

EU Research Trends - November 2015

This month, you can read that the high level group evaluating the FP7 handed over its report to the Commissioner for research, science and innovation, Carlos Moedas, the EU- budget for next year is adopted, Carlos Moedas launched a joint research competition with Brazil, Brussels is slowly but fully back on track, with meetings and conferences taking place as planned, and the Arctic is on the agenda at several occasions in Brussels.

Trends

Data protection regulation - state of play

Triologue negotiations on the regulation on data protection are currently in process between the Parliament, the Commission and the Luxembourgish presidency on behalf of the Council. Negotiations on chapter 9, article 83 have started, but no final decision is yet taken. The Luxembourgish negotiating team presented a new draft compromise on article 83 but differences in opinions are requiring further negotiations before a compromise can be found. Negotiations continues the coming weeks and are expected to end before Christmas. If not entirely then at least in the form of a political agreement on the regulation.

Universities Denmark have send a letter to the negotiation teams participating in the triologue negotiations. The letter is attached this newsletter for your information.

Commission launches new mechanism to strengthen scientific advice for policy making

The European Commission's new Scientific Advice Mechanism (SAM) is officially launched with the announcement of the seven leading scientists who will form the first High Level Group of scientific advisors. Together with a six million EUR grant to European academies and learned societies, this marks a new approach to the use of independent science advice in Commission policy making.

The mechanism is being launched six months after it was first announced by Commission President Jean-Claude Juncker and Carlos Moedas, the Commissioner for Research, Science and Innovation. It draws on experience in Member States and worldwide and is based on a High Level Group of independent science advisors and a stronger relationship with national academies and other bodies.

Carlos Moedas, Commissioner for Research, Science and Innovation, said: "I am delighted that the Scientific Advice Mechanism (SAM) announced by President Juncker just a few months ago is now up and running. The support from the scientific community has been tremendous with many eminent scientists coming forward to help. The seven exceptional scientists I have appointed to the group will take the use of independent science advice in Commission policy making to a new level. The European Commission will rely on their independent advice on a range of complex policy issues where high-level scientific input is needed".

The seven members of the High Level Group were selected following an open call for nominations and the recommendations of an independent identification committee.

They are:

- Janusz M. Bujnicki
Professor, Head of the Laboratory of Bioinformatics and Protein Engineering,
International Institute of Molecular and Cell Biology, Warsaw
- Pearl Dykstra
Professor of Sociology, Erasmus University, Rotterdam
- Elvira Fortunato
Professor, Materials Science Department of the Faculty of Science and Technology, NOVA University, Lisbon
- Rolf-Dieter Heuer
Director-General, European Organization for Nuclear Research (CERN)
- Julia Slingo
Chief Scientist, Met Office, Exeter
- Cédric Villani
Director, Henri Poincaré Institute, Paris

- Henrik C. Wegener
Executive Vice President, Chief Academic Officer and Provost, Technical University of Denmark

The objective of the Scientific Advice Mechanism is to ensure that the Commission has access to the best possible scientific advice, independent of institutional or political interests. It will bring together evidence and insight from different disciplines and approaches, take into consideration the specificities of EU policy making, and ensure transparency. It will complement the in-house scientific services of the Joint Research Centre and existing specialist committees. The first meeting of the Group will take place in January 2016.

A grant of 6 million EUR for European networks of academies and learned societies is included in the 2016 work programme for Horizon 2020. The grant will support academies to collaborate across Europe in providing science advice for policy. The independent Identification Committee that recommended membership of the Group was composed of three members: Prof Rianne Letschert, Prof David King and António Vitorino. A new secretariat for the High Level Group has been established in the European Commission's Directorate General for Research and Innovation.

For more information, please go to the website of the [Scientific Advice Mechanism](#)

EU budget for 2016 adopted

The EU budget for 2016 has been adopted. One day after the Council, the European Parliament confirmed the deal reached during the Conciliation earlier this month. Next year's budget is set at 155 billion EUR in commitments and 144 billion EUR in payments.

The 2016 budget will strengthen the EU response to the refugee crisis both within and outside the EU. More money will go to aid for refugees in the neighbourhood. It will also boost investment in competitiveness, jobs and growth, supporting the recovery of the European economy.

Some key features of the 2016 budget include:

More than 4 billion EUR to address the refugee crisis both in the EU and in the countries where refugees are coming from. This brings the total EU funding for the refugee crisis in 2015 and 2016 close to 10 billion EUR.

EUR 69.8 billion in commitments (nearly half of the annual budget) to stimulate growth, employment and competitiveness.

EUR 2 billion in commitments and 500 million EUR in payments to unlock 315 billion EUR of investments for Europe with the guarantees from the European Fund for Strategic Investments (EFSI).

EUR 10 billion in payments (11.6 % more than in 2015) to invest in research and innovation mainly through the Horizon 2020 programme.

EUR 1.8 billion in payments (30 % more than in 2015) to enable young people to work and study across the EU through Erasmus+, the European programme for education, training, youth and sport.

The Arctic on the agenda in Brussels

The Arctic Futures Symposium 2015 took place in Brussels. The theme of the event was *Regional Development in a Changing Arctic* and included speakers from across fields and sectors: politicians, researchers, and representatives from the Commission, from business organisations, large - as well as - small companies, interest organisations and many more. The focus of the event was on different aspects of blue growth, innovation and environmental security as well as a session on the role of the Arctic Council.

Blue growth in the Arctic

The theme of blue growth in the Arctic was divided in two themes: Maritime transport and Bio economy, tourism and environmental security.

Maritime Transport

In the theme of Maritime Transport, the main points from the presentations were that more research on the traffic in the arctic is necessary to be able to create a sustainable development of the transport sector. The information available today is

scattered and hard to use, and there is a need for a deeper understanding of the patterns of transportation. This should give the required knowledge base to policymakers to decide how to operate and regulate in the Arctic waters. In the Commission, this is dealt with through the [JRC Blue Hub](#).

For these remote areas shipping is important, and often the only way to transport goods. This gives logistic challenges in regard to equipment for offloading and multi-functioning vessels for rescue, ice management and oil-spills. The Danish Ministry of Defence is preparing an analysis of the Arctic security issues, which is to be published early 2016.

The input from outside Europe came from China, where trials to go from China to Europe and back have been held. It has proven its commercial value, but there is a long way to go. It will take long term strategic planning and development of infrastructures to create safe and green shipping.

Bio economy, tourism and environmental security

In research on the Arctic, an interdisciplinary approach with both social and environment assessments as well as public consultations should be developed to encompass all the aspects of regional development. In the traditional communities, women are moving away to study and do not always return, which pose a threat to upholding the traditional life in these communities as it is often the women's share of the family income that enables the men to uphold the hunting traditions. On the other hand, there are also more structural issues, which hinder the traditional way of life, such a restrictions on fishing licences. Therefore there is a need for a holistic approach when studying in Arctic, and there needs to be focus on how new activities in the area can avoid having a negative impact on indigenous communities.

Tourism development in Greenland relied for many years on political gut feeling, but the tourism sector are now trying to rely future development on statistics and documentation. Furthermore, it should be more specialized compared to what kind of activity is coming in - holiday tourist, business trips or researchers coming in. Bio economy is important to Greenland, as 90 % of raw material export is fish and while fishing is still important, a new industry is emerging from the mining economy. Sustainable development in the area of mining will require innovation.

Innovation in arctic industries

“The best way to predict the future is to invent it” said Runa Haug Khoury, moderator. A main thing to consider when discussing innovation in the Arctic is whether the current type of innovation is in the interests of the region. There is a potential as the communities in the Arctic are large on resources, but since they are low in population, they need help from the outside. From the business-sector, there was a request for entering into broader collaborations; to create safe and sustainable development, the private sector needs to work together with researchers as well as their suppliers to secure this kind of development. Adaption to the local environment is crucial to successful innovation.

To illustrate this, Stephen Mooney from the Yukon Research Centre presented various ways in which research facilities cooperate with local businesses and communities while taking into consideration knowledge from the indigenous peoples living in the area. As an example, he presented a project where scientist in cooperation with the first nations (Canadian term for indigenous peoples) living in the area, developed indigenous plants to create better ecosystems to avoid water from absorbing more chemicals from the ground. The first nations provided the knowledge on which plants to use, and the researchers enhanced the capability of these plants to be able to clean contaminated soil from mining. In addition, people living in Arctic often has ideas how to deal with the problems they encounter, but often does not have the sufficient means to develop them. One of the things that has proven successful in working with cold climate innovation is to open up for ideas from the public, and if they are good enough the research centre takes them in and develops them further in collaboration with the owner of the idea.

For more examples from the Yukon Research Centre, [Cold climate innovation](#).

The digital Arctic

One of the defining challenges of the Arctic is the distances and connectivity is an important issue. In many of the remote areas, people are still reliant on satellite-connections, which is a lot slower than a regular broadband connection. This creates opportunity cost as well as social cost for not developing the area as many services

today goes through online platforms and many opportunities lies in having better connectivity.

Technology and connectivity is important to make ends meet in areas with the complexity of a country but with a small population. On one hand, one of the obstacles for locally developing technology can be the lack of experts or specialists locally but with greater connectivity, these forces are within reachable distance. On the other hand, one of the advantages are that access to the right network and the “go-to-guy” is much easier, as people are more willing to take risks on local vendors.

To sum up, some of the main points of the Arctic Futures Symposium were that there is a need for research in the area to create safe and sustainable development, but also that when doing research or projects in the Arctic, people needs to be more aware of the local communities and to use the knowledge already present in these societies.

For more information please follow this [link](#)

The next step

The Danish government sees great opportunities for research in the Arctic. Therefore, the Minister for Higher Education and Science has taken the initiative to organise an event in Brussels placing Arctic research on the Horizon 2020 agenda. The event, Solving Key Arctic Challenges in Horizon 2020, is bringing together Arctic experts and European policymakers at a policy seminar in the European Parliament on 30. November followed by expert workshops on 1. December. The objective is to develop a set of policy recommendations at ways to strengthen Arctic Research in the Horizon 2020 programme for 2018-2020.

FP7 evaluation report

The independent High Level Expert Group (HLEG) that has evaluated the EU's Seventh Framework Programme for Research and Technological Development (FP7) has handed over its report to R&I Commissioner Carlos Moedas.

Welcoming the report, Commissioner Moedas said: *"Rigorous evaluation is essential in assessing how European investment in research and innovation is contributing to economic growth and job creation, as well as to our efforts to tackle major societal challenges. This report of the High Level Expert Group provides exactly that kind of detailed analysis. I would therefore like to thank Mrs. Fresco, Mr Martinuzzi and the other members of the Group for their excellent work. Their report provides an essential insight into how FP7 has performed. The Commission will publish its response to the Group's report early in 2016."*

[Read the full FP7 evaluation report entitled "Commitment and Coherence"](#)

Safety situation in Brussels

Saturday 21. November the Belgian government raised the alert level in Brussels to the highest of four grades following the terror attacks on the 13. November in Paris and the links to Brussels. The metro and underground tram system were closed followed by shopping malls, schools and higher education institutions.

While cancelling several meetings and conferences, EU institutions and several other work places left it to personnel to decide if they preferred to stay at home and telework. Metros remained closed for four days, schools for two and shortly the city started getting back to normal despite the high numbers of heavily armed police and military present. The alert level is subject to re-evaluation the last day of November, but was already lowered to three during the week.

Juncker's first year as Commission President

On 1. November, the Juncker Commission celebrated its one-year anniversary. The man behind the concept "big on big things; small on small things" set out 10 priorities when appointed President of the European Commission. One year later, these priorities are still valid - although the issue of a new migration policy has been moved up the list to match current events. A few months ago, Juncker gave his first State of the Union speech, where he reported on the progress of his priorities. He

gave a positive assessment on each priority, and concluded that his team was well on its way to delivering the promised results.

However, one year into Juncker's mandate, there seems to be a consensus that some cases could have been handled better. Furthermore, there are also some issues, which are unclear at this time. One of these is the European Fund for Strategic Investment (EFSI). A lot of time and political capital were put into the launching of EFSI; however, it is yet to be seen if it will have the desired impact by helping to achieve significant growth. EFSI is part of the "Juncker Plan" which is meant to spark growth and support job creation, but so far only one third of the Member States have chipped in and the private sector criticizes the scheme for being too difficult to participate in.

Another area, which has not been as successful as expected, is the "Digital Single Market". The Commission had plans to make proposals and launch reviews in 2015, but many of these have been postponed. Therefore, it seems doubtful if Juncker and his team will manage to finish the planned 16 digital initiatives at the end of next year.

On a positive note, Juncker's decision to appoint seven Vice Presidents, each heading a team of other Commissioners, seems to be successful. He has also proven to have made good picks when assigning people to the different portfolios. Most of the Commissioners in the new college have lived up to their important - and at times difficult - jobs such as Frans Timmerman (better regulation and first Vice President), Margrethe Vestager (competition) and Kristalina Georgieva (budget and human resources). Juncker's aim of achieving better and more transparent regulation has been successful in terms of new policy initiatives and withdrawals. In 2010-2014, there was an average of 130 new initiatives per year and a total of 26 proposals for withdrawals. In 2015, things were turned around as only 23 new policies were initiated and 80 proposals sent for withdrawal.

EU Commission links up with Brazil - 10 million EUR biofuels research programme

Research Commissioner Carlos Moedas has launched a joint research competition with Brazil to develop second generation biofuels made from cellulosic waste such as

wheat straw, and non-food crops such as the fast-growing miscanthus grass, short rotation coppice poplar and willow.

The EU will co-fund the programme with the research funding agency of the state of São Paulo (FAPESP), the Council of State Foundations for Research (CONFAP) and the Brazilian Ministry of Science, Technology and Innovation, which between them will provide matched funding up to 10 million EUR for two projects.

The Brazilian and European projects will have the same start date, the same targets and will last up to five years. There must be a company in Brazil involved in the proposals, committed to putting up at least half of Brazil's costs.

Submission opens in May 2016 with projects expected to start a year later.

Marine research pact

The EU and the Brazilian government also made a commitment to develop common scientific knowledge on the Atlantic Ocean.

"Both Brazil and the EU share common challenges within the Atlantic Ocean," Moedas said announcing the pact on a visit to Brazil. *"I am certain that today's declaration will advance our future research and innovation collaboration".*

Moedas' predecessor Máire Geoghegan-Quinn signed similar declarations on marine research with Canada and the US.

During his visit to Brazil Moedas also promoted 'Destination Europe' a programme to encourage foreign researchers to apply for EU research funding. This was the first of several similar PR events planned in Latin America.

Human Brain Project back on track after Commission signs new contract

The European Commission has guaranteed funding for the controversial Human Brain Project (HBP) until at least 2019, following a review of the project and restructuring of the research programme.

An agreement signed with project leader the Swiss Federal Institute of Technology in Lausanne (EPFL) sets out the research direction for the next seven and a half years and confirms HBP will continue to receive funding from the EU Horizon 2020 programme, pending successful independent reviews and proposal evaluations.

EPFL Provost Philippe Gillet, president of HBP's board of directors, cheered the massive overhaul of the structure. The three-member executive committee led by neuroscientist Henry Markram, which exercised most of the management power, has been dissolved and replaced by a 22-member governing board.

In addition, plans are underway to create a new legal entity for the project, which will ensure no single institution has too much control over its direction.

For the 112 institutions participating in HBP, the hope is the agreement marks a line in the sand after the project fell into disarray, with some neuroscientists criticising the emphasis on large-scale mapping of the brain and computer simulations rather than traditional, small-scale bench research. A protest letter questioning the project's scientific validity and its governance appeared online in July 2014 and quickly gathered more than 800 signatures from scientists.

A committee of 27 scientists set up to review all the arguments concluded the project had raised "unrealistic expectations".

The agreement now signed reflects many of the recommendations that appeared in the committee's report. The big question is whether the new agreement can restore confidence among the project's detractors and put it on the right scientific path.

For more information please follow this [link](#).

Thinking Ahead Sustainably: Policies, Scenarios and Models to address Grand Societal Challenges

16 December 2015, Brussels

The FLAGSHIP final public conference will be held on December 16, 2015, at CEPS premises (Centre for European Policy Studies), Congresplaats 1, 1000 Brussels, Belgium, with the title of "Thinking ahead sustainably: Policies, Scenarios and Models to address Grand Societal Challenges".

The event welcomes scientists and researchers, representatives of the European Commission, policy makers, civil society and other relevant stakeholders. The registration is free of charge but pre-registration is requested.

During this event, the FLAGSHIP Reference Document will be presented. This document is the main output of the project and it includes a set of EU-relevant policy

recommendations on the potential of transition and change for the future of the EU. Information exchanged during the conference will lead to an updated (and a definitive final version) of the FLAGSHIP Reference Document, to be made available as previous versions on this website.

Further information please visit the [conference page](#) and [agenda](#)  749 KB

The human factor in energy transition & security towards 2050

15 December 2015, Brussels

Two major challenges are impending upon our energy future: the achievement of a secure energy supply, and a move from dependency on non-renewable to a dependency on renewable energy sources. The challenges call for radical changes or 'energy transitions': revisions that concern the entire energy system, not just some of its parts. These transitions are structural, as they modify the way energy provision is organised at the level of society. They are radical, since they may demand abandoning existing technologies even if they still work. And they are fundamental, because they require that we start thinking in novel ways about energy, its provision, and how a good and just society is organized around energy.

The International Seminar "The human factor in energy transition & security towards 2050" aims at discussing the above mentioned topic, presenting the final results of the EU MILESECURE-2050 project. The project work-programme was articulated in three main stages. At the first stage, both a study of European main trends and policies and an analysis of a set of 90 "anticipatory experiences" of the transition towards low carbon society were conducted. At the second stage, the knowledge deriving from the above two studies was embodied in innovative forecasting models and scenarios. At the third stage, policy guidelines and a manifesto on the transition were drafted. Following the project structure, this seminar is organized around three key issues: Multidimensional Knowledge, Innovative Models and Effective Policies. For each of these issues, a paper highlights the main research outputs and stimulates discussion with European experts, energy stakeholders and policy makers in a specific working session.

Further information please visit the [conference page](#) and [programme](#)  535 KB

COP 21 - European Union flagship event “Research and innovation: our energy for a low-carbon future” - 8 December 2015, COP 21, Paris, France - European Union Pavilion -room: 'Brussels'


The European Union flagship event “**Research and innovation: our energy for a low-carbon future**” will take place at the COP21 in Paris.

At the event distinguished speakers will highlight the critical role of research and innovation in making the transition to a low-carbon future happen.

The speakers panel include:

- **Maroš Šefčovič**, European Commission Vice-President for the Energy Union
- **Carlos Moedas**, European Commission Commissioner for Research, Science and Innovation
- **Jerzy Buzek**, Member of the European Parliament, Chair of the European Parliament Committee on Industry, Research and Energy (ITRE)
- **Hans-Joachim Schellnhuber**, founding Director of the Potsdam Institute for Climate Impact Research (PIK)
- **Nicholas Stern**, Chair of the Grantham Research Institute on Climate Change and the Environment at the London School of Economics (LSE)
- **Peter Bakker**, President of the World Business Council for Sustainable Development

The flagship event will take place on Tuesday, 8 December 2015, from 18.30 to 20.00. As of 18.00 a drink will be offered to participants.

More information is available here: [EU Flagship event - flyer](#)  175 KB

Comments or questions should be directed to [Rikke Edsjö](#)