

8 February 2019

Deep-Tech, Deep-Science, Deep-Mind

The Role of Emerging Technologies and Innovation Ecosystems in Horizon Europe

Roundtable Report

Rationale

On the 31st January of 2019, APRE – Italian Agency for the Promotion of European Research and CNR – National Research Council of Italy, in collaboration with the European Commission, organised the **High Level Round Table**:

“Deep-Science, Deep-Tech, Deep-Mind: The Role of Emerging Technologies and Innovation Ecosystems in Horizon Europe”

The event gathered more than **50 participants from European institutions, Member States and Associated Countries delegates, experts from academia, research and industrial associations.**

Speakers

Welcome: Luca Moretti, CNR

Thomas Skordas, Director ‘Digital Excellence and Science Infrastructure’, DG Connect, European Commission

Neville Reeve, Policy Development and Coordination’, DG Research & Innovation, European Commission

Tommaso Calarco, Director, Institute for Quantum Control of the Peter Grünberg Institute at Forschungszentrum Jülich

Moderator: Gianluigi Di Bello, APRE

Discussion Points

The round-table was the occasion to stimulate a debate on:

- A. Relevance of interdisciplinary and collaborative breakthrough research and innovation, and modalities for effective continuation within the next EU R&I Framework Programme across Pillars in Horizon Europe.**
- B. Trends towards deep-tech in the current and next EU Framework Programmes for R&I and implications at project and programme level. Building blocks to bridge science, talents and technology (EIT, EIC, Partnerships).**
- C. Adaptability of Horizon Europe Programme to establish uplinks across instruments such as Partnerships, Missions, Flagships and the Open Innovation Pillar structure.**
- D. Coherence of the Horizon Europe Commission's proposal (June 2018), as well as of the reactions of the European Parliament and the Council (December 2018), with the expectations of research stakeholder community, taking into account the state of the ongoing interinstitutional negotiations that started in January 2019.**

Takeaways

The following key recommendations emerged from the stakeholder debate

- A. The request for the EU to continue supporting low-TRL collaborative and interdisciplinary research was further highlighted by all the stakeholders. In this respect, participants reaffirmed the importance to have a dedicated window for interdisciplinary and collaborative breakthrough research with a bottom-up approach in Horizon Europe's structure. This should be built on the model of the Horizon 2020 FET Open scheme.**
- B. Strong emphasis was put on the risk that the shift of FET scheme from the science-oriented pillar to the new European Innovation Council Pathfinder might distort the nature of the support. Stakeholders argued that the breakthrough and collaborative research window would fit at best within Pillar 1 of Horizon Europe.**
- C. Participants also discussed the possibility to support collaborative research through cross-cutting schemes with a dedicated budget within the**

Clusters of Pillar II of Horizon Europe, as well as to preserve the collaborative nature of projects within the future EIC Pathfinder.

- D. **In addition, participants stressed the necessity to foster realistic project uplinks within the three Pillars.** In particular, operational links between the **Open Innovation Pillar and other innovation instruments (e.g. Institutional Partnerships)** are still unclear with a possible clear negative impact on systemic TRL advancement. A simple establishment of uplinks might not serve the purpose to achieve effective cross-pillars interaction.
- E. **FET Flagships were recognised as an excellent instrument in strengthening S&T cooperation between the Union and its partners,** unifying the R&I community and Member States around a common research agenda and delivering benefits for society in a jointly coordinated effort. Participants requested that the current Horizon 2020 FET Flagships (Human Brain Project, Graphene, Quantum Technologies) should be maintained as such in Horizon Europe. In this respect, the position of the European Parliament, including the €1 billion dedicated to Quantum Research under the ‘Digital, Industry and Space’ cluster under Pillar II, should be supported in the inter-institutional negotiations in order to be kept in the final Regulation.
- F. Participants argued that **current CSA Preparatory Actions for future FET Flagships, which will start in the beginning of March, might be considered for continuation in the form of other EU R&I instruments,** namely R&I Missions or Institutional Partnerships. This is key to guarantee a follow-up for the emerging technological trends and topics, currently supported under the FET programme.
- G. Being the result of a wide consultation process at Member States level, further followed by two stage of evaluation, the CSA topics have already undergone a strong selection process and reflect real research priorities for EU. Therefore, the discussion on **the CSA Preparatory Actions could be the ground around the development on the new Institutional Partnerships,** selecting the specific type of undertaking accordingly to the nature of the consortia.

Next steps

- **Open side talks to interinstitutional negotiations** on Horizon Europe
- Stakeholder **Outcome Review** mid April 2019