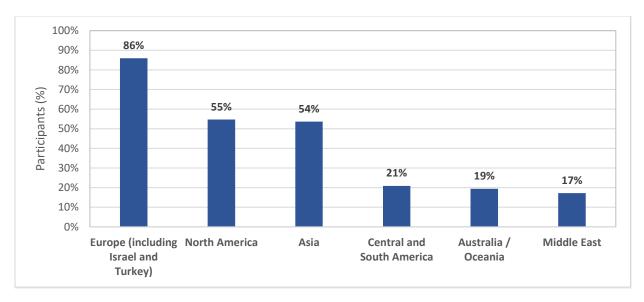
Effects reported due to Eurostars participation:	Number of participants	%
Access to other sources of finance	338	58%
Access to new geographical markets	314	71%
At least one new employee*	473	53%
At least one patent application**	323	33%

Source: Eurostars-1 participant survey (2017) and Eurostars-2 Market Impact Reports

Also, the improved post-project monitoring tracks new markets reached by geographical location for Eurostars-2 projects (*Graph m.*). Overall 219 participants reported looking to reach new geographical markets out of which 192 claimed to have had success. Unsurprisingly, the results indicate that most participants entered new European markets, however in roughly half of the cases markets in North America and Asia were mentioned. The results should not be surprising since Canada and South Korea have a high rate of participation in the Eurostars programme. This indicates that international cooperation with consortium partners plays an important role in facilitating expansion to new markets and highlights the importance of attracting other non-EU countries to the programme.

Figure L. Geographical markets reached by Eurostars-2 participants

^{*} and ** count the SMEs which reported a positive effect due to data differences between Eurostars-1 and Eurostars-2



Source: Eurostars-2 Market Impact Reports (n = 192)

Investment activity after Eurostars

According to Eurostars-1 survey and Eurostars-2 Market Impact Reports, a total of 578 participants (around 60%) reported looking for additional sources of funding. Roughly 58% were successful in accessing either private investments, public grants (national and EU) or bank loans.

For a better overview of private investment activity, Eureka has been taking advantage of external databases such as Dealroom⁶² to track the activity of its beneficiaries. According to Dealroom records, at least 17 % of SMEs received additional funding after participating in Eurostars and in total €3613.5 million additional funding has been raised. This further highlights the importance of providing support to SMEs looking for additional funding. There is potential to improve by further exploring synergies with Horizon Europe and Eureka Investment Readiness activities, as well as developing links between Eureka's different mechanisms of support, such as Clusters (collaboration with leading, big industry players in strategic areas) and GlobalStars (R&D&I collaboration with third countries), depending on individual needs.

⁶² Dealroom database: https://app.dealroom.co/investors/eurostars

Annex B: Eurostars strengths and lessons learned

The Eurostars programme has been consistently improved by responding to feedback and evaluation reports. Eurostars-2 was built on the experiences of the first programme and was significantly improved.⁶³

All evaluations to date conclude that Eurostars is well aligned with the objectives of the ERA and meets the needs of its target group namely the R&D performing SMEs. The main advantages for them are the bottom-up approach, that the SME is in the lead of the project, the possibility to build small consortia in a flexible way and a reasonable success rate. The well-established network of NPCs and NFBs which have a deep local implementation and an extensive experience in supporting SMEs shouldn't be forgotten as added value.

Many recommendations have been implemented and helped to improve Eurostars. Specifically, during the development of Eurostars-2 major changes have been introduced:

- The evaluation system was revised, the evaluation criteria were set-up better meet the targets of Eurostars as well as considering the requirements of H2020. The expert database has been improved and a much higher number of experts ensures a high quality, good market knowledge as well as the coverage of all thematic areas.
- Milestones were included in Eurostars-2 to make sure that several important recommendations will be implemented, including improved time to contract, central monitoring was introduced to avoid double reporting for the participants and a standardized financial viability methodology was developed.

All evaluations call for a higher more balanced but also more flexible budget from Eurostars countries as well as from the Commission. Between Eurostars 1 and 2 the budget was raised three times and we targeted to fund the first 50 projects on the ranking list as well as 50 - 75% of the projects. Both targets have been met in 95% of cases. National budget issues in general are difficult to address as they are closely linked to economic and political developments in each of the countries.

To further improve Eurostars-2 and prepare for Eurostars-3, two evaluations were conducted by the European Commission and the Eureka network in 2017⁶⁴. A SWOT analysis is presented in below.

The reports reached similar conclusions on Eurostars:

- It is considered a valuable tool to develop R&D performing SMEs;
- It is complementary to other support programmes for SMEs but with the added value of encouraging transnational research cooperation between SMEs;
- The full bottom-up approach, together with the small size of the consortia which eases project management, are added strengths of the programme;
- The central evaluation process is widely recognised by the different stakeholders consulted as positive and well structured, being fast, transparent, and professional;

⁶³ Final Evaluation of the Eurostars Joint Programme (2014)

⁶⁴ Eureka commissioned Mid-term evaluation Eurostars-2 - Taskforce report (2017); Analysis of impact of completed Eurostars-1 projects (2017); Interim evaluation of the Eurostars-2 Joint Programme (2017)

- It plays an adequate and complementary role in promoting excellence in technological research, development and demonstration;
- It meets the needs of SMEs in helping them to internationalise and grow;
- Participants appreciate the good support at national level;
- It is easy to apply to, fast and the administrative burden is much lower compared to other programmes.

Several recommendations for improvement were made in both evaluations, which are addressed in the above application:

- Enhance activities of currently less-active countries; A balanced participation of all countries in terms of budget, number of proposals and high-quality proposals;
- Harmonisation and synchronisation should be further enhanced;
- Improve data collection to follow up the project results.

Eurostars-3 has built upon its identified strengths to respond to the recommendations as further elaborated in the above application.

Strengths of Eurostars Programme identified by SMEs and funders

- Dedicated SME-focused instrument specifically designed for its target group: SMEs truly in the driving seat
- Bottom-up and open
- Long-term commitments from the EU and Participating States creating stability for participants in countries concerned
- · Countries can participate either with a dedicated budget or through national programmes
- Global collaboration through the participation of Eureka associated and partner countries
- High accessibility ease of application and low administrative burden in comparison to other international multilateral and bilateral programmes
- Small and very flexible consortia and close to market innovation
- Central submission and independent evaluation accepted by all participating countries
- The level of synchronisation (e.g. time to contract) and harmonisation (e.g. evaluation) make accessing and understanding this multilateral programme much easier
- Support at national level and ability to work directly with national funders
- Transparent and open programme with clear processes and feedback.

Eurostars independent evaluations

To improve Eurostars-2 further and to prepare for Eurostars-3 two evaluations were conducted by the European Commission and the Eureka network in 2016. On the following pages you may find the key findings from the two evaluations.

Eurostars participating countries

Strengths

- Efficient due to the central evaluation and well managed by the ESE
- Internationalisation also beyond EU and access to international markets
- Meets the needs of SMEs
- Bottom-up approach
- Fast and easy application procedure which is manageable for SMEs
- Flexible regarding the composition of consortia
- Funding according to national rules
- High number of high-quality projects is funded

Weaknesses

- Budget in some countries available budget is not sufficient -> countries who have sufficient budget can't spend it -> might lead to decrease of budget
- Countries who committed to participate don't commit (fully) financially
- Low number of applications some countries would need more (good) applications to spend their budget
- High administrative burden due to the EU regulations
- Furostars is not well know

Opportunities

- Widening the network: more cooperation with third countries/Eureka associated

 Member states
- Position Eurostars in the landscape of other (competitive) programmes and promote it
- Learn from best practice opportunity to improve national procedures and rules and make them more innovative and appropriate for R&D SMEs
- Boost visibility of Eurostars and explore the full potential
- More common effort with the regions
- Supporting national policy priorities

Threats

- Too many similar programmes which leads to a competition between the programmes
- Decreasing (financial) commitments of MS
- · Lack of national support and funding

Eurostars project participants

Strengths

- Small projects, i.e. small number of partners (at least two)
- Public funding rate
 Straightforward application process
- Bottom-up principle, with no thematic restriction
- Transparent, central evaluation with feedback received
- National contact point (supported received in national language, national funding contract/procedure, ...)
- Possibility to cooperate internationally with a large number of member states, even outside European Union/Europe
- Fast evaluation and grant agreement signature
 - Two Cut-off days per year Comprehensive feedback on the evaluation Success rate

Weaknesses

- Dualism: Central evaluation and monitoring / National contact point (national funding rules, reports, ...)
- Process of selecting funded projects (e.g. some projects on the ranking list are nog funded, because at least in one country the national budget is exhausted
- Public funding rate (e.g. different rates in different countries)
- Success rate is too low

Eurostars – 2 Interim Evaluation Report and Taskforce Report recommendations

In the last year we have been concentrating on the development of Eurostars-3 and how to best place it in Horizon Europe, find synergies within the future EIT and EIC and other partnerships. We have well understood that Eurostars-3 needs to follow a different rationale and orientation. One example for the new orientation the change of the target group: innovative SMEs will replace R&D performing SMEs.

We have a much better understanding of Horizon Europe now. Therefore, the table is an updated argumentation including all improvements over the last year but gives mainly the direction for the different Eurostars-3.

Program Implementation Implementation strategy Participating States should first receive MIRs and Final report and market impact report forms assess them on efficiency, effectiveness and have been amended and the central pragmatism to-go-to-the-market. Their assessment monitoring by the ESE has been implemented. per project should be addressed to the ESE as an The participants are asked about reasons if element for the payment of the EC top-up. It will allow they have problems with the marketing. This creating an instrument for assessment of the will allow us to further analyse bottlenecks. bottlenecks for commercialisation to build new go-to-An enhanced data collection system and the-market and financial toolboxes monitoring of projects will be put in place. The content of the MIRs and the follow-up measures on complete projects will be discussed with Participating States prior to the commencement of Eurostars-3. The system will comply with the Impact Pathways of Horizon Europe and will be integrated in CORDIS to increase the visibility of Eurostars-3 participants and projects funded. Post-project performance analysis will be put in place to monitor the commercialisation performance of Eurostars participants. The synergies developed with other actors under Pillar III will improve the service offered to Innovative SMEs funded by Eurostars. To support companies to go to the market we'll provide them access to Invest Horizon activities. The management of the programme should foresee This is in the interest of the Eurostars countries the total annual EU funding as requested in the Annual and the Commission as well. Eureka will work Work Plan (AWP). Losses of EU annual funding should with the Commission to find appropriate be avoided. solutions under Horizon Europe. The call for convergence of Art.185 creates difficulties Leverage is key. EU Member States have made and tensions with Participating States that are huge concessions to alignment since the start reluctant to further harmonize the national rules and of Eurostars-1, in no small part, because of the procedures and funding rates for Eurostars-2. Article reward of offsetting costs through the receipt 185 TFEU may be not the most appropriate instrument of top-up. We have reached a high level of in absence of further convergence potentialities. integration. Some differences are of advantage, for example the different funding rates in the countries represent the economic situation in the countries. In some countries a higher funding rate is reasonable to allow the required companies to participate. This also supports widening. It is important to communicate the different rules in a transparent way. On the public Eurostars website all the necessary information is available and updated regularly.

Key Issues	Implementation strategy
At least 2 R&D performing SMEs from 2 different	
Participating States should be mandatory in the proposed project consortium with a fair distribution of activities and a good balanced budget	 The fact that companies can shape their consortium according to their needs is one of the unique selling points of Eurostars. Arbitrary barriers to entry are reduced to a minimum, to ensure relevance across as many of Europe's SMEs as possible. In 80% of existing projects two SMEs are already involved thus there is not a need for a change. With the maximum share of 70 to 75% for one participant a balanced budget is secured. The fair distribution of activities is and will be part of the evaluation.
	Eurostars Evaluation Guidelines state that a fair distribution of tasks and budget is a requisite to obtain a high score. The added value of the partnership is also addressed by the evaluators.
troducing into the market two years after the oject completion new products, services or occases should be organised and effectively	 An ambitious but realistic time to market will be incorporated into the evaluation and will not be part of the eligibility criteria anymore.
implemented at programme level as well as project level. The two years requirement should be a clear criterion to take into consideration in the evaluation process.	Instead of setting up a 24 months hard deadline for all, we will adapt to the specific characteristic of each project and the market to be addressed. This reflects better the needs of projects funded under a bottom-up programme like Eurostars
R&D performing SMEs as eligibility criteria should be assessed at national level as it is done for the SME self-declaration.	One of the major changes in Eurostars-3 will be that we'll address innovative SMEs instead of R&D performing SME. We will give promising SMEs greater access to Eurostars which will also support the widening aspect. The innovative character of SMEs involved will be assessed as part of the Excellence evaluation criteria.
	Within the improvement of the operations of Eursotars-3, we have foreseen the creation of the Legal and Financial Check. These tasks will be performed by the National Funding Bodies and will include all aspects to be addressed at national level including the Commitment Check, the financial viability and SME status.
	As this will not be a criterion in Eurostars-3. The target group will be innovative SMEs aiming for innovative projects. In the evaluation the level of innovation will be assessed.

The uniqueness of the Eurostars programme in the European panoply of market creating innovation tools to support SMEs should be preserved and restrengthened.

- Eurostars is an impressive example of a successful innovation stimulating programme with a unique funding approach which addresses the vast heterogeneity of innovation in SMEs by using a bottom-up design where the type of innovation as well as the technology employed is determined by the technological needs of SMEs, and not by public administrators, scientists or technologists. The bottom-up approach combined with close to market innovation of SMEs is a uniqueness in Europe.
- Eurostars-3 will build on this and continue to be a platform for transferring and exchanging knowledge and experiences not only between supported SMEs but also between administrative bodies involved in SME support.
- Sharing best practice has always been a major attribute of the Eureka network. Also, in the future Eurostars will offer a unique opportunity for learning from best practices in implementation of the programme but also for other national R&D programmes for SMEs.

Programme implementation, Data and Impact

The EC should consider in the short term not granting the EU top-up to those Eurostars projects for which grant agreements have not been signed within one year of the cut-off period.	 Eurostars has made significant improvements on reducing time-to-contract. The EC and Eurostars countries will discuss opportunities to further shorten time to contract for funded projects which includes grant agreements. With the revision of the evaluation process a huge step towards shorter time to contract will be made.
Time to contract should be calculated at the project level when the consortium agreement is signed and not at the participant level when they sign their grant agreement with their respective NFB	 This will be discussed in association with shorter and more efficient procedures and included in the implementing guidelines. The new evaluation and synchronization process will shorten the average time to contract by 6 weeks. Further improvements are under discussion.
Constantly update the centralized ESE database and improve the data collection, selection and monitoring mechanisms in the ESE Database.	 The central ESE database has been updated. With the introduction of the central monitoring data collection, training, selection and the monitoring process have been improved. The key impact indicators for Horizon Europe have been considered for developing the monitoring for Eurostars-3. The new data collection system put in place will be aligned with the requirements to be integrated into CORDIS. Ex-ante, ex-post and ad hoc data collection will be implemented, following the Key Impact Indicators under Horizon Europe. The scope of the data collected will be expanded in order to provide insightful information on the impact delivered by Eurostars-3 including societal challenges and UN SDGs.
Structure and content of MIR reports should be improved in order to assess projects' results on efficiency, effectiveness and pragmatism with regards to-go-to-the-market.	 MIR has been updated accordingly and is used since 2018. As only the first projects in Eurostars-2 have been finished and the first MIR is sent one year after project completion this new template will be used for all Eurostars-2 projects. We also refer to the answer for the first recommendation under `program implementation`
Put in place a follow-up of the results of funded projects (i.e. FiRs) and their introduction into the market within two years after projects' completion	Analysis of the results of funded projects and their timescale – measured via MIRs - is regularly performed in annual reports and other reports.

(MIRs) to better inform Participating States and the European Commission.

- The improved FIR and MIRs have been introduced in 2018.
- Time to market will not be an eligibility criterion anymore in Eurostars-3(see above). The follow up system on commercialisation will adapt to the time to market stated by each project in the application form.

Governance

The Eurostars budget is around 50% of the total administrative budget of ESE including Eureka activities. This is not perceived in the institutional governance of Eureka. A distinctive (from Eureka) Eurostars governance agenda should be set up

- Nowadays the ESE is implementing more additional activities like GlobalStars, Innowwide or Invest Horizon. Therefore, the proportion of Eurostars to the overall budget is lower. The implementation of Eurostars-3 will be enhanced which will also have impact on the administrative costs. The administration of the Eurostars budget will be part of the final decision on the type of the future partnership and the contract. Accordingly, the Eurostars governance structure will be adapted.
- The Eurostars Advisory Group as well as the National implementation group are specific Eurostars Governance groups.
- Eurostars is on the agenda of each Eureka governing meeting and as described in the various programme documents, only participating member states have voting rights (the Eurostars-2 HLG members).
- As Eurostars is an integral part of Eureka it is integrated in the meeting agendas. This also creates synergies and makes the meetings efficient.

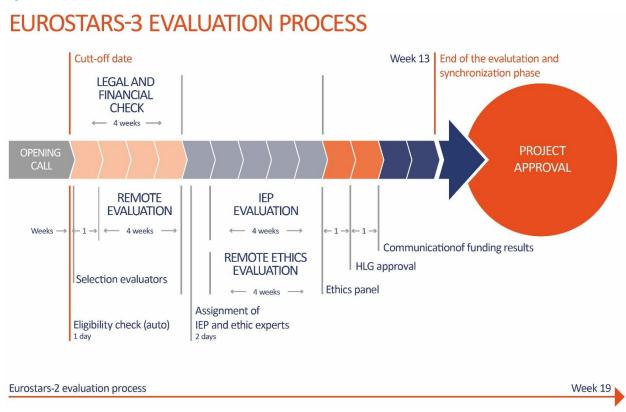
An in depth and representative survey of the barriers encountered by under-represented Participating States should be carried out following two vectors: exogenous barriers and endogenous barriers. A particular emphasis will be put on the role of NPCs of under-represented Participating States.

We have analysed the reasons of underrepresented states from all angles. Several
activities like have led to improved
participation of these countries. Under the UK
chairmanship a brochure was developed to
advise Eureka Member States how they can use
structural funds; Portugal is now using them.
For the future we count on the envisaged
improvements at EU level and that structural
funds will be equal to country contribution. It
would help considerably, if Eureka would be
specifically mentioned in the regulation or

The current evaluation process is too fragmented, and	guidelines for ESIF to ensure managing authorities consider it as an option. Other countries managed to raise regional interest and several projects are now funded by regions. With the help of Swiss best practice coaching and support, Croatian participants were offer support in learning how to submit better proposals; this has had demonstrable impact in participation rates. Estonia supported Eurostars 1 using structural funds and two cut-offs ago they joined Eurostars-2 with their own national funding scheme. For Eurostars-3 we will even elaborate further on the possibilities to contribute to the widening aspect.
The current evaluation process is too fragmented, and the evaluation criteria are too numerous and narrow to have a realistic overview of the project's quality. More feedbacks should be given to the evaluators about the outcomes of the submitted projects they examined.	 As the target group and eligibility criteria will change for Eurostars-3 the whole evaluation methodology will be reviewed as well as the way and content of feedback to the different parties. Operational improvements which are part of the implementing guidelines for Eurostars-3: Shorter evaluation phase, Clearer division of task between the ESE and the NFBs. Set up of a system to track the quality of reports done by the remote experts. IEP mandate to evaluate the quality of these reports. Before the commencement of and during Eurostars-3, evaluation reports will be analysed and improved wherever needed.

Annex C: Eurostars-3 Evaluation and Monitoring process

Figure N.



Monitoring at project and participant level

Progress reports submitted during the projects and impact reports submitted afterwards will be closely studied to track potential and actual impacts, in the short, medium and longer term. The data will be made available for integration into EU systems to meet data sharing requirements, based on a principle of real-time monitoring.

Quantitative indicators, including the leverage effects, will be collected and analysed along with a strong qualitative component. In the latter a portfolio approach will be adopted. Incorporating qualitative methods will enable investigating the programme's effects from multiple angles. Often causal relationships are not straightforward and incorporating intangible outcomes is needed to demonstrate the full scope of results⁶⁵. A clearly defined set of criteria will be established to ensure objectivity. The main purpose will be to uncover behavioural patterns and mechanisms behind the observed outcomes as well as to provide additional evidence about longer-term spill-over effects.

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The main qualitative methods will consist of:

- Case studies: The case studies will be based on a representative sample of participants. Representativeness will be established through selection criteria that will ensure the sample includes participant with any individual characteristics that could potentially influence the experienced impacts. These characteristics may include participant country, organisation type, organisation age, size, sector/technical area and consortium size.
- In depth-interviews: Eurostars-3 will adopt a structured approach to conducting in-depth interviews meaning the questions will be pre-determined and standardised between respondents. The interviews will be used for triangulating results by providing a descriptive background, uncovering spill-over effects and gathering information on how the programmes were implemented and why they have been more or less successful in achieving their results.

This methodology will broaden the scope of the "Eurostars Success Stories" currently used. Eureka will collect input from successful and non-successful projects and study the reason behind the latter. The input obtained may be used to increase the quality of the services provided to SMEs in accompanying measures such as coaching and mentoring.

Built around the key impact pathways approach detailed in the Horizon Europe proposal, the clear focus will be on demonstrating using economic impact pathway indicators, achieving the economic and societal impacts of innovation-based growth, creating more and better jobs, and leveraging investment.