

12 January 2017

## Interim evaluation of Horizon 2020 and future orientation for FP9

### Position of Estonia

#### Ministry of Education and Research

The opinion from Estonia is formulated as the result of a national consultation process and represents the views of stakeholders from universities, R&D institutions, the Estonian Research Council, enterprises and ministries.

#### Key recommendations:

1. It is important to continue supporting measures for widening participation and spreading excellence. This helps to create and maintain contacts with peers from across the EU and contribute to forming new thematically strong consortia or integrating partners into relevant existing collaboration networks. The list of eligible activities in the projects should be more flexible and allow the allocation of funds for conducting research.
2. In order to generate synergies between ESIF and Horizon 2020, it is necessary to implement similar simplification measures in SF programmes supporting RDI, especially with regards to state aid rules.
3. There is a need to increase the coherence and openness of the research and innovation partnerships (both PPP and P2P).
4. Radical steps are needed to better communicate the added value of the Framework Programme and involve citizens and politicians to the scientific discussions.
5. We feel that support (in the form of grants) for cooperation projects with a lower technology readiness level should be increased in order to create more possibilities for new discoveries and future cooperation with industries and not to impede the possibilities of university participation to the programme.

#### 1. Motivation and added value

Estonian organisations have been active participants across Horizon 2020 (H2020) instruments and pillars. Estonian researchers and innovators have received funding from H2020 for some of the most visible and well-known research projects.

The added value of H2020 for Estonian participants lies in **cooperation**. International and transnational cooperation has a major impact on increasing our researchers' excellence, visibility, impact and networking (incl. in sectors that have not been very strong academically). This creates pre-conditions for successful participation in other calls (and also contributes to decreasing the innovation divide). The Framework Programme is the main international cooperation instrument for Estonian researchers, not only with European countries but also with third countries. Moreover, the added value of H2020 lies in call topics that are often broader in scope than national funding programmes and, thus, offer more possibilities for applicants from different fields and promote inter-sectoral cooperation. Lastly, H2020 is a highly recognized funding scheme and our participation in H2020 increases the prestige, international visibility and excellence of Estonian organisations.

**We regard very highly the H2020 success in integrating research, development and innovation into other sectors and sectoral policies.** EU R&I instruments are an important tool for us in increasing the participation and capacity of sectoral ministries to solve socio-economic problems. Estonia has always seen EU research policy coordination as a driver for aligning European, national and regional research policies more closely by synchronising research programmes and funding as well as, importantly, also increasing internationalisation. EU research and innovation partnerships make it possible to leverage public money and, through international cooperation, we can increase the impact of R&D considerably by getting better value for money.

## 2. Implementation

The simplification measures introduced in H2020 have been very effective, especially the grant management in the Participant Portal, harmonised financing rules and the improved access to information on calls. However, **access to information comes more easily to experienced applicants than to newcomers.** Based on the feedback from Estonian national contact points, applicants need most assistance with the impact part of the work programmes and with finding the right call from the various H2020 pillars.

Based on national consultation, we propose the evaluation and improvement of the following elements:

- Participant Portal:
  - **Calls for applications should include cross-references to all other calls on related topics.** Sorting calls should also be made easier (e.g., by deadlines, subtopics).
  - Access to information on outsourced Public-Private Partnerships should be improved.
- Call topics:
  - Calls should avoid pre-defining the use of technologies in applications and give the applicants more flexibility to propose their own technologies/ solutions.
  - **There is a need to balance the focus between fundamental research and activities that emphasise high Technology Readiness Levels (TRL) across H2020.** The third “Societal Challenges” pillar, in particular, is focused too much on projects with high Technology Readiness Levels, resulting in an increasing gap between fundamental research and closer-to-the-market activities.
  - **The formation of work programmes and call topics should be more transparent.** The European Commission conducts several public consultations and surveys in order to get feedback, but the respondents often do not feel that their responses have been taken into account. There is still the perception that larger players have more influence on the development of work programmes.
- Further steps are required to increase the **acceptance of usual accounting practices.** The current system prohibits the recruitment of excellent researchers or sometimes even decreases the motivation to submit applications.
- **Oversubscription and very low success rates are a great concern since it demotivates the participation of excellent researchers and innovators in H2020.** For instance, in 2016, fourteen Estonian SME proposals were above the threshold in the SME instrument Phase II cut-off but only one received funding. If the success rate is

very low, then the selection process seems more random than based on objective criteria. It also discourages newcomers – one of our respondents said that there is no point in applying to H2020 if you do not have previous experience. One solution could be a **more detailed evaluation feedback** and a more transparent explanation of how the final assessment is formulated.

### 3. Synergies between ESIF and Horizon 2020

Estonia has directed a significant proportion of EU Structural Fund aid to the development of RD infrastructure, human capital and entrepreneurship. The Estonian Ministry of Education and Research and the Estonian Research Council have implemented several measures to enable the co-use of H2020 and SF to support Estonian participation in the following instruments: Teaming for Excellence, ERA Chair, European Research Council grants, ERANET, EIT-KIC. From ESIF, we have covered costs that are not financed by the European Commission. In the case of ERC, researchers who have made it to the second stage of evaluation with their ERC grant applications but have not received funding from the European Research Council, can apply for grants to the Estonian Research Council to proceed with the research project that was not funded by ERC or prepare a new ERC grant application.

**Based on our experience, creating synergy between ESIF and H2020 is possible but very difficult administratively because the objectives of the programmes differ starkly.** Currently, most Estonian organisations have avoided experimenting with it in co-funding participation from H2020 (except the Estonian Research Council, the Ministry of Education and Research). Secondly, **managing the SF is an administrative burden both for programme implementers as well as beneficiaries.** For instance, if ERANET is co-funded from the state budget, beneficiaries need to submit a report once a year, but if they receive co-funding from SF, they need to submit a report for every cost item continuously. For H2020, the European Commission has implemented successful simplification measures, but has failed to do so in the case of ESIF. **In order to generate synergies between the two funds, it is necessary to implement similar simplification measures in SF projects (which both support RDI), especially with regards to state aid rules.** In addition, **it is important to gather evidence on the use of ESIF funds on the project and programme level.**

### 4. Structure

The structure of Horizon 2020 is logical; its different parts complement each other. However, for organisations focusing on technology development, it is still difficult to find information on relevant calls and too much effort goes into processing the H2020 work programmes. The connections and synergies with other EU programmes (ESIF, LIFE, etc.) could also be clearer.

### 5. Partnerships

European R&I partnerships are of interest to Estonian participants. However, the participation of Estonian organisations in the EU R&I partnership instruments remains modest because the **partnering landscape is too complex to navigate (incl. finding the right partnership to participate in) and participation often requires significant financial and human resources.** For instance, in the case of EIT-KICs, it was mentioned that the participation in them has, so far, brought more costs than benefits to individual applicants. The experience of Estonian

ministries with Public to Public Partnerships depends on their experience. Some have very positive experiences and think that EU P2Ps help to advance their sectoral objectives, others view the impact in less positive terms. Among the P2P schemes, Estonian organisations value most highly art. 185 initiative “BONUS”, “EMPIR” and ERANETs.

- **There is a need to simplify the R&I partnering landscape.** We believe that the interim evaluation of H2020 is a good opportunity to take stock and assess the partnering instruments (not just separately but also in relation to one another). Based on the H2020 interim evaluation results, we need to get a “helicopter view” of the (thematic) distribution of all joint initiatives and partnerships as well as of the participating countries (incl. EU-13 vs EU-15). In the light of the next FP, it is necessary to discuss the principles of creating new partnerships, their duration (phasing in and phasing out) and increasing their openness to new participants. In our view, this topic is closely connected to addressing the innovation divide by increasing EU-13 participation in these initiatives.
- We need to **eliminate barriers in participating in partnerships**, including the high administrative burden and high participation fees.
- **It is necessary to better communicate the added value of P2Ps, especially JPIs.** There are low levels of political commitment because the expectation is to get faster results from applied research. The political challenge is for MS to fully understand and appreciate the potential that the process offers (not just through single joint calls but also through aligning national instruments).
- **There is a need to clarify the position of P2Ps in relation to FP and in addressing societal challenges.** In relation to this, Joint Programming, ERA working groups and the programming of FP need to be linked more closely. Currently, there are too many parallel governance structures that make the landscape difficult to manage. Also, **it is necessary to clarify the relationship between different Joint Programming and other instruments** (JPIs, ERANETs, art. 185, but also SET-Plan and other strategies).
- **We should introduce measures to open up networks.** The expected project consortia size has increased considerably in H2020, which forces us to review the approaches participants take to forming and entering consortia, including the possibilities to integrate EU-13 to the “old boys” networks. Entering consortia is very costly and resource-intensive for Estonian participants, and they often lack the necessary contacts and networks. It is also very difficult to enter already established consortia.

## 6. Future orientations

- **The next framework programme should, in addition to supporting research excellence, also support the participation of low-performing countries** because, otherwise, the so-called modest innovators will be left even more behind and the participation gap will increase. SF cannot be the sole measure to decrease the innovation gap because, while it makes it possible to invest in infrastructure, it is not designed as a mechanism of transnational cooperation. **Widening measures** should be continued. This helps to create and maintain contacts with peers from across the EU. The list of eligible activities should be more flexible and also allow for the allocation of funds for conducting research.

- It is important to continue to allocate **grants** instead of shifting the balance towards financial instruments. Grants are extremely important for universities and public research organisations but also for small enterprises.
- **It is important to create opportunities to respond to quickly evolving societal challenges. This can be done by creating possibilities for researchers to offer input through bottom-up calls** where they can submit proposals on the subjects of their choice. There are very few such calls in H2020 but there should be more to react with greater flexibility to unexpected and new challenges. In a world where things move quickly and where it is getting harder to anticipate changes, we must be more flexible and risk-averse. Otherwise, we will not be able to respond to the next unexpected question or challenge we meet, since this calls on the R&D system to have knowledge that, at present, we can neither suspect nor imagine.
- **We should look how smaller scale, targeted collaborative projects could be used more.**
- In order to increase the socioeconomic impact of the framework programme, it is important to increase the role of and **better integrate the Social Sciences and Humanities (SSH)** in the Framework Programme. SSH researchers should have equal possibilities to contribute in solving challenges. New technologies developed in H2020 can only be successful if they are fit for the market and society.
- It is important to create better synergies and complementarity with the European Structural and Investment Funds (ESIF) and other EU funding programmes. The planning of synergies between SF and FP needs to be developed in an earlier stage and in parallel. The Seal of Excellence has good potential for creating synergies between the two.
- The Framework Programme should continue and deepen its focus on creating conditions for **promoting cooperation between universities and SMEs.**
- In H2020, the Technology Readiness Level (TRL) has increased considerably, impeding the possibilities of universities to participate in the programme. **Support for cooperation projects with a lower technology readiness level should be supported more** in order to create more possibilities for new discoveries and future cooperation with industries.
- **Radical steps are needed to increase the awareness and impact of H2020 projects among citizens and the society as well as public engagement, citizen science and science education.** Reaching out from Science to Society is today more important than ever. Involving and including citizens into Scientific discussions already at the planning stage of research will have crucial impact in creating a common future.
- **It is important to take steps to motivate the end users to take on a key role in projects.** Currently, researchers and technology providers dominate in H2020.
- It is important to **ease access for newcomers** to participate in the Framework Programme to generate more novel ideas.