



EUROPEAN COMMISSION

## MEMO

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### **Public-private partnerships under Horizon 2020: launch of activities and first calls**

Seven public-private partnerships, established under the EU's new research funding programme Horizon 2020, are being launched today. They represent a total investment of €19.5 billion into research and innovation over the next seven years, where the EU contribution of €7.3 billion will unlock a €12.2 billion investment from the private sector and the Member States. Together with four more public-public partnerships with Member States, they form an Innovative Investment Package representing an investment into Europe's future of over €22 billion.

These partnerships work in a number of fields crucial for Europe's economic growth, creation of jobs, industrial competitiveness, and well-being of citizens.

The first round of calls is worth a total of €1.13 billion in public funding, which will be complemented by a comparable amount from the private partners. The calls are competitive and open to the participation of companies, SMEs, universities, research organisations and others. The best projects are selected for funding through peer review.

#### **Innovative Medicines Initiative 2**

Europe's Innovative Medicines Initiative (IMI) enters its second term. A partnership between the EU and the European Federation of Pharmaceutical Industries and Associations (EFPIA), IMI2 aims to meet public health needs, improve patient access to innovative medicines, and pave the way for more personalised treatments. IMI2's budget for 2014-2024 is over €3 billion.

The first IMI2 funding round opens today. An investment of €24.63 million of EU funding, to be complemented by an equivalent amount from the pharmaceutical sector and other organisations, will go into research and innovation projects focusing on diabetes and eye disease. Type 1 diabetes affects 17 million people worldwide and there is no cure. The project resulting from this Call will help improve our understanding of the disease, so that patients can be diagnosed earlier and receive more personalised treatments. Retinal diseases are a leading cause of blindness and there are few effective treatments. The second Call topic aims to improve the development of treatments for age-related macular degeneration (in which the central area of the retina deteriorates) and diabetic retinopathy (where retinal damage a complication of diabetes).

Máire Geoghegan-Quinn, European Commissioner for Research, Innovation and Science, said: *"One of the biggest challenges we face is to provide Europeans with better medicines and treatments, and at the same time ease the burden on our healthcare systems. Close cooperation between public and private actors in the life science sectors can help us towards this goal."*

Roch Doliveux, CEO of UCB and Chair of the IMI Governing Board, said: *"Never has science given us so many opportunities to innovate and provide better health to European citizens. With IMI2, Europe reinforces its leading position in research and innovation public-private partnerships, engaging all of our brain power across academia and industry to harness the complexity of new sciences and help European citizens live longer and enjoy healthier lives."*

**More information:** [website](#) | [factsheet](#)

## Fuel Cells and Hydrogen 2

The second generation of the Fuel Cells and Hydrogen (FCH 2) Joint Undertaking aims to accelerate the commercial deployment of hydrogen-based energy and transport solutions across Europe through a total investment of €1.33 billion. The projects under FCH 2 will improve performance and reduce the cost of products as well as demonstrate on a large scale the readiness of the technology to enter the market in the fields of transport (cars, buses and refuelling infrastructure) and energy (hydrogen production and distribution, energy storage and stationary power generation).

With an indicative budget of €93 million from Horizon 2020, the 2014 call for proposals will support 22 topics covering a broad range of applications. For example, one of the projects in this call aims to accelerate the deployment of fuel cells and hydrogen based mobility in Europe by rolling out at least 100 vehicles and 23 hydrogen refuelling stations.

Máire Geoghegan-Quinn, European Commissioner for Research, Innovation and Science, said: *"The current FCH partnership has already put zero emission vehicles on the streets of a number of European cities, and installed heat and power units in people's homes. The new programme will continue to deliver cleaner and affordable solutions for energy and transport. These are technologies that will not only reduce our CO2 footprint, but also reduce our energy dependence."*

Henri Winand, Treasurer of NEW-IG, Member of the Governing Board of the FCH 2 JU and CEO of Intelligent Energy, said: *"Fuel cells and hydrogen can help Europe address some of its biggest challenges: cut carbon dioxide emissions, deliver on the need of large scale energy storage, reduce dependence on fossil fuels and create jobs and growth. Now, our objective is to unleash this great potential. This important investment and new money will facilitate the entry of fuel cell and hydrogen into the market and for fuel cell and hydrogen based products and services to become an everyday reality sooner rather than later."*

**More information:** [website](#) | [factsheet](#)

## Clean Sky 2

The launch of the Clean Sky 2 programme sets the scene for a decade of European aeronautics research and innovation geared towards making the global aviation industry "future proof": providing safe, seamless and sustainable air mobility to meet citizen's needs. It will develop and test new technologies that will increase aircraft fuel efficiency, thus reducing CO<sub>2</sub>, NO<sub>x</sub> and noise emissions by between 20% to 30%. Clean Sky 2 (CS2) will support the competitiveness of Europe's aeronautics sector, creating new market opportunities and vital high-skill jobs.

The first call of CS2 includes 29 topics for a total funding budget of €205 million from Horizon 2020. This call is dedicated to the selection of "Core Partners", who will become members of the Joint Undertaking. Among others, the topics concern advanced aerodynamics for large or regional aircraft, lightweight composite structures, modules and components enabling more fuel efficient and quieter engines, and on-board power distribution.

Máire Geoghegan-Quinn, European Commissioner for Research, Innovation and Science, said: *"The technology that the current Clean Sky has worked on could already reduce aviation CO2 emissions by 20% when compared to 2000 levels. This new initiative will take it much further. It is by far the largest and most extensive aviation research programme ever launched. It will make future aircraft cleaner and quieter, and help Europe maintain its technological edge."*

Jean-Paul Herteman, Chairman and CEO of the Safran Group, said: *"Clean Sky 2 will have a galvanising impact on the European innovation chain in aeronautics, from academia to leading industrial players, from research organisations to SMEs. It will be key to delivering the technologies for the greener and quieter aircraft of the future, and to meeting mobility, environment and competitiveness challenges ahead in the global world."*

**More information:** [website](#) | [factsheet](#)

## **Bio-based Industries**

Thanks to this new €3.7 billion public-private partnership between the EU and the Bio-based Industries Consortium (BIC), stakeholders will join forces to develop Europe's bioeconomy. The priorities of the Bio-based Industries (BBI) programme include doubling of the share of bio-based chemicals produced in Europe (from 10% to 20%); an increase of biomass mobilisation by 10% as well as a reduction of imports of protein for feed by 15% and fertiliser components used for feedstock production by 10%; and meeting of the 15% target increase in waste and by-product utilisation by 2020.

This €50 million Call for Proposals - not including industry contributions, which are expected to reach up to €150 million - contains a total of 16 topics, including five demonstration actions and one flagship action.

Máire Geoghegan-Quinn, European Commissioner for Research, Innovation and Science, said: *"The bioeconomy has huge potential that is attracting investments all around the world. With this new partnership, we want to harness innovative technologies to convert Europe's untapped renewable resources and waste into greener everyday products such as food, feed, chemicals, materials and fuels, all sourced and made in Europe."*

Peder Holk Nielsen, CEO of Novozymes, said: *"The BBI 2014 Call for Proposals is a first step in a long-term strategy that will deliver tangible social, economic and environmental results. It is the outcome of a year-long effort involving the European Commission and the industry following an extensive consultation of experts and stakeholders. It is a visionary Call that lays the foundation for an increasingly ambitious and successful initiative."*

**More information:** [website](#) | [factsheet](#)

## **Electronic Components and Systems for European Leadership (ECSEL)**

This partnership sets out to maintain Europe's position at the leading edge in the design and manufacturing of electronic components and systems, which provide benefits and support innovation across the economy. Working with a total budget of some €5 billion, ECSEL is the only Joint Undertaking to combine not only funding from the EU and the private sector, but also from participating states.

Today, ECSEL is launching two calls for proposals. The first call concentrates on research and innovation actions to generate and demonstrate novel ideas in selected fields; the other on innovation actions to support successful deployment of advanced ideas to the market. The total volume of public funding in the two calls is expected to reach at least

€300 million, including an EU contribution of €135 million and at least a similar amount from participating Member States.

Vice-President of the European Commission [@NeelieKroesEU](#), responsible for the Digital Agenda, said: *"Today our growth comes from innovation; and most innovation comes from digital technology. And underpinning virtually all of it are some kind of chips or systems based on them. Few people understand how they work, or how much effort and ingenuity goes into making them; but from your home to your hospital, your car to your mobile, few of us today could imagine living without the innovations they enable. I am encouraged by the commitments of the Member States to the ECSEL programme, and I look forward to seeing the first strong proposals very soon."*

Jean-Marc Chery, Chief Operating Officer of STMicroelectronics, said: *"The ECSEL programme is organized to cover the essential areas of nanoelectronics, embedded systems and smart systems integration as well as their enabling technologies and related applications. The strategy of the Electronic Components and System industries, together with the knowledge institutes backing this programme, is based on the exploitation of European strengths and opportunities with the ambition to position Europe at the forefront of new emerging markets with high potential growth rates. We are all very proud to be the stakeholders of the ECSEL Joint Undertaking and are eager to deliver results with a significant societal and economic impact on Europe's competitiveness and prosperity."*

**More information:** [website](#) | [factsheet](#)

## Shift2Rail

This new public-private partnership, working with a total investment of €920 million in the next seven years, sets out to drastically improve the quality and efficiency of rail services in Europe by accelerating the uptake of innovative solutions. The initiative will pool the resources and expertise of all key players to increase reliability and punctuality of rail services by as much as 50%, to double railway capacity and thereby reduce congestion and CO2 emissions, to cut the costs of infrastructure and rolling stock by up to half, and to retain Europe's leadership in the global rail market. These objectives can only be achieved if all actors in the rail sector work in partnership.

Three precursor topics were already launched under Horizon 2020 Work Programme 2014 for a value of €52 million, covering intelligent infrastructure and mobility management, smart rail services and new generation of rail vehicles. The management of these projects will be transferred to Shift2Rail. A call for Associated Members to the Joint Undertaking will be launched within the next three months to identify the core partners who will work hand in hand with the Commission to make sure Europe can get more passengers and freight onto its railways, and the first calls for activities will follow in 2015.

Vice-President Siim Kallas, EU commissioner for mobility and transport, said: *"If we want to get more passengers and freight onto Europe's railways, then rail needs to provide better services and offer an attractive choice to more customers. For that to happen, rail needs to innovate. With Shift2Rail, the Commission is more than tripling its financing for rail research and innovation, which, combined with private funding, will represent a unique opportunity to develop strategic technologies and solutions that will help to strengthen the competitiveness of European businesses and retain Europe's leadership in the global rail market."*

Jochen Eickholt, CEO of Divison Rail Systems, Siemens AG, Infrastructure & Cities Sector, said: *"The SHIFT2RAIL Joint Undertaking is an unprecedented collaborative R&D effort made by the European rail industry and represents the culture of innovation that the rail sector needs. It has been designed not only to increase our industrial competitiveness*

*worldwide but specifically to provide EU passengers and freight customers a quality paradigm shift for their transportation needs."*

**More information:** [website](#) | [factsheet](#)

## **Single European Sky ATM Research (SESAR) 2020**

The goal of the SESAR programme is to develop the new technology needed to deliver Europe's Single Sky, the ambitious project to reform Europe's airspace, doubling capacity and halving air traffic management costs. The project involves more than 2500 experts covering the full range of air traffic management (ATM) expertise. The second generation of SESAR will aim to demonstrate the viability of the ATM solutions already developed within the current programme, and to bring them towards deployment. The programme will work in an overall budget of €1.5 billion, of which €500 million will be provided by the European Union and the rest by Eurocontrol and industry.

A call for expression of interest is launched today in which existing members will have an opportunity to continue in the partnership with the EU and Eurocontrol, and new members and associate partners are expected to join. Up to €400 million in co-financing will be available for the selected members.

Vice-President of the European Commission Siim Kallas, responsible for mobility and transport, said: *"SESAR 2020 Research and Innovation programme will provide Europe's aviation sector with many more forward-looking ways of tackling and solving the challenges it faces. In turn, this will create new business opportunities to benefit Europe's society and wider economy. It is why I believe that what SESAR produces and provides is not only vital for the Single European Sky (SES) to achieve its ambitious goals, but also for us to achieve the Europe 2020 growth strategy for a smart, sustainable and inclusive economy."*

Massimo Garbini, Chief Executive Officer of ENAV and member of the SJU Administrative Board, said: *"To stay a leader in aviation worldwide, Europe needs a modern and efficient Air Traffic Management (ATM) system. The SESAR R&I Programme is unprecedented and unique in bringing together the best minds of the entire aviation sector through a public-private partnership in order to fast track performance-driven ATM technological and operational improvements. Much like the EU's Horizon 2020 programme, SESAR 2020 will ensure excellence and industrial leadership in the field of ATM Research & Innovation, and will contribute to tackling Europe's broader economic and societal challenges."*

**More information:** [website](#) | [factsheet](#)