Executive summary

This paper is LERU's contribution to the development of ideas on the next European Framework Programme (FP) for Research and Innovation (R&I), hereafter referred to as FP9. With this paper, LERU seeks to go beyond general principles and come up with concrete proposals on how to organise FP9, to make the next FP for R&I even more efficient and focused than the current one, generating impact on society and European competitiveness, in both the short and long term. The LERU member universities are, and have been for many years, among the top performers in EU research FPs. This paper is built on their expertise. LERU is looking forward to discussing the ideas set out in this paper with the European Commission (EC), members of the European Parliament and Council representatives. LERU will engage with the European institutions, providing suggestions and comments, in every step of the development of FP9.

LERU strongly supports the EU Framework Programme for Research and Innovation. Research should (continue to) be one of the core activities of the EU, post 2020. The FP has a clear EU-added value because it generates an EU-wide competition for excellence, stimulates mobility of researchers and funds collaboration to jointly address global challenges and to stimulate innovation. The FP plays a crucially important role in fostering a coherent, internationally competitive European research landscape. It is an important instrument for realising the European Research Area (ERA), setting out frameworks and goals for EU funding and so influencing Member States to introduce structural reform in order to head in the same direction.

For FP9 LERU has the following key messages which are crucially important for FP9's attractiveness, influence and impact, in Europe and beyond:

- The European Framework Programme for R&I brings real value to the EU. It should be funded appropriately. If FP9 is to be an ambitious FP that provides decent funding and support for knowledge creation and innovation in different ways, through different programmes, a **budget of at least EUR 120 billion**, is needed.
- The European Research Council (ERC), Marie Skłodowska Curie Actions (MSCA) and the Collaborative Research and Innovation programme should be the **cornerstones of FP9**. Support for innovation should be a policy but not a funding priority.
- 3. The excellence of the work proposed should (continue to)

be the main selection criterion for funding in FP9. LERU considers the impact of FP funded projects to be very important, but emphasises that the impact of projects should never prevail over the quality of the proposed research and/or innovation work. In FP9 the EC should broaden its views on impact, as a dynamic, open and networked process and on innovation, including social and societal innovation.

- FP9 rules should be built on an increased trust in beneficiaries, especially if they have well- established robust accounting and project management practices in place.
- LERU strongly supports the ERC and the continuation of its excellent work in FP9, supporting considerable increase of its budget and focusing the majority of its activities on the Starting, Consolidator and Advanced grants.
- 6. MSCA should have a central role in FP9 and needs a significantly increased budget compared to current levels. Initial Training Networks and Individual Fellowships should form the core of the 'Actions' in FP9. MSCA should become part of the Research Commissioner's portfolio in the future.
- LERU advocates bringing all collaborative funding together in FP9, creating one strong collaborative research and innovation programme that aims at funding interdisciplinary, international and cross-sectoral projects.
- 8. Funding for collaborative research and innovation activities should be **spread in a balanced way between early stage, medium and advanced activities**, thereby ensuring the process is constantly fed off new ideas and insights. The funding should be allocated to broad topics, defined **bottom-up**, as well as to specific calls, defined **top-down**.
- Instead of the current externalisation of ERA-nets and Joint technology initiatives, LERU proposes replacing them with a system of co-funding collaborative R&I calls by public and private partners, aiming at keeping these schemes within the FP, allowing for increased transparency and accessibility.
- 10. Widening participation to the FP remains important, whereby the focus and action should be on developing synergies between FP9 and European Structural Investment Funds (ESIF). A specific part of ESIF should be earmarked to this end when the ESIF post 2020 is developed.

Other important, more detailed recommendations on FP9 are:

General aspects

- Universities are key actors to build a knowledge-based society and to enable innovation in Europe. They are at the beating heart of R&I. The funding schemes, set-up and rules of FP9 should stimulate universities, and their best researchers to participate.
- FP9 should focus on funding research and innovation, but also seek to stimulate education – as an important third side of the whole knowledge triangle, e.g. through the development of synergies with the successor of Erasmus+.
- Given continuation of rules is simplification in itself, LERU recommends maintaining as much as possible H2020 rules of participation, changing only what really needs improvement and involving experts in financial reporting from experienced beneficiaries when preparing these changes.
- FP9 should award the vast majority of its funding through research grants, using financial instruments only for close-to-market projects and if beneficiary appropriate. Also a move towards output-based funding should, if introduced, be limited to close-to-market activities.

ERC

- ERC should remain part of FP9 but with guaranteed autonomy vis-a-vis the EC. ERC policy should continue to be designed by, monitored by, and managed for researchers.
- Next to Starting, Consolidator and Advanced grants the ERC should certainly continue the successful Proof of Concept scheme.

MSCA

• The EC should not introduce measures in MSCA that potentially weaken a competition for excellence. At the same time, synergies between MSCA and ESIF should be developed.

Collaborative R&I programme

 In the collaborative programme a majority of funding should be spent on broad topics that result from a bottomup consultation process and fit within a predefined set of challenges, aligned with the UN sustainable development goals. Next to these, top-down calls should be issued to address emerging issues or to complement the bottomup topics.

- The EC should organise the clustering of related (collaborative) projects, funded by the FP, generating an exciting opportunity for knowledge exchange and leading to an increased impact of the research funded, and to accessible impacts to business and the wider public.
- The EC should develop follow-up funding for FP funded, collaborative projects, similar to the Proof of Concept scheme of ERC.
- The EC should continue to monitor participation from researchers from Social Sciences and Humanities and guarantee their involvement both in the expert groups that select the bottom-up topics as well as in the evaluators chosen to select applications for funding.
- FP9 should be open for association to countries that are of strategic importance to the EU's R&I landscape and should stimulate the participation of third countries in collaborative projects, preferably through reciprocal agreements similar to the current one with National Institutes of Health (NIH) in the US.

Evaluation

- A robust, transparent evaluation system in FP9 is needed. LERU proposes a system of standing evaluation panels, complemented with remote reviewers. Detailed briefing of reviewers, monitoring of evaluations by the EC and open and transparent feedback to applicants about the evaluation of their proposal are crucial.
- Where only remote evaluations are used, such as in MSCA, the EC should introduce at least virtual consensus meetings, to ensure a high quality process to which each expert can fully contribute. However, LERU remains in favour of continuing as much as possible face to face consensus meetings, which are a critical part of the evaluation process.

Innovation instruments and EIC

 Together with state aid, tax policy, public procurement and venture capital, FP9 has a crucial role in setting up the framework conditions that are needed to enable a stimulating European innovation ecosystem. The EU needs a systemic approach to innovation.

- Academic innovation experts need to be appointed on to the board of the European Innovation Council (EIC) as soon as possible.
- EIC's primary role should be to advice the EC on innovation policy and on the development, use and efficiency of the EC's innovation instruments. Streamlining and optimising these instruments should be a key responsibility of the EIC.

EIT

- The EIT needs to maintain a good degree of independence from the EC but, given its important role in the EU innovation landscape, needs to become part of the portfolio of the next Commissioner for Research and Innovation.
- In FP9, the EIT should focus on completing its reform, especially regarding its governance and organisation, on consolidating its role as transformation and translation agent and on supporting the activities of the existing KICs.

Widening

- The EC should incentivise Member States to reform internally systems that currently hamper institutions in these countries to participate to their full potential in the EU R&I FP.
- When ESIF post 2020 is developed, a fixed percentage of the ESIF should be earmarked for synergies with FP9. Possible areas to exploit these synergies are: seal of excellence, EIT RIS partnerships, return phase for intra-European MSCA fellowships, co-funding of basic infrastructure in MSCA COFUND activities and co-funding of certain topics as a public partner in the collaborative R&I programme.
- The EC should develop a model of a minimum salary for the 100% reimbursement of personnel cost.

Responsible Research and Innovation (RRI)

- Europe requires continued efforts to promote research integrity and FP9 rules and grant agreement should clearly define the RRI standards that are required. This should, however, not result in tick-box exercises or heavy-handed regulatory approaches.
- In FP9 the EC should continue its push for gender equality and gender mainstreaming. Long-term monitoring of gender equality is crucial.

• Ethics should be considered and funded as a proper domain of research that systematically develops excellent research on questions of science and innovation.

Open Science

- Insofar as possible FP9 should support the main lines for action of the European Open Science agenda.
- In FP9, the EC should continue the H2020 approach regarding the openness of data and open access to publications. Measures to ensure compliance with provisions for open access to publication and research data should be taken. Funding to facilitate the take-up of new open access publishing models and presses, and to encourage exchange of ideas, should be introduced.

Research infrastructures

 FP9 should introduce a set of principles for research infrastructures, aiming at transparency in information and access policies, solid embedding in existing organisations and clear indicators for operational and scientific excellence.

Other EU research funding activities

 FP9 rules should apply as much as possible to fund all research activities supported by the EC, including those in programmes from other Directorates-General/ policy fields. Extremely problematic is the liability of the coordinator for partners' activities in some of these programmes.

Defence research

• The EU's defence research programme should not be part of FP9 as the modalities and beneficiaries of the programme will differ too strongly from FP9.