

EU Research Trends - October

The outcome of the first year of Horizon 2020 shows that after 33 calls and 16.000 applications, some 187 contracts are signed. The average success rate is 14 %, with great variation between topics. In general more industry is involved, whereas a major drop in third country participation is seen.

Trends

A high level conference is co-organized on 26.-27. November 2014 in Milan, Italy, by the European Commission (DG CNECT) and the Lombardy Region at the occasion of the Italian Presidency of the EU

In 2015 there will be many co-funding opportunities for the public bodies in Europe to purchase innovative solutions aiming at tackling concrete public challenges. It is foreseen in the framework of H2020 to be launched calls for proposals to support joint procurement implementations in several domains of public interest like the following:

1. Transport
2. Cloud Computing
3. Energy
4. Optical broadband
5. Education and e-learning
6. Robotics

All these topics will be discussed in parallel sessions during the Innovation Procurement conference on 26.-27. November in Milan.

European Commission and data industry launch 2,5 billion EUR partnerships to master big data

The European Commission and Europe's data industry have committed to invest 2.5 billion EUR in a public-private partnership (PPP) that aims to strengthen the data sector and put Europe at the forefront of the global data race.

Mastering big data could mean:

- up to 30 % of the global data market for European suppliers;
- 100.000 new data-related jobs in Europe by 2020;
- 10 % lower energy consumption, better health-care outcomes and more productive industrial machinery.

A Memorandum of Understanding to set up the PPP on big data has been signed by European Commission Vice President Neelie Kroes and President of the **Big Data Value Association**, Jan Sundelin, who acts on behalf of companies including ATOS, Nokia Solutions and Networks, Orange, SAP, SIEMENS, and research bodies such as Fraunhofer and the German Research

Centre for Artificial Intelligence. The EU has earmarked over 500 million EUR of investment over 5 years (2016-2020) from Horizon 2020 which private partners are expected to match at least four times over (2 billion EUR).

The PPP will help focus public, private and academic research efforts to support research and innovation in game-changing big data ideas in fields such as energy, manufacturing and health to deliver services like personalised medicine, food logistics and predictive analytics. By implementing its Strategic Research & Innovation Agenda and concentrating Horizon 2020 support on common priorities, the PPP will strengthen Europe's big data community and help lay the foundations for the thriving data-driven economy of the future. The PPP will also support "Innovation Spaces" that will offer secure environments for experimenting with both private and open data. These will also act as business incubators and hubs for the development of skills and best practices.

The PPP, due to start on 1 January 2015, is one of the first outcomes of the European Commission's recent policy and action plan accelerate the development of Europe's data-driven economy.

The Data PPP complements eight existing Public-Private Partnerships under Horizon 2020, for example on Photonics, Robotics, High Performance Computing, Advanced 5G networks for the Future Internet and Factories of the Future. These all address strategic technologies that will underpin growth and jobs in key sectors of a knowledge-based European economy, while targeting significant societal challenges.

The Data PPP is a partnership between the European Commission and the Big Data Value Association, a non-profit, industry-led organisation whose members include ATC, IT Innovation, IBM, SINTEF, University of Bologna (CINI), Polytechnical University of Madrid, NOKIA Solutions and Networks, THALES, University of Duisburg Essen, Siemens, SAP, Engineering, TIE Kintetx, ANSWARE, Software AG, Orange, Atos, INDRA, ITI, VTT, Fraunhofer, DERI, and the Technical University of Berlin. The association is open for additional companies and research organisations to join.

Strong focus on environment and industrial innovation in 2015 work programme for EU standardisation

For the second year running, the European Commission published a Union work programme for European standardisation for the year to come. The documents build up on the conclusions of the European Council of March 2014, which emphasised the need of a strong and competitive industrial base as a key driver for economic growth and jobs. Most of the strategic priorities where the Commission intends to ask from the relevant organisations the development of standards are in the field of environment and green technologies.

The Commission also indicated additional priorities in other fields relevant to innovation and new technologies: advanced manufacturing technologies, key enabling technologies, sustainable industrial policy, construction and raw materials, clean vehicles and vessels and smart grids and smart metering.

The work programme is an essential document for EUREKA Clusters, which activities revolve for an important part around the setting and implementation of strategic standards. EUREKA

Clusters' standardisation activities focus particularly in highly technological sectors such as mobile, Internet, software and associated technologies in the field of transports. EUREKA projects have notably helped to set famous standards such Mp3 and 4G mobile telecommunications.

Standards also offer opportunities to SMEs developing technologies answering specific regulations. Recently, partners in the EURIPIDES VECTOR project seized the occasion of the International Maritime Organisation issuing a new standard on safety at sea (SOLAS) requiring that all vessels weighing more than 500 tons be equipped with at least one gyrocompass to move into the market with a new innovative solution.

The communication on the annual Union work programme for European standardisation for 2015 is available on the European Commission's website.

Fast Track to Innovation Pilot (2015-2016) A Free Interactive Information Event

9. January 2015, Brussels

This is your chance to discover a new exciting opportunity for industry-driven innovation under Horizon 2020.

Participants at this event will:

- Acquire insight into the objectives of this new scheme
- Become familiar with the modalities of the Fast Track to Innovation call
- Get practical tips and tricks on how to apply and how to maximise chances for success when applying
- Be able to interact throughout the event with EU-officials

Registration is open and can be made via e-mail: RTD-FTI-EVENT@ec.europa.eu.

Seats are free of charge and will be assigned on a first-come, first-served basis (maximum two seats per organization).

The event will be recorded and made available via webstream later.

European higher education remains too conservative to adapt to technological innovations

European higher education remains too conservative to adapt to technological innovations, said a Commission High Level Group on the Modernisation of Higher Education in its report published 22. October.

The group, which was launched in 2012 to examine such challenges, makes 15 recommendations to EU member states about how to integrate digital teaching and learning methods in their educational curricula.

Current learning systems are reluctant to leave behind conventional classroom methods and restructure the way universities and schools operate. Teachers do not have the necessary professional training to cope with new ways of schooling. The institutions themselves are poorly equipped with new technologies in order to deliver high quality, online education.

“Although Europe is starting to make progress, it is still lagging behind the US in using new technologies in our universities and colleges,” said Mary McAleese, the former President of Ireland, and chair of the High Level Group. “We should capitalise on the strengths we have, such as the wide use of ECTS [European Credit Transfer and Accumulation System] credits to ensure that digital learning in Europe is recognised, accredited and quality assured.”

Students are also reluctant to enroll in online degree programs, as an alternative to traditional, classroom-based ones, because many online courses do not offer credits towards obtaining a diploma. In fact, one of the group's recommendations to EU countries is that they recognise e-learning as a legitimate part of the educational system, and formalise it. The benefits of a digital teaching programme are multiple, according to the report. An online course not only can be adapted to the needs of each student. It also allows for immediate feedback to and from participants.

The group's recommendations come at a time when the demand for higher education is expected to increase. According to UNESCO, more than 250 million students will request entry into a degree programme in 2025, compared to 100 million students today. To satisfy such demand, universities and schools will have to start mixing traditional and digital schooling.

“Europe is facing the challenge of coping with greater numbers of students, greater diversity among them, and the need to improve the quality of learning and teaching,” Commissioner Vassiliou said. “I am especially pleased that the new Erasmus+ programme, which I launched in January, will be able to support the implementation of recommendations by the group.”

Erasmus+ funds European projects that help students and educational institutions among others to train, develop their digital education and the use of ICTs.

“It is key to move towards the implementation of new modes for learning, teaching and assessment, keeping in mind that the student population is diverse as well as students’ needs,” said Fernando Miguel Galán Palomares, Vice-Chairperson of European Students’ Union. “ICT tools are a perfect opportunity to do so. The future of education is blended and student-centred.”

Contribute to developing a comprehensive EU Research & Innovation policy framework for nature-based solutions by participating in this e-consultation

The European Commission is developing an EU Research and Innovation policy on nature-based solutions to tackle some of the most pressing challenges of our time. Nature-based solutions can transform societal challenges into innovation opportunities by capitalising on existing knowledge and turning natural capital into a source for green growth and sustainable development. These solutions are inspired and supported by nature, while maintaining and enhancing natural capital. They are sustainable measures that simultaneously meet environmental, social and economic objectives.

The objective of the EU Research & Innovation policy on nature-based solutions is to position Europe as a world leader both in Research & Innovation on nature-based solutions and in the global market for nature-based solutions.

This stakeholder e-consultation is part of a multi-stakeholder dialogue that will contribute to developing a comprehensive EU Research & Innovation policy framework for nature-based solutions. The e-consultation provides the opportunity to contribute your view and expertise on potential innovation opportunities, relevant examples, and related research and innovation needs for nature-based solutions.

The European Commission, in co-operation with the European Platform for Biodiversity Research Strategy (EPBRS), invites knowledge holders and providers, policy-makers, implementers and market players, users and society at large - from local, regional, national, EU and global level to participate.

Engaging in this anonymous collaborative online dialogue (of max. 80 minutes) from your PC/tablet via (<http://www.synthetron.com/how-synthetron-works/>) and will be triggered by documents sent to registered participants. The four discussion sessions are:

- o Improved Risk Management and Resilience – 10:00 CET
- o Restoration of Degraded Ecosystems – 12:00 CET
- o Climate Change Adaptation and Mitigation – 14:00 CET
- o Sustainable Urbanisation – 16:00 CET

Click here for [REGISTRATION](#) (until 7 November 2014).

FLAG-ERA Joint Transnational Call 2015 Pre-announcement

FLAG-ERA launches funding instruments in support of the Flagship initiatives on Graphene and Human Brain. The FLAG-ERA Consortium launches a dedicated joint call for proposals worth 18,5 million EUR on 27. October 2014. In parallel, FLAG-ERA announces the launch of Association Mechanisms for integration of nationally and regionally funded research into the Flagships work plans.

FLAG-ERA gathers 37 research and innovation funding agencies, research councils and ministries (NRFOs) from 26 countries within the EU and beyond, all working together to create an environment that enables the coordination of national and regional funding to support the Flagships. As such, FLAG-ERA coordinates the national investments in the Flagships; encourages their actual development and take up of their results and aims to widen their impact.

- FLAG-ERA published a press release, that can be viewed here:
[FLAG-ERA press release 27/10/2014](#)
- More info on the FLAG-ERA Joint Transnational Call 2015 :
<http://www.flagera.eu/FLAG-ERA-call-2015>
- More info on the Flagship Association Mechanisms:
<http://www.flagera.eu/flagship-association-mechanisms>
- [FLAG-ERA website](#)
- The two Flagship Projects: [Graphene & The Human Brain Project](#).
- Archive: [Pree-announcement of the call](#).

Info Day: Horizon 2020 Societal Challenge 5 – calls for proposals 2015

17. November 2014, Brussels

This info day is for anyone who wants to carry out a European project related to the Societal Challenge 5 and would like to know more about the objectives of Work Programme 2015 and application procedures.

The purpose of the Information Day is to present the calls under Work Programme 2015 to the potential applicants as well as to provide guidance on the preparation and submission of proposals. Six brokerage sessions planned in the afternoon will be an opportunity for participants to network with other potential applicants.

The event will take place in English. No interpretation is foreseen.

Please note that while attendance is free of charge, you will have to cover your travel and accommodation expenses and will need to make your own arrangements.

More information and registration**Info day: Horizon 2020 Societal Challenge 2 - calls for proposals 2015**

21. November 2014, Brussels

Attend the info day in Brussels to get first-hand information on the coming call for proposals under Horizon 2020 Societal Challenge 2 - Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the Bioeconomy.

Societal Challenge 2 covers three calls for proposals under which projects can apply for funding:

- Food security, sustainable agriculture and forestry
- Marine and maritime and inland water research
- Bioeconomy

Participation in the Info Day is free of charge but registration is compulsory. You can register until 17 November 2014 via “Coming events/ Registration” on the Bioeconomy website.

Applications will be considered on a “first come, first served” basis.

Group registrations are not possible and neither is it possible to register several persons with the same e-mail address.

The Info Day is organised by the European Commission's Bioeconomy Directorate (DG Research and Innovation).

More information, programme and registration

EU Budget 2015

At the plenary session in October, the European Parliament reversed the Council's cuts in the draft EU budget for 2015. An agreement on additional funds for 2014 is a prerequisite for Parliament to do a deal on next year's budget with Council.

Parliament raised commitment appropriations to 146,380.9 million EUR and payment appropriations to 146,416.5 million EUR for 2015. The Parliament's position on the draft budget was approved by 464 votes to 186, with 46 abstentions.

Parliament as a whole reversed all the cuts made by member states in the Commission's original proposal and requested extra funding to boost economic growth and job creation, as recommended by its Budgets Committee. Small and medium-sized enterprises (SMEs), research programmes and education, including the student exchange programme Erasmus+, should receive 190,5 million EUR more.

To halt the growth of the payment gap gaining volume since 2010 to 25 billion EUR at the end of 2014, the Parliament voted for a 4 billion EUR payments top up for 2015.

On 28 October, three weeks of "conciliation" talks with the Council will start with the aim of agreeing a Council/ Parliament deal by 17. November. Next year's budget is set to be voted by Parliament and signed by its President on 26. November.

There are two reverse positions within the Council. A majority is demanding cuts in payments, while a blocking minority is preventing cuts in Structural funds.

The Commission is running short of funds at present and is likely to reduce prepayments to 25 %.

Comments or questions should be directed to Rikke Edsjö