

Consultation on Horizon 2020 and Horizon Europe evaluation and Strategic Plan 2025-27

Position paper of the Swiss National Science Foundation (SNSF)

1 Introduction

The SNSF emphasizes the importance of the European Framework Programmes for Research and Innovation for the research community. It is a unique way for researchers and innovators to compete with their ideas and knowledge thereby driving scientific advances. The programmes also provide added value by tackling societal challenges that concern countries in and outside of Europe.

The SNSF values the opportunity to provide feedback to the evaluation of the European Framework Programmes for Research and Innovation and the next strategic plan.

2 Key messages

Structure: The clear structure of both programmes serves scientific communities well.

Implementation: The high administrative burden requires further thought and action. There is room for higher transparency in communication and elaboration of work programmes.

International cooperation: The shift towards scientific protectionism creates tension with efforts on open science and a globally open approach. The benefits of cooperation need to be carefully considered.

Balanced approach: Horizon Europe should ensure more opportunities for fundamental research and trust that such research will deliver a substantial impact in the long run. More dedicated funding opportunities should also be ensured for Social Sciences and the Humanities. Their contribution is essential for societal challenges.

Open Science: Large advances have been made in Open Access to scholarly publications, Open Data, in Research Assessment and providing research infrastructures. Next steps are needed to establish Open Science for the benefit of researchers and the competitiveness of the European research system alike.

Gender equality: The introduction of mandatory Gender Equality Plans is important because it pushes policy developments in national research systems.

Research Careers: For its competitiveness, Europe needs to remain attractive for scientific talent. To support this, mobility (e.g. pension funds, intersectoral) needs to be further enabled and better career pathways created.

3 Horizon 2020

3.1 Structure of the programme and its instruments

Improved structure: Structural clarity increased from the previous programme (FP7). The three pillars (Excellent science. Industrial leadership. Societal challenges) provided a clear framework.

Complementarity to pillars: The horizontal program parts complemented the pillars well. In particular, spreading excellence and widening participation, was an important element.

European research Council: In Horizon 2020, the European Science Council (ERC) established itself as institution and driver for excellence in scientific research. It is a very important institution of the framework programmes. Stability in its funding instruments is an asset.

3.2 International cooperation

Global openness: This programme improved the possibilities for cooperation also with non-associated countries greatly in comparison to its predecessor. Being open to the world was explored in the pillars on

societal challenges, but also in excellent science. Synergies for instance with the Belmont Forum were enabled. This was a valuable attribute.

Cooperation as multiplier: The support to science and innovation was based on the principle of circulating knowledge, people and ideas. This open and cooperative approach is important for science.

3.3 Open science

Open Access (OA): The European push for OA was instrumental in fostering the widespread transition to Open Access. Horizon 2020 did this by establishing clear requirements for Open Access to scholarly publications, in line with best practices at the time of introduction.

Research Assessment: Endorsement of DORA (San Francisco Declaration on Research Assessment) led to important and valuable policy developments at national level (e.g. evaluation policy and practices at SNSF). Yet, a change of evaluation practices in line with the DORA principles was not fully achieved during Horizon 2020.

3.4 Balancing approaches

Introducing impact as driver: With Horizon 2020, the framework programmes started to orient research and innovation activities towards targeted societal aims. For basic research, impact is not always foreseeable. Less focus should be put on achieving immediate impact.

4 Horizon Europe

4.1 Structure of the programme and its instruments

Evolution not revolution: The continuation in structure with the three pillars and horizontal actions provided the research and innovation community with a stable framework, which is positive.

4.2 Implementation

Transparency in call elaboration: In the elaboration of calls for collaborative projects, lobbying groups of companies, industries or other are very successful in dictating the agenda. This can lead to a suboptimal outcome in the sense that the final exploitation goes in the wrong direction.

Communication of Work Programmes: The process of communicating the contents of work programmes is not transparent for external participants. Communicating to all stakeholders early and transparently is necessary.

High administrative burden: In comparison to national funding programmes, which can have a discouraging effect on researchers to submit proposals.

4.3 Balancing approaches

Strong focus on impact: The focus on achieving societal and economic impact was reinforced in Horizon Europe. The focus should be on scientific performance rather than on economic performance. Lowering investments in basic science (that) poses the risk of that the “next big thing” is missed. The impact of basic research has an element of unpredictability. Therefore, there is a need for enough room for bottom-up ideas in pillar 2 (no pre-set topics).

Support Social Sciences and Humanities (SSH): The integration of SSH in pillar two needs to be reinforced and funding provided for these disciplines. Providing support to the research communities so they can better advocate for their topics (e.g. elaboration of work programmes), could improve this.

4.4 International cooperation

Focus on competitiveness: In Horizon Europe, competing with other scientific regions is at the centre, rather than cooperating. Third country participation in bottom-up funding opportunities is restricted. This is a lost opportunity for scientific progress.

Negative effects for Horizon Europe of Switzerland's non-association: Expertise and leadership skills cannot be contributed in the best way, which results in the loss of networks. Establishing alternatives requires time. Problems in communication and misinformation have an impact on how consortia are built. There is also a heterogeneity in how to cooperate with a non-associated participant (practical decisions are delegated to coordinators).

International synergies: The focus on strengthening synergies among different parts of the framework programmes and other European programmes comes at the expense of international openness (e.g. Belmont Forum cooperation).

4.5 Open science

Necessary next steps: Horizon Europe established requirements for Open Research Data and revised its Open Access requirements, in line with internationally recognized principles, e.g. those of cOAlition S. This is crucial to establish Open Science as a cornerstone of best scientific practice.

Incentives as drivers: Open Science is deeply intertwined with the incentive and rewards system of research. Horizon Europe expanding its requirements into Open Data is a positive development towards normalizing and valuing open research practices. The recently established Coalition for Advancing Research Assessment (CoARA) is playing an important role in enabling and establishing OS, for the benefit of researchers and the competitiveness of the European research system alike. Active engagement of the EC and ERC as CoARA signatories are crucial to its momentum and success.

Infrastructure: Open Science depends on sustainable infrastructure. Open Research Europe for Open Access and the European Open Science Cloud as a broader data infrastructure are valuable services. They also inform and structure service implementation in Switzerland.

4.6 Gender equality

Gender equality plans: The introduction of compulsory gender equality plans is an important development. It has a signalling effect and pushes national research systems to develop and refine their policies. Monitoring should focus not only on bare numbers but should also take into account incentive systems and other measures taken.

4.7 Research Careers

Supporting talent circulation: By reducing regulatory hurdles (e.g. pension funds) mobility of researchers can be supported. Intersectoral mobility needs to be facilitated.

Offering attractive opportunities: Diversifying and modernising positions and career pathways in the academic domain can counter brain-drain toward industry.

Reform research assessment: Collaboratively as engaged members of the Coalition on Reforming Research Assessment.

5 Strategic plan 2025-27

Open strategic autonomy: The concept is in tension with efforts on open science and a global approach. The implications and how it is implemented needs further clarification.

Social Sciences and Humanities need to be integrated more visibly and explicitly. Contributions from these research areas are essential for all societal challenges. Currently, there is a lack of funding opportunities within the framework programmes for SSH.

Global interconnectedness: Topics surrounding entanglement (e.g. mobility, cooperation across borders) need to be strengthened.

Multilateral cooperation landscape: Streamlining of European partnerships was a constructive development that simplified the landscape and approaches greatly. However, there is a number of other multilateral initiatives that exist outside of the partnerships (e.g. Quant-ERA, Green Era Hubs, ERA-Nets under Horizon 2020 that continue to launch calls with new funding). They should find their place in a consolidated partnership landscape. The interface with the missions also needs to be clarified.