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European University

EELISA position paper on Horizon Europe mid-term review

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EELISA InnoCORE Partners

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4	BEN	İstanbul Teknik Üniversitesi	Istanbul Technical University	ITU	Turkey
5	BEN	Scuola Normale Superiore	Higher Normal School	SNS	Italy
6	BEN	Scuola Superiore di Studi Universitari e di Perfezionamento Sant'Anna	Sant'Anna School of Advanced Studies	SSSA	Italy
7	BEN	Universitatea Politehnica din Bucuresti	Politehnica University of Bucharest	UPB	Romania
8	BEN	Budapesti Műszaki és Gazdaságtudományi Egyetem	Budapest University of Technology and Economics	вме	Hungary
9	BEN	Université Paris Sciences et Lettres	Université PSL	PSL	France

























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1 Introduction: an heterogenous group of HEIs showing strong complementarities under Horizon Europe

Initiated in 2021, the European Engineering Learning Innovation and Science Alliance (EELISA¹) is one of the 44 European Universities selected by the European Commission under the Erasmus+ call. Made of ten² European higher education institutions, EELISA represents more than 194,000 students and 50,000 graduates each year, 18,500 faculty members and 12,000 administrative staff. Linked to EELISA and made of the same HEIs, EELISA partners are working on the research and innovation dimension of the Alliance under its H2020-funded project EELISA InnoCORE (EELISA INNOvation and COmmon REsearch Strategy).

EELISA gathers together a heterogonous group of HEIs (Higher Education Institutions) with different profiles regarding their participation under the EU Framework Programmes for Research and Innovation. Under the previous framework programme (Horizon 2020), taken as a whole³, EELISA performed best under the Excellence Science pillar with over 125 million euros of EU net contribution (*source Horizon Dashboard*) followed by Societal Challenges (79.11 million euros of EU net contribution) and Industrial Leadership (25,4 million euros). However, the situation differs from one partner to other. Whereas the Excellence Science pillar was by large the most important pillar for ENPC, FAU, ITU, SNS, SSSA and PSL, the Societal Challenge pillar was where UPM and UPB got the highest contributions and BME performed best under the pillar Industrial Leadership. For the time being, under the current framework programme Horizon Europe, EELISA obtained 39.33 million under Global Challenges and European Industrial Cooperation and 22.66 under the pillar Excellence Science.

The R&I capacity of EELISA partners has been analysed regarding number of research structures and researchers, and R&I outputs (publications, patents and funded projects and awards) under the 11 selected EELISA SRA (Strategic Research Areas)⁴. The various capacities and specialisation of partners in the different SRAs open up immense possibilities regarding collaboration under Horizon Europe, particularly for collaborative projects which require multidisciplinary consortia gathering different and complementary capacities.

This position paper represents the first effort from EELISA partners to jointly analyse as an Alliance the functioning of Horizon Europe, its opportunities and obstacles for participation. The document presents the views of EELISA's member universities on the first years of Horizon Europe and highlights issues of particular importance for its members. It also makes some recommendations on how the programme could be improved. EELISA position paper on Horizon Europe is made under the umbrella of the EELISA Policy Liaisons Board, an expert group made of experts in EU projects or EU policy-making from each EELISA partner institution (please refer to footnote 2 on this matter).

2 R&I framework programmes as a key tool for the promotion of the international dimension of our Alliance members

EELISA partners highly appreciate the EU Framework Programme for Research and Innovation as a powerful tool boosting their internationalization, helping them deepen, widen and diversify collaborations with other international partners as well as with industrial stakeholders. Participating in EU projects increases the visibility and recognition of EELISA researchers in the international academic field, EU projects providing academics with an opportunity to cooperate with other institutions and peers all around the world and thus boosting their international prestige. EELISA partners value R&I programmes also as way to attract international talent and increase the impact of their research activities, including bringing research closer to society. Within this context, the **EU R&I programmes represent a fundamental and indispensable tool for EELISA institutions**.

² EELISA was made originally of 9 partners. In November 2022, a tenth partner, ZHAW (Zurich University of Applied Sciences), jointed the consortium. EELISA InnoCORE is only made of the nine original partners. **This paper only reflects the views of the nine original partners.**

⁴ <u>https://eelisa.eu/eelisa-research-strategy/</u>



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¹ https://eelisa.eu/

³ Data from PSL (Paris Science et Lettres) take only into account "central" PSL and not its 11 schools (which have their own independent PICs).



Despite this fact and mirroring national and regional differences in Europe, the impact and importance of European research programmes also differs from one EELISA partner to the other. Whereas the EU R&I programmes constitute a clearly more attractive funding scheme for most partners compared to national and regional R&I schemes (ENPC, UPM, BME) (making EU R&I programmes a key source of funding for the R&I activities of some), it has to be noted this is not the case for instance in Germany, where German national funding is considerably high, the international dimension being the main advantage highlighted by EELISA partner FAU when asked about the main benefits of FPs.

For building this section, EELISA partners were also asked about the major negative aspects of R&I FPs. As a general comment, EELISA partners welcome all the efforts to try to simplify the administrative procedures of R&I programmes but recognize that the fear of a very heavy administrative workload constitutes a major aspect deterring researchers from participating in EU research programmes. Together with this, the major drawback discouraging researchers are the low success rates.

In the following sections, EELISA partners analyze the major aspects of Horizon Europe. Firstly, we analyse and provide recommendations regarding the main pillars for the programme: Excellent Science pillar, Global Challenges and Industrial Competitiveness pillar, Innovative Europe pillar and Widening participation and strengthening the European Research Area pillar. Following this, EELISA partners provide their insights regarding some big initiatives (namely, missions and partnerships) and then their view on the rules of participation.

3 EELISA's position on Horizon Europe

3.1 The Excellent Science pillar: a much-appreciated pillar, where some changes announced raised concerns

EELISA partners appreciate the European Research Council programme not only as a prestigious funder of cutting-edge frontier research but also as well-functioning structure. **The ERC programme is very well adapted to the needs and specificities of frontier research projects**. EELISA researchers positively value not only the flexibility and freedom that the ERC provides, but also the format of the proposals and evaluation process. The stability of the rules and terms over the years is much appreciated.

In connection with this, **EELISA** partners would like to express their concern regarding some changes announced by the ERC, namely the combination of the CV and track record templates and the introduction of the lump sum scheme announced for advanced grants. Whereas the lump sum approach might simplify some aspects of the financial management, EELISA partners agree with The Guild in emphasizing "the importance of evaluating the Horizon 2020 pilot before a further roll-out of the scheme" Currently, ERC projects are characterized by a (much appreciated) light reporting, not requiring the provision of any milestones or deliverables. At the frontier of science, disruptive progress is not predictable in a way to describe it in detailed project plans. After a highly selective application process, EU should trust their grantees to pursue their long-term objectives and should provide them with the freedom to do it in a flexible manner, as it has been the case until now. Again, although lump sum approach might facilitate the financial management aspects of project, its suitability "should be carefully considered to avoid unintended consequences".

EELISA partners would like to congratulate ERC for two initiatives that are considered particularly useful in supporting ERC applicants: ERC Visiting Fellowship Programme and ERC Mentoring Initiative.

⁵ https://www.the-guild.eu/news/2023/the-guild-s-recommendations-for-horizon-europe-s-interim-evaluation.html



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Regarding MSCA actions, the limitation of the MSCA postdoctoral fellowship to young researchers has raised concerns among EELISA partners. Whereas EELISA HEIs agree that researchers need to be supported with special attention in the early stages of their career, it is also true that learning and training represents a lifelong process. Senior researchers still benefit from postdoctoral fellowships and need continuous training. Moreover, for some countries, MSCA postdoctoral fellowships are the only scheme having an impact on attracting excellent researchers from abroad, who often are at a more experienced stage of their career. EELISA partners call for an evaluation of the impact of the 8-years of research experience rule and propose as a potential alternative having some programme dedicated to senior researchers. Lastly, EELISA partners call for an increase in the budget of MSCA Staff Exchanges and MSCA Postdoctoral Fellowships in line with high inflation and associated rising prizes in many EU and associated countries.

3.2 The Global Challenges and Industrial Competitiveness pillar: a new configuration of clusters that complicated finding opportunities and a too strong focus on high TRLs

The new cluster structure compared to the previous one under H2020 (societal challenges) had some drawbacks regarding clarity and easiness in finding topics for researchers. Under Horizon Europe Work Programmes (2021- 2024), certain topics have seen their identity "diluted", as they have been merged and moved around clusters. More specifically, the part of cluster 4 related to industry is mainly focused on industry digitalization while other traditional topics within this area, such as materials, have been barely considered. In general, some cluster definitions are application-oriented (e.g. space), whereas others are more "tool"-oriented (e.g. digital), which leads to further confusion.

A reorganization is certainly necessary to adapt the structure to the current development of global challenges. Yet for cross-sectional topics, the attribution to a certain cluster is not always straightforward. **The possibility to tag topics to more than one cluster should be evaluated.** An example for this is climate-related topics: they have been split between cluster 5 "Climate, energy & mobility" and cluster 6 "Food, bio-economy, natural resources, agriculture & environment". This merging and moving around topics made it difficult for researchers finding the right opportunities. Clusters should be more clearly redefined and topics linked to a certain area should be put together, for instance, all climate-related topics should be under cluster 6.

Regarding the structure and redefinition of clusters, "digital" should be a separate cluster, since it is an extremely wide topic and merging it with industry and space made cluster 4 "Digital, Industry and Space" far too big and too difficult to navigate. We would also like to highlight the importance of maintaining cluster 3 "Civil security for society" as an independent cluster and call against its merging with cluster 2 (as it is discussed in every Framework Programme). The current geopolitical environment (the war in Ukraine, migration crisis, terrorism, cybersecurity issues, earthquakes in Turkey) and the increasing number of natural disasters, together with the fact that the ecosystem, agents, and practitioners in this area are very specific, all this supports the relevance of keeping its independence as an autonomous cluster.

Another concern is the fact that, in certain clusters (as is the case of cluster 6), there is a decreasing number of topics appearing in the Cluster Work Programme, given the considerable number of new cofunded partnerships that are being created. Getting to know the partnerships and all the additional initiatives is very time-consuming for participants and might leave those who do not participate in them at disadvantage or even unaware of these opportunities. See section 3.5 below.





EELISA members express their agreement with other university associations (such EUA⁶, The Guild or CESAER⁷) on their **concern regarding the increasing focus on high TRLs (technology readiness-level)** and the need to rebalance the proportion of calls with lower, medium and higher TRLs. EELISA also agrees LERU's recommendation "of having a three-stage funding approach in pillar II, with funding for collaborative projects at lower TRLs, medium TRLs and high TRLs. Interdisciplinarity should be strongly incentivised across the three stages. In this approach, broader, less prescriptive topics should be iintroduced for the lower and medium TRL calls, while the higher TRL calls should be more prescriptive about the expected outputs and impact. An increased use of two-stage evaluations would be welcome for lower and medium TRL calls".

3.3 The Innovative Europe pillar: concerns about the increasing focus on industry and companies

Regarding the Innovative Europe pillar, EELISA partners would like to express their **concern about the increasing focus of this pillar on industry and companies**, thus, losing the grip on the transfer from the research and innovation providers (HEIs with connected ecosystems) to the valorising entities (industry). This increasing focus on business refers as well to the European Institute of Innovation & Technology (EIT) and its Knowledge and Innovation Communities (KICs). As highlighted by other university organisations (The Guild), "the increasing focus on business activities has been translated into activities mostly targeting companies, despite the EIT's core objective of integrating knowledge triangles", **giving the impression that the EIT is turning into an investment bank.**

EELISA partners would also like to highlight the complexity of administrative aspects in all phases of the EIT projects and the overregulation of issues related to financial reporting. **Participating as a university is becoming more and more difficult**, given the constraints imposed for setting-up consortia. Moreover, the funding rate per participant has decreased while co-funding and sustainability requirements have increased.

Lastly, the European Innovation Council being a major novelty, their instruments are not yet sufficiently known. Compared to similar instruments under Horizon 2020, many of them have undergone deep modifications in their procedures, requirements and supporting schemes in a short period of time, causing a lot of uncertainty.

3.4 Widening participation actions: key for supporting cohesion

EELISA partners fully support this pillar of Horizon Europe and particularly the dedicated widening actions as a tool for creating a more vibrant and cohesive European research and innovation ecosystem. To reach these ambitious goals and ensure that all regions in Europe have the opportunity to contribute to scientific advances, widening actions should not only be endowed with sufficient resources. These actions must be strongly focused on research activities taking place in the widening countries and, most importantly, they must be correlated with structural reforms at the level of the beneficiary organizations.

On the particular case of the new Hop-on Facility, EELISA partners think that **Horizon Europe** applicants should be encouraged to involve partners from widening countries right from the beginning of the proposal development process. Although the Hop-on Facility can be considered relevant and impactful, it has been observed that established consortia show reluctance to include new members after their projects have already commenced.

⁷ https://www.cesaer.org/content/5-operations/2023/20230222-horizon-consultation-package/20230222-addendum-note-to-cesaer-contribution-to-public-consultation-on-the-past-present-and-future-of-the-european-research--innovation-framework-programmes-2014-2027.pdf



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Lastly, EELISA partners would also like to highlight some difficulties that the widening actions pose for institutions from non-widening countries. Particularly, these actions request and expect the participation of institutions from non-widening countries, however, the requirements of the calls (particularly, conditions on the distribution of the budget) sometimes underestimate the required effort from non-widening institutions. Regarding twining, the information on financial management of these projects is not yet enough developed to apply easily.

3.5 EU Missions, European Partnerships and other big initiatives: a very complex landscape that complicates participation

The rationalization of partnerships and the new Horizon Europe missions count among the major novelties of the new R&I framework programme. EELISA partners appreciate the efforts made by the European Commission for the rationalization of partnerships. However, it has to be noted that the landscape of European Partnership is still rather complex, with far too many initiatives. The new Horizon Europe missions added to the complexity and the fragmentation of the landscape. Overall, navigating the different missions, partnerships, and other initiatives has become a very complex exercise. All these initiatives require a huge positioning work that overloads entities, as they are similar to "micro-programmes": it is necessary to know each ecosystem in depth, to understand all the related policies, to contribute to their SRIAs/SRIDAs, to be member of their associations in the case of partnerships, to be present and active in the regular activities (fora/calls/working groups), to be aware of the different rules for participation, etc. This approach is favoring positioning instead of excellence and promoting "experts in participation" rather than "experts in excellence". As stated by UPB, "Although UPB won five national projects to support RO entities to participate to the EU missions, it is very difficult for UPB to identify the appropriate European calls where to participate with serious chance of success" (UPM, Prof. Dana Gheorghe). The interests of missions for researchers, their impact and efficiency are still to be evaluated.

4 On the rules of participation

4.1.1 Proposal writing and evaluation

Building a proposal remains a complex exercise that could be simplified. Firstly, whereas the circulation of draft work programmes and their later publication helps foresee and prepare participation, deadlines of calls are still very constrained, particularly for building a strong consortium. The diversity of partners that a winning consortium requires together with the requirements that partners need to meet under certain instruments (e. g under the 2023 EIT pilot calls) and the limited time-frame from the opening to the closing, make it difficult establishing consortia. **Opening proposals further in advance** would allow a better preparation.

Horizon Europe brought along changes to the proposal template, such as shorter page limits or fewer redundancies, which we believe have been quite positive. Nevertheless, it is our feeling that the actual content of the proposal is becoming more complex due to the growing number of concepts and approaches that must be considered when building the proposal (e.g., multi-actor approach, SSH, gender dimension, Open Science, Europe Taxonomy, DNSH, etc.). EELISA partners totally understand and support the relevance of these concepts, however, it must be noted that oftentimes they are currently being tackled and evaluated merely from a "cosmetic" point of view (only checking whether they are named). Developing these concepts can take more time than developing the scientific components or the main objectives of the project. Using 25% of the very limited space in the template on them is often mere virtue signalling. Lastly, this delves deeper in the risk highlighted above of promoting "experts in participation" and dependency on consultancy firms.

The evaluation procedure in Horizon Europe, following the path set in Horizon 2020, is correct and clear. However, EELISA partners think that there are still a few areas for improvement. Particularly, the comments in the evaluation summary reports of Pillar 2 proposals are too generic and do not provide enough help for participants who want to improve the shortcomings in their proposals.



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Sometimes the same proposal can even receive contradictory evaluations. A clear identification of the shortcomings and more specific comments (as those provided in other instruments) would add more value to the evaluation and would allow participants to really improve their proposals. Lastly, although the evaluation seems to be faster than in the case of Horizon 2020, which is a positive aspect, there is still room for speeding up time-to-grant. Regarding calls of the European Research Council, for candidates who pass step 1, a feedback (even light) from the first assessments would be welcome, since this would allow a more in-depth preparation on the key points for the interview.

Our French partners (ENPC and PSL) would like to welcome the more active role that the network of NCPs (National Contact Points) is having, with the organisation of useful meetings and events. This is a strengthening action that our French partners would like to highlight, to be continued to make European funds more visible and accessible to target audiences.

4.1.2 Project management: the annotated model grant agreement, personnel costs, third parties, lump sum

Regarding project management, EELISA partners would like to highlight three aspects that raised uncertainties.

Personnel costs

The new daily rate approach generated contradictory opinions and situations for EELISA partners. Whereas some partners consider that the 215-day-a-year rule is a welcome simplification, the new approach did not mean any simplification for some partners but had the opposite effect. Some EELISA partners consider it a rigid scheme that does not allow for the calculations to be adapted to the specificities of each country or entity. For instance, at PSL there is a big variety of employees, which means that some of them are working less than 215 days. In this context, a more flexible scheme providing options like under H2020 —fixed number of hours, 1720 h; individual annual productive hours; and standard annual productive hours— might be a more appropriate solution.

In H2020 it was possible to use the last closed full financial year calculation method, so that an employee would only have one single rate for each year regardless of the number of actions in which he/she participated during that year. In Horizon Europe we must use actual personnel costs for the months within a reporting period. With this new methodology, one single person could have as many different rates as projects in which he/she participates.

Third parties

The regulation, names and classification of third parties (other than beneficiaries) participating in projects or providing resources to projects have changed, although the actual situations and scenarios remain the same, from H2020 to Horizon Europe as they were regulated in detail in Articles 11, 12 and 14 of the H2020 GA. **The deregulation in Horizon Europe leads to legal uncertainties and insecurities,** in particular regarding the notion of "seconded persons", which does not adequately cover all possible situations and raises doubts about the eligibility of costs related to collaboration (equipment, travel, consumables, other costs incurred by third parties). A detailed description in article 4.3 of the Consortium Agreement - DESCA template would be recommended for a perfectly clear situation for all parties.

The lump sum approach

Whereas the lump sum approach looked like an important simplification at first sight, its actual implementation posed several problems to EELISA partners, very much in line with the problems pinpointed by CESAER⁸:Firstly, given that the financial payments of the reporting periods depend on the completion of the work packages, this approach requires applying a different form of organization of the WPs during the setting up of the project in order to guarantee an optimal financial management. The associated risk is that the setting up of the project is done more in a financial logic rather than a scientific logic. Moreover, because of this reason, the design of the project is more time-consuming during the proposal preparation phase.

⁸ https://www.cesaer.org/content/5-operations/2023/20230222-horizon-consultation-package/20230222-addendum-note-to-cesaer-contribution-to-public-consultation-on-the-past-present-and-future-of-the-european-research--innovation-framework-programmes-2014-2027.pdf



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The new approach has also created uncertainties regarding several aspects: audit expectations, need of submitting an amendment (or not) for transferring activities or budget. It would be advisable to further develop these aspects in the AGA in order to make the lump sum costs a truly simplified modality.

Lastly, EELISA partners would like to express their agreement with CESAER statements on the lump sum approach: it did not lead to any simplification in entities with multiple participation in different cost modalities. This is UPM's, FAU's or ENPC's case, since the same internal controls and procedures have to be followed both in the lump sum and real costs modalities. As CESAER indicates, "while some EU-funded projects do not request the reporting of timesheets, many beneficiaries still need to maintain these according to their usual practices and for reasons other legal and financial obligations, such as related to auditing and/or 'double funding' questions".

5 Final remarks

EELISA partners would like to highlight again the importance of the EU R&I programmes for the internationalization and funding of their research activities. EELISA partners agree on welcoming all the simplification efforts made by the European Commission, the administrative burden being one of the major deterrents for researchers when approaching EU funding. Any simplification measure, however, must be taken carefully and be well thought of before widening its use, in order to avoid non-desired effects. To conclude, EELISA partners want to express again their appreciation of EU projects, including the opportunity offered by EELISA and EELISA InnoCORE themselves, as tools facilitating the creation of spaces for learning, improving and building the future of Europe.

This paper is undersigned by the nine partners of EELISA InnoCORE project.

