

Position Paper

Funding Europe's Future

ZVEI proposals for a future European research and innovation policy



January 2018

Core Messages:

- 1. Take innovation as the major key objective in EU policies - Create a coherent EU R&I policy framework**
- 2. Foster industry participation - Respect special needs of businesses**
- 3. Keep the global perspective in mind**
- 4. Keep simplifying measures and instruments**

Motivation:

Europe's future prosperity will be heavily dependent on the success of the transition to a digital knowledge based economy and society. To make this transition successful, a sustainable, effective and ambitious research and innovation policy is needed which has to be put front and centre to all policy actions in order to extend Europe's strength as leading global actor for research, technology and the creation of new businesses.

The next European Framework Programme 9 (FP9), starting 2021 and lasting for seven years, will be a key asset to achieve these objectives. In FP9, Europe needs to work much faster and more effectively to augment the creation and diffusion of innovation which is also one of the main findings of the Lamy report (p.7): "When looking ahead to the future of Europe in a globalising world, the contrast is striking between Europe's comparative advantage in producing knowledge and its comparative disadvantage in turning that knowledge into innovation and growth".

ZVEI Suggestions for a post 2020 European R&I Programme:

- 1. Take innovation as the major key objective in EU policies - Create a coherent EU R&I policy framework**

- Double the budget: aiming for the 3% target**

Research and innovation are the base for Europe's economic competitiveness and growth. It is essential that the EU and its Member States seriously try to reach the 3% target of overall EU GDP invested in R&I. To reinforce this goal the budget of the post 2020 EU research and innovation programme should significantly be raised, and ideally doubled (most desirably by shifting budget within the MFF) compared to the H2020 budget. To maintain the current R&I investment of 2% only is not a satisfying option for the next decade, considering the strong necessity for further digitalisation and in times of accelerated competition with Asia and the US.

- Keep the excellence principle**

The excellence principle has proven its worth leading H2020 to be a globally renowned research programme of highest ambition, quality and impact. It should be kept without any geographical or cohesion criteria.

- Keep the three-pillar structure**

The current framework programme with its three-pillar structure - Excellent Science, Industrial Leadership, Societal Challenges - has proven to be well functioning and is widely accepted among all stakeholders. Nevertheless it is essential to strengthen the industry pillar and to focus on technical innovation to foster EU-industries' competitiveness and hence create more jobs.

- **Focus on impact**

A focus on impact is welcomed. Existing good practices in public-private partnerships should be used as benchmark (e.g. each JTI has specific measurable objectives and key performance indicators (KPIs) allowing for monitoring and evaluation).

- **Focus on civil R&I**

FP9 should - as its predecessors - focus on civil R&I. EU defence research will likely be a fundamental step towards the EU defence union. Nevertheless, it is important that defence research will be funded separately without any negative financial impact on the civil R&I funding in order to keep FP9 indiscriminately open to all applicants in all topics.

- **Think long-term: Key Enabling Technologies (KETs)**

It is also essential that research on KETs is strengthened since KETs will again provide the basis for mission driven technical innovation. The planned FP9 consultation will help identifying the required new KETs (like e.g. Artificial Intelligence, Blockchain, distributed energy systems, quantum technologies). Significant investments are needed to maintain or gain European competitiveness in such technologies. This being said, there is also need for systemic innovation to transform whole systems through an interdisciplinary approach because a mission driven research objective (like e. g. CO₂ neutral cities) will require interdisciplinary cooperation between many different fields of technology and stakeholders.

- **Strengthen public-private-partnerships (PPPs)**

PPPs (cPPPs and JTIs) have proven to be very successful instruments and should be kept. They provide a unique opportunity for speeding up innovation through tight integration of start-ups, SMEs, LEs, and RTOs in their respective domains. All parties involved should strive to grasp the potential benefits even better in the future.

- **Leverage synergies of FP9 and the European Structural and Investment Funds**

There is a need for a comprehensive innovation policy framework in Europe where relevant policy areas are streamlined with each other. In accordance with the findings of the Lamy report, funding of FP9 and European Structural and Investment Funds (ESIF) has to be streamlined to ensure complementarity and interoperability and leverage synergies. The ESIF successor should focus with a major share of its budget on funding R&I and digital infrastructures (such as universities, research centres, incubators, science parks, testbeds, broadband, 5G, etc.) to create an ecosystem that helps to achieve the objectives of the new FP9.

- **Design the European Innovation Council (EIC) to foster innovation**

The EIC could be an additional valuable player in the EU innovation landscape, if structure, competence and objectives are well defined and complementary to the European Research Council. From an industry perspective, it is of utmost importance that the members of the EIC truly represent the driving forces of innovation across all industrial sectors. They should not be limited to academia and start-up entrepreneurs. In order to maintain - and even increase - industry participation, EIC should not be directing industry research agendas in a top-down manner but instead act as a powerhouse of excellence leaving industrial research the freedom to innovate while pushing for projects of high risk and impact. To most effectively do so the EIC should act as a high-level adviser to the commission on innovation policy most importantly on the design of instruments like funding, large scale projects or innovative procurement and regarding how to strengthen the engagement of science and industry to better turn knowledge into business.

- **Promote disruptive and incremental innovations**

Both disruptive and incremental innovations are needed. While it does make sense to address disruptive innovation in a more coherent and ambitious way, EU public R&I-funding policy should also keep the focus to a major part on incremental innovations, since

these are key to European enterprises' global success especially regarding SMEs. To foster disruptive innovation one might consider some kind of "ARPA-EU" instrument modelled after US DARPA/ARPA-E programmes barring their respective topical restrictions i.e. "to make pivotal investments in breakthrough technologies".

- **Generate a strategic focus: missions**

The focus on global challenges and "missions" could be attractive as it captures the objective of prioritising investments in areas with a clear EU added value and these missions present a "quasi" continuation of the Societal Challenges under H2020. Nevertheless, clarification is necessary and clear objectives of the "missions" have to be defined first: What should be understood as a mission and how should it be implemented in R&I programmes? Who decides what a mission is? What is the expected time horizon for deliverables? How to precisely measure and evaluate the success of these missions? ZVEI supports a more visionary and more strategic direction of FP9 but urgently calls on the European Commission and the European Parliament to involve all stakeholders to solve this lack of clarity.

2. Foster industry participation - respect special needs of businesses

- **Reinforce the LEIT pillar**

All three pillars need sufficient and well balanced funding. In our opinion the funding of the industrial pillar LEIT should be given more emphasis since this tackles Europe's weakness to turn knowledge into innovation (as stated in the Lamy report).

- **Raise success rates**

Oversubscription must be reduced. The success rate for proposals should rise to at least 20%, aiming to secure funding for about 30% of the high quality proposals to attract more enterprise participation, as recommended in the Lamy report. A stronger focus in the scoping of single calls and more two-stage evaluation procedures should be considered - assuming that there is a very selective stage one resulting in a higher success probability in stage two. Also, more industry engagement in the evaluation phase should be foreseen and the EU Commission should make much more use of remote consensus meetings, as this will increase the number of industry evaluators (and incidentally reduce the cost and environmental impact of travel).

- **Focus on cooperation and European added value**

The whole value network should be addressed, since academic partners, SMEs and large enterprises are most successful when they cooperate. The EU-added value of individual FP grants for SME's is highly questionable. In case there is a reasonable need for such a grant, responsibility should be left to the respective Member States where they are based or operating.

- **Keep well-functioning funding frameworks**

To maintain the achieved high level of collaboration, currently established financial incentives in the form of grants should remain in place for all actors of the value chain, including small and large companies, as should equal funding rates for all partners.

- **Be careful concerning open data**

We fully support open innovation. Open access to research data and other results should only apply on a voluntary basis, because it is of utmost importance to protect the partners' legitimate interests, especially when intellectual property is at stake. Therefore, it has to be ensured that enterprises have the option not to disclose data of sensitive nature (at least via an "opt-out" option). Furthermore it is important that an opt-out can be exercised anytime during a project, not only during the proposal phase. Proposals with an opt-out will be discriminated against by project evaluators, either consciously or unconsciously.

- **Be more flexible concerning IPR rules**

The affiliate clause should be abolished and IPR rules should be more flexible.

Non-EU affiliates of globally acting EU based companies should not be treated as third parties. Project results should be used by such affiliates without any further notification or request for allowance (“affiliate clause”).

- **Improve rules of joint ownership of intellectual property (IP)**

The default regime for joint ownership of IP should support unrestricted use by a co-owner and its affiliates of jointly owned IP, as well as the right to grant non-exclusive licenses to third parties without giving notice or paying compensation to the other joint owner. The request to give 45 days prior notice is a heavy and unnecessary burden on companies. Each co-owner should have the right to all benefits resulting from its (co-) owned work without permission of others to the extent legally possible.

- **Remove barriers to cooperation due to IP rules**

If a default regime includes barriers, partners try to avoid a real cooperation in order to avoid the creation of joint ownership. This attitude cannot be the intention of Horizon 2020 and therefore also not of future Framework Programmes; restrictions in IPR rules that hinder global exploitation of the participants’ joint project results have to be avoided.

3. Keep the global perspective in mind

- **Take global competition into account**

The EU should aim to create a global level playing field with regard to public support of private sector R&I. This includes further development and opening of state aid regimes to react on global developments. Instead of taking care for the inner-European competition only, DG Competition should take responsibility for Europe’s competitiveness and level playing field against non-European regions, too.

- **Aim for reciprocity in global cooperation**

ZVEI fully supports the idea to open up R&I programmes on an international level, i.e. beyond Europe’s member states. The basic principle for international cooperation should be reciprocity, when it comes to participation, funding, the protection of intellectual property, know-how and data transfer or exchange.

- **Keep the Important Projects of Common European Interest (IPCEI)**

The High Level Group on Key Enabling Technologies underlined Europe’s crucial need for strategic public funding instruments and state aid rules in light of rising global competition. The European treaties already offer a suitable instrument to account for such global imbalances in markets and competition: Important Project of Common European Interest - a multi-national state-aid instrument to facilitate public-private co-financing at strategic level. However, the communication of the European Commission giving guidance on IPCEIs will expire by the end of 2020. Thus, this communication needs to be renewed and could be revised by the Commission. In particular, global competition and the competitiveness of the EU Key Enabling Technologies should be much more emphasised as one of the most relevant aspects for the application of state aid rules and compliance with the internal market.

4. Keep simplifying measures and instruments

- **Simplify funding schemes**

There is a great need to make the next FP more efficient and user friendly. Therefore ZVEI supports the idea of simplifying the funding schemes, e.g. by reducing the number of different instruments (e.g. by combining similar instruments) or introducing a “one stop shop” for requests in case uncertainties arise. A trust based, more risk tolerant approach towards the beneficiaries must further lead to more simplification of the Horizon 2020 (and later FP9) modalities especially for the applicants.

- **Design calls appropriately**

There should be a mix of “top-down” calls (with thematic objectives) and “bottom-up” calls (open to any researcher and innovator who contributes to the pillars’ objectives). Nevertheless, the central criterion for granting projects must always be excellence.

- **Reduce bureaucracy**

To increase the overall economic efficiency, we strongly recommend additional simplification efforts in FP9, especially in terms of reducing the administrative burden. Suitable measures concern the reduction of the audit burden and the recognition of nationally accepted accounting practices. In particular, the accounting of internal costs for obtained services or products must be simplified.

- **Improve on the “Fast Track to Innovation” instrument (FTI)**

We welcome the introduction of the FTI in H2020. But the restriction to at most five partners in a consortium and the restricted budget hampers a wider uptake and hence success of FTI. Thus, this instrument should be opened to consortia with more partners. Furthermore, it should be checked (e.g. by the EIC) if elements of FTI (like the time to grant within six months) could be adopted for other instruments.



Funding Europe’s Future - ZVEI proposals for a future European research and innovation policy

German Electrical and Electronic
Manufacturers’ Association
Innovation Policy Department
Lyoner Strasse 9
60528 Frankfurt am Main, Germany

Contact: Cornelius Eich, ZVEI
Phone: +32 2 892-4622
Fax: +32 2 892-4629

Editor: Dr. Christian Kellermann-Langhagen, ZVEI

January 2018

www.zvei.org

An initiative of:

Vorstandsrbeitskreis Innovationspolitik

ABB

Endress+Hauser Management

Harting

Infineon Technologies

Kathrein-Werke

Mahle International

NXP Semiconductors Germany

Phoenix Contact

Robert Bosch

Sennheiser Electronic

Siemens



Content in this booklet is licensed under an Creative Commons attribution noncommercial, sharealike, 4.0 international.