vsnu
vereniging van universiteiten
association of universities
THE NETHERLANDS

VSNU POSITION PAPER HORIZON 2020

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Introduction

The Dutch universities consider the European research programmes to be of great added European value and key to maintain a strong position within the global market. Its present aims and form show how much Horizon2020 has improved since previous Framework programmes. And we believe that we should hold on to this accomplishment when looking at the next Framework Programme.

In view of the importance for economical and societal development and the positive effects on our global competitiveness, we strongly advise the budget of the new programme should be increased compared to the present relative and absolute financial levels.

Excellence is necessary as a main principle for the advancement of science and its impact on society and economy. As a key principle, both at the national and the EU level, we believe scientific excellence should always be the main criterion for the selection and support of research projects and programmes. The excellence principle is currently firmly embedded in the Horizon 2020 programme, with the ERC as its prime example, and there is every reason to continue this in the current programme as well as in future programmes. Horizon2020 has a tremendous impact on the Dutch and European research and innovation agenda.

For the midterm evaluation we have made an overview of issues that need attention in Horizon2020. We also want to share our propositions for the next Framework Programme. These are both reflected in the position paper in annex.

We wish to highlight one concern for the coming years: the low success rates. Low success rates are not only an issue in Horizon 2020, but also in the Dutch funding programmes and other national programmes throughout Europe.

Change is needed, because the low success rates itself lead to less interest from talented researchers for the programme; they discourage participation. The application process and time to grant have been greatly improved but are still demanding for researchers, who most of the time come up empty-handed. The evaluation and selection process also discourages scientists to apply: many applications receive very high or top marks after evaluation but few are contracted. The application process therefore, in a way, seems like participating in the lottery and this can lead to frustration. Both the EU and the participating institutions need to step up their actions to improve the success rates, where possible in cooperation with national funding agencies.

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Annex

The way forward to a new Framework Programme.

The VSNU considers the interim evaluation of Horizon 2020 an important step towards the new Framework Programme (FP9). Both the accomplishments and the lessons learned, are vital ingredients for FP9. The findings of the High Level Expert Group (HLEG) that has prepared the ex-post evaluation of FP7[1] show the huge achievements of the previous programme. And our findings reflect the recommendations of the HLEG. Looking forward to a new Framework Programme, we find these notions essential:

1. The strong focus on excellence needs to be maintained, the ERC is o f crucial importance for this.
2. Widening participation should start with capacity building, fully based on the use of the structural funds (ESIF). A restructuring of the Widespread instruments should further promote excellence by enforcing stronger links and cooperation between pockets of excellence all over Europe.
3. Social Sciences and Humanities need to be integrated in the Programme and the funded projects.
4. Finding ways to raise success rates is a key condition to keep the interest of excellent researchers and research groups in participating in the Programme.
5. The budget for the new framework programme should increase, both as a percentage of the total EU budget and in absolute figures.

With these notions for FP9 it is of great importance that Horizon 2020 keeps its focus on the following objectives:

1. Strengthening the strong scientific and economic competitiveness of Europe in the world. The competitive nature of Horizon 2020, with excellence and societal and economic impact as core criteria, is of crucial importance.
2. Ensuring that all excellent research in Europe can take part in Horizon 2020 and in the new FP9.
3. Increasing and securing the budget.
4. Improving the success rate.
5. Improving the user friendliness and reducing bureaucracy.

These objectives are further elaborated in the following paragraphs.

[1] COMMITMENT and COHERENCE, essential ingredients for success in science and innovation. Brussels, November 2015.

1. Strengthening the strong scientific and economic competitiveness of Europe in the world. The competitive nature of Horizon 2020, with excellence and impact as core criteria, is of crucial importance.

1. *Collaborative research* should be considered more important in the components of the programme with low Technology Readiness Levels (TRLs). Specifically in the Grand Societal Challenges, collaborative research is under pressure, because of the stronger focus on innovation and applicability of scientific results. For instance, when targeting critical challenges and opportunities in the global context, collaborative research is essential.
2. Calls and projects in the Grand Societal Challenges lack focus on broader knowledge chains. The interaction between investigative research and mission oriented research should be encouraged. This would enhance the impact the excellent research will have.
3. Horizon 2020 encompasses three pillars: 1. Excellent Science, 2. Industrial leadership and 3. Grand Societal Challenges. Bridges between these pillars are missing. This is in agreement with the recommendation of the HLEG for more integration.
4. More focus on the cross-over between the Grand Societal Challenges is needed.
5. The funding of the European Research Council (ERC) is vital for Dutch and European leadership in world class research. The ERC grants support the investigative research that is the foundation for radical innovations society needs.
6. Excellent research has great impact in many different forms on the economy and society. Sometimes it is achieved only after a long period of time. It is essential to recognize and appreciate the importance of all different forms of impact on both short and long term.

2. Ensuring that all excellent research in Europe can take part in Horizon 2020 and in the new Framework Programme.

We believe in a European Research Area in which all 28 Member States participate actively. Widening participation to countries that put effort in strengthening their own science and innovation systems, is needed to contribute to a true European Research Area. Widening the base of excellence within the EU is necessary to participate in the global competition in the long run. Building research capacity as a precondition for widening participation, is primarily a responsibility for the Member States. It is for this reason that the structural funds should be put to better use. Starting from the key principle of excellence as main criterion for the selection and support of research projects under the Framework Programme, we need to find ways to connect more excellent researchers to excellent research projects. It is our European responsibility to work together, continuously widening the base of excellence, validated by international peer review for the selection and support of excellent projects and programmes.

A large part of the EU member states is not sufficiently represented in the participation in Horizon 2020. This underrepresentation is a directly linked to the relative spending levels of member states as percentage of their GNP. The current Widespread instruments of Horizon 2020 (ERA chairs, Teaming, Twinning and policy support) do not yet achieve the mobilisation of the scientific and financial potential of the regions and partners concerned. The use of these instruments in the Netherlands is limited as well, despite the great interest and efforts up to now. Here we see a concrete example for the need for an alignment of research and innovation instruments.

1. Excellence should always be the criterion for participation in Horizon2020 and FP9.
2. The widening instruments should be reformed to have an optimal effect. The instrument should provide more inclusiveness.
3. The solution is not to provide more budget for the instruments as such. The Widespread instruments should focus more on policy support: assistance with joining networks and acquiring knowledge and skills for application.
4. Capacity building of research infrastructure and human capital should be funded by ESIF.
5. ESIF funds could be used more effectively to generate better targeted research and innovation (as a condition for economic growth). ESIF should therefore have targets for investments in R&D (e.g. 25% the funds available).
6. Horizon 2020 funds are an addition to national funding, and not a replacement for lack of funding or budget cuts.

Balancing research and innovation with different TRLs
Currently Horizon 2020 focuses too much on TRL as an indicator for impact. TRLs are not sufficient to indicate impact for all different projects and programmes or to indicate effects for the longer term.

1. The valorisation of projects with TRL 1-3 will not follow through when it is not part of *collaborative research*.
2. The societal and economic impact of valorisation of results in Pillar 1 are extremely limited if there is no link with Pillars 2 and/or 3.

Mainstreaming Social Sciences and Humanities (SSH)
Mainstreaming SSH in Horizon 2020 is important. SSH should therefore be part of the evaluation of applications. It is also important that SSH remains a primary focus point for each Grand Societal Challenge. Recent events in Europe and the world show that this kind of research is not only greatly appreciated, but also needed.
International Cooperation (outside EU)
Horizon 2020 should focus more on current and developing scientific hotspots around the world.

1. Horizon 2020 should be selective towards participation of developing countries. Cooperation should also be linked to the collective expansion of knowledge for the Sustainable Development Goals of the UN.
2. Collaboration with highly industrialised countries should be increased.
3. Sufficient funding in the partnering countries needs to be secured, to avoid putting the burden of financing on partner research organisations. Bilateral treaties or cooperation agreements between the EU and non-EU countries should explicitly deal with the funding arrangements.

3. Raising and securing the budget.
Research and innovation are essential to maintain the European economic competitiveness in the world. To keep the level of excellence and impact of research in Europe, the budget for FP9 should be higher than Horizon 2020, both in absolute figures and relatively in the Multiannual Financial Framework. In addition, a clear and fixed financial framework is essential for improving scientific collaboration. Interventions in the budget during the duration of the Programme should be prevented. New financial instruments (revolving funds, loans) are of no or very little value to investigative research, because the outcomes of

investigative research are rarely marketable. Public support is indispensable and science needs to be brought closer to the public. The Dutch lessons in formulating a National Science Agenda with concrete input from the public[2], could serve as an example.

Horizon 2020 should look for synergy with other EU-Programmes, for example in complementarity with ESIF. This does not mean, however, that the Programmes should be interconnected, since this could stand in the way of the competitive nature of Horizon 2020.

It is important that the new Framework program starting in 2020 continues to stimulate collaboration, even if the timeframe of the collaboration exceeds the duration of the Programme.

1. New instruments should be evaluated for their purpose and necessity according to the *innovation principle.*
2. New instruments should be accompanied by new budget or replace an existing instrument.
3. Loans are not suitable for funding scientific research at universities.

4. Improving the success rate.

The success rate for applications is unacceptably low. This needs to change, because the application process and time to grant takes too long and demands a lot of time and effort from the researchers, who most of the time come up empty-handed. It also discourages scientists to apply: because of the high scores of a lot of applications that do not make the cut, handing in a proposal seems like participating in a lottery. Both the EU and the participating institutions are responsible for improving the success rates, if possible in cooperation with national funding agencies.
Applying more Strict evaluation criteria could reduce the amount of applications. And more use of well-designed two-stage evaluations would help lowering the burden for both applicants and evaluators.
Open Access of the resulting research publications needs to be a prerequisite.

The Review procedure (including applicable criteria) should be more transparent for researchers. Liaison officers within the organisation can play a key role here, including offering coaching during the preparation of proposals.
Time to grant and feedback on the proposals has been shortened, but could still do with further improvement. A quick signalling of a 'no', to start with, would already be helpful.

5. Improving the user friendliness and reducing bureaucracy.

With H2020, major steps were taken to reduce bureaucracy. However, users remark that still further progress in this regard can be made. The Programme must aim its regulatory framework more towards user friendliness.

1. Simplification seems to work out mostly in favour of the Commission and not necessarily of the researchers/users.
2. For eligibility of internal invoicing, national accounting principles should apply.

[2] 11.700 research questions were put forward by the Dutch public, when asked for their ideas for the science agenda.

3. National regulations should be the starting points for ethical issues regarding projects under Horizon 2020. Certification on this basis could help to reduce the administrative burden for research organisations.

Participant portal

The participant portal for H2020 has significantly improved, but could do with further improvements.

1. The system is much too complex for users/researchers who are not dealing with the system on a regular basis or indeed have time to get accustomed to the system.
2. The system should stimulate quick contact and interactions with executive agencies.
3. A better search engine needs to be part of the system.

Submitting project proposals

1. Better coordination for deadlines regarding EU calls and national calls is highly desirable. This would also benefit the success of proposals.
2. Diversity policy as a criterion for proposals needs to be continued.
3. Research organisations themselves need to take better account of the time needed for contract preparation after a proposal has passed the threshold.

Contract management

Which regulations apply for subcontracting within projects is often unclear. Obligations to tender pose a serious delay in getting the work done. All of this brings extra time and costs. It is desirable to have a shorter procedure available for research projects.

Assigning costs

High quality research infrastructure is essential to carry out excellent research. A better incentive to invest in infrastructure is needed to support excellent research.

1. The maximisation of 25% indirect costs is not sufficient. It should be possible to declare the costs of the use of research facilities in a realistic way.
2. EU financing of projects for salaries should also be based on the current national norms.