

EU Research Trends - June 2018

In June, Research Trends brings news on the Horizon Europe proposal presented 7th June and other relevant proposals such as Digital Europe, EU Space Programme, the European Defence Fund and the Connection Europe Facility. Also, we look at the ministerial roadmap for the European Science Cloud and the high-level committee set up to search for the next ERC president.

The general events calendar is attached to the email sending out Research Trends.

Trends

Proposal for the 2021-2027 Framework Programme - Horizon Europe

The Commission proposal for the next Framework Programme 2021-2027, Horizon Europe, is out. In overall numbers the proposed budget allocation is 100 billion EUR of which 97,6 billion EUR is accounted for by Horizon Europe, this figure includes 3,5 billion EUR to be allocated under the InvestEU Fund and 2,4 billion EUR for the Euratom Research and Training Programme. The Commission calls for a swift agreement on both the overall long-term EU budget and the sector proposals such as Horizon Europe. In the press conference presenting the proposal, the Commissioner underlined that excellence science through ERC and MSCA are some of the strongest elements in Horizon 2020 and that these will continue under Horizon Europe (pillar I) but with increased budget.

In reality, the increase is marginal and this is one of the main points of criticism from the research community. Example from The Guild inserted <u>here</u>.

In his presentation of the Horizon Europe programme, the Commissioner also highlighted the changes that Horizon Europe will bring. (i) The first one being the European Innovation Council (EIC) which has the ambition of helping the EU to become a frontrunner in market-creating innovation. The EIC will consist of two main funding instruments, one for early stages and the other for development and market deployment. The EIC is to complement the European Institute of Innovation and Technology EIT. (ii) Furthermore, the Commissioner highlighted the second main change namely the introduction of missions which will form part of the second pillar on called global challenges and industrial competitiveness. Examples of potential missions include: finding a cure for cancer, clean transport or plastic-free oceans. The idea with the mission concept is that they are to be co-designed in a separate process involving citizens, stakeholders, the European Parliament and Member States. Many voices concern in regard to the introduction of mission because although their appeal is easy to see from a communicative point of view they require significant budgets to be successful and a real joined up policy approach.

In terms of reaching out to the countries that perform poorly in Horizon 2020, the new programme will double the investment in spreading excellence and widening participation.

Horizon Europe will also be reinforcing the work on open science requiring open access to publications and data, to assist market uptake and increase innovation.



In the context of a new generation of European Partnerships, the Commission wants to streamline the number of partnerships and increase their effectiveness and impact. The Commission press release can be found <u>here</u>. The legal text for Horizon Europe can be found on this <u>link</u>.

European Parliament appoint lead draftsmen for Horizon Europe

The European Parliament has appointed two rapporteurs responsible for steering the Horizon Europe negotiations through the Parliament. Christian Ehler (EPP, DE) will surprisingly 'only' handle the specific programme and Dan Nica (ALDE, RO) will handle the regulation and rules of participation for Horizon Europe and thereby be the main negotiator. Nica is former deputy prime minister of Romania and Romania will hold the Presidency of the Council from January to Juli 2019. Ehler has a long interest in research and innovation, and negotiated already as rapporteur of Horizon 2020. For more information, please access this article.

University associations unite in response to EU Commission proposal

14 university associations, including EUA, the Guild and others have united to issue a common response to the Commission's proposal for Horizon Europe. The key messages of the statement are: (i) increase the total budget, (ii) review the budget allocation, (iii) put the realization of the European Research Area at the centre of Horizon Europe across all pillars. (iv) Foresee better linkages between research, innovation and education, (v) Include SSH reflection as well as options for fundamental research in all clusters and missions. The joint statement is attached to the email sending out this newsletter.

Commission publishes final report of BOHEMIA foresight project

The Commission has published the final report of the BOHEMIA project, the main EU strategic foresight study to support future EU policy in research and innovation. The authors of the report 'Transitions on the Horizon: Perspectives for the European Union's future research and innovation policies' summarizes key recommendations and identify 19 likely future scenarios with disruptive implications for EU R&I. The recommendations center around: (i) EU R&I policies must be transformative, (ii) Anticipation and preparation need to be at the forefront of R&I policy and (iii) Public engagement and evidence are needed. For more information, please follow this link.

Commission publishes proposals for research linked programmes: InvestEU, Digital Europe, Connecting Europe Facility and Space

The Commission has published a series of proposals that often (but not always) link to the research programme. All proposals are part of the upcoming MFF:

- <u>EUInvest</u>: The Commission proposes the creation of the new InvestEU Programme within the next MFF, in order to bring EU budget financing in the form of loans and guarantees under one roof. InvestEU will integrate a number of different financial programmes. Legislative proposals for EUInvest can be accessed through this <u>link</u>.
- <u>Digital Europe</u>: Commission proposes to create first ever Digital Europe Programme. Digital Europe should invest 9,2 billion EUR in the EU budget 2021-2027 to address digital challenges. The proposal includes 5 focus areas: (i)



<u>Supercomputers</u>, (ii) <u>Artificial Intelligence</u> including <u>Digital Innovation Hubs</u> (iii) <u>Cybersecurity</u> and trust, (iv) Digital skills, and (v) Ensuring a wide use of digital technologies across the economy and society including <u>Digital Innovation Hubs</u>. For more information about the proposal, please follow this link.

- <u>Connecting Europe Facility</u> : CEF is renewed through this proposal and is suggested to get a budget of 42,3 billion EUR to support investments in infrastructure networks for transport, energy and digital. For the legislative proposals in support of CEF please follow this <u>link</u>.
- <u>EU Space Programme</u>: Space should have a programme of 16 billion EUR and should help to maintain and further build on successes such as Galileo and EGNOS in satellite navigation, Copernicus in Earth observation and will develop new security components. It will invest more in space activities, adapting to new needs and technologies to foster a strong and innovative space industry. For legislative proposals and fact sheets on the EU Space Programme, please follow this link.
- <u>European Defence Fund</u>. The Commission has proposed a regulation for the European Defence Fund (EDF). The future MFF will include a specific chapter on defence that comprises two instruments: the EDF and the Military Mobility. The Fund is set up to provide 13 billion EUR in funding which will make the EU one of the four biggest defence research and technology investors in Europe. For the first time, funds from the common EU budget will be used for supporting the field of defence research. For more information, please follow this link.

European Parliament critical of Commission's budget proposal

The European Parliament has passed a non-legislative resolution on the Commission proposal for the EU budget for 2021-2017 (MFF). In the resolution the MEPs among other things point out that the Commission is foreseeing a smaller budget increase than announced for key programmes such as Horizon Europe and Erasmus+. Parliament has previously suggested a Horizon Europe budget of 120 billion EUR and to triple rather than double Erasmus. For more information, please follow this <u>link</u>.

EU Prize for low-cost space launch solution - now open

The European Innovation Council (EIC) has opened the Horizon Prize to develop a European Low-Cost Space Launch solution. The prize will award 10 million EUR to an innovative and commercially viable solution offering low-cost launch services for light satellites. The prize will contribute to the objectives of the <u>Commission's Space</u> <u>Strategy for Europe</u>. Deadline is 1st June 2021. For more information, please follow this <u>link</u>

EU Research Ministers endorse roadmap for European Science Cloud

During the most recent meeting of EU research ministers, the ministers endorsed the roadmap for the creation of the European Open Science Cloud (EOSC). The Commission's plans include a wide, pan-European federation of existing and emerging excellent infrastructures. Membership in this federation would be voluntary and the governance structure would include member state ministries, stakeholders and scientists. The next milestones for the initiative include the set-up of the governance structure and the launch of projects directly supporting its implementation under the INFRAEOSC call of Horizon 2020. For more information, please follow this Link.



Consultation on European Open Science Could implementation

A stakeholder consultation on the draft 'Rules of Participation of EOSC' has been launched. Stakeholders may publish or comment posts, agreeing or disagreeing with principles and recommendations. The consultation is open until 8th August and results will be presented at the Austrian Presidency Event: Launch of the EOSC Governance Structure in November. To access the consultation, please follow this <u>link</u> and to read more about the EOSC, please follow this <u>link</u>.

LERU presents advice paper on Open Science

LERU has presented its new advice paper on Open Science and the cultural change that is needed for universities and other stakeholders to embrace it. LERU is convinced that Open Science brings new and exciting opportunities for academia and how academics interact with society. However, LERU also realizes that for universities and other stakeholders to embrace Open Science, there needs to be a culture change. LERU discusses the eight pillars of Open Science as identified by the European Commission. For each of the eight Open Science pillars, recommendations about what universities can do are formulated. The paper also offers high-level conclusions and recommendations for the transition at the institutional level and provides a set of questions which universities can use to measure their progress in implementing Open Science. For more information, please follow this <u>link</u>.

EU and UK publish statement reporting on Brexit negotiation progress

The Commission and UK has published a joint statement on the progress achieved regarding the terms of the withdrawal agreement for UK. The statement was presented mid-June with a view to the meeting of the European Council, at the end of June. Among others, the joint statement set out issues on which agreement has been reached at negotiators' level. These include for instance intellectual property and Euratom issues. The EU chief negotiator, Michel Barnier, has underlined that serious divergences remain. For more information, please follow this <u>link</u>.

Commission launches new European Sustainability Award

The Commission has launched the first ever EU Sustainability Award to recognize the efforts and creativity of European citizens, businesses and organisations who work towards reaching the UN Sustainable Development Goals (SDGs). The award will champion inspiring initiatives which provide concrete solutions for achieving the SDGs. Applications can be submitted until 14th September 2018. The winners of the award will be selected by a jury of members from the Commission's Multi Stakeholder Platform on the SDGs and will be announced at a high-level ceremony in Spring 2019. For more information and submission, please follow this <u>link</u>.

High-level Committee set up to search for new ERC President

The Commission has announced that 7 experts have been selected to conduct the search for the next president of the ERC. The search committee will be chaired by former European Commissioner and Italian Prime Minister, Mario Monti, who is today president of Bocconi University. Former ERC president Helga Nowotny from Austria is also member of the committee as is Fabiola Gianotti, Director-General of CERN, Carl-Henrik Heldin, Director of the Ludwig Institute at Uppsala University, Jules A.



Hoffmann, Chair of Integrative Biology, University of Strasbourg and Nobel Prize in Medicine and Alice Gast President of Imperial College London, and Maciej Zylicz, President and Executive Director of the Policy Science Foundation. The next ERC president is to take up duties on 1st January 2020. For more information, please follow this <u>link</u>.

Study finds 79% of ERC projects are breakthroughs or major advances

The ERC has presented a new independent study according to which 79% of the frontier research projects funded by the ERC were of major impact. 19% lead to a breakthrough and 60% to a major scientific advance. Almost half of the projects have already left their mark on economy, society and/or policy-making whilst around three quarters are foreseen to do so in the medium and long-term. For more information, please follow this <u>link</u>.

Member States discuss future of European education cooperation for realization of the European Education Area

The main topic of the high-level meeting in Vienna was on the future of European education cooperation in the context of setting up the European Education Area. The Member States had a first exchange of ideas on the structure and possible priorities of a strategic framework for European cooperation in education and training post-2020. Furthermore, they looked at how such a new strategic framework could be set up to provide more focused support and to generate more effective and long-lasting impact. Equally, a discussion on longer term aspects of the implementation of the 'European Universities' Initiative was discussed.

New High-Level group on Artificial Intelligence and new AI Alliance launched

Following the call for experts issued in March this year and communicated in this newsletter, the Commission has now appointed 52 experts to the new High-Level Group on Artificial Intelligence (AI). The group consists of representatives of academia, business and civil society and will support the implementation of the EU Communication on AI published in April this year. To Danes are onboard this group: Gry Hasselbalch and Cecilia Bohnefeld Dahl. Together with this group, the Commission is also launching the European AI Alliance and its online platform which aims to stimulate debate on AI, share best practices, contribute to AI ethics, network and stimulate activities relating to AI. Anyone wishing to join the platform can do so. For more information, please follow this Link.

Commission renews 'Stairway to Excellence' initiative

The Commission has announced the continuation of the 'Stairway to Excellence' initiative. The initiative was launched in 2014 when smart specialization became a requirement under Cohesion Policy rules. For 2018-2019 it is focused on preparing the MFF with a budget of 3 million EUR for these two years. The initiative helps regions develop, update and refine their smart specialization strategies ahead of the next budgetary period 2021-2027. It will also help identify adequate EU resources to finance innovative projects and pair up with other regions with similar needs to create innovative clusters. For more information, please follow this <u>link</u>. Please notice that regions can flag their interest and participate via the <u>Smart Specialisation Platform</u>.



Finland and Sweden signs EU High Performance Computing declaration

In June four new countries signed the <u>European High Performance Computing</u> <u>declaration</u>. Implying that 20 EU countries have now signed this commitment to digitize Europe with High Performance Computing. Denmark has not signed the declaration. For more information please, follow this <u>link</u>.

JRC publishes Annual Report

The Commission's Joint Research Centre (JRC) has published its Annual Report for 2017. In 2017, the JRC celebrated its 60th anniversary and this was also the first full year of implementation of the JRC's 2030 strategy. Among the highlights mentioned in the annual report are: (i) Policy support for several unexpected, complex and sensitive issues such as 'dual food quality' in the EU, (ii) Contributions to several Commission initiatives such as the Energy Union and Smart Specilisation, (iii) The set up of several new Knowledge and Competence Centers, (iv) as well as research on aspects of digital transformation, including cyber security, block chain and Artificial Intelligence. For more information, please follow this <u>link</u>.

SAM publishes Opinion on EU authorization process of plant protection products

The Commission's Scientific Advice Mechanism (SAM) Group of Chief Scientific Advisors has published a new independent scientific opinion on the EU's authorization processes of Plant Protection Products (PPP). The opinion has been developed on the request of the Commissioner for Health and Food Safety. The opinion can be found on the SAM subsite of DG RTD through this <u>link</u>. The recommendations in the opinion are informed by an accompanying Evidence Review Report that can be found <u>here</u>.

Commission report on SSH integration in H2020

The Commission has published its third report on SSH integration based on projects financed under SSH flagged topics in 2016. The results are encouraging and seem to have a similar level to previous findings. The report concludes that there is room for improvement especially with regard to integration of SSH across the work programmes and expanding the SSH partners beyond a select handful of countries. For more information, please follow this <u>link</u>.

Commission publishes brief on social innovation

The Commission has published a policy brief on the Research, Innovation and Science Policy Expert (RISE) group on social innovation. The brief looks at the potential of social innovation and in particular at how it can be mainstreamed in the innovation agenda and supported through Horizon Europe and other EU actions. Whilst focusing on needs of organisations delivering social innovations the authors also recognize the great diversity and bottom-up nature of the activities in this field. The brief includes four recommendations to be considered in designing Horizon Europe. Among them the need for socially-driven missions. For more information, please follow this <u>link</u>. Should you wish to read more about the purpose and tasks of RISE, please follow this <u>link</u>.

Commission seeks expert evaluators for H2020 Prize on Social Innovation

The Commission is looking for experts to review applications for <u>the Horizon Prize on</u> <u>Social Innovation</u>. The purpose of this contest is to develop innovative and sustainable mobility and transport solutions improving the lives of seniors and people with



disabilities. Experts with a high level of expertise and experience in social innovation, entrepreneurship, ageing, mobility and transport are invited to apply. Deadline is 30th September 2018. The prize was launched on 27th November 2017. The prize will be awarded in the second or third quarter of 2019. For more information please consult the <u>Participant Portal</u>.

79 innovative projects funded under recent EIC pilot

The Commission has published the results of the latest round of the SME Instrument (phase 2) as well as Fast Track to Innovation. In total 79 projects will be funded and receive 146.173 million EUR. The SMEs taking part in this 2nd phase of the SME Instriument went through face-to-face interviews with a jury of innovators, entrepreneurs and venture capitalists. Italy had the highest number of successful SMEs (9) followed by Spain (7) and Denmark, Germany and France each respectively with 5 successful SMEs. For more information, please follow this <u>link</u>.

Report on Widening Participation and Strengthening Synergies

The Mutual Learning Exercise (MLE) has published its third Topic Report 'Improving Networking through participation in EU level initiatives'. The focus of the report is on strategies, innovative mechanisms and schemes developed at national or regional level, aiming at improving networking through participation, in a wide variety of EU-level initiatives, in order to reinforce capacities to participate in framework programmes. The report provides a landscape of existing initiatives and identifies lessons learned. To download the report, please follow this <u>link</u>.

EU project SynchroniCity launches call

On June 1st the EU project lead by Aarhus University <u>SynchroniCity</u> launched an open call for companies. The purpose of SynchroniCity is to create a global market for human-centered IoT-enabled urban services which are interoperable, replicable and reusable across cities and across domains. Call is open till 30th September. For more information, please use this <u>link</u>.

Universities Denmark hosts MEP briefing in the European Parliament

On 20th June, Dean of Health at Aarhus University, Lars Bo Nielsen, together with dean of research from DTU Katrine Krogh Andersen represented Universities Denmark during a breakfast meeting in the European Parliament in Brussels. The briefing was intended to prepare the Danish MEPs for the forthcoming negotiations on Horizon Europe. A full report of the meeting can be obtained on request.

Highlighted events

Info-day Societal Challenge 1 - Health

12th July the Commission is hosting an info day on <u>web stream</u> for Societal Challenge 1: Health. For more information, please follow this <u>link</u>.

SAVE-THE-DATE Info-day and matchmaking on Societal Challenge 5

On 11th and 12th September in Brussels, the Commission hosts an info-day and matchmaking on Societal Challenge 5 (Climate Action, Environment, Resource Efficiency & Raw Materials). Keep an eye on this <u>link</u> to register.



Events attended in June. Summaries can be obtained by request

5th June - Innovative Europe - a new EU Innovation strategy? Science Business event

5th June - EITs role in strengthening EU innovation. European Parliament event

7th June - Women in Science - the past and present. Polish Embassy event

18th June - Spreading Excellence - DG RTD event

19th June - Digital event - ECSEL Joint Undertakning event

20th June - Transforming Consumer and Health-Oriented Society through Science and Innovation

26th June - Beyond 2020, the next generation knowledge programmes. Nether event

Comments or questions should be directed to Rikke Edsjö or Lina Christensen