

# EU Research Trends - March 2016

This month you can read about the terror attacks in Brussels, the new EU-Turkey deal on refugees, Europe's Research and Innovation Observatory, Open Science and much more.

## Trends

### Brussels Attacks: what happened and where next?

"What we feared has happened", said Charles Michel, the Belgian Prime Minister, following the attacks that took place in Brussels Tuesday 22 March at the Brussels Airport and the Maelbeek Metro Station. More than 30 people died in the two attacks and a lot more were injured. The two attacks have left indelible traces on the city of Brussels. Because of the elevated threat level, police and military are present everywhere and inspections of people's bags take place at the largest train stations. In the city centre, the streets are emptier than ever and there is almost no people using the subway, which is now back on track. At the time of writing the airport is still shut down.

The terrorist attacks in Brussels are not a unique event. In November last year Paris was attacked where 130 people died. The terrorist attacks in Paris were rooted in Belgium and the manhunt for Paris suspect Salah Abdeslam finally ended by his arrest in Brussels Friday the 18<sup>th</sup> of March. But only four days later the attacks in Brussels took place and Salah Abdeslam has been associated with several of the perpetrators behind the attacks in Brussels. This shows that terrorism is a common threat that has a cross-border impact on security and safety within the EU.

In order to ensure a high level of security within the EU, research on security threats and their impacts is needed. Horizon 2020 offers a number of opportunities to finance projects that can help in the fight against security threats. These include:

- 17 million EUR call for research on [radicalization in the EU](#), which focuses on developing policy recommendations and practical solutions;

- 10 million EUR call for research on [the fight against crime and terrorism](#), including development of new and advanced technologies.

See the complete list of H2020 calls on security [here](#).

### **EU-Turkey deal to return refugees from Greece is a reality**

At the European Council emergency summit on migration the 18 March in Brussels, European leaders and Ankara agreed on relocation of Syrian asylum-seekers. EU Heads of State and Government hope that this deal will reduce the flow of asylum-seekers into the EU and calm the existing crisis.

In order to break the business model of the smugglers and to offer migrants an alternative to putting their lives at risk, the EU and Turkey has decided to end the irregular migration from Turkey to the EU by signing the deal. Under the agreement, Turkey is obliged to take back Syrian migrants who reach Greece illegally in return for the relocation in Europe of Syrian refugees now in Turkey. Europe hopes forcing refugees back to Turkey will dissuade them from crossing the Aegean, while also upending the human-smuggling trade. Nearly all the refugees arriving in Europe from Syria do so via Turkey. In return for Turkey's agreement, the EU will grant visa-free travel to Turkish citizens by this summer, accelerate Turkey's EU membership application and increase financial aid to help Turkey manage the refugee crisis. To seal the deal, the EU leaders also agreed to open an additional chapter in Turkey's blocked EU accession talks.

Key points from the agreement:

- Returns: All 'irregular migrants' crossing from Turkey into Greece from 20 March will be sent back. The Greek authorities will individually assess each arriving migrant.
- One-for-one: For each Syrian returned to Turkey, a Syrian migrant will be resettled in the EU. Priority will be given to those who have not tried to illegally enter the EU and the number is capped at 72.000.

- Visa restrictions: Turkish nationals should have access to the Schengen passport-free zone by June. This will not apply to non-Schengen countries like the UK.
- Financial aid: The EU is to increase financial aid to help Turkey manage the refugee crisis by 3 billion EUR to 6 billion EUR.
- Turkey EU membership: Both sides agreed to “re-energise” Turkey’s bid to join the European Union and they agreed to open chapter 33, a budgetary chapter, in Turkey’s EU accession talks.

The agreement is expected to reduce the flow of asylum-seekers into the EU in the present situation but the EU is aware that the international migrant population in Europe is expected to increase in the future. For that reason, research on migration continues to be an important part of Horizon 2020. Under the topic “The European Union and the global challenge of migration”, the European Commission plans to launch a call under Horizon 2020 in October 2016 that supports research on the migration challenge. The research should focus on one or two dimensions: 1) An integrated approach to migration and development and 2) EU policy coherence and migration. The results of research under this topic is expected to bring about greater policy coherence and effectiveness in the field of migration management and relations with third countries by clearly identifying and depicting good practices and effective ways to manage incoming and transiting migration at the benefit of local communities and immigrants.

For more information on the Horizon 2020 call, please follow this [link](#).

### **Energy Union: Commission seeks views on comprehensive research, innovation and competitiveness strategy**

The European Commission has launched a [public consultation](#) on the development of an Integrated Research, Innovation and Competitiveness Strategy aimed at facilitating the EU’s transition to a sustainable, competitive, energy-efficient and low-carbon economy.

The strategy is linked to the implementation of the [Energy Union Communication](#), which called for more research and innovation to ensure that the energy transition happens via modern, user-friendly, safe, sustainable and secure solutions to the benefit of EU citizens and businesses. Commitments taken at the [COP21](#) international climate conference in Paris in December 2015 reinforce the need to step up efforts for reaching agreed climate targets.

The Commission is inviting all stakeholders and interested parties, including EU citizens, private and public organisations to share their views on how to achieve the EU's energy and climate targets, as well as sector-specific research, development and innovation goals needed for the transformation. The consultation will also look into the competitiveness of EU economic actors and new business opportunities, and examine how transport - one of the main energy users in the EU - can contribute to achieving the overall climate and energy goals.

The consultation will run for 12 weeks and its findings will feed into the integrated Research, Innovation and Competitiveness strategy to be presented at the end of 2016.

More background information: [Towards an Integrated Strategic Energy Technology \(SET\) Plan](#)

### **EU supports Zika research with 10 million EUR**

The European Commission has released 10 million EUR for research on the Zika virus, currently affecting large parts of Latin America.

The most affected country is Brazil, where the World Health Organisation (WHO) has declared that the recent cluster of severe brain malformations in new-borns may be linked to the virus. While the risk of transmission of the Zika virus in the EU is low, there is currently no treatment or vaccine against the virus, and diagnostic tests for infections are not widely available.

The funding will go into projects that will first have to prove the link between the virus and severe brain malformations reported in newborn children. If proven, researchers

could then move on to combatting the Zika virus, including developing diagnostics and testing potential treatments or vaccines.

The funding will complement a number of other research initiatives currently funded under Horizon 2020 that can aid in the fight against Zika. One is a 40 million EUR call for research on [vaccine development for malaria and neglected infectious diseases](#), which includes the Zika virus. A further 10 million EUR topic on [research infrastructures for the control of vector-borne diseases](#) could go a long way to combatting the mosquitos that spread Zika and a number of other prevalent diseases. Finally, the EU is co-funding research on the prevention of infectious diseases in Latin America and the Caribbean under the [ERANET](#) programme.

More information:

[EU-funded research on Zika](#)

[Outbreak of Zika Virus Disease - Latest Developments](#)

### **Europe's Research and Innovation Observatory - Horizon 2020 Policy Support Facility website is now online**

A new website to monitor the pace of research and innovation within the EU is now online. It provides data and analyses at both national and EU level.

The [Research and Innovation Observatory \(RIO\) - Horizon 2020 Policy Support Facility](#), hosted by the JRC and developed jointly with the European Commission's [Directorate-General Research and Innovation](#), supports policy-making in Europe by providing practical information for the design, implementation and evaluation of research and innovation policies.

The Observatory produces detailed yearly RIO Country Reports, assessing the evolution of national research and innovation systems and identifying key challenges to feed into the EU policy process. As of this year, it will also provide a series of thematic analytical

reports on the impact of public funding instruments on excellence and on effective knowledge transfer mechanisms between business and academia.

The outcomes of the activities of the Horizon 2020 Policy Support Facility (PSF) feed into the website in order to strengthen support to evidence-based policymaking. The PSF was launched by the Commission in March 2015 to assist EU Member States and Associated Countries in reforming their research and innovation policies.

In addition, the website offers quantitative and qualitative information by country, including policy documents, reports, statistics and visualisations of key indicators, as well as regular coverage in its news section of research and innovation policy developments in Member States.

The website also constitutes an important knowledge base in support of the [European Semester](#), the EU's annual cycle of economic policy coordination, as part of which the European Commission undertakes each year detailed analyses of the Member States' research and innovation performance and policies, and provides them with recommendations.

## **26 new COST Actions to start in spring 2016**

The new Actions are highly interdisciplinary, as **more than half** indicated their research covered at least two main [OECD fields of Science and Technology](#) .

Highlights:

- Over **50 %** indicated **natural sciences** as their main field, with medical and health sciences and engineering and technology coming in as second and third options, respectively.
- Out of the **1085 participants** in all 26 successful proposals, **more than one third are female**.
- Around **27 %** of participants are **affiliated to an institution in [Inclusiveness Target Countries](#)**.
- Roughly **one in three participants** is an **early career investigator**.

- **One in three main proposers** - the project leaders - is **female**.

A detailed list of the 26 Actions is available for download: [Approved Actions 2016 \(PDF, 425 kB\)](#)

### **Canada and South Africa join Eurostars**

Both Canada and South Africa joined the Eurostars-2 programme as partner countries in March 2016. Canadian and South African SMEs will therefore be able to participate in Eurostars-2 projects as main or other partners. Reflecting the growing importance of globalisation in RDI, this is a major step towards very fruitful collaborations between European and Canadian or South African businesses.

**Canada** joined EUREKA as associated member in 2012 and renewed its membership in 2015 until June 2018. Under the leadership of the National Research Council of Canada (NRC), the National EUREKA Office undertakes activities across Canada to promote awareness and generate project opportunities. These collective efforts have generated impressive returns in the initial three years, demonstrating Canada's commitment to EUREKA and its standing as a reliable R&D partner.

In its second year of association **South Africa** continues to deepen the collaboration within the Network, with awareness raising activities on the possibilities offered by EUREKA. The EUREKA secretariat was invited to participate in the conference "The Science Forum South Africa - 2015" which brought together South African and international stakeholders in science, technology and innovation with interest in the African continent.

[More on Eurostars-2](#) [How to apply for funding \(next deadline 15 September 2016\)](#)

## JRC's Work Programme for 2016-2017 adopted

The European Commission has adopted the JRC's Work Programme for 2016-2017. The key orientations of the JRC work programme reflect the 10 priorities set by the Commission's agenda for jobs, growth, fairness and democratic change. In particular, the JRC will support a wide array of policy initiatives addressing economic growth, energy and climate, and migration.

Related documents:

[Commission Implementing Decision 2016](#)  [52 KB]

[Key Orientations for the Multi-Annual JRC Work Programme 2016 - 2017](#)  [1 MB]

[Detailed work plan for the JRC Work Programme 2016 - 2017](#)  [3 MB]

## JRC Data Catalogue - making open science a reality

Making JRC's research data publicly available follows the JRC Open Access Policy which grants free and unrestricted online access to all JRC peer-reviewed research and review articles.

Research data produced by the JRC or in cooperation with other partners is now publicly available, in support of the European Commission's strategy on [Open Science](#) for improved circulation of knowledge and thus innovation for generating growth. The first version of the [JRC Data Catalogue](#) is online and its datasets can be freely consulted and downloaded.

This catalogue will also feed into the [EU Open Data portal](#), which is the single point of access to a growing range of data produced by the EU Institutions. Interested users have access to data on a wide range of topics, such as climate, freshwater resources, alien species, soil or forests. The information can be used for further research and other projects, providing the source is acknowledged.

[JRC's data policy](#) was designed to help enhance transparency and drive innovation. It is a pillar in the development and implementation of scientific knowledge management

at the JRC and it follows the commitments and regulatory basis from the [Commission Decision on the reuse of Commission documents \(2011/833/EU\)](#).

Underlying principles of the JRC data policy are: open data (free, full, open and timely access to JRC data by default), data acquisition (restriction-free access and use of licensed data), data management (metadata, storage, accessibility) and implementation (identification of responsible entities, guidelines, data management plans, monitoring of implementation).

Initially, the catalogue contains around 500 sets of the data wealth produced by the JRC, and more information will be uploaded on a regular basis.

### **Few countries ready to adopt gold standard open access to scientific journals**

The Dutch EU presidency has vowed to bring countries together on open access, but a new study reveals there is a long way to go in making journals subscription-free. Only five EU countries want to abandon the traditional journal subscription model and move to open access publication of the results of publically funded research, [according to a new study](#).

Alongside the Dutch government, which is using its presidency of the EU to push the case for open access, only Hungary, Romania, Sweden, and the UK share the view that academic publishers should stop charging readers a subscription and instead charge authors for publishing their papers.

This gold standard open access is the route the Netherlands has been pursuing aggressively at home, and which it has pledged to steer the whole of the EU towards during its current presidency.

However, the European Commission's study on the state of play across Europe, shows that most governments favour the green model of open access, in which researchers deposit versions of their journal articles in an online archive open to everyone. Green

open access is preferred in universities and institutes in Belgium, Cyprus, Denmark, Estonia, Greece, Ireland, Lithuania, Malta, Norway, Portugal, Slovakia and Spain.

To read the story in full please follow this [link](#)

### **Science: How Close to Open?**

5 April 2016, Amsterdam

This event will look into the present and future of intellectual property boundaries in chemistry research and will debate questions such as: Which model for peer-review publishing? Who owns research data and how to share it? Which approach is better for creating innovative products and services?

Together with researchers, publishers, EU and government officials EuCheMS intends to build bridges between all concerned and to provide answers to questions.

[More information and registration](#)

### **Cells, Circuits and Computation: Expanding the horizons of big data analysis**

1 July 2016, Copenhagen

In this one day workshop prior to FENS 2016, scientists from the Allen Institute for Brain Science and from the Human Brain Project will discuss early findings that have emerged from data mining and analysis of work performed through both organizations. A hands-on training session will include training in effectively using the publicly available tools from both projects.

[Read full text](#)

### **Human Brain Project: Young Researchers Event**

12 April 2016, Budapest

The goal of this community-building workshop is to train a new generation of scientists to use and collaborate with each other using simulation tools. The event is open to all

young scientists of the Human Brain Project community, but also to external participants.

[Register](#)

[Read full text](#)

[Programme \(PDF\)](#)

### **Seminar on “Heritage of the European Science Foundation”**

11-12 April 2016, Florence

In its 40 years of existence, the European Science Foundation (ESF) has accumulated a very significant body of documents representing a resource for several purposes including the science and management of research. ESF has recently transitioned into a services-based institution, strengthening science through peer review, evaluation, and project management among other activities. As a part of this evolution, ESF has transferred its archives documenting past activity to the Historical Archives of the European Union (HAEU), which will host and make ESF archives accessible to researchers. The ESF collection at HAEU traces the significant historical importance of past ESF networking, funding and coordination activities in the stimulation of European research, and the legacy of ESF itself as a milestone in building a common platform for science in Europe.

To commemorate this transfer, a seminar is being organised by the ESF, HAEU, and the University of Strasbourg Institute for Advanced Studies (USIAS). While marking the opening of the ESF collection at HAEU, this seminar will offer an opportunity to discuss the ESF heritage in the context of current and future developments in the governance of research in Europe. Ongoing research projects on ESF experiences will be presented and possible further initiatives will also be deliberated.

### **Re-Industrialisation of the European Union 2016 - Registration Open !**

26-28 October 2016, Bratislava, Slovakia

Excellent science, research and innovation are essential for a sustainable development of the European economy. That is why hundreds of representatives from European and

international research, innovation communities, and the business sector will meet to discuss this topic during a prestigious event in the field of **nanotechnologies, advanced materials, manufacturing and production technologies, biotechnology** - the International Conference REinEU2016.

From **26th to 28th October 2016** the capital of Slovakia, Bratislava, will welcome about 1,000 participants, which makes it one of the largest events during the Slovak presidency of the Council of the EU in the second half of 2016.

[Conference Website](#)

#### **Concertation and Consultation Workshop on Micro-Nano-Bio Convergence Systems** 25-29 June 2016, Otranto (Lecce), Italy

MNBS 2016 sessions will give emphasis to the successful transition from proven micro-nano-bio technologies and systems to fabricate competitive, validated and cost-effective products that can be used in real-life applications. The programme will include (poster) presentations on FP7 & H2020 projects, invited speaker sessions, bringing smart system integration and converging micro-nano-bio-ICT technologies and solutions providers close to business and end-users, as well as panel discussions on funding opportunities, future topics and cross-collaborations.

[Further information](#)

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