

VSNU
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Broadening EU's horizons

Position paper FP9



Introduction

The European project was conceived to bring peace and prosperity to its citizens after two world wars. In the last decades, it has been of great importance for all Europeans. The project has stimulated economic and societal cohesion and, in doing so, brought peace, security and economic prosperity for its inhabitants.

Recent political events and the economic and financial crises have made it crystal clear that the benefits coming from European cooperation cannot be taken for granted. Europe is facing societal, economic and political challenges that are as great as ever. With Europe on the brink of a new era, it is now time to decide on the future EU which we need to face these challenges.

The Association of universities in the Netherlands (VSNU) argues that the EU can maximise its added value for European citizens by focussing more resources in a concerted way on excellent research and innovation¹. Studies show that two-thirds of European economic growth is derived from R&I². Moreover, we need to develop new knowledge and use it to educate new talents in order to tackle the new challenges that our societies will face with regard to e.g. health care, digitalisation, security, climate and food.

Thus, Europe needs to lead the world in the development and dissemination of knowledge. And Europe needs the EU and a new, larger, Framework Programme in order to make this happen. Only a Europe-wide R&I programme will strengthen the position of the EU on the global scale by enhancing coherence and taking competition and cooperation to the next level.

With this bigger picture in mind, the VSNU expresses its position on the development of a new Framework Programme. A new Framework Programme which:

1. Focusses on excellence
2. Increases the impact of R&I, including through open science
3. Leaves ample room for fundamental research
4. Stimulates an interdisciplinary approach by fully integrating the Social Sciences and Humanities
5. Includes all regions and talents
6. Raises success rates
7. Comes with a bigger budget to match these bigger ambitions

¹ In line with the recent draft Council conclusions "From the Interim Evaluation of Horizon 2020 towards the ninth Framework Programme".

² See for instance the conclusions in the Ex-Post-Evaluation of FP7 by the High Level Expert Group.



1. Maintaining the focus on excellence

The strong focus on excellence, which is currently firmly embedded in the Horizon 2020 programme, needs to be maintained in all parts of FP9. Excellence should always be the main criterion for the evaluation of research programmes and projects.

The ERC, a prime example of the excellence principle, has already shown in abundance that focussing on excellence boosts the level of researchers and research projects. Moreover, it allows us to retain scientific talent and attracts top researchers to Europe, which strengthens Europe's position on a global scale, both in research and education.

Compromising on excellence would be detrimental to the added value and scientific, economic and societal impact of the European Framework Programme.

2. Increasing the impact of R&I, including through open science

In order to fulfill the promise that FP9 will tackle global societal and economical challenges, we need to find new ways to increase the impact of science. The VSNU agrees with the Lamy Group that more impact can be achieved through the stimulation of open science and by increasing the collaboration between business, societal organisations and academia. We strongly feel that the increased involvement of citizens will not only enhance impact, but will additionally help to boost confidence in both science and European collaboration. Moreover, a strong connection between research and education ensures that students benefit from the new insights of researchers and vice versa.

Therefore, we propose the following:

- Clarify the scope of the sought impact in calls for proposals. Key is to delineate and provide clarity as to the domains (thematic, e.g. tied to the Sustainable Development Goals), sought effects (scientific, economic, societal, cultural), and timeframe (short versus long term) of the desired impact.
- Find other ways to scale and measure impact, for example scientific impact and societal or marketability readiness (SRL or MRL). The current concept of TRLs is confusing as a measure for innovation where societal impact is concerned. Organising Policy Dialogues for topical policy and practice-oriented themes could also help in this regard.
- Let the European Innovation Council stimulate collaboration in the entire knowledge chain. Both for incremental and breakthrough innovation, strong links between higher education institutions, research institutes, governments, multinationals and small and medium-sized enterprises are pivotal.
- Introduce open follow-up funding calls. Creating opportunities for new consortia to build on the results of accomplished FP7/H2020 projects will increase the leverage of EU funding. In addition, it will facilitate the funding of projects at all TRL levels.
- Stimulate sharing and reusing data. Researchers should get acknowledged and/or rewarded for making their data accessible for others. Data should be as open as possible, as closed as necessary, and where appropriate in line with the FAIR Principles (Findable, Accessible, Interoperable and Re-usable). Funds should be available for data stewardship and curation of all data and research materials, with secure preservation for a reasonable period. During the course of the project, but



also after finishing the project. Data citation and data-sharing principles should be developed that are accepted and implemented at a European level.

- Work towards 100% open access of all research publications based on research funded by FP9.
- Formulate concrete priorities and responsibilities for 'open science'.
- Involve citizens in the definition of missions (as proposed by the Lamy Group) and their follow-up. The unique bottom-up way in which The Dutch National Research Agenda was formulated, could serve as an example.
- Stimulate strong connections between research, industry and education. Ensure that students learn from the results of cutting-edge research and that we develop talents that are capable to realize the impact Europe needs.

3. Leaving ample room for fundamental research

A new Framework Programme should leave ample room for research at the lower TRL levels. Fundamental research is the foundation and core of scientific breakthroughs in all disciplines, and the starting point of the economic and societal innovations that result from these breakthroughs.

Therefore, we propose the following:

- Increase investment in bottom-up projects at relatively low TRLs in order to secure and extend Europe's leadership in R&I.
- Improve the feedback loop in which outcomes of lower TRL-research enforce higher TRL-projects and vice versa. This will feed the (much-needed) dialogue between universities, industry, governments and the general public (quadruple helix).
- Stimulate the use of ERC-research results in calls in the other pillars and stimulate collaborative fundamental research that addresses the societal challenges.

4. Stimulating an interdisciplinary approach by fully integrating the Social Sciences and Humanities

The Social Sciences and Humanities have proven to be of great value to the Framework Programmes since FP6 and full integration is a "must" for FP9. An integrated approach across disciplines and sectors is needed if we are to create real impact and contribute to a healthy, inclusive, and secure society for future generations. SSH are key contributors to a genuinely increased interdisciplinary approach to tackling the societal and economical challenges Europe faces. Moreover, SSH can play a key role in getting the public more involved in research and innovation, and in ensuring technology uptake and adoption.

Therefore, we propose the following:

- Mainstream SSH into the programme's mission and ensure SSH researchers are involved in formulating the future societal challenges or missions. The Sustainable Development Goals (SDGs) can help in this process.
- Explicitly include SSH on the topic level of the call.
- Raise the level of SSH expert reviewers in all evaluation panels;
- Stimulate applicants to engage SSH researchers in setting up a consortium and writing a proposal from the beginning of the process.



5. Including all talents and regions

Leading the world in the development and dissemination of knowledge is only possible when Europe fully capitalises on all of its potential. The fact that a great number of EU Member States and regions are underrepresented in the current Horizon 2020 programme, shows that we need to invest in capacity building as a means of bridging the innovation gap. The European Union and its Member States cannot afford the current waste of talent if we want to lead the global competition in the long run.

Therefore, we propose the following:

- Make sure the Structural Funds are put to better use. Building a base of excellence - by developing both research infrastructure, investing in human capital and modernising HEIs and education - is primarily a responsibility of the Member States. The Structural Funds can and should be used for realising this objective. This could be achieved for example by paying more attention to building a base of excellence in smart specialisation strategies and by better involving universities and other research institutions in the development of these strategies.
- Optimise synergies between the EU R&I policy and other EU policies such as the Structural Funds. For example by allowing NCPs to identify Flagship Structure Funds-projects. The partners in these projects should be well facilitated in writing proposals for the Framework Programme.
- Ensure that the widening instruments within the new Framework Programme further promote excellence by forging stronger links and enforcing cooperation with pockets of excellence all over Europe.

6. Raising success rates

FP9 should introduce alternative ways to deal with oversubscription and to raise success rates. This, combined with further simplification, is key to preserving the interest of excellent researchers and research groups to participate in the programme. Tackling this challenge is tied to a structural improvement of the overall budget available for the programme (see more details further below), as well as improving the selection and evaluation procedures.

Therefore, we propose the following:

- Define and include the relative weight attached to the different evaluation criteria in the call for proposal.
- Optimise evaluation procedures. Feedback should be formulated more directly and specifically to facilitate a learning curve for applicants. In addition, it is important for applicants to understand the relative score of their proposal, e.g. by recognising that the proposal is in the top 10% or (far) below average. This provides an increased sense of transparency and contributes to enhanced practices of resubmission.
- Coordinate and potentially link EU and Member State calls:
 - Realise complementary and joint programming;
 - Coordinate the timing of EU and Member State calls;
 - Investigate the possibility that rejected excellent proposals get funded at Member State level.
- Introduce open calls with multiple collection dates for MCSA and FET.



- Introduce a FAQ section as part of the call for proposals. Allow applicants to publicly submit questions in the exploratory phase with answers made publicly available in a dedicated section in the Participant Portal. This will result into a transparent process during which the scope of the call is clearly delineated. This benefits all applicants and can decrease oversubscription. Such an approach could be tested by way of a pilot prior to implementation throughout the entire programme.
- Simplify further to increase user-friendliness and reduce bureaucracy for researchers. The participant portal and regulations with regard to contract management are specific points that need attention in this regard.

7. Increasing the budget

The EU should modernise its budget by concentrating more on spending in areas that focus on growth and societal cohesion. For this reason, and echoing the demands from the European Parliament and the Lamy-report, the VSNU calls for a substantial increase of the budget available for R&I in all headings of the Multiannual Financial Framework and the Framework Programme specifically, both as a minimum percentage of 15% of the total EU budget and in absolute figures of €120 Billion for FP9.

A significantly higher R&I budget serves more goals: not only the EC R&I programmes will profit from a higher funding leverage, but also the national programmes will profit, and as a consequence, the joint programmes.

When it comes to the financial instruments used in FP9, it is highly critical that grants stay available. While other financial instruments, such as revolving funds and loans, might be suitable for innovation projects close to the market, research grants are the only way to fund the investigative research which can lead to the most disruptive innovations of the future.