

Towards the Ninth Framework Programme (FP9)

DIGITALEUROPE'S Contribution to the Public Consultation on EU funds in the area of investment, research & innovation, SMEs and single market

Brussels, 8 March 2018

KEY MESSAGES

- **Support digital technologies and skills as key components of FP9:** As the digitisation of Europe necessitates R&I in all areas, double the ICT budget and promote an interdisciplinary approach.
- **Build FP9 from Horizon 2020's successes:** Keep the 3-pillar structure which proved suitable and consult the industry on potential changes made to the instruments, as they are well understood and working. Stick to the 3 evaluation criteria.
- **Ensure strong industry participation:** Tackle the oversubscription issue to get more industry on board and encourage and increase funding to public-private partnerships. Align accounting procedures and recruit more evaluators with industry backgrounds. Defend a stable and coherent IP regime which does not hinder innovation.
- **Simplify procedures and reduce administrative burden:** Launch flexible and shorter calls to foster a wide variety of projects. Provide better post-application feedback. Make evaluations and audits simpler, for instance through the full implementation of the Single Audit Principle and by allowing remote evaluations.
- **Improve coherence and create synergies with other funds and programmes:** Connect R&I funding initiatives together but align rules and administrative procedures across instruments and programmes where necessary. Maintain the "excellence" principle.

RESEARCH & INNOVATION NEEDS EU SUPPORT

Collaboration in the field of Research & Innovation (R&I) is essential to develop, diffuse and apply new knowledge, build momentum for global standards and create early access to future markets. The European Framework Programmes offer DIGITALEUROPE's members a well-established structure for peer-to-peer cooperation between skilled researchers from all over Europe, allowing them to exchange new ideas for state-of-the-art research, apply them in addressing societal challenges, build platforms and establish networks of talented people. The partnerships made through the Framework Programmes include a wide range of actors, including large firms, SMEs, research institutes and academia across European borders, creating innovation ecosystems nurturing European R&I.

Overall, our member companies are not strongly dependent on the Framework Programmes funding for their Research & Development activities. After all, Horizon 2020 represents only about 3% of total R&D expenditure in the EU. Even though the funding provided by the Framework Programmes might be relatively small in monetary terms, it adds real benefits as a crucial instrument in the available policy mix of R&I support. Compared to similar national or regional programmes, the Framework Programmes support cross-border R&D&I pre-competitive cooperation between different stakeholders, even competitors, while avoiding anti-trust issues. Such programmes help building pan-European partnerships and synergies with critical mass, making Europe competitive beyond national partnerships. Finally, the Programmes facilitate the development of industry capabilities for Europe-wide R&D&I platforms and infrastructures and the creation of European networks with customers and suppliers.

DIGITALEUROPE hopes that the next Framework Programme (FP9) will build on the experience gained with Horizon 2020 to foster R&I in Europe.

DIGITALEUROPE'S RECOMMENDATIONS FOR FP9

1. Support digital technologies and skills as key components of FP9

As recognised by the European Commission in their Digital Single Market strategy, the digitisation of Europe's economy and society necessitates research and innovation in all areas. Digital technologies are fundamentally changing European economy and society, creating highly skilled jobs in knowledge intensive organisations, not only in the ICT sector. Three-quarters of the value of the digital economy for Europe lies in the transformative potential of ICT for other sectors and public services¹. Given this essential role ICT plays in supporting and enabling innovation in other areas, we strongly recommend that it needs to be kept as an independent area of collaborative research and innovation efforts.

Double the ICT budget: As digital technologies and the digitalisation are now cornerstones of the European economic growth, the ICT sector must be given sufficient budget allocation within the Programme. Doubling the budget for the digital sector would ensure that future generations of technologies can be researched while, at the same time, the latest available ICT products and services based on previous research and innovation investments are used to solve societal challenges and to improve Europe's competitiveness in vertical sectors.

Support digital Key Enabling Technologies (KETs): DIGITALEUROPE is pleased with the Commission's recognition of Artificial Intelligence, Cybersecurity and Connectivity as KETs to invest in for Europe's future². We believe that other KETs should also be acknowledged in the coming years and supported by the Framework Programmes, including Data analytics (e.g. Deep Learning), additive manufacturing (e.g. 3D-Printing), Blockchain, Autonomous Robotics, Quantum technologies and Power electronics.

Promote an interdisciplinary approach: Building upon the focus area in the 2018/20 Work Programme, FP9 should include support for digitisation in all areas as one of its main goals. This should be supported by the

¹ [Report on the Digital Transformation of European Industry and Businesses](#)

² ["Re-finding Industry", Report from the High Level Strategy Group on Industrial Technologies](#), 2018.

implementation of a more interdisciplinary approach within FP9, to facilitate research throughout all technology areas. Finally, newly developed solutions and technologies should be supported by an improved investment-friendly environment and governments as early adopters.

Further support digital skills: With digital transformation in full gear, the demand for digital skills is growing in Europe. Digital skills are needed at all levels: technical ICT specialist skills, user skills needed for work and employability and the skills needed by citizens to fully participate in a digital economy and society. However, the skills supply is not able to meet the increasing demand and digital skills gaps are emerging.

As supporting research and innovation is the main mission of Horizon 2020, the Programme presented only marginal opportunities for boosting digital skills. Nevertheless, those possibilities have offered significant importance for knowledge transfer coming from research and science, bridging the gap between schools and higher education (actions under “Science with and for society”) or supporting innovative European society (actions under “Europe in a changing world”) and more. DIGITALEUROPE would recommend continuing support for digital skills development within FP9.

2. Build FP9 from the existing framework programmes’ successes

We believe that Horizon 2020 has established the basis of a successful Framework Programme with a sustainable structure. Horizon’s 2020 instruments are well understood by our members and working: they should not be changed drastically, as too many modifications in rules and procedures would be difficult for potential participants to adapt to. DIGITALEUROPE would therefore see FP9 as an evolution – building on existing successes yet continuously improving the implementation.

Consult the industry on potential changes: If any important modifications were to be made to the instruments from Horizon 2020 to FP9, the private sector should be involved in the making of such adjustments. In any case, the industry should have the opportunity to be more engaged in the design of work programmes. Our members have participated in research and innovation across the different parts of Horizon 2020 – including the European Research Council, MSCA, LEIT, various Societal Challenges, the contractual Public-Private Partnerships, Joint Technology Initiatives and EIT. FP9 needs to keep the right balance across the whole research & innovation chain from fundamental to market-innovation driven research. It needs to consider their differences in terms of impact, lead times, leverage effects and European added-value. We consider the current distribution between investigator-driven research and mission-oriented research (approximately 30-70%³) reasonable and it should not be changed.

Maintain the 3-pillar structure: DIGITALEUROPE believes that Horizon 2020’s structure, based on three pillars remains fundamentally suitable. We emphasise that the Industrial Leadership pillar is an essential part of Horizon 2020 where research is translated into innovation, demonstration and standardisation. Therefore, it also needs to remain in FP9 to ensure the continued relevance of EU-funded research & innovation for businesses as well as investment in the key industrial technologies of the future. Excellent research must be accompanied by excellent innovation, and Horizon 2020’s LEIT is an essential link between the fundamental research conducted in the Excellent Science and the Societal Challenges pillars to address the big trends of the future.

³ [Issue papers for the High Level Group on maximising the impact of EU research and innovation programmes](#)

Keep the 3 formal criteria of evaluation: Although we have noticed that other policy aspects are slowly but gradually considered informally in the evaluation process, DIGITALEUROPE recommends sticking only to the three formal criteria. The success of Horizon 2020 and previous Framework Programmes is built on excellence and impact and these criteria should not be weakened in FP9. For example, it should be made explicit to proposers and evaluators that the request for a European dimension and the eligibility criterion of minimum three Member States participating do not imply that large artificially built consortia with broad geographical distribution are per se any better than excellent small ones. Similarly, the instruction to evaluators that “partial coverage of a call specific challenge is to be reflected in (a lower) score”, in combination with the explicit mentioning of an indicative proposal budget and duration, de facto discourages and penalises the submission of smaller project proposals despite their possibly higher excellence and impact.

3. Ensure strong industry participation

Two-thirds of R&D investment in Europe comes from the business enterprise sector. The ICT industry’s participation in EU R&D funding programmes has brought many important benefits and has allowed stakeholders from academia, institutes and other industries to take advantage of such resources. However, over both FP7 and Horizon 2020, industry participation (including SMEs) has remained between 25% and 30%⁴ only. To ensure that the next Framework Programme will have sufficient impact on R&I, it is of utmost importance to enhance the participation of key industrial sectors and companies and tailor those obligations that are currently mainly geared towards the specificities of research, to the possibilities and needs of all actors in innovation. Drawing on our members’ previous experiences, DIGITALEUROPE would like to emphasise the following aspects:

Increase funding to public-private partnerships (contractual PPPs and joint undertakings): Many DIGITALEUROPE members are active participants in the contractual PPPs and/or the ECSEL Joint Technology Initiative (a major institutional PPP on Electronic Components and Systems), as well as in the related private associations and technology platforms. Involving a diverse participation of larger companies, SMEs, research institutes and academia to set the strategic research & innovation agendas, contractual PPPs address the entire innovation and value chain. They have proven to be a successful instrument to increase European competitiveness and innovation in their respective areas and must be continued under FP9.

Align accounting procedures: To ensure that the industry will be more involved, there is also a need to bring the Framework Programmes and the industry world closer. This could be achieved by simplifying cost-claiming by further aligning with industry accounting practices. We appreciate the European Commission’s efforts and focus on simplification measures: accepting the participants’ own accounting principles in FP9 would be a further step in the right direction.

Recruit more evaluators from the industry: As the Framework Programmes put increased emphasis on innovation, it is crucial that evaluators contribute the necessary knowledge to assess the impact of projects. This is why more evaluators and reviewers from the industry sector should take part in the application process. In 2015, only 16% of evaluators were selected from the private sector, including SMEs. This is an alarming decrease from the previous year when 21.9%⁵ of evaluators were drawn from the private sector. Overall, from 2014 to 2016, only 17% of the evaluators had an industry background⁶. In our experience, the issue is not necessarily a lack of Industry experts being offered but their selection. The goal must be 30% of evaluators drawn from the

⁴ Private Sector Participation (funding) [DG RTD Annual Monitoring Reports](#)

⁵ Private Sector Participation in Evaluation [DG RTD Annual Monitoring Reports](#)

⁶ [Horizon 2020 in full swing: Three years on – Key facts and figures 2014-2016](#), “Evaluation of proposals”, DG RTD, 2018, p. 42.

private sector (in line with current project participation). A broader use of remote evaluation, and its extension to the consensus-making phase, would certainly contribute to the solution of the problem.

Tackle the oversubscription issue, which refrains the industry from applying and participating in the Programmes. Decreasing success rates have a direct impact on the effectiveness of the Programme and its ability to attract the most talented and innovative applicants. There is a significant risk that industry might increasingly choose not to submit or join proposals since the chances of success are so low (even for highly rated ones) and disproportionate to the cost of writing them, which may increasingly be seen as a waste of resources. Solutions to the problem of oversubscription that we are currently discussing⁷ include: (1) more focused strategic objectives in the forthcoming Work Programme, and (2), broader use of two-stage submissions. However, this would only work if the first stage is made more selective (leading to a success rate of at least 33% or even 50% in the second stage), and if it does not excessively prolong time-to-grant.

Defend a stable IP regime: To invest in R&I and participate to collaborative projects, the industry needs to have guarantees that its work is based on a stable intellectual property regime. The global nature and high complexity of the ICT industry, as well as the speed of technological innovation, require straightforward, uncomplicated contractual arrangements. The successful commercialisation and exploitation of research results depends critically on guaranteeing contractual freedom to consortium partners. For example, the default regime for jointly generated results should be a regime that supports exploitation rather than driving parties away from genuine collaboration. Additionally, IPR rules preventing global exploitation of the consortia’s research results must be avoided.

Let research consortia decide their Open Access to Research Data policy: While DIGITALEUROPE supports open access to scientific publications, the existing right to opt out of the obligation of granting Open Access to Research Data must remain in FP9. A tailor-made approach is needed where public and private consortium partners decide on a voluntary and case-by-case basis whether access can be granted, and if so, to which data and to whom. This approach respects the essential protection of intellectual property, security, confidential information and personal data as well as legitimate commercial interests.

4. Simplify procedures and reduce administrative burden

Despite the many benefits of the Framework Programmes for the stakeholders taking part in R&I collaboration, there is room for improvement, especially regarding the complexity of the procedures. DIGITALEUROPE’s recommends implementing fewer, shorter and clearer rules in FP9 compared to Horizon 2020, to reduce administrative burden and the delays which make applying to the Programme difficult. Calls should be more flexible to be more dynamic, to answer the needs of actors in innovation. Proposals should be shorter, with reduced time between the publication of a call for proposals to the actual start of a given project.

Launch flexible calls: As the preparation and writing of an application is complex and time-consuming, proposals should be less detailed for candidates to be able to plan the project over a duration of 4 years (1 year of project preparation, submission and evaluation + 3 years for carrying out the project). And because budgeting resources in a company beyond 12-18 months and/or precisely defining an R&D work plan with deliverables for 3 to 4 years is often difficult, “agile projects” should be implemented. Shorter (12 to 18 months) and agile projects should therefore be an option for consortia. Agile projects require agile workplans (precise work plan for one year, updated every year) and agile partnerships. This would prove particularly useful for the ICT sector, in which innovation requires rapid research capabilities.

⁷ [DIGITALEUROPE position on oversubscription and evaluation in Horizon 2020](#)

Provide better post-application feedback: There is also a need to provide better feedback to candidates for them to be able to understand potential weaknesses in their applications and to prepare accordingly for possible other submissions. This would help applicants which may not submit applications anymore and ultimately reduce their R&I spending if they are not able to identify how to improve their files for further applications.

Simplify reviews and audits: once their application has been accepted, successful applicants are still facing tedious administrative burden, for instance regarding reviews and audits. For FP9, the possibility to have remote reviews should be provided. This would prevent the project participants from travelling to Brussels for each review phase and avoid costly and time-consuming journeys. The single audit principle should be extended, to ensure that control work is not duplicated, which automatically decreases the administrative burden on auditees.

Consider post-research burdens: Other administrative weight outside of the Framework Programmes may deter the investments in R&I that the Programmes support. For instance, the complex market introduction regulatory framework on newly developed solutions technologies. The regulatory environment prevents early investment in Europe compared to other regions, preventing the European Union from developing the best solutions in a timely fashion. Simplifying procedures and reducing administrative burden is thus crucial for FP9 but these are also issues affecting the whole process of creation and distribution, not only the research phase.

5. Improve coherence and create synergies with other funds and programmes

Horizon 2020 integrated the continuation of the Framework Programme 7 (FP7) with the parallel CIP (Competitiveness & Innovation Programme) and the EIT (European Institute for Innovation & Technology) activities. These efforts to minimise fragmentation need to be continued and reinforced for FP9 where appropriate and necessary. Especially the internal cohesion between the societal challenges and other areas of the programme should be increased. For example, we found 17 different initiatives⁸ addressing Health within Horizon 2020. To ensure impact, projects in different areas and instruments addressing the same topic or challenge need to be better connected.

Connect R&I initiatives together: At the programmatic level, synergy both with the member states' research and innovation strategies, priorities and programmes and other EU instruments should be sought and aligned along societal challenges and/or sectors as appropriate. This would lead to more efficient investment generating higher impact across the innovation chain, especially if national interventions and private finance can be brought together with EU funding.

Maintain the excellence principle: DIGITALEUROPE is concerned about combining funding from Horizon 2020 and ESIF at the level of an individual project. Regional or socio-economic aspects should not play a role in the selection of proposals for FP9 funding: scientific, organisational and economic excellence must remain the sole selection criterion of FP9. The availability of ESIF funding being too unevenly distributed across Member states, making synergy at project level nearly impossible in practice. Synergies should instead be sought at the programmatic level. This could be achieved by using ESIF funding for capacity building upstream of a Horizon 2020 project or by using ESIF downstream for implementation of the results. The Seal of Excellence is a promising example to create synergy with ESIF.

Promote coherent and burden-free synergies: Synergies should not prevent the programmes from keeping a clear focus to reduce oversubscription. Vague programme objectives would lead to very general calls for proposals, resulting in too many applications. Moreover, creating such synergies between programmes and funds

⁸ Full list: 1 Societal Challenge, 2 Joint Technology Initiatives, 5 contractual Public-Private Partnerships, 2 Public-Public Partnerships, 2 Joint Programming Initiatives, 2 Large Scale Pilots on Internet of Things, 2 EIT Knowledge & Innovation Communities, 1 European Innovation Partnership.

should not complicate and/or delay procedures and processes. It is thus extremely important to ensure that potential synergies would be achieved in parallel with an alignment of rules and administrative procedures across instruments and programmes. No programmes with different sets of rules should be combined without prior harmonisation.

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ABOUT DIGITALEUROPE

DIGITALEUROPE represents the digital technology industry in Europe. Our members include some of the world's largest IT, telecoms and consumer electronics companies and national associations from every part of Europe. DIGITALEUROPE wants European businesses and citizens to benefit fully from digital technologies and for Europe to grow, attract and sustain the world's best digital technology companies. DIGITALEUROPE ensures industry participation in the development and implementation of EU policies.

DIGITALEUROPE's members include in total 25,000 ICT Companies in Europe represented by 60 corporate members and 37 national trade associations from across Europe. Our website provides further information on our recent news and activities: <http://www.digitaleurope.org>

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National Trade Associations

Austria: IOÖ	France: AFNUM, Syntec Numérique, Tech in France	Romania: ANIS, APDETIC
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Croatia: Croatian Chamber of Economy	Ireland: TECHNOLOGY IRELAND	Sweden: Foreningen Teknikföretagen i Sverige, IT&Telekomföretagen
Cyprus: CITEA	Italy: Anitec-Assinform	Switzerland: SWICO
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