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**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN
PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL
COMMITTEE AND THE COMMITTEE OF THE REGIONS**

Horizon 2020 interim evaluation: maximising the impact of EU research and innovation

1. INTRODUCTION

Research and innovation (R&I) are crucial for sustaining Europe's socio-economic model and values, as well as its global competitiveness. This is increasingly the case in a rapidly changing world, where our success depends ever more on producing knowledge and swiftly converting it into innovation than on exploiting natural resources or lowering wages. Sustainable growth in the future can only come from investing in R&I now.

Horizon 2020, the EU Framework Programme for Research and Innovation (2014-2020), is a key EU asset to this end. It aims to stimulate economic growth and create jobs by coupling R&I, promoting excellent science and industrial leadership, and tackling societal challenges.

In line with the Better Regulation guidelines¹, Commission services carried out a comprehensive Interim Evaluation of the programme's progress in its first three years of implementation². The stakeholder response to the public consultation on the Interim Evaluation was very strong, with more than 3500 respondents and over 300 elaborated position papers.

Three additional, self-standing interim evaluations covered the European Institute of Innovation and Technology (EIT)³; the public-public partnerships (P2Ps) set up under Article 185⁴ of the Treaty on the Functioning of the European Union (TFEU); and public-private partnerships (PPPs, implemented through joint undertakings) launched under Article 187⁵ of the TFEU. Separate independent expert groups also performed one mid-term review of the nine contractual public-private partnerships⁶, and one of the direct actions of the Joint Research Centre⁷.

The Interim Evaluation provided the evidence-base for the report and forward-looking recommendations⁸ of the independent High Level Group on maximising the impact of EU R&I programmes, chaired by Pascal Lamy (Lamy High Level Group).

As required by Article 32 of the Regulation establishing Horizon 2020⁹, the purpose of this Communication is to raise to the attention of the EU Institutions the key findings (Section 2) and lessons learnt from the overall evaluation (Section 3). This includes possible improvements and orientations for the future, including first responses to recommendations made by the Lamy High Level Group on maximising impact.

¹ https://ec.europa.eu/info/files/better-regulation-guidelines_en

² SWD (2017) 220 In-depth interim evaluation of Horizon 2020

³ SWD(2017)352 Final

⁴ SWD(2017)340 Final

⁵ SWD(2017)339 Final

⁶ <https://publications.europa.eu/en/publication-detail/-/publication/6de81abe-a71c-11e7-837e-01aa75ed71a1>

⁷ http://publications.jrc.ec.europa.eu/repository/bitstream/JRC107957/jrc_implementation_review_web_final.pdf

⁸ “LAB – FAB – APP - Investing in the European future we want”, Report of the Independent High Level Group on Maximising the Impact of EU Research and Innovation Programmes, 3 July 2017

⁹ Regulation 1291/2013 of the European Parliament and of the Council of 11 December 2013

2. KEY FINDINGS FROM THE INTERIM EVALUATION OF HORIZON 2020

The other EU Institutions endorsed the findings of the Interim Evaluation: the European Parliament (EP)¹⁰, the European Economic and Social Committee (EESC)¹¹, the Committee of Regions (CoR)¹², and more recently the Competitiveness Council through Council Conclusions¹³ of 1 December 2017. The Member States also adopted an opinion through the European Research Area and Innovation Committee (ERAC)¹⁴. The common view is that Horizon 2020's implementation is largely a success.

Horizon 2020 is attractive and relevant. Participants come from the best institutions and companies in and outside Europe, covering a wide range of disciplines. Stakeholders express strong satisfaction with the programme, as shown by the sustained interest in its highly competitive calls. **More than half of Horizon 2020 participants are newcomers compared to the previous Framework Programme 7 (FP7).** Industrial participation has increased, with 23.9% of the budget for industrial and enabling technologies and societal challenges going to SMEs - well over the target of 20%. Horizon 2020 has shown flexibility in responding to evolving political priorities, such as migration, and emergencies such as the Ebola and Zika outbreaks.

The programme offers unique collaboration and networking opportunities. One in five Horizon 2020 scientific publications is the result of academia-private sector collaboration. Horizon 2020 results in more interdisciplinary publications than FP7. The contractual PPPs, which bring together the private sector and the Commission in jointly defining research and innovation agendas, have added value by strengthening inter-sectoral cooperation and fostering innovation.

Horizon 2020 is on track to contribute significantly to the creation of jobs and growth. Even if Horizon 2020 represents less than 10% of total public R&D spending in the EU, macroeconomic models project its socio-economic impact to be in the order of EUR 600 billion and 179000 jobs by 2030¹⁵. Moreover, it supports achieving EU policy objectives through its focus on excellent science, industrial leadership and societal challenges¹⁶.

Excellence as the core underlying principle ensures quality. Having excellence as the main criterion for allocating funding has helped the first scientific publications of Horizon 2020 to be cited already at twice the world average rate. Patents produced through the programme are of higher quality and likely commercial value than similar patents produced elsewhere. Horizon 2020 already has supported some 17 Nobel prize-winners.

¹⁰ EP T8-0253/2017, REPORT on the assessment of Horizon 2020 implementation in view of its interim evaluation and the Framework Programme 9 proposal

¹¹ EESC information report INT/807, Horizon 2020 (evaluation)

¹² CoR Opinion SEDEC-VI/026, Local and Regional Dimension of the Horizon 2020 Programme and the New Framework Programme for Research and Innovation

¹³ From the Interim Evaluation of Horizon 2020 towards the ninth Framework Programme - Council conclusions (adopted on 1/12/ 2017) <http://www.consilium.europa.eu/media/31888/st15320en17.pdf>

¹⁴ ERAC 1207/17, ERAC Opinion on the Interim Evaluation of Horizon 2020 and preparations for the next Framework Programme

¹⁵ SWD (2017) 220 In-depth interim evaluation of Horizon 2020, Section 8.4, p. 141 and p. 144

¹⁶ Still, the expenditure targets for sustainable development and climate change is not yet met, so efforts have been stepped up in the final Work Programme.

The leap in simplification has paid off. The large-scale simplification measures introduced (e.g. single set of rules, electronic signature of grant agreements, the Participant Portal as the one-stop-shop for interactions with participants, single reimbursement rate, flat rate for indirect costs) have greatly reduced administrative burden and costs, leading to large decreases in time to grant (110 days faster than in FP7). Stakeholders appreciate the simplified funding model, which has not reduced the level of co-funding by beneficiaries.

Horizon 2020 has shown clear EU Added Value. It brings economies of scale, scope and speed compared to national and regional-level support to R&I and thereby increases the EU's attractiveness as a place for research and innovation. The programme's additionality (i.e. not displacing national funding¹⁷) is very strong. Single-beneficiary programme parts like the SME Instrument, the ERC and Marie Skłodowska Curie Actions add EU value through pan-European competition and the structuring effects they exert on national R&I systems.

Horizon 2020 is delivering value for money. Horizon 2020's administrative overhead is lower than in FP7, thanks to the extensive delegation of programme implementation to specialised executive agencies and the harmonised implementation through the Horizon 2020 Common Support Centre. Administrative expenditure is below the target of 5%. It is particularly low for the executive agencies and the EIT.

The evaluations of Horizon 2020-supported partnership initiatives show how effective they are in leveraging significant additional private and public funding and in aligning R&I priorities across Europe.

The interim evaluation of **the EIT** concluded that it contributes to addressing structural weaknesses in the EU's innovation capacity. The EIT's Knowledge and Innovation Communities (KICs) add EU value by stimulating close and effective links between education, research and innovation across a diverse set of global challenges. The EIT is the platform to launch and grow KICs, whose educational programmes combine technical knowledge with entrepreneurial and innovation education, direct access to businesses, and international mobility.

Public-public partnerships under Article 185, e.g. Eurostars2, Joint Baltic Sea Research Programme (BONUS), have created long-term R&I partnerships and networks between research funders and governments, thus contributing to the European Research Area (ERA). They mobilise significant investment in transnational research projects in important policy areas, with an increasingly global action remit. The key strength for all **public-private partnerships under Article 187**, e.g. CleanSky2, Bio-Based Industries (BBI), is their ability to engage and leverage strategic industry partners in priority areas of action for the Union, across borders and business sectors, and their direct contribution to competitiveness and EU policy goals. They link activities across the innovation cycle, and help overcome fragmentation in their respective sectors by creating long-lasting pre-competitive collaborative networks that bring together previously unrelated stakeholders. **Contractual PPPs**, e.g. Factories of the Future (FoF), Energy-efficient Buildings (EeB), were found to have broadly achieved their goals, being flexible and efficiently managed, bringing together major industrial partners in EU-driven strategies, with mutual

¹⁷ SWD (2017) 220 In-depth interim evaluation of Horizon 2020 section 8.2.2.3 p. 114

understanding of deliverables by industry and a high level of transparency, and openness in participation, including of SMEs.

3. LESSONS LEARNT TO MAXIMISE THE IMPACT OF FUTURE FRAMEWORK PROGRAMMES

The main purpose of the comprehensive interim evaluation was to draw lessons for the future based on an analysis of both strengths and weaknesses. These will help improve the implementation of Horizon 2020 in its last three years (2018 – 2020) and of the EIT and Article 185 and 187 Initiatives.

The combined evaluation exercise also provides longer-term lessons learned¹⁸, which will inform the design of the successor Framework Programme for the period post-2020. The final Horizon 2020 Work Programme for 2018 – 2020 is already testing some of the solutions designed to address the lessons learnt for the longer-term, including a pilot phase of a future European Innovation Council (EIC) and the use of lump sums as an alternative to cost reimbursement in some areas.

What follows is a summary of the main lessons learnt and areas for improvement.

3.1. Invest more ambitiously

Horizon 2020 is found to be underfunded – its increased attractiveness and continued relevance has resulted in large-scale oversubscription (a success rate of only 11.6% compared to 18.5% for FP7). An additional EUR 62.4 billion would have been needed to fund all proposals independently evaluated above the stringent quality threshold. This underfunding represents an opportunity cost for Europe's promising R&I potential and constitutes a waste of resources for the applicants (who spent an estimated EUR 636 million a year preparing proposals¹⁹).

In response to the Horizon 2020 interim evaluation, the European Parliament, supported by the Committee of Regions, similarly calls, among others, on the EU to avoid budget cuts to Horizon 2020 and to endow the successor programme with at least EUR 120 billion. The ERAC calls for proportionality between budget and ambitions. Similarly, Council Conclusions emphasise the need to prioritise R&I across all relevant EU policies, and provide significant funds for the future programme.

The Lamy High Level Group recommends prioritising R&I and allocating more funding to it in EU and Member State budgets. The Group suggests that doubling the budget of the post-2020 programme is the best investment the EU can make in order to align investment with that of the EU's main competitors and realise the currently wasted potential of unfunded high-quality proposals (i.e. to aim for funding for at least 30% of high quality proposals).

The Commission takes note of the call from the High Level Group and other EU institutions to invest more in R&I through the future Framework Programme, in light of the current programme's strengths and EU added value. EU funding for R&I should be

¹⁸ SWD (2017) 220 In-depth interim evaluation of Horizon 2020 section 12 p. 186

¹⁹ SWD (2017) 220 In-depth interim evaluation of Horizon 2020 section 7.3.2 p. 60

matched by ambitious national and regional funding in order to reach the R&D investment target of 3% of EU GDP.

3.2. Continue simplification

Horizon 2020 has made great progress in terms of simplification compared to FP7, but simplification is an ever continuing undertaking, requiring constant improvements.

The EU Institutions note and appreciate the substantial progress made in simplification and equally stress the need to continue. The EESC sees it as a way to enlarge the circle of applicants, while ERAC sees continued simplification as a way to design even more user-friendly tools and rules.

The Lamy High Level Group's ambition is to make the EU the most attractive R&I funder in the world (#7 Simplify further). This implies radically privileging impact over process, e.g. by minimising documentation, making calls more flexible (including on the choice of instrument and costing), and within R&I consortia adapting to changing trends and new opportunities. The Group suggests weighing the reduction in reporting obligations against having continuous and real-time data on the impacts of projects.

The Commission is continuing the simplification drive, including through pilot actions in the last Work Programme of Horizon 2020, Subject to experience with these pilots, the Commission will pursue further simplification to support faster innovation cycles and lower administrative burden. To this end, the Commission will explore possibilities to: simplify the present real cost reimbursement system; increase acceptance of usual accounting practices; increase the use of lump-sum project funding against fulfilment of activities and other simplified forms of funding; reduce the burden for preparing and submitting proposals; reduce the 'time to grant'; and improve feedback given to applicants.

3.3. Support breakthrough innovation

Thanks in part to the EU Framework Programmes, Europe is a global scientific powerhouse. However, it does not perform at the same level in innovation. Horizon 2020's Interim Evaluation has identified some potential for supporting breakthrough, market-creating innovation, but concludes that such support must be considerably strengthened; for example, only a relatively small number of firms receiving grants benefits from financial instruments under Horizon 2020²⁰. This may hinder the scale-up to the European and international level of young innovative firms.

The European Parliament equally stresses the importance of innovation support in general, and of disruptive innovation and scaling up in particular, while Council Conclusions emphasise the importance of supporting the whole innovation value chain, including high-risk disruptive technologies, while the possible future EIC should support breakthrough innovations and the scaling up of innovative companies. The Committee of Regions and ERAC opinions also make this point.

The Lamy High Level Group recommends supporting innovation (e.g. technological, social, business model) across all EU policy domains. This will notably create a common regulatory framework that fosters entrepreneurship, European industrial competitiveness

²⁰ SWD (2017) 220 In-depth interim evaluation of Horizon 2020 section 8.2.2.3 p. 111 and 8.2.3.3 p. 123

in the global market and its leadership in the current industrial revolution (#2 Build a true EU innovation policy that creates future markets). The Lamy Group suggests promoting and investing in innovative ideas with rapid scale-up potential through a European Innovation Council (EIC) that is empowered to invest in entrepreneurs and businesses - irrespective of size, sector or maturity - with risky innovations that have rapid scale-up potential at the crossroads of different technologies and disciplines. It also recommends (#4 Design the EU R&I programme for greater impact) that the EIC design new proposal evaluation and selection processes to better capture high-risk, high-return projects, introduces greater flexibility in grant management (stop-go decisions) and tolerates failure.

The Commission acknowledges the mounting importance of market-creating innovation²¹ and will consider ways to further support it in the future building on current actions in the area of the Digital Single Market, Energy Union and Capital Markets Union. Venture capital in Europe is one-fifth the level of that in the US. The new generation of companies in the collaborative and digital economies originate predominantly in the US and Asia. The Commission has already taken action to build up an industrial policy, digitalise EU industry, and develop the collaborative economy²².

Building on the current achievements in innovation support through the SME Instrument, collaborative projects and public-private partnerships, the future Framework Programme should provide support faster and more flexibly. It should exploit the complementarity of grants and financial instruments, in order to attract and scale up young and quickly growing innovative companies to international and European levels, improve market-uptake of R&I results and accelerate innovation diffusion. The aim should be to put Europe at the forefront of market-creating innovation. To this end, a first pilot phase of a future European Innovation Council is launched in the last Work Programme of Horizon 2020. The experience gained from this first phase, together with strategic support from the recently established High Level Group of Innovators²³, will provide a basis for further decision making on a fully-fledged EIC.

3.4. Create more impact through mission-orientation and citizen involvement

The Interim Evaluation points to the need for greater impact and more outreach to citizens²⁴. This is not only important for improving the communication of the contribution of R&I to tackling societal and technological challenges; involving citizens, customers and end-users in the programme agenda-setting (co-design) and its implementation (co-creation) leads to more innovation by stimulating user-driven innovation and the demand for innovative solutions. This will also respond to the opportunity of adopting a more impact-focused, mission-oriented approach in the future²⁵. The Work Programmes of Horizon 2020 already pave the way towards mission-orientation, using Focus Areas as a stepping-stone.

²¹ SWD (2017) 220 In-depth interim evaluation of Horizon 2020 section 8.2.2.3 p. 111 and 8.2.3.3 p. 123

U Industrial Policy Strategy, see COM(2017) 479

²³ <https://ec.europa.eu/research/eic/index.cfm?pg=hlg>

²⁴ This is also supported by the recommendation of the High Level Expert Group that carried out the ex-post evaluation of FP7: “bringing science closer to citizens”; COM(2016) 5 final

²⁵ Idem “focus on critical challenges and opportunities in the global context” COM(2016) 5 final

All EU Institutions stress the importance of getting citizens more involved and maximising impact from the Framework Programme. The Committee of the Regions is very explicit in encouraging the adoption of a new, complementary approach based on missions. ERAC and Council Conclusions point to the need to deliver better and continued outreach to society, and call for exploring a mission-oriented approach.

The Lamy High Level Group takes this analysis up in several of its recommendations. It suggests defining R&I missions with a transformative potential and that mobilise many actors and investors to realise them, including through public procurement of innovation (#5 Adopt a mission-oriented, impact-focused approach to address global challenges). The Lamy Group puts forward the UN Sustainable Development Goals (UN SDGs) as a global reference framework for defining such missions. It pleads for involving the public in defining missions and for more citizen science (#8 Mobilise and involve citizens). It argues in favour of a more effective branding of EU R&I, e.g. through wider communication of its results and impacts (#11 Capture and better communicate impact). To boost innovation, the Lamy report recommends that sectoral policies be fully engaged with innovation policy-making. It attaches great importance to seeing a programme driven by purpose and impact rather than instruments, with a fine-tuned proposal evaluation system and greater flexibility (#4 Design the EU R&I programme for greater impact).

The Commission, through the final Work Programme of Horizon 2020, is already taking up some of the lessons learnt in terms of impact and outreach to citizens (e.g. through clearer impact statements and reinforced dissemination and exploitation of research results). The future programme should be built from the onset around a clear intervention logic and differentiated proposal evaluation. It will start from clear and, as far as practicable, quantified expected long-term impacts, medium-term results and short-term outputs, in support of EU policy priorities, the UN SDGs and the implementation of the Paris Agreement.

Based on the results of the interim evaluation and bearing in mind the scope and thrust of the Work Programmes for Horizon 2020 for 2018-2020, R&I missions (scientific, technological, social etc.) in the next programme should create more impact, achieve better outreach, and encourage a systemic approach. They should address EU policy objectives, capture the public's imagination (engaging with people about values, making them part of the process, and proud to be European), forge links between disciplines and sectors, and go beyond what is currently possible.

3.5. Increase synergies with other EU funding programmes and EU Policies

Synergies already exist between Horizon 2020 and other EU programmes, such as the European Structural and Investment Funds (ESIF), the European Fund for Strategic Investments (EFSI), external relations instruments, the Connecting Europe Facility, and the Common Agricultural Policy. Still, they should be further strengthened and made more efficient and effective²⁶. In particular, building on synergies with ESIF and smart specialisation strategies²⁷, R&I capacities built over the past decade in lower performing

²⁶ This is also supported by the recommendation of the High Level Expert Group that carried out the ex-post evaluation of FP7: “align research and innovation instruments“; COM(2016) 5 final

²⁷ COM(2017)376 Strengthening Innovation in Europe's Regions: Strategies for resilient, inclusive and sustainable growth

regions could be better used for Framework Programme-supported projects and to increase participation in trans-national R&I networks and activities.

The European Parliament opinion gives high prominence to synergies between EU funding programmes, which it deems crucial to make investments more effective, exploiting in particular the smart specialisation strategies. The Parliament calls for enhanced synergies between the future Framework Programme and other dedicated EU funds in support of R&I. The ERAC opinion indicates that synergies between ESIF and the Framework Programme should be developed on a systemic level, already in the programming phase. Council Conclusions similarly call for synergies, coherence, compatibility and complementarity.

The Lamy High Level Group recommends designing future funding programmes with complementary, mutually reinforcing and interoperable intervention logics to support capacity-building in regions that are catching up in terms of innovation (#6 Rationalise the EU funding landscape and achieve synergy with structural funds).

The Commission will capitalise on the experience gained in jointly implementing the current generation of funding programmes (e.g. the introduction of the Seal of Excellence²⁸) and will focus on enhancing synergies from the programme design stage to ensure that the range of instruments and programmes covers the whole innovation chain. This will be done by bringing priorities more in line with each other; making co-funding schemes more flexible in order to pool resources at EU level; and improving the compatibility of rules (for example, making it possible to apply automatically the Seal of Excellence). The future programme will also continue to provide support to policymaking.

3.6. Strengthen international cooperation

International cooperation in R&I is vital for ensuring access to talent, knowledge, know-how, facilities and markets worldwide, for effectively tackling global challenges, and for implementing global commitments. While Horizon 2020 has a broad international outreach and openness to the world, third-country participations declined when compared to FP7, so international cooperation needs to be further intensified in order to continuously strengthen Europe's R&I excellence and competitiveness and solve global societal challenges.

The European Parliament calls for strengthening international R&I cooperation, including with associate partners and emerging countries, as soon as possible through concrete actions. The Parliament, in addition, highlights the value of science diplomacy. Council Conclusions reaffirm the importance of reciprocity.

The Lamy High Level Group gives similar prominence (#10 Make international R&I cooperation a trademark of EU R&I). The group recommends further stimulating international cooperation activities and opening the programme to association by the best and support to participation by all, based on reciprocal co-funding in partner countries.

The Commission endorses the importance of strengthening international cooperation in R&I. The final Work Programme of Horizon 2020 seeks to do just that. Criteria and rules should be considered for associating third countries based on excellence in R&I. The

²⁸ <https://ec.europa.eu/research/soe>

Impact Assessment for the future programme may consider several ways of stimulating international cooperation in order to make sure that EU researchers work with the best and most appropriate R&I partners worldwide.

3.7. Reinforce openness

There is a need to build on the great progress made in terms of making the scientific publications and data generated by Horizon 2020 openly accessible to the wider scientific community and public. However, so far less than 70% of the publications produced in Horizon 2020 are available in Open Access, with no clear signs of improvement.

The European Parliament opinion is in favour of the general principle of Open Access, while ERAC regards the 100% Open Access policy of Horizon 2020 as a clear measure in favour of knowledge circulation. Importantly, the Council Conclusions on the transition towards an Open Science System²⁹ give valuable guidance for the future, while the Council Conclusions on the Interim Evaluation of Horizon 2020 highlight the role of Open Science in boosting impact and transparency.

The promotion of Open Science (and Open Access specifically) are referenced throughout the Lamy High Level Group report as key guiding principles that should be rewarded (#3 Educate for the future and invest in people who will make the change).

The Commission will further develop its policies in support of the Open Science Agenda³⁰. Building on the experience of implementing Horizon 2020, all publications should be openly accessible and all data should be Findable, Accessible, Interoperable and Re-usable (FAIR). The Commission will explore ways to make the next Framework Programme fully embrace Open Science as a way of strengthening scientific excellence, benefiting from citizen participation, achieving better reproducibility of results, and increasing the re-use of research data.

3.8. Rationalise the funding landscape

A key area for improvement is the rationalisation of the Horizon 2020 funding landscape. This applies in particular to the landscape for partnership instruments and initiatives³¹. Stakeholders point out that the many instruments and initiatives, with the complexity it entails, are difficult to understand and may lead to overlaps. Reforming the current partnership landscape should make it possible to use their full potential in achieving ambitious policy objectives.

The EIT evaluation identifies the need to develop further synergies with other EU initiatives from the programming stage. There is scope for streamlining the relevant goals the EIT and the KICs are expected to achieve with clear and measurable objectives; the role of the KICs in the EU R&I landscape also needs to be better defined. The Article 185 evaluation finds that the EU public-to-public cooperation (P2P) landscape has become crowded, with too many similar initiatives working with insufficient coherence among the P2Ps, as well as between the P2Ps and Horizon 2020. The Article 187

²⁹ <http://data.consilium.europa.eu/doc/document/ST-9526-2016-INIT/en/pdf>

³⁰ <https://ec.europa.eu/research/openscience/>

³¹ Horizon 2020 supports two broad categories of partnerships, in addition to FET Flagships and KICs: those mainly involving Industry, i.e. Article 187 initiatives or Public-Private-Partnerships (PPPs) and contractual PPPs (cPPPs); and those involving mainly Member States, i.e. Article 185 initiatives or Public-Public-Partnerships (P2Ps), ERA-NET Cofund, EJP-Cofund and Joint Programming Initiatives.

evaluation points out that Public-Private Partnership (PPP) activities need to be brought more into line with EU, national and regional policies, and calls for a revision of the Key Performance Indicators. The contractual PPPs (cPPPs) review identified challenges of coherence among cPPPs and the need to develop synergies with initiatives such as KICs.

ERAC considers it particularly urgent to rationalise the funding schemes, while considering P2Ps essential for more coordinated implementation of national and EU R&I. Competitiveness Council Conclusions similarly stressed that the current R&I ecosystem has become too complex, and stressed that all partnership initiatives should have an exit strategy from FP funding. The European Parliaments advocates ‘decomplexifying’ the EU funding landscape.

The Lamy High Level Group likewise prioritises rationalisation (#6 Rationalise the EU funding landscape), within and beyond the Framework Programme. It finds that the range of funding schemes for R&I risks diluting excellence by favouring ‘competition among those in the know’. It recommends eliminating one third of R&I funding schemes, instruments and acronyms. More specifically on partnerships, the Group recommends limiting EU co-funding to partnerships that clearly deliver on EU missions, with a simplified and flexible co-funding mechanism (#9 Better align EU and national R&I investment). Lastly, the Group recommends that KICs be more coherently deployed to address global challenges, by directly incorporating them into the post-2020 EU R&I programme (#3 Educate for the future and invest in people who will make the change)³².

The Commission welcomes these assessments. In the short term, the Commission will endeavour to improve performance within the current life cycle through the Annual Work Plans and Work Programmes along the lines recommended in the respective evaluations. In the longer term, it will look into how to rationalise the different EU R&I instruments and funding schemes to the advantage of beneficiaries, without undermining the achievement of its policy objectives. A future EIC could present an opportunity for streamlining innovation support schemes. Possible R&I missions could be used to structure the KICs so that they have clearer objectives, communicate better and have more impact.

The Commission also intends to explore in the Impact Assessment of the future programme ways of rationalising partnerships (including KICs and Future and Emerging Technologies Flagships), improve their openness and transparency, and link them with future EU R&I missions and strategic priorities. It will consider, as part of a strategic process, for example, the additionality of capabilities, relevance for political priorities agreed between the EU, Member States, industry and other stakeholders, flexibility, exit strategies integrated from the start, and delivery of impact that cannot be achieved through the Framework Programme alone.

4. OUTLOOK

To date, Horizon 2020 has been an EU success story with undeniable EU Added Value. Building on the positive findings of the Interim Evaluation, the stakeholder feedback and

³² The report of the HLG on the EIT identified a clear need to strengthen the role of the EIT headquarters as a provider of shared services and expertise to the KICs. (https://ec.europa.eu/education/sites/education/files/eit-hlg-final-report_en.pdf)

the Lamy High Level Group call for ‘an evolution, not a revolution’, a further refinement and optimisation rather than an overhaul of the Framework Programme is needed.

The Commission welcomes the recommendations of the Lamy High Level Group; it will consider them, as appropriate, in the design of the next Framework Programme in order to set a new level of ambition for global leadership in science and innovation.