

EU Research Trends - July 2014

Have your say on the future of science: public consultation on Science 2.0

The European Commission has launched a public consultation on 'Science 2.0', in order to gauge the trend towards a more open, data-driven and people-focused way of doing research and innovation. Researchers are using digital tools to get thousands of people participating in research, for example by asking them to report if they catch flu in order to monitor outbreaks and predict possible epidemics. Scientists are being more open too: sharing their findings online at an early stage, comparing and debating their work to make it better. Increasingly, scientific publications are available online for free. By some estimates, 90 percent of all available data in the world has been generated in the past two years, and scientific data output is growing at a rate of 30 percent per year.

The consultation will look at awareness of and participation in these trends, as well as get views on the opportunities created by 'Science 2.0' to strengthen the competitiveness of European science and research.

The European Commission has already integrated some aspects of 'Science 2.0' into its policy. In particular, open access to scientific publications is mandatory for research under Horizon 2020. A Pilot project on Open Research Data has also been launched. Through its research programmes, the EU also funds a number of citizen science projects and supports some of the e-infrastructure that makes Science 2.0 possible.

'Science 2.0' is rapidly gaining momentum globally as a result of digital technologies and in response to current weaknesses in science, including the slow and costly scientific publication process, criticism of the peer review system and the challenge of reproducing research results due to lack of re-useable and replicable data.

This is taking place in the context of major, interconnected trends:

- a significant increase in scientific production and a trend towards open access to scientific information and open research collaboration (remote collaboration of scientists);
- steady increase in the number of actors in science (today, the world has the largest number of scientists ever) and greater involvement of citizens in research (in the research itself or as funders or agenda setters);

New ways of doing science thanks to the availability of large-scale datasets and constant growth in computational power.

The consultation, as well as background information, can be found [here](#)

The deadline for responses is 30 September 2014.

The New European Parliament

The Committee on Industry, Research and Energy (ITRE) held its constitutive meeting Monday 7. July, where chairs and vice-chairs were elected. The Committee members elected Mr. Jerzy Buzek, Polish Conservative and former President of the European Parliament (2009-2011) as chair and Ms. Patrizia Toia, Mr. Hans Olaf Henkel, Mr. Miloslav Ransdorf, and Mr. Morten Helveg Petersen as vice-chairs. Together, the chair and vice-chairs make up the bureau of the Committee, elected for a two-and-a-half year term.

Five Danish Members of the European Parliament (MEP's) have chosen the ITRE-committee: Bendt Bendtsen (PPE), Jeppe Kofod (S&D) and Morten Helveg Petersen (ALDE) are members and Morten Messerschmidt (ECR) and Jens Rohde (ALDE) are substitutes. The main difference between being a member and a substitute of a parliamentary committee is that the latter can only vote, when a member is absent.

Western Balkans countries and Moldova sign up to Horizon 2020

Five Western Balkan countries (Albania, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, Montenegro and Serbia), and the Republic of Moldova have now full access to Horizon 2020. All six countries have experience of cooperation on research and innovation with the EU through the seventh framework programme (FP7), and are seeking to build on this under Horizon 2020.

Researchers, businesses and other research partners from the six countries are already well embedded in EU research projects and networks. The fact that all the countries are associating at the same time will also increase the opportunities for regional cooperation. To get the most out of Horizon 2020, all six countries need to build upon their experience of FP7 and strengthen national research and innovation capacities. Although participation of SMEs is still limited, the number of small enterprises engaging in research and innovation is increasing, which is another step towards successful participation in Horizon 2020 given the programme's greater focus on the entire innovation chain, from the lab to the market.

The association agreements, which will apply retroactively as from 1 January 2014, will allow research and innovation entities from all five Western Balkan Countries and Moldova to take advantage of the funding opportunities offered under Horizon 2020 right from the start. Ten countries are now associated to Horizon 2020.

Under the seventh framework programme for research, FP7, the six countries participated as follows:

	Number of projects participated in	EU contribution received (in million euro)
Albania	35	2.4
Bosnia and Herzegovina	45	3.1
The former Yugoslav Republic of Macedonia	105	11.5
Montenegro	52	4.2
Serbia	307	53.9
Moldova	55	3.9

Launch of first partnerships between EU and industry

On Wednesday 9 July, the European Commission launched the first call for projects for research partnerships between the EU, the private sector and member states. This effectively means putting into practice the “innovation investment package”, which was presented a year ago. The president of the European Commission, José Manuel Barroso, asserted that the partnerships would aid recovery “with first calls for proposals for 1.1 billion EUR to be matched by industry, within a package representing an overall 22 billion EUR boost to growth and jobs creation over seven years”. On this occasion, the Commission organised an event in Brussels that brought together the CEOs of the main companies involved (Novozymes, Safran Group, STMicroelectronics, Intelligent Energy, UCB, ENAV and Siemens). Barroso said that such partnerships “will continue delivering results that no single country, company or even the European Union as such would achieve alone”. The aim is to create seven public-private partnerships, which will focus on a number of areas including new treatments for diabetes and eye disease and a roll-out of dozens of hydrogen-powered road vehicles and refueling stations.

These are:

- [innovative medicines \(IMI2\)](#)
- [Fuel Cells and Hydrogen 2 \(FCH2\)](#)
- [Clean Sky 2 \(CS2\)](#): to develop cleaner, quieter aircrafts with significantly less CO2 emissions

- [Bio-based Industries \(BBI\)](#): to use renewable natural resources and innovative technologies for greener everyday products
- [Electronic Components and Systems for European Leadership \(ECSEL\)](#)
- [Shift2Rail](#): to develop better trains and railway infrastructure
- [SESAR 2020](#): to develop the new generation of European Air Traffic Management system that will enhance the performance of air transport

The EU will invest 1.13 billion EUR in the first calls for proposals and expects private companies to provide a similar amount. Research institutions and universities are also invited to take part in the project. The project will represent a total investment of 19.5 billion EUR in research and innovation over the next seven years. The EU's contribution to the budget will be 7.3 billion EUR, which will help to unlock 12.2 billion EUR in private sector investment and investment from member states. The figure of 22 billion EUR mentioned by Barroso also includes the four public-private partnerships completing the “innovation investment package”.

Transfer of the European Reference Index for the Humanities (ERIH)

The European Science Foundation (ESF) and the Norwegian Social Science Data Services (NSD) have announced that the transfer of the European Reference Index for the Humanities (ERIH) to NSD has been completed and ERIH PLUS is now accessible at the [NSD website](#).

Following the memorandum of understanding signed in January 2014, NSD will now operate the new reference index for scientific journals in the humanities and social sciences. The goal is to enhance the global visibility of high-quality research in the humanities and social sciences across Europe, and to facilitate access to research journals published in all European languages. The ERIH PLUS index encompasses the original ERIH lists, which initially only covered the humanities disciplines. The new reference index is called ERIH PLUS, in order to indicate that the list has been extended to also include social science disciplines.

Call for submissions

ERIH PLUS is ready to receive submissions for the inclusion of journals. To be included, the scientific journal must meet the benchmark standards described [here](#).

For submissions of new journals for inclusion in ERIH PLUS, please access this webpage:

<http://erihplus.nsd.no/>

For further information, contact: erihplus@nsd.uib.no

Update of H2020 programme

The adoption of the [updated 2014-2015 Horizon 2020 Work Programme](#) confirms the amounts for the actions to be implemented through next year's budget – see table below – and brings in two main novelties presented here: a new pilot call for Fast Track to Innovation and five research Innovation Prizes.

Work Programme 2015 – Funding for calls and financial instruments		
Excellent Science Pillar:~ 2.7 billion EUR		
European Research Council	4 calls	1 665 million EUR
Marie Skłodowska-Curie actions	4 calls	745 million EUR
Future and Emerging Technologies (FET)	1 call	58 million EUR
European Research Infrastructures (including e-Infrastructures)	4 calls	275 million EUR
Industrial Leadership Pillar:~ 1.8 billion EUR		
Information and Communication Technologies (ICT)	3 calls	733 million EUR
Nanotechnologies, Advanced Materials, Biotechnology and Production	5 calls	564 million EUR
Space	5 calls	104 million EUR
Access to Risk Finance	no call - Financial instruments	362 million EUR
Innovation in small and medium-sized enterprises (Does not include 260 million EUR for SME instrument or Eurostars)	1 call	30 million EUR
Societal Challenges Pillar:~ 2.3 billion EUR		

Health, demographic change and wellbeing	3 calls	573 million EUR
Food Security, Sustainable Agriculture and Forestry, Marine and Maritime and Inland Water Research and the Bioeconomy	3 calls	190 million EUR
Secure, clean and efficient energy	4 calls	596 million EUR
Smart, green and integrated transport	3 calls	253 million EUR
Climate action, environment, resource efficiency and raw materials	3 calls	339 million EUR
Europe in a changing world – inclusive, innovative and reflective societies	5 calls	123 million EUR
Secure Societies	4 calls	196 million EUR
In addition		
Spreading Excellence and Widening Participation	1 call	65 million EUR
Science with and for Society	4 calls	45 million EUR
Fast Track to Innovation Pilot	1 call	100 million EUR
EURATOM	1 call	39 million EUR

Commission announces 100 million EUR Fast Track to Innovation and five innovation prizes

The European Commission has presented the details of a new 100 million EUR "Fast Track to Innovation" (FTI) pilot action and five innovation prizes under H2020. The FTI aims to support Europe's economy by offering innovative businesses and organisations grants to give a final push to get great ideas to market. The prizes offer a reward for technological breakthroughs of high societal relevance. The initiatives underscore the drive to support innovation in Europe as part of the first, two-year Horizon 2020 work programme. There are 7 billion EUR for Horizon 2020 calls during 2015.

The Fast Track to Innovation scheme will be open for applications as of January 6 2015². Proposals can be submitted at any time as of that date, and they will be ranked following three cut-off dates in 2015: April 29, September 1 and December 1. It will support small consortia of three to five organisations with strong business participation to give promising ideas the last push before entering the market. It is open to ideas in any area of technology or application and to any legal entity established in the EU or in a country associated to Horizon 2020.

The contests for the five innovation prizes will start in late 2014 and early 2015. The prizes, worth 6 million EUR in 2015, cover three different thematic areas of research: health ("Reduction of the Use of Antibiotics Prize", "Food-Scanner Prize"), the environment ("Reduction of Air Pollution Prize") and ICT ("Collaborative Sharing of Spectrum", "Optical Transmission Prize").

The response to the first Horizon 2020 calls announced in December has been enormous, with over 17,000 proposals submitted by end-June, seeking nine times the available funding. This marks a substantial increase from the previous 7th Framework Programme (FP7) and a higher level of competition. There has been a notable increase in applications from industry, with business applications to the "industrial leadership" and "societal challenges" pillars of Horizon representing 44 percent of the total compared with 30 % under comparable areas of FP7. SME participation is particularly strong, with over 5,500 SME applications to the Horizon calls on encouraging leadership in enabling and industrial technologies and nearly 2,700 applications for funding under the new 3 billion EUR SME Instrument.

The ERC working programme 2015

The European Commission has adopted the [ERC Work Programme 2015](#), as established by the ERC Scientific Council. It includes the budget and timeframes of ERC 2015 competitions for Starting, Consolidator and Advanced Grants. Funding for the top-up scheme Proof of Concept, open only to ERC grant holders, is also announced. (See overview for all these calls on p. 4 in the Work Programme).

The document also includes a call for proposals to promote the output of ERC-funded research amongst a wider audience. With an indicative budget of 1.6 million EUR, its goal is to support communication actions, which will help raise awareness of ERC projects and their scientific

results across Europe, not only amongst scientists, but also amongst media, policy-makers, the business community and the general public.

Information for applicants on how to submit proposals will be available through the EU Research and Innovation Participant Portal as of 16 September 2014. The planned call deadline for applications is 16 December 2014. (See especially pp 42 – 43 in the Work Programme).

For questions or comments to the newsletter, please contact [Rikke Edsjö](#)