

Position Paper *Horizon Europe and Beyond*

By Universities of the Netherlands (UNL), Netherlands Federation of University Medical Centres (NFU) & The Royal Netherlands Academy of Arts and Sciences (KNAW) –
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Introduction

Research and innovation are the backbone of European global competitiveness and key to achieving the European Union's long-term ambitions to tackle complex societal challenges. With Horizon Europe the EU has demonstrated a significant commitment to all innovative research within its borders and beyond. Dutch universities, university medical centres (umc's) and the Royal Netherlands Academy of Arts and Sciences (KNAW) strongly support the European research programmes and take active part in the international community of researchers they sustain. This international scientific cooperation has allowed for strong ties between different countries and cultures and created a community of values around the pursuit of knowledge and common ideals. The Research and Innovation Framework Programmes have been instrumental in funding ground-breaking research in fields such as health, climate, and digitalisation. Although significant progress has already been made in the past decades, there is still room to further optimize the current Horizon Europe programme and align strategic priorities to tackle the great challenges of our time. The signatories look forward to contributing to the future Research and Innovation Framework Programmes, to ensure they have a lasting impact on European citizens everywhere. To this end, we offer five main recommendations for the future, along with a number of suggestions to improve the current programme.

1. Invest in research and innovation as a strong strategic priority for Europe as a whole

Horizon Europe, more than any of its predecessors, embodies the ambition to mobilise research and innovation partners to attain geopolitical, economic and societal goals. According to the European Commission, "it tackles climate change, helps to achieve the UN's Sustainable Development Goals and boosts the EU's competitiveness and growth".¹ If the EU wants to deliver on these goals and its wider ambitions, research and innovation need to be at the forefront of its geopolitical strategy in all policy areas. Climate policy cannot be executed without investing in environmental research and new innovative solutions are indispensable in policies as diverse as agriculture, development aid, protecting our cyberspace and safeguarding the rule of law. We call on both the EU and its member states to give research and innovation top priority and make sure they are fully embedded in policies across the board.

Making research and innovation a stronger priority requires a more ambitious, stable and reliable research and innovation budget. Around us, global competitors are prioritising R&I to retain or increase competitiveness, strategic autonomy and technological superiority. China has now surpassed the EU in their R&I expenditure relative to its GDP.² With the CHIPS and Science Act, the United States passed legislation that directs \$170 billion to scientific research, innovation and space exploration, thereby recognising the essential role scientific advancement plays in maintaining a global leadership role and solving global challenges. Europe cannot stay behind. We call on both the Commission and national governments to give research and innovation top priority and commit to the necessary investments. Concretely, national governments should work towards the Lisbon target, investing at least 3% of their GDP on research and innovation. The EU on their part should consider

¹ Source: https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en

² Source: <https://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS?locations=EU-US-CN>

structurally strengthening the seven-year budget for the framework programme to at least €120 billion, in accordance with the recommendations set forth in the Lamy report.³ Additionally, the annual uncertainty on available budget and its risk of being re-allocated to other programmes during the course of the programme period are also not conducive in reaching the EU's policy goals and should be avoided as much as possible.

2. Maintain excellence and impact as a key principle throughout the whole spectrum of research and innovation

Horizon Europe should remain dedicated to supporting excellent and impactful science as a key principle. Excellence has rightly been securely anchored in the Horizon programme and has ensured that funded research rivalled the state-of-the-art in its field. Programmes such as the European Research Council (ERC) should be strengthened further to ensure that the EU generates enough frontier knowledge. However, it is also essential that generated knowledge finds a way to European citizens. Funding the entire spectrum from fundamental research to applied innovation in a sophisticated way is one of the core strengths of Horizon Europe. This could especially be further improved by allowing fundamental research to play a larger role in Horizon Europe's Pillar 2. Currently, Pillar 2 calls are often too broad, too industry-oriented or aiming for very high impact levels, leaving little room for fundamental research. For university medical centres especially, there need to be enough opportunities within Cluster 1 (Health) to translate fundamental research into clinical research and apply findings inside and outside the clinical environment. Our Dutch universities, university medical centres and research institutes are more than willing to play an important role in maintaining the balance between fundamental and applied research: they already deliver a solid knowledge base for fundamental and innovation-oriented programmes and invest in ecosystems that boost innovation and stimulate entrepreneurship.

3. Unlock Europe's rich and diverse potential

The challenges that Europe is facing are multifaceted, highly complex and require cooperation between disciplines. Horizon Europe should therefore foster inter- and multidisciplinary approaches more than ever before. The signatories believe that excellent researchers from all disciplines should participate in Horizon Europe calls. The programme has already made significant progress in including Social Sciences and Humanities (SSH) in its call topics, but they have not always been included in practice. To ensure all the facets of today's societal challenges are tackled adequately, we encourage the Commission to continue the integration of the SSH-domain in Horizon Europe call topics.

The signatories also believe all member states should actively participate in the European Research Area agenda and therefore support widening participation and spreading excellence activities. However, genuine and sustainable change can only be achieved by concurrent investments and reforms at the national level.⁴ It is crucial that all member states simultaneously invest in their national research and innovation ecosystems to ensure widening measures have a lasting impact. Moreover, the potential of all member states can only be fully unlocked through synergies between Horizon Europe and regional, national or other EU policies and programmes. We encourage the EU to further align the Framework Programme for Research and Innovation with its Structural and Investment Funds, Erasmus Programme, and national funding programmes. Alignment should be visible in policy priorities as well as funding structures and implementation modalities.⁵

4. Prioritise well-functioning instruments and completing the European Research Area

The current framework programme funds a multitude of scientific endeavours, some more successful than others. Instruments such as the European Research Council (ERC) have more than proven their worth, allowing researchers to pursue new and innovative ideas across the continent. The EU missions have so far not been

³ Source: <https://op.europa.eu/en/publication-detail/-/publication/ffbe0115-6cfc-11e7-b2f2-01aa75ed71a1/language-en>

⁴ Source: https://www.eca.europa.eu/Lists/ECADocuments/SR22_15/SR_Horizon_2020_Widening_EN.pdf

⁵ See also: <https://eua.eu/resources/publications/918:building-synergies-between-education,-research-and-innovation-by-aligning-the-eu-funding-programmes.html>

as successful. They were set up to bring concrete solutions to our biggest challenges, but realising those ambitions with the necessary resources scattered across wide-ranging projects and themes will be difficult. Research and innovation need a long time to truly showcase all their benefits for society and deepen their impact. We therefore advise the Commission to prioritise dedicating resources to strengthening well-functioning instruments over designing new ones.

In choosing priority areas, the Commission should make sure Horizon Europe and its successor programmes are deployed as tools to complete the European Research Area: a borderless internal market for research, innovation and technology. Instruments should contribute to the ERA Policy Agenda in areas such as Open Science, Reforming Research Assessment, promoting gender equality and protecting academic freedom.

5. Streamline and simplify process and procedures

The enormous challenges Europe is facing require policies and programmes that are transparent, efficient and effective. Applying for Horizon Europe funding should be an easy, clear and smooth process. Not a single brilliant proposal should be wasted because the applicant could not navigate the application procedure. With each framework programme, the Commission takes strides in streamlining procedures, but due to changes and additions, the job of simplification is never complete. Especially with regard to the European partnerships, there is still a lot of uncertainty surrounding each partnership's differing regulations. The Commission should therefore take action by establishing a clear and uniform governance. In general, the conditions for the application should be as comprehensive as possible, so researchers know how they will be evaluated and are not deterred by broad or complex criteria. We call on the Commission to include stakeholders not only on the policy level, but also on implementation level by directly contacting the participants, introducing the user panel, thereby allowing open feedback to improve the programme as well as the synergies with other relevant programmes.

In the coming months of evaluation, reflection, and looking ahead, Dutch universities, university medical centres and research institutes warmly invite the Commission to engage in a discussion on our five recommendations to make sure Horizon Europe's impact will continue to grow.

Annex (UNL)

Based on their experience with the Horizon Europe, Dutch universities have additionally formulated a number of suggestions to further improve transparency, user-friendliness and accessibility.

Association

It is time for the Commission to move ahead with the association of the United Kingdom and Switzerland. The European research sector benefits greatly from collaboration with likeminded countries, yet agreements with two important partners, the United Kingdom and Switzerland, still seem a distant reality. The uncertainty surrounding cooperation with organisations in either country has caused significant scientific damage, with consortia falling apart or collaborations falling through. It is time for the EU to listen to the European research community and 'stick to science'.⁶

Harmonisation

For Horizon Europe to be effective, instruments should correspond to the national research infrastructure systems. A prime example for Dutch universities are the MSCA-Doctoral Networks. Currently, participants only receive three years of funding, while a standard doctoral programme lasts four years. It would be incredibly helpful if the MSCA-Doctoral Networks could switch to four year funding of PhD students to cover the full length of a standard doctoral programme. In a more general sense, it is important to tailor instruments to fit their purpose. The lump sum grant model, for example, is not a 'one size fits all': while lump sum funding works well with smaller projects it is no suitable for bigger projects with multiple stakeholders and higher risks.

Proposals

Researchers would greatly benefit from practical advice on the parts of their applications that are further removed from their core activity: research. In terms of impact, dissemination, exploitation and communication of projects, researchers could use basic step-by-step instructions and practical workshops to improve their applications. There should also be a balance between the scientific and administrative part of proposals. It is important for applicants to report on aspects such as open science, ethics, and data management, but they should not overshadow the scientific core of the application.

Criteria

The weight of different (especially new) criteria should be clear to the researchers. For a transparent application procedure, the evaluation criteria need to be more clearly linked to the instructions in the proposal template and the additional criteria from the general annex to Horizon Europe, which are not mentioned in the evaluation criteria themselves.

Evaluation

Transparency and consistency in evaluations is crucial for a robust process and for researchers to improve upon their proposals. Researchers deserve uniform and clear feedback to their proposals, from dedicated evaluators with the right expertise. Concretely, the Commission could improve its practices by integrating the principles of the Agreement on Reforming Research Assessment into its instruments and adding a rebuttal phase for ERC grants.

Timing

Calls should not be opened in the summer or have overlapping deadlines. Forming consortia over the summer is challenging and it is not logical to have calls close when the results of previous calls have not been published.

⁶ See also: <https://stick-to-science.eu/>

Infrastructure

The Funding & Tenders portal should be improved to make it more user friendly. Relatively simple changes, such as allowing for a change in order of partner beneficiaries or in the name of the project, can make a big difference. It should also be easier to save online forms and the system should clearly and early on indicate important deadlines and due dates.
