

CESAER

MORE KNOWLEDGE FOR A BETTER WORLD

STATEMENT DATED 7TH DECEMBER 2017

The [Europe 2020 strategy](#) emphasised smart, sustainable and inclusive growth. Together with the [10 Commission priorities for 2015-19](#), it provided the Europe's overall political agenda for growth and jobs for the current decade. It attributed an important role to the knowledge triangle of education, research and innovation, notably in tackling the [grand challenges](#).

At the beginning of the decade, the lack of sense of urgency and of national and European investments into the knowledge society, post-factual politics, populism, authoritarianism, protectionism, intolerance of divergent opinions, political interference with academia and nationalism jeopardise the ability of Science, Technology, Engineering, Arts, Architecture & Mathematics (STEAM) to act in the public interest and to take full societal responsibility. War, terrorism, increasing inequalities, climate change and related migration are topping these crises. Moreover, digitisation and automation will bring about fundamental changes to human activity in general and to employment in particular. New technologies, such as artificial intelligence and biotechnology, raise fundamental issues of ethics and social cohesion: value pluralism and moral overload concerning STEAM are key challenges in the 21st century.

The current narrative to overcome the structural weaknesses in Europe's economy, improve its competitiveness and productivity and underpin a sustainable social market economy are thus not sufficient anymore to safeguard the [future of Europe](#) and the [future of humanity](#). That is why the [universities of science & technology](#) united within [CESAER](#) offer their key messages for the next overall political agenda to the European institutions.

PRIORITISE KNOWLEDGE

We particularly call upon the heads of state and governments to help realise [knowledge societies](#), thus ensuring STEAM its full impact and benefit for all. The core message is to view knowledge as the key driver and enabler for the future of Europe rather than as simply a tool to serve vested public and private interests and to realise macro-economic goals. Achieving sustainability, solidarity, democracy and decarbonisation; safeguarding the boundary conditions such as sustainable peace and prosperity and incorporating respect for rule of law and human rights, democratic citizenship, evidence-based policy making and free circulation of knowledge must be at the core of the new strategy for Europe. Europe should formulate an ambitious agenda to further and integrate a European Education Area ([EEA](#)) and the European Research Area ([ERA](#)) finally realising the [Europe of knowledge](#). Enabling the linking of STEAM areas, better linking them to the social sciences and humanities, realising more inter-, trans- and multidisciplinary education and research, building values into (information) systems and assuring value-sensitive design along a value hierarchy are key notions in this respect.

MORE AND BETTER INVOLVE CITIZENS AND MAKE A GENUINE OFFER TO THE WORLD

While states, business, industries and academia fully understand and recognise the added value of knowledge policies, funding programmes and competition for excellence at European level, we see an urgent need to better involve citizens and society at large. The introduction of missions to increase the visibility of knowledge and unlock its disruptive innovation potential is a promising way forward. Such missions should be broad political contexts, connect knowledge to citizens through bottom-up co-creation within the quadruple helix, realise more integration and be concrete. But Europe must refrain from looking inward and re-inventing the wheel. Recalling the 17 United Nations (UN) [Sustainable Development Goals](#) (SDGs), we acknowledge our crucial role in contributing responsibly to achieving them by 2030. We firmly believe that the UN SDGs provide a critical set of missions. Europe should use the UN SDGs as source of inspiration for its missions and also programme its future funding programmes accordingly as good plans [implementing them](#). This will enable Europe to take the lead and offer collaboration with like-minded third countries.

GENEROUSLY SHIFT FUNDS

Prioritising knowledge, better involving citizens and making a genuine offer to the world will allow a powerful new narrative for the immediate [future of Europe](#), the next budget and the next generation of European funding programmes from 2021 onwards and justify the necessary large-scale increased investments into knowledge. We urge the EU ministers of finance to allocate € 160 billion for the 9th EU Framework Programme for Research & Innovation and at least € 40 billion for the successor of Erasmus+. These programmes should leverage more private and public national investments and in terms of committing to overall and country-specific targets for investments into higher education, research and innovation. Widening participation and spreading excellence should be enacted through ring-fencing funding for knowledge in the European Structural and Investment Funds (ESIF) and FP9 and Erasmus++ should be given the lead over support to knowledge from other EU programmes, notably the ESIF and the external action programmes. We also point out to the need to adjust and amend the state aid and competition rules accordingly: funding for knowledge may not be seen as costs, but as long-term investments. Therefore, risk-taking rather than risk avoidance must be promoted and a shift from the current focus on short-term socio-economic return of investment towards education and training, scientific, social, economic and societal benefits and the provision of a more `flexible` set of the funding instruments are needed.

KEY MESSAGES ON FP9

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The EU Framework Programme for Research & Innovation (FP) from 2014 to 2020 ([Horizon 2020](#)) integrated the FP, the Competitiveness and Innovation Programme (CIP) and due to cuts is to obtain about €74 billion instead of the budgeted €80 billion in current prices.

The establishment of the FP, the European Research Council ([ERC](#)) and the inclusion of the European Research Area ([ERA](#)) and related 5th Freedom in the Treaty on the Functioning of the European Union ([TFEU](#)) concern the most important and tangible achievements of European integration in Research & Innovation (R&I). The FPs are powerful tools to create jobs and boost smart, inclusive and sustainable growth. Although limited in size, they are crucial for us universities of Science & Technology (S&T) as they stimulate us to deliver highest scientific excellence, boost our attractiveness worldwide, promote collaboration with all sorts of partners and allow our scientists and innovators to contribute to tackling societal challenges across borders. We welcomed the clear structure divided into three priorities. Complementing our [statement](#) `More knowledge for a better world` and our [technical paper](#) `How you can boost worldwide Research and Innovation`, the [universities of S&T](#) united within [CESAER](#) with this paper offer their key messages for the design of 9th FP (FP9) to the European institutions. Overall, a balance should be sought between conserving what goes well and introducing necessary novelties demonstrating Europe's highest ambitions.

KEEP ENTIRE PROGRAMME ATTRACTIVE

It is important to keep the entire programme attractive and make FP9 simpler and more transparent bringing more opportunities for newcomers, less serving vested interests and allowing for more bottom-up research. Therefore, the ERC should get substantially more funding (€4 billion *per annum* at the least), excellence should be applied as the key criterion and geographical distribution of budgets should be avoided. Missions could be introduced to increase the visibility of R&I and to unlock the disruptive innovation potential of research results and transformative effects on science, business & industry, systems, citizens and societies. The 17 United Nations (UN) Sustainable Development Goals ([SDGs](#)) could enable consortia consisting of partners from the quadruple helix (academia, business & industry, states & public services and citizens & society) through open calls across the entire FP9 to co-create bottom up more impact and wider benefits (i.e. scientific, economic, social & societal). The importance of Technology Readiness Levels (TRLs) should be reduced and the purpose of such consortia put first and instruments from funders second. Importantly, we point out to the European added value through open and European-wide competition for mono-beneficiary grants next to transnational cooperation in multi-beneficiary grants. Ensuring one single set of simplified EU rules for participation to safeguard a level playing field and increase acceptance of usual accounting principles and institutional practices are needed. In our [key messages on the successor of Erasmus+](#), we make concrete proposals for better linking of R&I to learning & teaching, including making education & training eligible costs in R&I projects under FP9.

SIMPLIFY INNOVATION FUNDING & BOOST DISRUPTIVE INNOVATION

While Europe is doing great in research, it is doing far less so in innovation. The European Innovation Council (EIC) therefore should boost disruptive & market-creating innovation by providing support along three flexible funding instruments. First, bottom-up Innovator Grants should target innovators & their ideas (8% of total EU FP9 budget). Like is the case with the ERC, these grants should fund persons and not organisations. However, the EU support should allow for the (co-) funding of institutional & inter-institutional grant & fellowship schemes and pre-pre-seed funding, including via cascade funding. Second, an action should be dedicated to support open innovation ecosystems without replacing existing (regional, national and private) funding (7% of total EU FP9 budget), including involvement in mid-size (around €50 million) and large-scale institutional (up to €200 million) and large-scale inter-institutional (above €½ billion) risk & venture capital funds under specific conditions taking State Aid & Competition rules into account. Third, the Proof of Concept scheme should be extended as a crosscutting Part IV under the entire FP9 (5% of total EU FP9 budget) and provide flexible funding adapting to differential development paths & regulatory contexts to bridge between research, application and commercialisation. The distribution of decision-making as close as possible to execution & avoidance of complex & long decision-making are key to success. That is why we advise to (co-) fund also institutional & inter-institutional schemes.

COMBAT OVERSUBSCRIPTION WITH MORE AND SMARTER FUNDING

Oversubscription and low success chances as a consequence of lack of investments have become the biggest threat to the FPs and we strongly support the [call](#) from the independent High Level Group on maximising the impact of FPs to substantially raise the budget for FP9: allocating €160 billion to FP9 is not only the single most important mean to combat them, but also matches the ambitious agenda for Europe we set out in our [statement on `More Knowledge for a better World`](#). The introduction of an ERA TOP-UP intervention scheme (whereby the EU funds additional activities of excellent research and innovation projects selected and funded at national level) and merging all current (innovation) co-funding actions into one effective and coherent COFUND intervention scheme will ensure that EU funding leverages more public and private investments under the EU rules for participation instead of covering R&D activities substituting own investments. Finally, there is a need for more `flexibility` in the funding instruments and the Member States should better and more apply the Seal of Excellence. Therefore, also the state aid and competition rules need to be adjusted.

KEY MESSAGES ON THE SUCCESSOR OF ERASMUS+

STATEMENT DATED 7TH DECEMBER 2017

The EU Programme for Education, Training, Youth and Sport ([Erasmus+](#)) integrated the former programmes for education & training, youth and sport, and five external higher education cooperation schemes and was given a budget of €16,5 billion under heading 1 and 4, of which 43% to higher education (Erasmus) and 1,9% to the [Jean Monnet Programme](#).

Erasmus+ is a forceful tool to improve the skills of our graduates, to modernise higher education and to realise the European Higher Education Area ([EHEA](#)). It helps universities to deliver excellence in education, promotes collaboration, boosts our attractiveness worldwide and enables us to realise institutional development strategies. We greatly appreciated the integration of former programmes and the clear and simplified structure along three key actions. Complementing our [statement](#) `More knowledge for a better world` and our [technical paper](#) `More Strategy, Higher quality`, the [universities of science & technology](#) united within [CESAER](#) with this paper offer their key messages for the design of the successor of Erasmus+ to the European institutions.

MORE STRATEGY

Increasing the strategic value and the budget for the centralised actions are key to unlock the full potential of learning & teaching in Science, Technology, Engineering, Architecture, Arts and Mathematics (STEAM). We see many opportunities in inviting consortia to co-create more and better impact and benefits together with various stakeholders through linking their proposals bottom-up to the 17 United Nations (UN) [Sustainable Development Goals](#) (SDGs). This will align the policy and programme objectives in education & training, external relations and research & innovation. Moreover, a single set of rules should apply to the Marie Skłodowska-Curie Actions ([MSCA](#)), the European Institute for Technology ([EIT](#)) Master and Doctoral Programmes, funding for education and training aspects and research skills in the PhD phase and for summer and doctoral schools under the various EU programmes (i.e. successor of Erasmus+, 9th EU Framework Programme for Research & Innovation - FP9 - and European Structural and Investment Funds - ESIF). More focus on quality, alignment of objectives and creating one set of rules will bridge better between learning & teaching and science & technology, bring about more innovation & impact, enable universities to implement more attractive career paths and significantly improve recognition of prior academic achievements. The reintroduction of former instruments `intensive programmes` and `curriculum development` will enable us to implement better our institutional development strategies. Trust and confidence should allow for less burdensome auditing. The contracts for Joint Programmes should be extended to five years to achieve their consolidation. Sounding Boards per (sub-) action established involving university staff to collect feedback on and suggestions for programme management, administration and implementation.

MORE QUALITY AND INNOVATIVE MIND-SETS

Quality in educational offer, administrative execution and in strategic vision are priorities for the successor of Erasmus+. First, it should address more and better solidarity and democratic citizenship, not least by using Jean Monnet to reach out to larger groups within universities and beyond - in creative ways beyond typical classwork - on topics related to European integration, history, citizenship, democracy and human rights, mass media and communication. Erasmus students should be encouraged to act as ambassadors for European values and their initiatives to strengthen the European idea and increase inter-cultural understanding and openness should be more supported. Second, we advise to foster more innovative mind-sets and more innovation in learning & teaching. [Erasmus for Young Entrepreneurs](#) would benefit from integration into Erasmus+. Moreover, entrepreneurship education would nicely fit into an extended Erasmus+ programme, particularly for the EIT labelled Master and Doctoral Programmes. In any case, a single set of rules should apply and transparency around the calls for proposals and evaluation be guaranteed. We also feel that the dissemination and communication efforts on projects results need to innovate, e.g. through television, social media and video clips. Third and importantly, we urge to centralise all Key Action 2 for higher education to leverage European added value through competition on excellence and to create a level playing field at European level and beyond.

MORE AND SMARTER FUNDING

We note a growing tension when we relate the institutional development strategies with regard to outgoing mobility to the means available and have increasingly encountered the need to make additional funds available. This cannot go on. We thus urge particularly the ministers of finance to allocate at least € 40 billion for the successor of Erasmus+ to match an ambitious [agenda](#) `More Knowledge for a better World`. The Erasmus+ successor must be leading over support to learning & teaching from other programmes, notably the ESIF and External Action programmes. We advise to introduce an EHEA TOP-UP intervention scheme whereby the EU funds additional activities of excellent higher education projects selected and funded at national level. Importantly, we advise to increase the budget for higher education cooperation in neighbourhood policy and capacity building for which the purchasing of equipment on the EU side should be allowed, real costs reimbursed, and funding for management overheads reintroduced.

For more information, please contact our [Secretary General](#).

[CESAER](#) is the European association of [fifty-one leading doctorate-granting specialised and comprehensive universities of science & technology](#) from twenty-six countries that champion excellence in higher education, training, research and innovation, influence debate, contribute to the realisation of open knowledge societies and deliver significant scientific, economic, social and societal impact.