

Contribution to the reflection on FUTURE FP9

GIURI – "Gruppo Informale Uffici di rappresentanza Italiani a Bruxelles" active in the field of R&I – intends to contribute to the ongoing debate on FP9 with first comments and recommendations also in the light of the Report on maximizing the impact of EU Research & Innovation Programmes ("Lamy Report") presented on July, 3rd 2017. Through the present position paper, the following items are identified as strategic issues:

- Overall structure of future FP9
- Need for a large concept of innovation
- Simplifying and enhancing participation
- Funding instruments
- Synergies with other EU programmes

Overall structure of future FP9

Compared with its predecessor Horizon 2020 has, up to now, achieved major progress in addressing the whole ecosystem of research and innovation. The current three-pillar structure – Excellent Science, Industrial Leadership and Societal Challenges – reflects quite well the entire innovation chain from frontier/blue sky research, over applied research to close-to-market actions (demonstrations, pilots, prototypes). Despite the need for further improvements – e.g. oversubscription, low success rates, etc. – Horizon 2020's architecture has managed to support impact-based research and innovation and to create real added value (new concrete innovative products and processes).

Excellent science and frontier research are essential in shaping and driving future innovations. The 'Industrial Leadership' pillar and its focus on key enabling and other industrial technologies contribute to transfer knowledge and strengthen industry technological know-how, capabilities and competitiveness. The challenge-based and multidisciplinary approach of the 'Societal Challenge' pillar is fundamental to achieve the objective of a smart, inclusive and sustainable growth in Europe and to deliver solutions with a direct impact on citizens' lives.

The next Framework Programme should build upon the positive results of H2020, as widely recognized by the interim evaluation documents, along with research community and industrial sector. The three-pillars structure and its balanced approach to research and innovation, also in terms of financial allocation of resources, should be maintained.

The next Framework Programme should not be oriented primarily to the achievement of specific technological breakthroughs or short-term economic impact. Taking note of the structure proposed by the Lamy Report for the next Framework Programme "LAB / Science and skills", "FAB / innovation and competitiveness" and "APP / global challenges", GIURI expresses its concern as regards some of the features there envisaged.

Frontier research should continue to be a key focus in FP9. In addition to the ERC which supports European scientific leadership, MSCA, FET and Research Infrastructure components are key instruments for strengthening research and innovation capabilities in Europe and should therefore be properly valorized. FET should be extended in scope. Development of research infrastructures is essential to foster technology development and should be supported also by valorizing existing competence centers.

Industrial innovation, based on collaborative research and Public Private Partnerships, should be maintained and strengthened. While recognizing the need for Europe to enhance breakthrough and market-creating innovation and bearing in mind the proposal for a European Innovation Council, GIURI recommends to keep a high focus on industry-driven innovation based on research. KETs should continue to play a central role in industrial innovation processes. Being structurally enabling, KETs are key factors to create new products, improve production processes and generate innovation. In this perspective, they represent an essential leverage to industrial competitiveness and should continue to play a significant role in the forthcoming FP9, with a stronger focus on their deployment and on actions aimed at helping companies to better integrate them into products and production systems.

Collaborative research projects – open to research organizations, universities, large, medium and small companies – have proven to be a successful instrument to strengthen those links between research and industry that are a key feature of innovation-friendly eco-systems; they have significantly contributed to enhance inter-disciplinarity as well as cross fertilization among sectors.

The missions approach as proposed by the Lamy Report captures the objective of prioritizing R&I investments in areas with a clear EU added value and impacts. It also has the potential to strengthen the link between research-driven and industry-driven innovation. Missions could represent an evolution of the societal challenges' approach towards a strengthened effort for real solutions (innovative technologies, services, products and processes). Missions should combine interdisciplinary, inter-sectorial approaches together with domain-specific application-oriented research activities. They shall cover the wide scale of TRL, especially those where research is needed.

Need for a large concept of innovation

The approach to innovation in H2020, largely fed by research, has proven to have a positive impact on real economy allowing businesses to revamp their investment in research and innovation as a way to recover from the economic crisis. Horizon 2020's success especially came from the participation of traditional companies that, thanks to the financial support to incremental innovations, had the opportunity to become leaders in their markets, increasing their revenues while creating new jobs and investments. The next Framework Programme should sustain based-research innovation and cooperation among different actors, aiming at the quadruple helix collaboration. Bearing in mind the strong accent the Lamy report put on breakthrough, market-creating and disruptive innovation, we believe that this should not be detrimental for incremental innovation. Both breakthrough and incremental innovation are crucial to businesses and society, to their modernization and digital transformation.

The establishment of the European Innovation Council (EIC) should be an opportunity for Europe to re-think its innovation approach and develop an integrated EU innovation strategy coordinated with other key EU policies along the "knowledge triangle". A broad definition of innovation should be considered and the EIC should support product and process innovation and address all type of organisations (large, medium and small enterprises, start-ups, RTOs, RPOs). Looking at supporting either the generation of new businesses developing high added value products (risk-taking, high-tech and knowledge intensive SMEs and industries) and the reconversion of existing 'traditional' businesses into innovation-driven companies, the EIC should operate mainly on the basis of a bottom-up approach and support projects aiming at both incremental and breakthrough innovation, from start-ups to scaling up of innovation.

The SME Instrument has been evaluated as one of the most innovative instruments introduced by Horizon 2020 (also thanks to its mono-beneficiary nature). The high participation rates registered so far showcase the interest of SMEs, particularly of those operating on traditional markets which have used it to innovate their products or processes. The SME instrument should be preserved as it is now in order to meet the specific objectives of all innovative SMEs. However, problems registered with regard to the evaluation procedure, low success rates and underfunding should be dealt with. Support to applicants through national contact points and EEN members should be enhanced. Enterprise Europe Network should continue to be an important instrument for supporting companies to cooperate at EU level. The "Seal of Excellence" and, more in general, synergies between European/national/regional funding programmes should be improved. The political objective ensuring that 20% of the funding goes to SMEs should be kept also in the future FP9 by endowing SMEs supporting schemes with more resources.

Simplifying further and enhancing participation

Horizon 2020 has demonstrated so far to be extremely attractive for both research organizations and enterprises also thanks to the remarkable simplification achieved in making the access to the programme easier and reducing the costs for applicants. Nevertheless, as underlined in the Lamy Report's, further simplification efforts are required in view of FP9. It still remains crucial to address the oversubscription and the success rate of Horizon 2020, the lowest ever recorded in framework programmes. To this regard it is essential that the future FP9 matches its ambitions through a substantial budget increase. Improving the design of calls by ensuring they remain open to different technology solutions but have a better defined thematic scope and desired impact, would allow some progress. A clearer and better tailored definition of 'expected impacts' is needed in order to help both the proposers and the evaluators; it should also be taken in mind that the current use of word "impact" in the topics description is often misleading as impacts cannot cannot be achieved during the time frame of the project but on the long term. The two-stage procedure revealed to be a useful tool to pre-screen proposals and have a more efficient selection process. However, the first stage should be more selective, leading to a higher success rate in the second stage. At the same time, individual project feedback to stage 1 proposals should be ensured.

Access to the FP should be facilitated by further simplifying access procedures, promoting "newcomers" participation and extending the "widening / spreading excellence" measures. Efforts should be deployed to engage not-for-profit organizations in the FP: NGOs, cities and civil society should be involved, notably through co-funding schemes. Participation could also be enhanced by fostering the role of local banks, taking into account their knowledge of the territory in which operate, the geographical proximity and other complementary elements that can effectively foster SMEs and startups innovation processes.

The size of projects should not be artificially inflated; it should depend on the subject and the objectives and not be driven primarily by administrative concerns. The 'value' of topics should be assessed realistically. The excessive transaction costs linked to unnecessarily large projects should be avoided.

It also appears essential to improve the evaluation procedures, investing more resources and time in giving substantial, adequate and relevant feedback about the results of the evaluation. The accuracy of the Evaluation Summary Reports (ESR) and of the evaluation process itself should be enhanced to provide beneficiaries with an exhaustive feedback on their proposals. This is fundamental to plainly understand the reasons of failure as well as to improve the quality of projects through corrective actions. A more accurate selection of experts and better trainings for evaluators could be beneficial. In line with the suggestion given in the Lamy report, "customised" evaluation processes in line with each pillars' objective could be considered.

International cooperation should be strengthened, in areas of common interest. Co-funding by third countries should be encouraged.

Funding instruments

GIURI particularly welcomes Lamy Report's recommendation on a substantial increase of the budget for FP9. This should be considered as *sine qua non* condition if Europe wants to achieve a high level of ambition and meet the new challenges and expectations of the society. Despite of BREXIT and thanks to the fact that Europe has finally recovered from the economic crisis, a new political awareness about the fundamental role of Science and Technology should be promoted and capitalized upon. In this context, the objective of a substantial increase of resources should be seen as viable.

Taking into account the view expressed in the Lamy Report that the Framework Programme should become a true R&I investment programme, a wider use of financial instruments at the expenses of grants should be avoided. Grants are fundamental for research and innovation projects, especially when innovation is particularly risky in terms of investment. Grants for collaborative projects are also the most important form of funding for R&I activities. Loans and other financial instruments for R&I activities should be conceived as complementary and not as substitute to grants, and targeting only actions closer to the market.

Synergies with other EU programmes

Increased synergy, coordination and strategic alignment with other EU programmes would help to maximise the impact of future FP9. While preserving the specific objectives of each programme (such as cohesion for structural funds, excellence for R&I, etc.) stronger synergies would contribute to give more effectiveness to the allocation and use of funding, avoid overlaps, reaching critical mass towards EU targets and priorities and leveraging private investments. Synergies between H2020 and other EU funding programmes – namely ESIF - are especially relevant when research results need to be valorised on the market. Managing Authorities of ESIF programs should get the recommendation to envisage concrete synergic measures in the ongoing and future programming period.

To this end, a better alignment between different types of instruments, especially as far as procedures and access rules are concerned, should be ensured. This is a fundamental aspect requiring better coordination and collaboration between different institutional levels, also considering the need for a revision of State aid rules – as underlined by the Lamy Report – in order to make them more in line with the synergies' processes. Differences in criteria and the lack of specific provisions as regards transnational R&I projects (e.g.: scale-up of Horizon 2020 innovation projects) limit the possibilities for stakeholders to combine ESIF and Horizon 2020 funding. Synergies could actually be enhanced by exempting ESIF funding from state aid legislation when combined with funding from the R&I Framework Program which is already exempted from this regulation. In this context, it will also be important to remove the obstacles still limiting the effectiveness of the Seal of Excellence instrument, by improving coordination among different institutional levels (European, national and regional).

Regions represent the best level to bring coherence and connect the actions of academic stakeholders, research centres, clusters and enterprises with European research and innovation policy. To this extent, synergies between the Research and Innovation Strategies for Smart Specialisation (RIS3) and FP for R&I should be enhanced. A better alignment of FP9 and RIS3 tools could allow stronger impact of R&I at territorial and local level. In line with the Smart Specialization strategies, one of the aims of FP9 should be to facilitate the creation of European value chains. A cross-cutting objective within FP9 should therefore be the support to the development of stable interregional networks of competence centers, involving universities, large companies, SMEs and public administration in the framework of scientific and technological collaboration projects, favoring a stronger integration between research and cohesion policy.

Created in 2011, GIURI is an informal platform of more than 80 Italian Brussels-based representation offices representing research organizations, business organizations, stakeholder associations, national/regional institutional bodies and financial intermediaries, actively dealing with EU R&I policies. GIURI promotes knowledge exchange, joint actions and cooperation between its members in order to strengthen R&I performance of the Italian system and enhance its capacity to successfully participate to EU funding programmes.

<u>This contribution to the ongoing debate on FP9 may not fully reflect the position of individual GIURI members.</u>