

Position Paper

22 February 2023

Lessons learned and way forward

The Guild's recommendations for
Horizon Europe

We thank all the members of The Guild's Innovation, R&I Policy and Widening Participation working groups.

For additional information, please contact Ivana Didak, Senior Policy Officer (Page 17-19): ivana.didak@the-guild.eu, Julien Chicot, Senior Policy Officer (Page 13-15): julien.chicot@the-guild.eu, Sarika Wilson, Head of Policy (Page 4-11): sarika.wilson@the-guild.eu

February 2023

Online version: <https://www.the-guild.eu/publications/position-papers/lessons-learned-and-way-forward-the-guild-s-recommendations-for-horizon-europe.pdf>

© The Guild of European Research-Intensive Universities, 2023

DOI: <http://dx.doi.org/10.48350/178851>

To cite this work please use the following reference:

The Guild, (2023). Lessons learned and way forward: The Guild's recommendations for Horizon Europe. The Guild of European Research-Intensive Universities and Bern Open Publishing. DOI: 10.48350/178851

This work is licensed under a Creative Commons Attribution 4.0 International License, except for logos and any other content marked with a separate copyright notice. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.



Table of Contents

Introduction.....	P. 4
The Excellent Science pillar: strengthen investments in the most successful part of the programme.....	P. 5
1. The European Research Council (ERC).....	P. 5
2. The Marie Skłodowska -Curie Actions (MSCA).....	P. 6
3. Research infrastructures.....	P. 7
The Global Challenges and Industrial Competitiveness pillar: empowering research to address societal needs.....	P. 8
1. Increase the number of low-TRL funding calls to achieve a true balance between research and innovation.....	P. 8
2. Provide a realistic and flexible approach to impact.....	P. 8
3. Ensure that the evaluation process focuses on scientific quality.....	P. 9
4. Continue implementing a systematic approach to interdisciplinarity and SSAH integration.....	P. 10
5. Re-orient the R&I missions to support cutting-edge research.....	P. 10
6. Foster international cooperation while cultivating ties with close partners.....	P. 11
The Innovative Europe pillar: leveraging the roles of research in innovation ecosystems.....	P. 13
1. European Innovation Council (EIC).....	P. 13
2. The European Institute of Innovation & Technology (EIT).....	P. 15
The Widening participation and strengthening the European Research Area pillar.....	P. 17
1. Teaming for Excellence.....	P. 17
2. Twinning.....	P. 18
3. ERA Chairs.....	P. 18
4. ERA Fellowships and ERA Talents.....	P. 18
5. Excellence Hubs.....	P. 18
6. Hop-on facility.....	P. 19

Lessons learned and way forward: The Guild's recommendations for Horizon Europe

Introduction

This position paper presents the views of The Guild's 21 member universities on the first years of Horizon Europe, and it makes concrete recommendations for how its pillars on Excellent Science (1), Global Challenges and European Industrial Competitiveness (2), and Innovative Europe (3), should be further developed. The Guild also presents recommendations for the Widening Participation and Spreading Excellence instruments in the programme's fourth, transversal pillar. This document is submitted for the public consultation by the European Commission, which launches the process for the ex-post evaluation of Horizon 2020, the interim evaluation of Horizon Europe, and the Strategic Planning process that will determine priorities for the current programme's final years. The Guild has earlier published its recommendations for Horizon Europe's scientific priorities in Social Sciences, Arts and Humanities, in Health Sciences, and in Digital and Artificial Intelligence, in view of the thematic clusters in Pillar 2.

The momentum is crucial for taking stock of how Horizon Europe has performed so far, and what lessons should be learned for the development of the EU's future framework programme for research and innovation (FP10). The key message of our network is that there is a critical need for further increasing investments in research and innovation at the EU level, as it is an essential and effective way to build Europe's resilience in the face of our key societal challenges. Secondly, The Guild emphasises the urgent need for a balanced approach to funding research and innovation. This would entail allocating a bigger share of the budget to the Excellent Science pillar, achieving a true balance in the Global Challenges pillar between research collaboration aimed at the creation of new knowledge and the application of existing solutions, as well as increasing the focus on breakthrough research in the Innovative Europe pillar. Finally, we welcome the opportunity to provide detailed feedback on the operation of the current programme and highlight the importance of protecting excellence and scientific quality as the key implementation aspects of Horizon Europe.

The Excellent Science pillar: strengthen investments in the most successful part of the programme

This pillar represents a crucial investment in Europe's ability to prosper as a knowledge society, to remain at the forefront of the global competition for knowledge production, and to maintain attractive conditions for the best talent to conduct their research. However, moving from Horizon 2020 to Horizon Europe resulted in a decline of this pillar's relative share in the programme's budget, from 31% in 2014–2020 to 26% in the current funding period. The Guild reiterates the need for increased investments in this pillar in absolute and relative terms, as demonstrated by the achievements and undeniable success of its instruments, together with the persisting budgetary constraints that prevent a large amount of cutting-edge research proposals to be funded.

1. The European Research Council (ERC)

The ERC has, since 2007, been the most prestigious funder of cutting-edge frontier research and it has ever since been setting standards for research excellence in Europe and globally. Building on its leading peer-review system and independent governance led by academics, its success has been incontestable in boosting Europe's scientific capacities through funding given to more than 10,000 grantees across the continent. The Guild reiterates its long-standing call for increasing investments to the ERC as a way to invest in the well-being, resilience and innovation capacity¹ of Europe.

Recommendations to further empower the ERC

- Continue protecting the independence of the ERC's Scientific Council as the main governing body of the ERC and its role in guiding the implementation of the funding streams of the ERC.
- In terms of the ERC joining the lump sum pilot, The Guild emphasises the importance of evaluating the Horizon 2020 pilot before a further roll-out of the scheme, and its suitability for the ERC should be carefully considered to avoid unintended consequences. The Guild stresses the importance of ensuring that the ERC holds on to its ability to fund research projects of highest quality reflecting the "high risk, high gain" nature. The possible requirement of planning the project according to the deliverables that will be achieved along the course of the project should not lead to more risk-averse projects being funded. The approach should be adjusted to the high level of flexibility required by projects focused on fundamental research, where the definition of milestones before the start of the project can be challenging.

1- According to a recent report, more than 40% of ERC-funded research projects were subsequently cited by patents. Munari, F., Morais Righi, H., Sobrero, M., Toschi, L., Leonardelli, E., Mainini, S., & Tonelli, S. (2022). Assessing the Influence of ERC-funded Research on Patented Inventions. In European Research Council. European Research Council. Retrieved February 7, 2023, from <https://erc.europa.eu/news-events/news/new-study-reveals-how-frontier-research-spurs-patented-inventions>

It is also noteworthy that the high level of inflation, for example, often forces researchers to change the pre-planned budget allocations for personnel costs during a project's lifetime, requiring flexibility in the management of the overall budget of the project. Finally, it is crucial that the new way of managing the grants results in reduced administrative burden to the researchers, and not only to the funder.

- Whereas The Guild welcomes the Scientific Council's decision to become a signatory of the European agreement for a research assessment reform, it is essential that scientific excellence, as defined by scientific communities, remains the sole evaluation criterion in the ERC and that this criterion is not diluted with new elements that would be evaluated under its scope.
- The Guild expresses its strongest support for the association of the UK and Switzerland in Horizon Europe, and in the Excellent Science pillar. The budgets of instruments such as the ERC should be boosted in accordance with the eventual budget shares allocated to beneficiaries in the associated countries.

2. The Marie Skłodowska-Curie Actions (MSCA)

The MSCA represents an outstanding set of instruments supporting the most promising research talent in Europe. The Guild welcomes the recent prioritisation of support for early career researchers in the debate framed in the context of the new European Research Area and urges that the political commitment for supporting more attractive and sustainable research careers in Europe should result in increased investments in the MSCA instruments, and especially the Postdoctoral Fellowships and the Doctoral Networks.

Recommendations to strengthen MSCA

- Although The Guild acknowledges the reasoning behind the changes² that were implemented in the rules of participation of the instruments, it is important to ensure consistency and continuity in the implementation of the rules (for example with regard to how many researchers can be supported through a project).
- Allow an extra year of funding in the Doctoral Networks for those universities that follow a four-year structure for completing a doctoral degree. It is currently a problem for many universities that the PhD candidates participating in the training programme are left without funding for the last year of their degree, due to the limitation of the funding to 36 months in all participating universities. We suggest that a possibility for extending the duration to 48 months would be introduced for institutions whose PhD programmes and their research activities last beyond 36 months. Accommodating the diversity of PhD structures better would enable an equal starting point for all universities' participation in the collaborative training programmes.

- Given the speed of inflation and increasing living costs and energy prices, The Guild asks the Commission to update the country coefficients to enable the grants to cover for the rising salary levels of researchers. It is now the case in several European countries that universities need to use their own funding to top up the salary offer for MSCA grantees to provide a sufficient income level for them. If left unaddressed, this situation might reduce the incentive to apply to certain institutions, as an adequate salary level might depend on the university's ability to top it up from its own funds.
- The Guild warmly welcomes the MSCA4Ukraine programme that supports researchers who have had to flee their home country at a time of war. To simplify the processes, The Guild asks for the application and grant management of this programme to be moved to the usual IT platform used with the rest of the MSCA instruments.
- Ensure that the MSCA Staff Exchanges remains attractive to the research community by ensuring the sufficiency of the budget allocation per project and by reducing bureaucracy related to the instrument.

3. Research infrastructures

Finally, The Guild expresses its support for the Research Infrastructures programme in Pillar 1. While the responsibilities for fostering research infrastructures differ between European countries, their importance should not be underestimated. Research Infrastructures are shared scientific resources where excellent science and societal needs meet. They enable researchers to foster cross-border collaborations, and allow an efficient sharing of resources and investments, in line with the goals embedded in the deepening of the European Research Area. Research infrastructures also play an important role in fostering Open Science and sharing research data in novel ways.

The very nature of infrastructural platforms for research aligns well with a need for societal efforts to address major challenges. They often have a disciplinary orientation and give new answers to eternal questions about the biggest objects in universe or the inner dimensions of the smallest structures in matter. The development of the E-ELT (European Extremely Large Telescope) or ESS (European Spallation Source) are examples of instruments with a high potential for ground-breaking discoveries. Such infrastructures can also be important hubs for networking in the context of addressing the SDGs and other cross-disciplinary undertakings with high societal relevance. In addition, the high-performance digital tools and services, for example in genomics or bioinformatics, are examples of infrastructural investments that play a crucial role in Europe's competitiveness.

The Global Challenges and Industrial Competitiveness pillar: empowering research to address societal needs

The Global Challenges and Industrial Competitiveness pillar of Horizon Europe marked, for the first time, the allocation of more than half of the Framework Programme's budget for challenge-driven collaborative R&I. It is thus an important source of funding available for any researcher who wants to engage in an interdisciplinary and collaborative project with a pre-described focus ranging from the Covid-19 pandemic to climate change. With over 50bn € allocated to this pillar, it is essential that its implementation is designed to maximise the long-term impact on understanding and finding solutions to the global challenges that it is dedicated to. Therefore, to ensure the programme's success and its scientific and societal impact, The Guild makes the following recommendations:

1. Increase the number of low-TRL funding calls to achieve a true balance between research and innovation

Currently, Horizon Europe's Pillar 2 is falling short of the goal to build the best possible knowledge base in support of Europe's resilience in relation to global challenges. This is due to the fact that the pillar continues the trend of Horizon 2020 of focusing on calls for projects at high technology readiness levels (TRL)². These projects are valuable in contributing to short-term solutions and in applying existing knowledge, but they need to be complemented with more calls for forward-looking projects that will increase our understanding of the challenges themselves. Since the mid-term review of Horizon 2020, there has been a growing consensus among stakeholders and member states that the challenge-driven pillar needs to be re-oriented to support projects at all TRLs. Consequently, this call to ensure a balance between lower and higher TRLs in the collaborative parts of the programme was included in the Horizon Europe regulation, and it should be a principle guiding its implementation³. We therefore ask the Commission to ensure that the next Strategic Plan and the upcoming Work Programmes of Pillar 2 endorse this principle agreed in the legislation and implement a genuinely balanced approach to TRLs in all thematic clusters by increasing the number of call topics focused on the creation of new knowledge and low TRLs (1–3).

In terms of the action types, the pillar should continue prioritising funding research and innovation activities (RIA) over the coordination and support actions (CSA) and innovation actions (IA). Since the RIA topics have often had a more innovation-oriented focus, it is within this action type that more research collaboration at lower TRLs should be funded.

2. Provide a realistic and flexible approach to impact

The question of TRLs is closely linked to the question of the expected impact of R&I projects. Horizon Europe adopted a new type of an approach to the impact of its funded projects, with

2 - According to the Commission, TRL 1–3 are not supported under Pillar 2 due to the impact approach that focuses on the use of solutions in addressing global challenges. Whereas figures for calls at low TRLs were not provided, 50% of the call topics that indicated a TRL have focused on TRL 6 and above in the past years, Source: Commissioner Mariya Gabriel's response to the Parliamentary question - E- 002714/2022(ASW). https://www.europarl.europa.eu/doceo/document/E-9-2022-002714-ASW_EN.html

3 - European Union. (2021). REGULATION (EU) 2021/695 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination, Article 7(3). Retrieved February 20, 2023, from <https://eur-lex.europa.eu/eli/reg/2021/695/oj>

detailed expectations of the achievements and deployment of the results described in the call texts. The new approach implicitly suggests that operating at a higher TRL will result in bigger impact. However, a discovery in a collaborative project focusing on basic research (TRL1–2) can be more ground breaking than the results of applied research projects. Achieving progress or breakthroughs in building new knowledge is a precondition for new applications, their commercialisation at a later stage, and the systemic transformation related to the solving of global socio-economic challenges. Hence, to maximise the impact of the programme, it is essential to fund more collaborative projects at low TRLs in Pillar 2, as demonstrated by examples such as the development of the Covid-19 vaccine that was enabled by basic research.

While the new approach on impact is beneficial in terms of asking the applicants to plan more concretely how to reach the expected achievements of the project, the descriptions of the expected impact in Horizon Europe have often been perceived as going beyond what the individual project can realistically achieve within the foreseen time and budget. This is especially the case with calls that have included expectations for different types of impacts to be reached. Whereas it is crucial for the applicants to justify what longer-term objectives the project will work towards, it is still true for the majority of the cases that the impact does not necessarily appear during the project or straight after it has ended. During the project and immediately after it has ended, only outputs and outcomes can be expected and counted (the key performance indicators). Instead, longer-term impact often requires a much longer time span, and can evolve in unpredictable directions. A focus on ordering pre-defined long-term results from the projects will also prevent them from coming up with truly innovative concepts, models and solutions that could not be foreseen in advance. This approach also prevents high- risk research and a broad exploration of solutions.

This new impact approach has made the opportunities in this pillar less attractive to many researchers and hard to approach for newcomers. According to [The Guild's survey](#) among its members, more than 60% of the researchers stated that the impact section of the application was either relatively difficult or very difficult to use. Introducing a long list of expected impacts going beyond the realistic scope of the project might risk having the unintended consequence that applicants overpromise what they can achieve in the funding application. In addition, the impact section in the application should be simplified, to ensure that describing the expected impact is not complicated by the way it is addressed in the form. Therefore, we ask the Commission to allow more flexibility in the applicants' approaches to impact and an option to articulate a relevant type of impact that their project will contribute to. The applicants should also be allowed more flexibility to prioritise and concentrate on one category of impact (for example scientific, economical, societal etc.) and to be realistic about its scope and timeline. The call texts should also allow for enough flexibility and a variety of approaches on how to reach the impact.

3. Ensure that the evaluation process focuses on scientific quality

The Guild maintains that scientific excellence should be the most important selection criterion for projects under Horizon Europe. The Guild has noted the changes introduced in the evaluation framework in Pillar 2 and expresses concern over the consequences of the introduction of additional elements under the "excellence" criterion. It has been extended to cover new elements such as "the quality of open science practices, including sharing and management of research outputs and engagement of citizens, civil society and users where appropriate". As a result, the excellence section of the evaluation framework includes a long list of elements that are not intrinsically related to the scientific merits of the proposal. Since it is under this same criterion that the scientific quality of the proposal is evaluated, it is important that the new aspects evaluated under this criterion don't

reduce attention given to the scientific merits, and lead to the lowering of the quality of the funded projects. Therefore, it is crucial that the evaluators are briefed about the importance of addressing these additional elements such as citizen engagement “where relevant”, as they might not be necessary for all projects and would be more suited to be evaluated under the “impact” criterion.

4. Continue implementing a systematic approach to interdisciplinarity and SSAH integration

The Guild welcomes the ambition to give wide support to interdisciplinary projects in Pillar 2 and notes the improvement that has happened in opportunities aimed at fostering interdisciplinary projects as compared to Horizon 2020. Using the flagging of topics that are especially relevant to the Social Sciences and Humanities (SSAH) in a more targeted way, making sure that the SSAH component is always evaluated under the excellence criterion, and ensuring that the evaluation panels of these calls include SSAH experts, are all important contributors to a more successful fostering of SSAH integration. However, a more systematic and clear approach is needed to ensure the best possible implementation of these approaches. For example, more explicit references to the significance and roles of the contributions from SSAH would be useful for ensuring that the consortia that will apply will have partners focused on those disciplines.

While interdisciplinarity as an important feature of Pillar 2 may be used to imply collaboration between researchers representing different academic fields, it is crucial that it is not used as a synonym for cross-sectoral collaboration – the fact that a project partner works in the social sector does not mean that they represent the Social Sciences perspective in the project. To enable truly interdisciplinary collaboration, the topics need to be built around a strong research component (see recommendations under section 1). While interdisciplinarity often boosts the impact of a research project, it should also be acknowledged that not all topics will benefit from either interdisciplinary or cross-sectoral collaborations, which is why it is important to avoid a one-size-fits-all approach.

Finally, the eventual quality of SSAH integration and interdisciplinarity should be evaluated based on the experience of the first years of Horizon Europe. The Guild is re-iterating its call for the establishment of an independent expert group responsible for this task, that can advise the Commission on the further improvement of SSAH integration and interdisciplinarity in the programme, including in the development of call topics.

5. Re-orient the R&I missions to support cutting-edge research

Horizon Europe’s missions represent one of the programme’s most visible novelties and they have been met with strong political support. The Guild first presented its [recommendations for missions in 2017](#), and highlighted that in order to be successful, the missions should build on European research excellence and adopt a long-term approach to achieving societal impact by funding collaborations covering a wide range of disciplines. After the preparatory stage of the missions, first experiences are unfolding on the types of projects that have been funded under the missions work programmes.

Having observed very low application rates in many calls across all the R&I missions, The Guild universities express their concern over their implementation. Several call topics have received only a couple of applications, resulting in unusually high success rates. The experiences from the first rounds of calls should lead to careful analysis of the reasons why these calls failed to attract a better response, and to a re-orientation of their scope in future calls.

One of the reasons that the mission calls have not been able to convince research communities to

participate is the lack of opportunities for collaborative research activities. Categorising the missions as “public policy programmes” has raised questions as to why the missions are funded in Horizon Europe, if the focus is not on funding research and innovation activities leading to the completion of their objectives. The Guild recommends that restoring a strong research focus for all missions should be addressed in the assessment of the mission approach planned for 2023, as stated in the Horizon Europe regulation⁴. The Guild also recommends that the budget allocation for the missions should not exceed 10% of the budget of Pillar 2.

Recommendations to strengthen the R&I Missions

- Only fund actions focused on research and innovation under Horizon Europe, in order not to dilute its focus or duplicate the tasks of other EU programmes. Funding for regional cooperation or other activities related to policy development should be funded from the European Regional Development Fund or other thematic programmes relevant for the topic of the mission (such as the EU4Health Programme or the LIFE Programme for climate-related cooperation projects).
- Highlight universities, research institutions and researchers more broadly as key target groups for the missions and demonstrate why their contribution is essential to their success.
- Introduce call topics that invite projects at low TRLs (1–3) to contribute to the missions. Scientific advancements and breakthroughs should be acknowledged as important contributors to the achievement of the missions.
- Allow more bottom-up approaches in the calls for proposals. This would entail less descriptiveness and more flexibility in the planning of the project.
- Allow opportunities for smaller projects whose consortia are easier to build and manage in public institutions.
- Include the mission calls in the relevant work programmes of the thematic clusters, as opposed to having their own work programme. This would bring them more visibility and ensure they are not forgotten.
- Provide more information on the synergies and prevent duplication between the missions and partnerships that might touch upon similar themes.

In light of these recommendations, The Guild calls for the Commission to review the implementation of the missions soon, in order to be able to reorient their focus and ensure improved implementation in the coming years. The Guild universities are also committed to taking part in the further development of the missions, to ensure that they will successfully reach their goals through high-quality research and innovation activities.

4 - European Union. (2021). Art. 8(5) of the REGULATION (EU) 2021/695 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination. Retrieved February 20, 2023, from <https://eur-lex.europa.eu/eli/reg/2021/695/oj>

6. Foster international cooperation while cultivating ties with close partners

The Guild supports the opening up of Horizon Europe to international partners. It is essential that countries with a strong research base outside Europe can participate through association, to effectively address Global Challenges and ensure the competitiveness of Pillar 2. In that sense, we endorse the efforts of the Commission to negotiate the association of strong science countries that were formerly excluded from the programme, such as Canada, Japan, New Zealand and South Korea. Including non-European countries in Horizon Europe and its programming exercise will also make it possible to better identify the global challenges to be addressed through Pillar 2.

At the same time, the (potential) participation of these countries in the programme only accentuates the absence of EU universities' long-standing and trusted partners in Switzerland and the United Kingdom. Decades of mutually beneficial collaboration in science between the EU and its neighbours are now at risk, and it will take time to rebuild the ties damaged by their exclusion from the programme. While international cooperation is crucial, there is no question that the association of Switzerland and the United Kingdom – that host some of Europe's most distinguished universities – should be a priority for the EU to boost the competitiveness, the quality and the budget of the programme in cooperation with like-minded partners, building on already existing excellent research collaborations, and supporting Horizon Europe's overall objectives.

Considering the Russian aggression on Ukraine last year, we fully support the Commission's commitment to ensuring the continuous and closer participation of Ukraine and Ukrainian organisations in Horizon Europe, in particular through waiving Ukraine's association contribution to the programme, as well as through the Horizon for Ukraine initiative.

In addition, The Guild strongly welcomes the flagging of call topics for collaborative projects with African partners under the 'Africa Initiative'. This is in line with [our call](#) to strengthen Europe–Africa cooperation in science, with a view to addressing challenges of mutual relevance to both continents and consolidate the research capacities of African universities. We are delighted that the Africa Initiative was reconducted in the 2023–2034 work programme and stress the need to ensure its sustainability over time. It will take time to foster new and long-lasting collaborations between African and European universities, and our institutions need clear signals that the EU is committed to reinforcing cooperation in the long run.

At the same time, it is crucial that the calls related to the Africa Initiative present a better balance between the four priority areas of the joint AU–EU Innovation Agenda (Public Health, Green Transition, Innovation and Technology, Capacities for Science), if the EU wants to meet its commitments. As mentioned in section 1, it is critical that a clear priority is given to Research and Innovation Actions that will genuinely contribute to the strengthening of the African science base while producing new knowledge on global challenges. In addition, we stress that a successful EU–AU cooperation in science and innovation will require more reflection on potential synergies with the Neighbourhood, Development, and International Cooperation Instrument (NDICI), in the framework of the Global Gateway strategy.

The Innovative Europe pillar: leveraging the roles of research in innovation ecosystems

The Guild welcomes the availability of dedicated funding for innovation in Horizon Europe's Pillar 3 "Innovative Europe". However, this funding must not contribute to further skewing the balance in Horizon Europe between curiosity-driven and fundamental research, on the one hand, and experimental development⁵, on the other hand. Likewise, it is crucial that Pillar 3 remains relevant and accessible to all the actors in innovation ecosystems, including research-performing organisations such as (research-intensive) universities.

The Guild highlights that the implementation modalities of the European Innovation Council (EIC) must be improved to unleash its intended potential. We also highly recommend that the European Commission reflect on the missions of the European Institute of Innovation and Technology (EIT) in the present innovation policy landscape and ensure that it remains relevant and attractive to all innovation actors, including universities.

1. European Innovation Council

The EIC is a major novelty introduced by Horizon Europe. We fully support its existence and are convinced that it is relevant, as there is a need for an innovation funding agency at the EU level that will be able to take risks and make investment in potentially game-changing and breakthrough innovations. The Guild makes the following recommendations to further improve its performance:

Clarify the objectives and scope of the EIC

After more than two years of exercise, the aim and scope of the EIC remain unclear. While it was announced that its objective would be to bolster innovation in Europe, especially breakthrough innovation, we perceive a focus on technological innovation, especially in deep tech. It is of crucial importance that the European Commission clarifies the aims and scope of the EIC so that researchers and research-performing organisations can identify eligible projects.

We acknowledge that the EIC is instrumental in the implementation of the New European Innovation Agenda⁶ and in the strategy for strengthening Europe's leadership in deep tech. However, we strongly recommend that the European Commission follow the Council's conclusion on the New European Innovation Agenda⁷ adopted in December 2022 and have a comprehensive approach to innovation.

This implies that the EIC must maintain its open calls for EIC Pathfinder and EIC Transition grants and that any kind of innovation, technological or not, is eligible as long as it has the potential to become a game-changer in Europe. A comprehensive definition of the innovation eligible for EIC support

5 - According to UK Research & Innovation, experimental development means "acquiring, combining, sharing and using scientific, technological, business and other relevant knowledge and skills with the aim of developing new or improved products, processes or services. [...] Experimental development may comprise prototyping, demonstrating, piloting, testing and validation of new or improved products, processes or services in environments representative of real- life operating conditions." <https://www.ukri.org/councils/innovate-uk/guidance-for-applicants/general-guidance/categories-of-research-and-development/>

6 - European Commission (2022). A New European Innovation Agenda. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. COM(2022) 332 final. Retrieved February 20, 2023 <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52022DC0332>

7 - Council of the European Union (2022). Conclusions on the New European Innovation Agenda. 14705/22. Retrieved February 20, 2023 from <https://data.consilium.europa.eu/doc/document/ST-14705-2022-INIT/en/pdf>

will convince universities to further engage in the programme and contribute to the emergence and strengthening of innovation ecosystems in Europe.

We also reiterate [our recommendation formulated in 2018](#) “to support the innovation potential of all disciplines, including the Social Sciences, Arts and Humanities (SSAH), recognising the importance of the social and cultural advancement of Europe’s societies”. If the EIC has the ambition of bolstering radical innovation, it is crucial that the supported projects are multi-disciplinary and integrate insights from SSAH.

Ensure that the portfolio-based management is transparent and does not cause EIC to deviate from the excellence criterion

The EIC portfolio management is unclear too, as highlighted in a 2022 report of the European Parliament⁸. We urge the European Commission to clarify what these portfolios are, what their scope is, how the portfolio management approach weighs in the evaluation and selection process, and how it can influence the execution of selected and funded projects. If the portfolios correspond to the thematic areas of the EIC project managers, the application of the portfolio management to the Pathfinder and Transition open calls may be interpreted as actually restricting their openness to some topics, leaving little difference from the challenge-oriented calls.

Horizon Europe must remain an excellence- based research and innovation funding programme, which means that the excellence criterion must remain the first and foremost criterion in the evaluation and selection of proposals. After an individual assessment mainly based on excellence, the proposals are evaluated against their potential contribution to the portfolios. This causes us concern, as excellent proposals may not be selected because of these portfolio considerations. The lack of transparency about the EIC portfolio management can therefore undermine the application of the excellence criterion.

Also, the EIC work programmes highlight that projects can be suspended or terminated if their objectives are not aligned with their related Challenge Portfolio. Since the procedure for termination is not clearly spelt out, there are many uncertainties that may dissuade research-performing organisations from applying for EIC support.

Therefore, The Guild urges the European Commission to ensure that the EIC portfolio management combine, in a transparent manner, a strategic approach to investment with a necessary focus on excellence, i.e. on the projects that aim at “science-towards- technology breakthroughs” and on those that are novel and ambitious with respect to the state of the art. Transparency must apply both to the nature of the portfolios and the implications of the portfolio management.

Expand eligibility for EIC Transition while ensuring clarity on which projects are eligible

We welcome the creation of the EIC Transition scheme and its support to researchers and research-performing organisations whose discoveries are not yet sufficiently mature to benefit from support from the EIC Accelerator. The Work Programme 2023 has nevertheless introduced potential confusion about its eligibility criteria.

We believe that the initial restrictions to EIC Pathfinder (and FET Flagship) and European Research Council Proof-of-Concept grants were too restrictive but a necessary first step in the learning-by-doing development of the EIC. The European Commission should therefore explore now how

8 - European Parliament (2022). Implementation report on the European Innovation Council: European Parliament resolution of 22 November 2022 on the implementation of the European Innovation Council. 2022/2063(INI). Retrieved February 20, 2023: https://www.europarl.europa.eu/doceo/document/A-9- 2022-0268_EN.html

it could enlarge eligibility to other relevant research projects funded by the European Union or national or regional public authorities. The challenge is nevertheless to ensure that it remains clear which projects are eligible for EIC Transition. For instance, while it is a positive step that all projects funded under Horizon 2020 or Horizon Europe can apply for Transition Challenges calls in the Work Programme 2023, it is unclear whether these encompass also the projects funded through the European partnerships – sometimes only partly financed by the European Union.

Revise the EIC IP rules for Pathfinder and Transition projects and leverage further universities' knowledge valorisation offices

The Guild reiterates its [concerns about Intellectual Property \(IP\) rules applicable to EIC Pathfinder and EIC Transition](#)⁹. Not only do these rules contradict the national, regional or institutional rules on the management of IP, but they are also barely workable, as they create legal uncertainties.¹⁰ For instance, it is unclear who the EIC inventors are, and whether their access rights are indefinite even when they leave their employing EIC beneficiaries to assume leadership positions in companies exploiting their EIC project outcomes.

The Guild reiterates that the researchers do not always have the required know-how and mindset and that they often need support from professional and specialised services to successfully engage in the exploitation of their research outcomes. Therefore, we [recommend](#) that the European Commission apply the standard Horizon Europe IP rules to EIC Pathfinder and Transition projects, support capacity-building and structures in universities' knowledge valorisation offices, and promote collaboration between researchers and these offices.

The EIC Work Programme 2023 amended the EIC IP rules by enabling EIC beneficiaries to suspend EIC inventors' access rights if their exercise negatively impacts the implementation of the dissemination and exploitation plan. This amendment is an improvement, but it is not fully satisfactory – it may create additional legal uncertainties if there are no clear guidelines about the requirements to be met to request the suspension of EIC inventors' access rights. It may also induce extra administrative burden if the EIC beneficiaries cannot suspend the access rights of all potential EIC inventors in the plan for exploitation and dissemination. Moreover, our fundamental concern remains. Whereas the European Commission should encourage collaboration between researchers and knowledge valorisation offices, the present rules pit them against each other. By granting by-default access rights to EIC inventors, they may indeed give them the idea that, by default, the universities will not provide them with the knowledge valorisation support that they need.

2. The European Institute of Innovation & Technology (EIT)

At its inception in 2008, the EIT was a highly relevant instrument thanks to its novel approach to the integration of higher education, research and innovation (the so-called "knowledge triangle"). The Guild expresses strong concerns about the evolution of its vision and strategy which has resulted, for some Knowledge and Innovation Communities (KICs), in lower considerations for higher education institutions and their role. This increasing focus on business activities has been translated into

9 - The Horizon Europe Model Grant Agreement states that "EIC inventors are granted indefinite access rights for exploitation purposes under the following conditions: the access rights are granted on a royalty-free basis unless the beneficiary [i.e., the university employing the EIC inventor] provides support to the EIC inventor to exploit the results (in which case the royalties may be shared on mutually beneficial terms, provided this does not make the exploitation by the EIC inventor impossible) [...]."

10 - European Parliament (2022). Implementation report on the European Innovation Council: European Parliament resolution of 22 November 2022 on the implementation of the European Innovation Council. 2022/2063(INI). Retrieved February 20, 2023: https://www.europarl.europa.eu/doceo/document/A-9-2022-0268_EN.html

activities mostly targeting companies, despite the EIT's core objective of integrating knowledge triangles.

Engage more universities in the EIT and the activities of its KICs

As part of the EIT's strategy to achieve financial sustainability, KICs ask for a return on their investments. This request is made to all KIC partners regardless of the nature of their projects (including education-related activities) and the status of the partners (which may prevent them from paying back the KICs' investments). It thereby contributes to the lower attractiveness of the EIT and its KICs to higher education institutions. Therefore, we urge the EIT to investigate where the application of this rule is relevant. The EIT must consider allowing for exemptions when the request for a return on investment undermines the contribution, and reduces the participation, of specific actors within the knowledge triangle.

The Guild notes that the main added value of the EIT for universities lies in its education, training, mentoring and networking activities, including the EIT HEI initiative. These must remain at the core of the services that the EIT and its KICs offer in order to accelerate the emergence of knowledge triangles and strengthen them. However, their long-term attractiveness will also depend on the financial rules applicable to them and the administrative burden that they may induce. For instance, universities participating in the EIT HEI still need to finance up-front the activities in the first phase of their projects because of lengthy procedures for the signature of the grant agreements, hence our call for a simpler procedure so that grant agreements can be signed earlier.

In sum, we urge the EIT to engage in a self-reflection on its *raison d'être* and implementation modalities to ensure that it keeps providing relevant support for strengthening cooperation among business, education and research organisations, and thereby increasing Europe's innovation performance and competitiveness.

The Guild additionally recommends that the European Commission improves the synergies between the EIT (including its KICs) and the EIC. We acknowledge the existence of a memorandum of understanding signed by both programmes. However, it remains to be seen how their synergies will support engagement from universities.

The Widening participation and strengthening the European Research Area pillar: need to monitor the fit-for-purpose of Widening instruments

The dedicated Widening actions in this pillar aim to tackle the R&I divide towards a more cohesive European research and innovation ecosystem. They enable countries that are less advanced in R&I (Widening countries) to upgrade their R&I systems, making them stronger and allowing the EU as a whole to advance together.

The Guild supports the inclusive commitment to excellence in R&I, meaning that excellence should be recognised and supported wherever it exists. This goes hand in hand with the excellence principle of the Framework Programmes, as we can only maintain Horizon Europe's scientific leadership by supporting the best talent.

We welcome the increased budget for Widening Participation and spreading excellence instruments in Horizon Europe. In addition to strengthening existing Widening instruments, the budget increase led to the creation of new instruments such as the Excellence Hubs, the European Excellence Initiative, ERA Talents and Hop-on Facility.

The full potential and impact of these measures is yet to be evaluated. We need more data about the effectiveness of Widening instruments to evaluate their contribution to reducing the disparities in R&I performance in Europe. Therefore, we fully support the European Court of Auditors recommendation to enhance the monitoring of Widening measures.¹¹ The Guild reiterates its recommendation for the ERA Forum dedicated sub-group to design and monitor the fit-for-purpose of measures for researchers and institutions from Widening countries.

Based on the experience of the first Horizon Europe calls, The Guild makes the following recommendations:

1. Teaming for Excellence

We welcome the two stage Teaming calls which have eased the application process in the preparatory stage. Also, Teaming has served as a particularly effective lever for Structural Funds, since complementary funding from national or regional authorities is required. However, applicants in some Widening countries still struggle to secure co-funding. In the case of the European Regional Development Fund (ERDF), delays in approving national operational programmes, different timings of calls and the strict focus on investment areas selected under the smart specialisation strategy have meant that some applicants could not submit their proposals for the first Teaming call. According to the evaluators, a failure to demonstrate access to complementary funding was one of the main shortcomings found in the stage 1 evaluation – in particular, describing the precise commitment and share of contributions from potential funding sources.¹² A further challenge is that many operational programmes provide support for infrastructure and equipment only in justified cases where there is

11 - European Commission, Directorate-General for Education, Youth, Sport and Culture, Dèlkutè, R., Nikinmaa, J., Pupinis, M. (2022). Study on mobility flows of researchers in the context of the Marie Skłodowska-Curie Actions : analysis and recommendations towards a more balanced brain circulation across the European Research Area : final report, Publications Office of the European Union. <https://data.europa.eu/doi/10.2766/401134>

12 - Funding and Tenders Portal. (n.d.). European Commission. <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-widera-2022-access-01-01-two-stage>

clear demand from the private sector, while research activities at low TRLs (1–3) are eligible in limited cases. To echo our [previous recommendations](#), we encourage national authorities to include the university sector in the design and implementation of smart specialisation strategies to maximise the potential of ERDF in building stronger R&I systems. We also invite the Commission to ensure synergies between Teaming and ERDF – when Teaming requires co-funding for infrastructure and activities at low TRLs, these costs should be eligible from the ERDF and this should be clearly communicated to the responsible national authorities.

2. Twinning

Guild members support the use of Twinning calls for funding dedicated cooperation with the Western Balkans region. We also welcome the upcoming Twinning Green Deal call to build capacity in R&I areas linked to the European Green Deal strategy. We support strengthening the research dimension of Twinning projects by allowing 30% of the grant to be used for R&I activities. While we recognise the capacity building nature of Widening projects, increasing the budget share for research activities across all Widening instruments can make them more attractive to researchers from Widening countries. At the same time, it could incentivise researchers from non-Widening countries to engage and contribute to the overall impact of these projects.

3. ERA Chairs

Attracting and retaining the required human resources is still one of the major challenges for institutions in Widening countries. We suggest further flexibility in appointments of ERA Chairs holders, for example the possibility to hire an employee of the host institution if recruitment of external experts was not successful after several open calls. The Guild reiterates its recommendation to use the MSCA calculation method to determine salary levels for ERA Chair holders instead of following national regulations.

4. ERA Fellowships and ERA Talents

The Guild supports the continuation of Widening (now ERA Fellowships) in Horizon Europe. Although not formally recognised as MSCA fellows, researchers with high quality proposals are offered the same conditions as MSCA Postdoctoral fellows. The recent MSCA Mobility Flows study recommended to increase the funding available for ERA Fellowships, since the pilot showed an “unambiguous capacity to contribute to more balanced flows of researchers to and from widening countries”¹³. In that context, the ERA Talents scheme can complement ERA Fellowships by focusing on training researchers and other types of R&I talents in Widening countries, such as data stewards, research managers or knowledge valorisation officers. Although we welcome fostering exchanges between academic and non-academic sectors within ERA Talents, we suggest emphasizing the interdisciplinary and the international potential of these projects alongside intersectoral mobility, which needs to work in both ways between the academic and non-academic sectors.

13 - European Court of Auditors. (2022). Measures to widen participation in Horizon 2020 were well designed but sustainable change will mostly depend on efforts by national authorities. Retrieved February 20, 2023 from <https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=61346>

5. Excellence Hubs

The Hubs are supposed to complement the well-established Widening measures with a dedicated innovation component linking academia, business, government and society. Although there is potential for strengthening innovation ecosystems in Widening countries, The Guild urges a clearer articulation of how different Widening instruments relate to each other, and what their ultimate objective is. Currently, the Hubs encourage teaming up of at least two Widening countries' R&I ecosystems. We suggest including cooperation with well-established R&I ecosystems outside the Widening countries in future calls, since links with top-level partners could have a greater impact and help in transferring best practices to Widening countries.

6. Hop-on facility

Given the delays with the start of the programme, there were only a few projects in Pillar 2 and EIC Pathfinder for Widening participants to "hop-on". Our first experiences demonstrate the need to raise awareness among project coordinators about the Hop-on Facility and the potential benefits for their projects. Further incentives might also lead to better responsiveness of project coordinators to requests for joining consortia.



Univerza v Ljubljani

