

CALL: FCH2 JU CALL FOR PROPOSALS 2018

Call identifier: H2020-JTI-FCH-2018-1

Publication date: 16 January 2018 **OJ reference** [OJ C 014/2018](#)

Topic:	FCH-01-1-2018: Large Scale Demonstration of H2 fueled HD Trucks with High Capacity Hydrogen Refueling Stations (HRS)			Open
Publication date:	16 January 2018			
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Types of action:	FCH2-IA Innovation action			
DeadlineModel:	single-stage	Deadline:	24 April 2018 17:00:00	
Opening date:	16 January 2018			
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				Time Zone : (Brussels time)
Topic:	FCH-01-2-2018: Demonstration of Fuel Cell applications for mid-size passenger ships or inland freight			Open
Publication date:	16 January 2018			
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Types of action:	FCH2-IA Innovation action			
DeadlineModel:	single-stage	Deadline:	24 April 2018 17:00:00	
Opening date:	16 January 2018			
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				Time Zone : (Brussels time)
Topic:	FCH-01-3-2018: Strengthening of the European supply chain for compressed storage systems for transport applications			Open
Publication date:	16 January 2018			
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Types of action:	FCH2-RIA Research and Innovation action			

DeadlineModel: single-stage
Opening date: 16 January 2018

Deadline: 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [FCH-01-4-2018: Fuel cell systems for the propulsion of aerial passenger vehicle](#)

Open

Publication date: 16 January 2018

Types of action: FCH2-RIA Research and Innovation action

DeadlineModel: single-stage
Opening date: 16 January 2018

Deadline: 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [FCH-01-5-2018: Next generation automotive MEA development](#)

Open

Publication date: 16 January 2018

Types of action: FCH2-RIA Research and Innovation action

DeadlineModel: single-stage
Opening date: 16 January 2018

Deadline: 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [FCH-01-6-2018: Game changer fuel cell stack for automotive applications](#)

Open

Publication date: 16 January 2018

Types of action: FCH2-RIA Research and Innovation action

DeadlineModel: single-stage
Opening date: 16 January 2018

Deadline: 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [FCH-01-7-2018: Improvement of innovative compression concepts for large scale transport applications](#) Open

Publication date: 16 January 2018

Types of action: FCH2-RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 16 January 2018

Deadline: 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [FCH-02-1-2018: Demonstration of a large-scale \(min. 20MW\) electrolyser for converting renewable energy to hydrogen](#) Open

Publication date: 16 January 2018

Types of action: FCH2-IA Innovation action

DeadlineModel: single-stage

Opening date: 16 January 2018

Deadline: 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [FCH-02-2-2018: Demonstration of large-scale steam electrolyser system in industrial market](#) Open

Publication date: 16 January 2018

Types of action: FCH2-IA Innovation action

DeadlineModel: single-stage

Opening date: 16 January 2018

Deadline: 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: <u>FCH-02-3-2018: Robust, efficient long term remote power supply</u>		Open	
Publication date:	16 January 2018		
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Types of action:	FCH2-IA Innovation action		
DeadlineModel:	single-stage	Deadline:	24 April 2018 17:00:00
Opening date:	16 January 2018		
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			Time Zone : (Brussels time)
Topic: <u>FCH-02-4-2018: Thermochemical Hydrogen Production from Concentrated Sunlight</u>		Open	
Publication date:	16 January 2018		
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Types of action:	FCH2-RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	24 April 2018 17:00:00
Opening date:	16 January 2018		
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			Time Zone : (Brussels time)
Topic: <u>FCH-02-5-2018: Hydrogen carriers for stationary storage of excess renewable energy</u>		Open	
Publication date:	16 January 2018		
<hr/>			
Types of action:	FCH2-RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	24 April 2018 17:00:00
Opening date:	16 January 2018		
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			Time Zone : (Brussels time)
Topic: <u>FCH-02-6-2018: Cost-effective novel architectures of interconnects</u>		Open	
Publication date:	16 January 2018		

Types of action:	FCH2-RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	24 April 2018 17:00:00
Opening date:	16 January 2018		

Time Zone : (Brussels time)

Topic: [FCH-02-7-2018: Efficient and cost-optimised biogas-based co-generation by high-temperature fuel cells](#) Open

Publication date: 16 January 2018

Types of action:	FCH2-RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	24 April 2018 17:00:00
Opening date:	16 January 2018		

Time Zone : (Brussels time)

Topic: [FCH-02-8-2018: Waste-stream based power balancing plants with high efficiency, high flexibility and power-to-X capability](#) Open

Publication date: 16 January 2018

Types of action:	FCH2-RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	24 April 2018 17:00:00
Opening date:	16 January 2018		

Time Zone : (Brussels time)

Topic: [FCH-03-1-2018: Developing Fuel Cell applications for port/harbour ecosystems](#) Open

Publication date: 16 January 2018

Types of action: FCH2-RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 16 January 2018

Deadline: 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [FCH-04-1-2018: PNR for safety of hydrogen driven vehicles and transport through tunnels and similar confined spaces](#)

Open

Publication date: 16 January 2018

Types of action: FCH2-RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 16 January 2018

Deadline: 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [FCH-04-2-2018: Hydrogen admixtures in the natural gas grid](#)

Open

Publication date: 16 January 2018

Types of action: FCH2-RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 16 January 2018

Deadline: 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [FCH-04-3-2018: Accelerated Stress Testing \(AST\) protocols for Solid Oxide Cells \(SOC\)](#)

Open

Publication date: 16 January 2018

Types of action: FCH2-RIA Research and Innovation action

DeadlineModel: single-stage

Deadline: 24 April 2018 17:00:00

Opening date: 16 January 2018

Time Zone : (Brussels time)

Topic: [FCH-04-4-2018: Strengthening public acceptance and awareness of FCH-technologies by educating pupils at schools](#)

Open

Publication date: 16 January 2018

Types of action: FCH2-CSA Coordination & support action

DeadlineModel: single-stage

Opening date: 16 January 2018

Deadline: 24 April 2018 17:00:00

Time Zone : (Brussels time)

CALL: EIT KICS CALL 2018

Call identifier: EIT-KICS-2018

Publication date: 12 January 2018 **OJ reference** [OJ C 012/2018](#)

- **16 January 2018 00:30** The submission session is now available for: EIT-Urban-Mobility(KICS), EIT-Manufacturing-2018(KICS)

Topic: [EIT-Manufacturing-2018: Added-value manufacturing: a cross-cutting challenge](#)

Open

Publication date: 12 January 2018

Types of action: KICS Kics

DeadlineModel: single-stage

Opening date: 16 January 2018

Deadline: 12 July 2018 17:00:00

Time Zone : (Brussels time)

Topic: [EIT-Urban-Mobility: Urban mobility:a cross-cutting challenge](#)

Open

Publication date: 12 January 2018

Types of action: KICS Kics

DeadlineModel: single-stage

Opening date: 16 January 2018

Deadline: 12 July 2018 17:00:00

Time Zone : (Brussels time)

CALL: SHIFT2RAIL JU CALL FOR PROPOSALS 2018

Call identifier: H2020-S2RJU-2018

Publication date: 11 January 2018

Work Programme Year: H2020-JTI-Shift2Rail-2018

Work Programme Part: [Shift2Rail Work Plan 2018](#)

Topic: [S2R-CFM-CCA-01-2018: Virtual certification & smart planning](#)

Open

Publication date: 11 January 2018

Types of action: Shift2Rail-RIA-LS Research and Innovation Action Lump-Sum

DeadlineModel: single-stage

Opening date: 16 January 2018

Deadline: 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [S2R-CFM-IP1-01-2018: Development of technology demonstrators for the next generation of traction systems and adhesion management systems](#)

Open

Publication date: 11 January 2018

Types of action:	Shift2Rail-RIA-LS Research and Innovation Action Lump-Sum		
DeadlineModel:	single-stage	Deadline:	24 April 2018 17:00:00
Opening date:	16 January 2018		

Time Zone : (Brussels time)

Topic: [S2R-CFM-IP1-02-2018: Implementing new technologies for the TCMS](#)

Open

Publication date: 11 January 2018

Types of action:	Shift2Rail-RIA-LS Research and Innovation Action Lump-Sum		
DeadlineModel:	single-stage	Deadline:	24 April 2018 17:00:00
Opening date:	16 January 2018		

Time Zone : (Brussels time)

Topic: [S2R-CFM-IP2-01-2018: Advanced Signalling, Automation and Communication System \(IP2 and IP5\)](#)

Open

Publication date: 11 January 2018

Types of action:	Shift2Rail-IA-LS Innovation Action Lump-Sum		
DeadlineModel:	single-stage	Deadline:	24 April 2018 17:00:00
Opening date:	16 January 2018		

Time Zone : (Brussels time)

Topic: [S2R-CFM-IP3-01-2018: Research into optimized and future railway infrastructure](#)

Open

Publication date: 11 January 2018

Types of action:	Shift2Rail-IA-LS Innovation Action Lump-Sum		
DeadlineModel:	single-stage	Deadline:	24 April 2018 17:00:00

Opening date: 16 January 2018

Time Zone : (Brussels time)

Topic: [S2R-CFM-IP4-01-2018: Passenger service platform specifications for an enhanced multi-modal transport eco-system including Mobility as a Service \(MaaS\)](#) Open

Publication date: 11 January 2018

Types of action: Shift2Rail-IA-LS Innovation Action Lump-Sum

DeadlineModel: single-stage

Opening date: 16 January 2018

Deadline: 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [S2R-CFM-IP5-01-2018: Technology demonstrators for competitive, intelligent rail freight operation](#) Open

Publication date: 11 January 2018

Types of action: Shift2Rail-IA-LS Innovation Action Lump-Sum

DeadlineModel: single-stage

Opening date: 16 January 2018

Deadline: 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [S2R-OC-IP1-01-2018: Technical solutions for the next generation of TCMS](#) Open

Publication date: 11 January 2018

Types of action: Shift2Rail-RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 16 January 2018

Deadline: 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [S2R-OC-IP2-01-2018: Analysis for Moving Block and implementation of Virtual Coupling concept](#) Open

Publication date: 11 January 2018

Types of action: Shift2Rail-RIA Research and Innovation action
DeadlineModel: single-stage
Opening date: 16 January 2018 **Deadline:** 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [S2R-OC-IP2-02-2018: Modern methodologies and verifications for GNSS in Railways and virtual test environment](#) Open

Publication date: 11 January 2018

Types of action: Shift2Rail-RIA Research and Innovation action
DeadlineModel: single-stage
Opening date: 16 January 2018 **Deadline:** 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [S2R-OC-IP2-03-2018: Communication environment assessment and validation](#) Open

Publication date: 11 January 2018

Types of action: Shift2Rail-RIA Research and Innovation action
DeadlineModel: single-stage
Opening date: 16 January 2018 **Deadline:** 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: <u>S2R-OC-IP3-01-2018: Measuring and monitoring devices for railway assets</u>		Open	
Publication date:	11 January 2018		
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Types of action:	Shift2Rail-IA Innovation action		
DeadlineModel:	single-stage	Deadline:	24 April 2018 17:00:00
Opening date:	16 January 2018		
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			Time Zone : (Brussels time)
Topic: <u>S2R-OC-IP4-01-2018: Semantic framework for multimodal transport services</u>		Open	
Publication date:	11 January 2018		
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Types of action:	Shift2Rail-RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	24 April 2018 17:00:00
Opening date:	16 January 2018		
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			Time Zone : (Brussels time)
Topic: <u>S2R-OC-IP4-02-2018: Supporting the implementation of the IP4 multi-modal transport ecosystem</u>		Open	
Publication date:	11 January 2018		
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Types of action:	Shift2Rail-RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	24 April 2018 17:00:00
Opening date:	16 January 2018		
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			Time Zone : (Brussels time)
Topic: <u>S2R-OC-IP5-01-2018: Radio communication and simulation of train dynamics for Distributed Power within long trains</u>		Open	

Publication date: 11 January 2018

Types of action: Shift2Rail-RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 16 January 2018

Deadline: 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [S2R-OC-IPX-01-2018: Paradigm shifts for railway](#)

Open

Publication date: 11 January 2018

Types of action: Shift2Rail-RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 16 January 2018

Deadline: 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [S2R-OC-IPX-02-2018: Transversal exploratory research activities and knowledge transfer](#)

Open

Publication date: 11 January 2018

Types of action: Shift2Rail-CSA Coordination and Support action

DeadlineModel: single-stage

Opening date: 16 January 2018

Deadline: 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [S2R-OC-IPX-03-2018: Innovative/breakthrough mobility concepts \(with rail as backbone\)](#)

Open

Publication date: 11 January 2018

Types of action:	Shift2Rail-CSA Coordination and Support action		
DeadlineModel:	single-stage	Deadline:	24 April 2018 17:00:00
Opening date:	16 January 2018		

Time Zone : (Brussels time)

CALL: H2020-JTI-IMI2-2017-13-TWO-STAGE

Call identifier: H2020-JTI-IMI2-2017-13-TWO-STAGE

Publication date: 30 November 2017

Topic:	<u>IMI2-2017-13-01: Assessment of the uniqueness of diabetic cardiomyopathy relative to other forms of heart failure using unbiased pheno-mapping approaches</u>	Open
Publication date:	30 November 2017	

Types of action:	IMI2-RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	28 February 2018 17:00:00
Opening date:	30 November 2017	2nd stage Deadline:	06 September 2018 17:00:00

Time Zone : (Brussels time)

Topic:	<u>IMI2-2017-13-02: Genome-Environment Interactions in Inflammatory Skin Disease</u>	Open
Publication date:	30 November 2017	

Types of action:	IMI2-RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	28 February 2018 17:00:00
Opening date:	30 November 2017	2nd stage Deadline:	06 September 2018 17:00:00

Time Zone : (Brussels time)

Topic:	<u>IMI2-2017-13-03: The value of diagnostics to combat antimicrobial resistance by optimising antibiotic</u>	Open
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Publication date: 30 November 2017

Types of action: IMI2-RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 28 February 2018 17:00:00

Opening date: 30 November 2017

2nd stage Deadline: 06 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [IMI2-2017-13-04: Mitochondrial Dysfunction in Neurodegeneration](#)

Open

Publication date: 30 November 2017

Types of action: IMI2-RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 28 February 2018 17:00:00

Opening date: 30 November 2017

2nd stage Deadline: 06 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [IMI2-2017-13-05: Support and coordination action for the projects of the Neurodegeneration area of the Innovative Medicines Initiative](#)

Open

Publication date: 30 November 2017

Types of action: IMI2-CSA Coordination & support action

DeadlineModel: two-stage

Deadline: 28 February 2018 17:00:00

Opening date: 30 November 2017

2nd stage Deadline: 06 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [IMI2-2017-13-06: A sustainable European induced pluripotent stem cell platform](#)

Open

Publication date: 30 November 2017

Types of action: IMI2-RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 28 February 2018 17:00:00

Opening date: 30 November 2017

2nd stage Deadline: 06 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [IMI2-2017-13-07: Linking digital assessment of mobility to clinical endpoints to support regulatory acceptance and clinical practice](#)

Open

Publication date: 30 November 2017

Types of action: IMI2-RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 28 February 2018 17:00:00

Opening date: 30 November 2017

2nd stage Deadline: 06 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [IMI2-2017-13-08: Human Tumour Microenvironment Immunoprofiling](#)

Open

Publication date: 30 November 2017

Types of action: IMI2-RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 28 February 2018 17:00:00

Opening date: 30 November 2017

2nd stage Deadline: 06 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [IMI2-2017-13-09: ConcePTION – Continuum of Evidence from Pregnancy Exposures, Reproductive Toxicology and Breastfeeding to Improve Outcomes Now](#)

Open

Publication date: 30 November 2017

Types of action:	IMI2-RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	28 February 2018 17:00:00
Opening date:	30 November 2017	2nd stage Deadline:	06 September 2018 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>IMI2-2017-13-10: Improving the preclinical prediction of adverse effects of pharmaceuticals on the nervous system</u>		
Publication date:	30 November 2017		
Types of action:	IMI2-RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	28 February 2018 17:00:00
Opening date:	30 November 2017	2nd stage Deadline:	06 September 2018 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>IMI2-2017-13-11: Translational Safety Biomarker Pipeline (TransBioLine): Enabling development and implementation of novel safety biomarkers in clinical trials and diagnosis of disease</u>		
Publication date:	30 November 2017		
Types of action:	IMI2-RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	28 February 2018 17:00:00
Opening date:	30 November 2017	2nd stage Deadline:	06 September 2018 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>IMI2-2017-13-12: Pilot programme on a Clinical Compound Bank for Repurposing: Cardiovascular diseases and diabetes</u>		
Publication date:	30 November 2017		

Types of action:	IMI2-RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	28 February 2018 17:00:00
Opening date:	30 November 2017	2nd stage Deadline:	06 September 2018 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>IMI2-2017-13-13: Pilot programme on a Clinical Compound Bank for Repurposing: Respiratory diseases</u> Open		
Publication date:	30 November 2017		
Types of action:	IMI2-RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	28 February 2018 17:00:00
Opening date:	30 November 2017	2nd stage Deadline:	06 September 2018 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>IMI2-2017-13-14: Pilot programme on a Clinical Compound Bank for Repurposing: Neurodegenerative diseases</u> Open		
Publication date:	30 November 2017		
Types of action:	IMI2-RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	28 February 2018 17:00:00
Opening date:	30 November 2017	2nd stage Deadline:	06 September 2018 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>IMI2-2017-13-15: Pilot programme on a Clinical Compound Bank for Repurposing: Rare/orphan diseases</u> Open		
Publication date:	30 November 2017		

Types of action:	IMI2-RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	28 February 2018 17:00:00
Opening date:	30 November 2017	2nd stage Deadline:	06 September 2018 17:00:00

Time Zone : (Brussels time)

CALL: BLUE GROWTH

Call identifier: H2020-BG-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Societal Challenges

Work Programme Year: H2020-2018-2020

Work Programme Part: [Food security, sustainable agriculture and forestry, marine, maritime and inland water research and the bioeconomy](#)
[+ More](#)

Call summary and aims

The Blue Growth Call aims at sustainably harvesting the potential of resources from seas, oceans and inland waters for different uses and across the range of marine and maritime industries, while protecting biodiversity and enhancing climate resilience. It supports sustainable growth in the marine and maritime sectors through a responsible management of marine resources for healthy, productive, safe, secure and resilient seas and oceans, which are essential for thriving ecosystems, climate regulation, global food security, human health, livelihoods and economies.

This call will boost the blue economy by: i) Improving our integrated knowledge about the reciprocal impact of climate change on marine ecosystems and biological resources in order to effectively manage their response, mitigation and resilience capacities; ii) Preserving and sustainably exploiting marine and coastal ecosystems, and biological resources to deliver improved nutrition and health; iii) De-risking major investments and boosting blue innovations on land and at sea to develop new bio-based marine value chains and open up new markets; iv) Developing smart and connected territories between land and sea; and v) Strengthening the international research and innovation cooperation around seas and oceans, to promote a globally sustainable blue economy.

Activities shall improve ocean observations - in support of the *G7 Future of the Seas and Oceans Initiative* - to better predict and mitigate the impact of stressors and changes (including sea-level rise), and the exploration of marine resources, including enhancing the access and management of data and services ("blue cloud"). They will tap into the potential of marine resources, including plankton and microbiomes, and aquatic production systems, from fisheries to aquaculture[[In this context, 'aquaculture' comprises the farming of aquatic organisms (including fish, shellfish, algae and aquatic plants) in all types of controlled or natural water environments (freshwater, brackish and seawater).]], for better food and nutrition security, health and bio-based products as well as climate change mitigation. Major international cooperation activities will also be launched, focusing on the South Atlantic Ocean and paving the way towards an 'All Atlantic Ocean Research Alliance' [[Belém Statement on Atlantic Research and Innovation Cooperation, Commission Decision C(2017)3551/F1, full reference to be introduced upon Council approval in mid July 2017.]], and reinforcing cooperation with partners in other regions such as the Baltic Sea and the North Sea, the Mediterranean and the Black Sea. All Blue Growth actions shall also contribute to improving science education and ocean literacy through dissemination, outreach and training activities.

A strategic coordinated approach for marine and maritime research across all parts of Horizon 2020 will support the implementation of relevant EU policies to help deliver key Blue Growth objectives across Europe, including the EU Outermost Regions. This will also involve relevant topics from other parts of Horizon 2020 in addition to Societal Challenge 2, which will be interlinked through a Blue Growth topics flagging system.

The Blue Growth Call is intended to deliver on a series of EU policies[[Including the EU Bioeconomy Strategy, 2030 Climate and Energy Framework, Circular Economy Package, Common Fisheries Policy, Integrated Maritime Policy, Marine Strategy Framework Directive, Maritime Spatial Planning Directive, Blue Growth Strategy, and the International Ocean Governance: an agenda for the future of our oceans.]] and international commitments such as the UN Sustainable Development Goals, and it also contributes to the following Focus Areas: 'Building a low-carbon, climate resilient future', 'Digitising and transforming European industry and services' and 'Connecting economic and environmental gains – the Circular Economy'.

The actions are expected to support Europe's endeavours to implement the Sustainable Development Goals (SDGs), in particular in particular SDG 2 'Zero hunger', SDG 13 'Climate action' and SDG 14 'Life below water'.

Call updates

- **11 December 2017 17:13**

For the following two-stage topics (i.e. BG-08-2018-2020 - Scope B; BG-08-2018-2019 - Scope C; LC-BG-03-2018) the first stage proposal template is available. Please the topic page for more information.

- **31 October 2017 00:31** The submission session is now available for: BG-01-2018(CSA), BG-08-2018-2019(CSA), DT-BG-04-2018-2019(IA), BG-02-2018(ERA-NET-Cofund)
- **31 October 2017 00:30** The submission session is now available for: LC-BG-03-2018(RIA), BG-08-2018-2019(RIA)

Topic: [BG-01-2018: Towards a Baltic and North Sea research and innovation programme](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 13 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [BG-02-2018: Blue Bioeconomy Public-Public Partnership](#)

Open

Publication date: 27 October 2017

Types of action: ERA-NET-Cofund ERA-NET Cofund

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 13 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [BG-05-2019: Multi-use of the marine space, offshore and near-shore: pilot demonstrators](#)

Forthcoming

Publication date: 27 October 2017

Types of action: IA Innovation action
DeadlineModel: single-stage
Opening date: 16 October 2018

Deadline: 23 January 2019 17:00:00

Time Zone : (Brussels time)

Topic: [BG-07-2019-2020: The Future of Seas and Oceans Flagship Initiative](#)

Forthcoming

Publication date: 27 October 2017

Types of action: IA Innovation action
DeadlineModel: single-stage
Opening date: 16 October 2018

Deadline: 23 January 2019 17:00:00

Time Zone : (Brussels time)

Topic: [BG-08-2018-2019: All Atlantic Ocean Research Alliance Flagship](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action
DeadlineModel: two-stage
Opening date: 16 October 2018

Deadline: 23 January 2019 17:00:00
2nd stage Deadline: 04 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [BG-08-2018-2019: All Atlantic Ocean Research Alliance Flagship](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action
DeadlineModel: single-stage
Opening date: 31 October 2017

Deadline: 13 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [DT-BG-04-2018-2019: Sustainable European aquaculture 4.0: nutrition and breeding](#)

Open

Publication date: 27 October 2017

Focus area: Digitising and transforming European industry and services (DT)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 13 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-BG-03-2018: Sustainable harvesting of marine biological resources](#)

Open

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Opening date: 31 October 2017

Deadline: 13 February 2018 17:00:00

2nd stage Deadline: 11 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-BG-09-2019: Coordination of marine and maritime research and innovation in the Black Sea](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 16 October 2018

Deadline: 23 January 2019 17:00:00

Time Zone : (Brussels time)

CALL: WIDESPREAD

Call identifier: H2020-WIDESPREAD-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Spreading excellence and widening participation

Work Programme Year: H2020-2018-2020

Work Programme Part: [Spreading Excellence and Widening Participation](#)

Call summary and aims

Activities under this section are expected to contribute to the realisation of the research and innovation potential in all parts of Europe by promoting the creation of Centres of Excellence, reinforcing urban transition towards sustainability across Europe, bringing high quality human resources to institutions to implement structural change and further promoting networking actions for sustained excellence.

Topic: [WIDESPREAD-01-2018-2019: Teaming Phase 2](#)

Forthcoming

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 15 May 2018

Deadline: 15 November 2018 17:00:00

Time Zone : (Brussels time)

Topic: [WIDESPREAD-02-2018: Support to JPI Urban Europe](#)

Forthcoming

Publication date: 27 October 2017

Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	15 November 2018 17:00:00
Opening date:	15 May 2018		
			Time Zone : (Brussels time)
Topic:	<u>WIDESPREAD-03-2018: Twinning</u>		Forthcoming
Publication date:	27 October 2017		
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	15 November 2018 17:00:00
Opening date:	15 May 2018		
			Time Zone : (Brussels time)
Topic:	<u>WIDESPREAD-04-2019: ERA Chairs</u>		Forthcoming
Publication date:	27 October 2017		
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	15 November 2018 17:00:00
Opening date:	26 July 2018		
			Time Zone : (Brussels time)

CALL: INTEGRATING AND OPENING RESEARCH INFRASTRUCTURES OF EUROPEAN INTEREST

Call identifier: H2020-INFRAIA-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Excellent Science

Work Programme Year: H2020-2018-2020

Work Programme Part: [European research infrastructures \(including e-Infrastructures\)](#)
[- Less](#)

Call summary and aims

This call will open up key national and regional research infrastructures to all European researchers from both academia and industry as well as ensure their optimal use and joint development.

In addition to serving basic science challenges, Integrating Activities target research infrastructures, ranging across all fields of science and technology, needed to support the EU political priorities and address the Societal Challenges, including Focus Areas. They also target research infrastructures needed to gain leadership in the industrial and enabling technologies.

ESFRI and other world-class research infrastructures are not specifically targeted by this call. Nevertheless, where relevant, they can participate in an integrating activity together with other key national and regional research infrastructures.

[+ More](#)

Call updates

- **05 December 2017 00:30** The submission session is now available for: INFRAIA-01-2018-2019(RIA)

Topic: [INFRAIA-01-2018-2019: Integrating Activities for Advanced Communities](#)

Forthcoming

Publication date: 27 October 2017

Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	20 March 2019 17:00:00
Opening date:	14 November 2018		
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			Time Zone : (Brussels time)
Topic:	<u>INFRAIA-01-2018-2019: Integrating Activities for Advanced Communities</u>		Open
Publication date:	27 October 2017		
<hr/>			
Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	22 March 2018 17:00:00
Opening date:	05 December 2017		
<hr/>			
			Time Zone : (Brussels time)

CALL: SUPPORT TO POLICY AND INTERNATIONAL COOPERATION

Call identifier: H2020-INFRA supp-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Excellent Science

Work Programme Year: H2020-2018-2020

Work Programme Part: [European research infrastructures \(including e-Infrastructures\)](#)
[- Less](#)

Call summary and aims

This call will reinforce European research infrastructures policy and international cooperation. Pooling and sharing of resources at European level requires the development of well defined policies and agreed mechanisms of cooperation and assessment. The global

dimension of the scientific challenges addressed by European research infrastructures makes increasingly relevant their international cooperation with research infrastructures in other world regions as well as the development of global research infrastructures.

The development of policy and international cooperation activities are, in addition to this call, encouraged in any proposal submitted to other parts of this work programme, where they appear to be relevant.

[+ More](#)

Call updates

- **05 December 2017 00:30** The submission session is now available for: INFRASUPP-01-2018-2019(RIA-CSA)

Topic: [INFRASUPP-01-2018-2019: Policy and international cooperation measures for research infrastructures](#) Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action
CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 14 November 2018

Deadline: 20 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [INFRASUPP-01-2018-2019: Policy and international cooperation measures for research infrastructures](#) Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action
CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 05 December 2017

Deadline: 22 March 2018 17:00:00

CALL: RURAL RENAISSANCE

Call identifier: H2020-RUR-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Societal Challenges

Work Programme Year: H2020-2018-2020

Work Programme Part: [Food security, sustainable agriculture and forestry, marine, maritime and inland water research and the bioeconomy](#)
[- Less](#)

Call summary and aims

The Rural Renaissance call will enhance the natural, social, cultural and economic potential of rural areas[[For the purpose of this call, the term "rural" is understood in a wide sense and also includes peri-urban, remote, mountain and coastal areas, unless otherwise specified in the topic description.]] and support policy coherence. It will boost economic development, ecosystem services and entrepreneurial innovation. This will be achieved by building on diversification and modernisation strategies, improving governance models, supporting innovative food and non-food[[Non-food chains include wood.]] value chains, and capitalising on local assets, including human natural and cultural capital.

The call will renew relevant policies dealing with rural areas and their analytical support tools. It will develop synergies between the main economic sectors of rural areas, strengthen the sustainable development of food and non-food chains making use of territorial assets, support the development of the circular economy in rural areas, develop a comprehensive approach towards digitisation as an enabler of rural economies, improve the agricultural knowledge and innovation systems (AKIS) in Europe so as to boost innovation and the delivery of the European Innovation Partnership "Agricultural Productivity and Sustainability (so-called EIP-AGRI).

Activities under the RUR call will be instrumental in implementing the Focus Areas "Digitising and transforming European industry and services" and "Connecting economic and environmental gains – the Circular Economy". Also, to a lesser extent, they will contribute to the Focus Area "Building a low-carbon, climate resilient future".

The actions are expected to support Europe's endeavours to implement the Sustainable Development Goals (SDGs), in particular SDG 9 'Industry, innovation and infrastructure', SDG 11 'Sustainable cities and communities', SDG 12 'Responsible consumption and production', SDG 13 'Climate action' and SDG 15 'Life on land'.

Societal Challenge 2 will co-finance with LEIT-ICT the topic DT-ICT-08-2019 "Agricultural digital integration platforms" with €15 million. In addition, Societal Challenge 2 will co-finance with LEIT-ICT the topic DT-ICT-09-2020 "Digital service platforms for rural economies."

This call is expected to continue in 2020.

From farm to society: understanding dynamics and modernising policies

The following paragraph is relevant for the entire 'From farm to society: understanding dynamics and modernising policies' section of the Work Programme, i.e. topics **RUR-01-2018-2019 to RUR-04-2018-2019** inclusive.

The objective is to better understand the assets and long-term drivers of rural territories and land use and establish how they are impacted by current policies. The design of innovative policy instruments/approaches and governance models through which to improve socio-economic and environmental conditions will be addressed. This includes activities on policies impacting the delivery of ecosystem services and public goods.

Organising sustainable food and non-food value chains under changing conditions

The following paragraph is relevant for the entire 'Organising sustainable food and non-food value chains under changing conditions' section of the Work Programme, i.e. topics **RUR-05-2020 to LC-RUR-11-2019-2020** inclusive.

The objective is to boost the development of innovative and sustainable food and non-food chains and services to support the diverse needs of communities and businesses, in a responsible and ethical way, hence fostering sustainable growth and jobs in rural areas and connecting territories (e.g. coastal-inland, rural-urban). This part will include activities related to the Focus Area "Connecting

economic and environmental gains – the Circular Economy".

Taking advantage of the digital revolution

The following paragraph is relevant for the entire 'Taking advantage of the digital revolution' section of the Work Programme, i.e. topics **DT-RUR-12-2018 to RUR-14-2018** inclusive.

ICT tools can play a key role in rural growth through a variety of impacts such as increased efficiency and competitiveness, social inclusion, new business models and opportunities, modernisation of services, renewal of governance models through, for example, improved participation of society. This call section will explore the conditions under which benefits of ICT applications can be maximized. This part will include activities related to the Focus Area "Digitising and transforming European industry and services".

Boosting innovation and enhancing the human and social capital in rural areas

The following paragraph is relevant for the entire 'Boosting innovation and enhancing the human and social capital in rural areas' section of the Work Programme, i.e. topics **RUR-15-2018-2019-2020 to RUR-17-2020** inclusive.

The objective is to support sustainable growth by encouraging innovation. This involves two main strands of activities: 1) strengthening the skills, human and social capital of farmers, foresters and rural dwellers by improving cooperation, knowledge transfer and networking; 2) investing into the knowledge and innovation systems to improve their delivery. In particular, support to the implementation of the EIP-AGRI "interactive innovation approach" will be provided.

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Call updates

- **23 January 2018 17:31**

The topics DT-RUR-12-2018 and RUR-14-2018 now correctly dispose of the rectified PART B template, which includes the sub-sections on financial support to third parties, under chapter 4.2.

- **11 December 2017 17:15**

For the following two-stage topics (i.e. CE-RUR-08-2018-2019-2020; RUR-01-2018-2019; RUR-02-2018; RUR-03-2018; RUR-04-2018-2019) the first stage proposal template is available. Please the topic page for more information.

- **31 October 2017 00:34** The submission session is now available for: RUR-15-2018-2019-2020(CSA), RUR-13-2018(CSA), RUR-01-2018-2019(CSA), DT-RUR-12-2018(IA), RUR-14-2018(IA), RUR-09-2018(CSA)
- **31 October 2017 00:34** The submission session is now available for: CE-RUR-08-2018-2019-2020(RIA), RUR-04-2018-2019(RIA), RUR-02-2018(RIA), RUR-03-2018(RIA), RUR-01-2018-2019(RIA)

Topic: [CE-RUR-08-2018-2019-2020: Closing nutrient cycles](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Connecting economic and environmental gains - the Circular Economy (CE)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 16 October 2018

Deadline: 23 January 2019 17:00:00

Time Zone : (Brussels time)

Topic: [CE-RUR-08-2018-2019-2020: Closing nutrient cycles](#)

Open

Publication date: 27 October 2017

Focus area: Connecting economic and environmental gains - the Circular Economy (CE)

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 13 February 2018 17:00:00

Opening date:	31 October 2017	2nd stage Deadline:	11 September 2018 17:00:00
			Time Zone : (Brussels time)
Topic:	<u>CE-RUR-10-2019: Circular bio-based business models for rural communities</u>		Forthcoming
Publication date:	27 October 2017		
Focus area:	Connecting economic and environmental gains - the Circular Economy (CE)		
Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	23 January 2019 17:00:00
Opening date:	16 October 2018		
			Time Zone : (Brussels time)
Topic:	<u>DT-RUR-12-2018: ICT Innovation for agriculture – Digital Innovation Hubs for Agriculture</u>		Open
Publication date:	27 October 2017		
Focus area:	Digitising and transforming European industry and services (DT)		
Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	13 February 2018 17:00:00
Opening date:	31 October 2017		
			Time Zone : (Brussels time)
Topic:	<u>LC-RUR-11-2019-2020: Sustainable wood value chains</u>		Forthcoming
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
Types of action:	IA Innovation action		

DeadlineModel: single-stage
Opening date: 16 October 2018

Deadline: 23 January 2019 17:00:00

Time Zone : (Brussels time)

Topic: [RUR-01-2018-2019: Building modern rural policies on long-term visions and societal engagement](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 23 January 2019 17:00:00

Opening date: 16 October 2018

2nd stage Deadline: 04 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [RUR-01-2018-2019: Building modern rural policies on long-term visions and societal engagement](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Deadline: 13 February 2018 17:00:00

Opening date: 31 October 2017

Time Zone : (Brussels time)

Topic: [RUR-01-2018-2019: Building modern rural policies on long-term visions and societal engagement](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 13 February 2018 17:00:00

Opening date: 31 October 2017

2nd stage Deadline: 11 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [RUR-02-2018: Socio-economic impacts of digitisation of agriculture and rural areas](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 13 February 2018 17:00:00

Opening date: 31 October 2017

2nd stage Deadline: 11 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [RUR-03-2018: Contracts for effective and lasting delivery of agri-environmental public goods](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 13 February 2018 17:00:00

Opening date: 31 October 2017

2nd stage Deadline: 11 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [RUR-04-2018-2019: Analytical tools and models to support policies related to agriculture and food](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 23 January 2019 17:00:00

Opening date: 16 October 2018

2nd stage Deadline: 04 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [RUR-04-2018-2019: Analytical tools and models to support policies related to agriculture and food](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Opening date: 31 October 2017

Deadline:

13 February 2018 17:00:00

2nd stage Deadline:

11 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [RUR-09-2018: Realising the potential of regional and local bio-based economies](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline:

13 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [RUR-13-2018: Enabling the farm advisor community to prepare farmers for the digital age](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline:

13 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [RUR-14-2018: Digital solutions and e-tools to modernise the CAP](#)

Open

Publication date: 27 October 2017

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 13 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [RUR-15-2018-2019-2020: Thematic networks compiling knowledge ready for practice](#)

Forthcoming

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 16 October 2018

Deadline: 23 January 2019 17:00:00

Time Zone : (Brussels time)

Topic: [RUR-15-2018-2019-2020: Thematic networks compiling knowledge ready for practice](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 13 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [RUR-16-2019: Fuelling the potential of advisors for innovation](#)

Forthcoming

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 16 October 2018

Deadline: 23 January 2019 17:00:00

CALL: SUSTAINABLE FOOD SECURITY

Call identifier: H2020-SFS-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Societal Challenges

Work Programme Year: H2020-2018-2020

Work Programme Part: [Food security, sustainable agriculture and forestry, marine, maritime and inland water research and the bioeconomy](#)
[- Less](#)

Call summary and aims

The Sustainable Food Security call is Horizon 2020's main contribution to research and innovation in relation to Food and Nutrition Security in Europe and beyond. Its commitment to sustainability implies that particular attention is given to the interfaces between the economic, environmental and social dimensions of food production. The call advocates for food system approaches to tackle the inherent links between ecosystems, food production, the food chain and consumer health and wellbeing.

The SFS call aims to

- deliver diverse and healthy food from land and sea
- increase resource efficiency and environmental performance of food systems from primary production to consumers
- understand the impact of climate change on agriculture, resources, food quality and identify options to manage its effects
- reduce greenhouse gas emissions and emissions of air pollutants from land use and food production taking into account main drivers such as inputs and consumption patterns

Collectively, the results of funded activities will contribute to creating the conditions for dynamic and innovative farming[[Depending on the topic "farming" will refer to terrestrial and/or aquatic primary production]] and food sectors that manage to turn high quality products and high environmental standards into a competitive advantage. They will help to ensure food production under future,

increasingly uncertain environmental conditions and move towards resource-smart, climate-smart and "eco-healthy" production and consumption.

Activities supported under the SFS call complement topics under the Blue Growth dealing with food and nutrition security from aquatic sources. They will contribute in particular to the Focus Area on "Building a low-carbon, climate resilient future" and to a minor extent to Focus Areas "Digitising and transforming European industry and services" and the "Circular Economy".

The actions are expected to support Europe's endeavours to implement the Sustainable Development Goals (SDGs), in particular SDG 2 'Zero hunger', SDG 11 'Sustainable cities and communities', SDG 12 'Responsible consumption and production', SDG 13 'Climate action' and SDG 15 'Life on land'.

This call is expected to continue in 2020.

From functional ecosystems to healthy food

The following paragraph is relevant for the entire 'From functional ecosystems to healthy food' section of the Work Programme, i.e. topics **SFS-01-2018-2019-2020 to SFS-18-2020** inclusive.

Activities aim to tap into the potential of ecosystems services for crop and animal (Depending on the topic the term "animals" can refer to aquatic or terrestrial animals) production, notably in relation to pest and disease control, nutrient cycling, soil fertility and productivity. They emphasise the relationship between modes of food production, ecosystem functions, food quality and consumer health. The importance of diversity and diversification in increasing the resilience of food systems is an underlying theme. It includes promoting a better use of plant, animal genetic and microbial genetic resources. A cluster of targeted microbiome activities will help to better understand how existing biodiversity can support processes across soils, plants, animals, the marine environment and humans. These will be referenced and linked to microbiome research under other parts of Horizon 2020.

Environment and climate-smart food production and consumption

The following paragraph is relevant for the entire 'Environment and climate-smart food production and consumption' section of the Work Programme, i.e. topics **LC-SFS-19-2018-2019 to CE-SFS-25-2018** inclusive.

Proposed activities open avenues to progress on low greenhouse gas emission agriculture, fisheries and food industries. They will support the development of strategies and tools to better cope with more variable and extreme weather events, changing environmental

conditions and new emerging threats. A number of topics target the mitigation capacity of the primary production sector and the synergies and trade-offs between adaptation and mitigation measures. Activities also tackle the stewardship and use of natural resources on land and sea and other inputs throughout food production. They aim at optimising resource use and reducing environmental footprints throughout primary production, food industries, food distribution, food service and households.

Building capacities

The following paragraph is relevant for the entire 'Building capacities' section of the Work Programme, i.e. topics **DT-SFS-26-2019 to SFS-31-2019** inclusive.

A defined set of activities addresses more fundamental research needs as well as the harmonisation and rationalisation of data, methods or infrastructures. Activities will help to test new approaches and develop new models for business creation and societal engagement. The delivery of knowledge and resources will support downstream translational research and innovations.

Targeted international cooperation

The following paragraphs are relevant for the entire 'Targeted international cooperation' section of the Work Programme, i.e. topics **SFS-32-2018 to SFS-40-2020** inclusive.

FNSSA Africa:

In 2016 the EU-Africa High Level Policy Dialogue on science, technology and innovation (HLPD) has adopted the roadmap ([Roadmap towards a jointly funded EU-Africa Research & Innovation Partnership on Food and Nutrition Security and Sustainable Agriculture](#), Addis Ababa, 4-5 April 2016) for the EU-Africa Research and Innovation Partnership on Food and Nutrition Security & Sustainable Agriculture (FNSSA). In support of the implementation of the R&I Partnership on FNSSA and in line with the 'Joint communication to the European Parliament and the Council for a renewed impetus to the Africa-EU Partnership'[[JOIN (2017) 17]], a number of actions are proposed. The actions include: for the overall support to the implementation of the EU-Africa R&I Partnership on a Cooperation and Support Action (SFS-33-2018); for pillar I of the roadmap (Sustainable intensification) a portfolio of projects (SFS-35-2019-2020 and CE-SFS-36-2020); for pillar II (Agriculture and food systems for nutrition) a research and innovation action (LC-SFS-34-2019). Pillar IV of the partnership should be considered as appropriate in each proposal.

Proposals are expected to establish relevant links with other projects funded in support of the EU-Africa R&I Partnership on FNSSA, including those funded by previous Horizon 2020 work programmes and those funded by the EU's development budget.

For FAB China:

The European Commission and the Chinese Academy of Agricultural Sciences signed a letter of intent on research and innovation cooperation in food, agriculture and biotechnology (FAB) in November 2013. They agreed to work towards an ambitious strategic long-term partnership and launched the FAB 'flagship initiative'. Building on this agreement, the EU-China Task Force on FAB has developed specific common priorities that will promote substantial, coordinated and balanced research and innovation cooperation between the EU and China. These priorities are reflected in topics SFS-37-2019 to CE-SFS-39-2019.

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Call updates

- **11 December 2017 17:08**

For the following two-stage topics (i.e. LC-SFS-19-2018-2019; SFS-01-2018-2019-2020; SFS-05-2018-2019-2020; SFS-06-2018-2020; SFS-07-2018; SFS-08-2018-2019; SFS-11-2018-2019; SFS-16-2018; SFS-27-2018; SFS-29-2018; SFS-30-2018-2019-2020; SFS-38-2018) the first stage proposal template is available. Please the topic page for more information.

- **31 October 2017 00:33** The submission session is now available for: SFS-16-2018(RIA), SFS-01-2018-2019-2020(RIA), SFS-38-2018(RIA), LC-SFS-19-2018-2019(RIA), SFS-07-2018(RIA), SFS-06-2018-2020(RIA), SFS-05-2018-2019-2020(RIA), SFS-30-2018-2019-2020(RIA), SFS-29-2018(RIA), SFS-27-2018(RIA), SFS-08-2018-2019(RIA), SFS-11-2018-2019(RIA)
- **31 October 2017 00:33** The submission session is now available for: LC-SFS-03-2018(IA), SFS-32-2018(CSA), SFS-33-2018(CSA), DT-SFS-14-2018(IA), SFS-28-2018-2019-2020(CSA), CE-SFS-25-2018(IA), LC-SFS-15-2018(CSA)

Topic: [CE-SFS-24-2019: Innovative and citizen-driven food system approaches in cities](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Connecting economic and environmental gains - the Circular Economy (CE)

Types of action: IA Innovation action

DeadlineModel: single-stage
Opening date: 16 October 2018

Deadline: 23 January 2019 17:00:00

Time Zone : (Brussels time)

Topic: [CE-SFS-25-2018: Integrated system innovation in valorising urban biowaste](#)

Open

Publication date: 27 October 2017

Focus area: Connecting economic and environmental gains - the Circular Economy (CE)

Types of action: IA Innovation action

DeadlineModel: single-stage
Opening date: 31 October 2017

Deadline: 13 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [CE-SFS-39-2019: High-quality organic fertilisers from biogas digestate](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Connecting economic and environmental gains - the Circular Economy (CE)

Types of action: IA Innovation action

DeadlineModel: single-stage
Opening date: 16 October 2018

Deadline: 23 January 2019 17:00:00

Time Zone : (Brussels time)

Topic: [DT-SFS-14-2018: Personalized Nutrition](#)

Open

Publication date: 27 October 2017

Focus area: Digitising and transforming European industry and services (DT)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 13 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [DT-SFS-26-2019: Food Cloud demonstrators](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Digitising and transforming European industry and services (DT)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 16 October 2018

Deadline: 23 January 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SFS-03-2018: Microbiome applications for sustainable food systems](#)

Open

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 13 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SFS-15-2018: Future proofing our plants](#)

Open

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	13 February 2018 17:00:00
Opening date:	31 October 2017		
			Time Zone : (Brussels time)
Topic:	<u>LC-SFS-17-2019: Alternative proteins for food and feed</u>		Forthcoming
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	23 January 2019 17:00:00
Opening date:	16 October 2018		
			Time Zone : (Brussels time)
Topic:	<u>LC-SFS-19-2018-2019: Climate-smart and resilient farming</u>		Forthcoming
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	23 January 2019 17:00:00
Opening date:	16 October 2018	2nd stage Deadline:	04 September 2019 17:00:00
			Time Zone : (Brussels time)
Topic:	<u>LC-SFS-19-2018-2019: Climate-smart and resilient farming</u>		Open
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		

Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	13 February 2018 17:00:00
Opening date:	31 October 2017	2nd stage Deadline:	11 September 2018 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>LC-SFS-20-2019: European Joint Programme on agricultural soil management</u>		
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
Types of action:	COFUND-EJP COFUND (European Joint Programme)		
DeadlineModel:	single-stage	Deadline:	23 January 2019 17:00:00
Opening date:	16 October 2018		
Time Zone : (Brussels time)			
Topic:	<u>LC-SFS-34-2019: Food Systems Africa</u>		
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	23 January 2019 17:00:00
Opening date:	16 October 2018	2nd stage Deadline:	04 September 2019 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>SFS-01-2018-2019-2020: Biodiversity in action: across farmland and the value chain</u>		
Publication date:	27 October 2017		

Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	23 January 2019 17:00:00
Opening date:	16 October 2018	2nd stage Deadline:	04 September 2019 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>SFS-01-2018-2019-2020: Biodiversity in action: across farmland and the value chain</u>		
Publication date:	27 October 2017		
Open			
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	13 February 2018 17:00:00
Opening date:	31 October 2017	2nd stage Deadline:	11 September 2018 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>SFS-04-2019-2020: Integrated health approaches and alternatives to pesticide use</u>		
Publication date:	27 October 2017		
Forthcoming			
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	23 January 2019 17:00:00
Opening date:	16 October 2018	2nd stage Deadline:	04 September 2019 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>SFS-05-2018-2019-2020: New and emerging risks to plant health</u>		
Publication date:	27 October 2017		
Forthcoming			
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	23 January 2019 17:00:00

Opening date:	16 October 2018	2nd stage Deadline:	04 September 2019 17:00:00
Time Zone : (Brussels time)			
Topic:	SFS-05-2018-2019-2020: New and emerging risks to plant health		Open
Publication date:	27 October 2017		
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	13 February 2018 17:00:00
Opening date:	31 October 2017	2nd stage Deadline:	11 September 2018 17:00:00
Time Zone : (Brussels time)			
Topic:	SFS-06-2018-2020: Stepping up integrated pest management		Open
Publication date:	27 October 2017		
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	13 February 2018 17:00:00
Opening date:	31 October 2017	2nd stage Deadline:	11 September 2018 17:00:00
Time Zone : (Brussels time)			
Topic:	SFS-07-2018: Making European beekeeping healthy and sustainable		Open
Publication date:	27 October 2017		
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	13 February 2018 17:00:00
Opening date:	31 October 2017	2nd stage Deadline:	11 September 2018 17:00:00
Time Zone : (Brussels time)			

Topic: [SFS-08-2018-2019: Improving animal welfare](#)

Forthcoming

Publication date: 27 October 2017

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 16 October 2018

Deadline: 23 January 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SFS-08-2018-2019: Improving animal welfare](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Opening date: 31 October 2017

Deadline: 13 February 2018 17:00:00

2nd stage Deadline: 11 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SFS-11-2018-2019: Anti-microbials and animal production](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Opening date: 16 October 2018

Deadline: 23 January 2019 17:00:00

2nd stage Deadline: 04 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SFS-11-2018-2019: Anti-microbials and animal production](#)

Open

Publication date: 27 October 2017

Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	13 February 2018 17:00:00
Opening date:	31 October 2017	2nd stage Deadline:	11 September 2018 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>SFS-12-2019: A vaccine against African swine fever</u>		Forthcoming
Publication date:	27 October 2017		
Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	23 January 2019 17:00:00
Opening date:	16 October 2018		
Time Zone : (Brussels time)			
Topic:	<u>SFS-16-2018: Towards healthier and sustainable food</u>		Open
Publication date:	27 October 2017		
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	13 February 2018 17:00:00
Opening date:	31 October 2017	2nd stage Deadline:	11 September 2018 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>SFS-23-2019: Integrated water management in small agricultural catchments</u>		Forthcoming
Publication date:	27 October 2017		
Types of action:	RIA Research and Innovation action		

DeadlineModel:	two-stage	Deadline:	23 January 2019 17:00:00
Opening date:	16 October 2018	2nd stage Deadline:	04 September 2019 17:00:00
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			Time Zone : (Brussels time)
Topic:	<u>SFS-27-2018: Monitoring food R&I investments and impacts</u>		Open
Publication date:	27 October 2017		
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Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	13 February 2018 17:00:00
Opening date:	31 October 2017	2nd stage Deadline:	11 September 2018 17:00:00
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			Time Zone : (Brussels time)
Topic:	<u>SFS-28-2018-2019-2020: Genetic resources and pre-breeding communities</u>		Forthcoming
Publication date:	27 October 2017		
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Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	23 January 2019 17:00:00
Opening date:	16 October 2018	2nd stage Deadline:	04 September 2019 17:00:00
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			Time Zone : (Brussels time)
Topic:	<u>SFS-28-2018-2019-2020: Genetic resources and pre-breeding communities</u>		Open
Publication date:	27 October 2017		
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Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	13 February 2018 17:00:00
Opening date:	31 October 2017		
<hr/>			

Time Zone : (Brussels time)

Topic: [SFS-29-2018: Innovations in plant variety testing](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline:

13 February 2018 17:00:00

Opening date: 31 October 2017

2nd stage Deadline:

11 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SFS-30-2018-2019-2020: Agri-Aqua Labs](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline:

23 January 2019 17:00:00

Opening date: 16 October 2018

2nd stage Deadline:

04 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SFS-30-2018-2019-2020: Agri-Aqua Labs](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline:

13 February 2018 17:00:00

Opening date: 31 October 2017

2nd stage Deadline:

11 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SFS-31-2019: ERANETs in agri-food](#)

Forthcoming

Publication date: 27 October 2017

Types of action: ERA-NET-Cofund ERA-NET Cofund

DeadlineModel: single-stage

Opening date: 16 October 2018

Deadline: 23 January 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SFS-32-2018: Supporting microbiome coordination and the International Bioeconomy Forum](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 13 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SFS-33-2018: Support to the implementation of the EU-Africa Research and Innovation Partnership on Food and Nutrition Security & Sustainable Agriculture \(FNSSA\)](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 13 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SFS-35-2019-2020: Sustainable Intensification in Africa](#)

Forthcoming

Publication date: 27 October 2017

Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	23 January 2019 17:00:00
Opening date:	16 October 2018	2nd stage Deadline:	04 September 2019 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>SFS-37-2019: Integrated approaches to food safety controls across the food chain</u>		
Publication date:	27 October 2017		
Forthcoming			
Time Zone : (Brussels time)			
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	23 January 2019 17:00:00
Opening date:	16 October 2018	2nd stage Deadline:	04 September 2019 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>SFS-38-2018: Highly efficient management of soil quality and land resources</u>		
Publication date:	27 October 2017		
Open			
Time Zone : (Brussels time)			
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	13 February 2018 17:00:00
Opening date:	31 October 2017	2nd stage Deadline:	11 September 2018 17:00:00
Time Zone : (Brussels time)			

CALL: TRANSFORMING EUROPEAN INDUSTRY

Call identifier: H2020-NMBP-TR-IND-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Industrial Leadership

Work Programme Year: H2020-2018-2020

Work Programme Part: [Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing](#)
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Call summary and aims

The purpose of this call is to transform European industry through the integration of digitisation and other enabling technologies and achieve global industrial leadership. Success will be seen in global industrial leadership, notably in manufacturing, and in opportunities for re-industrialisation.

The call covers:

- the manufacturing process itself, ranging from manufacturing excellence and flexibility to increased reliability, accuracy and durability, from improving energy efficiency and re-use of materials or re-manufacturing to skills development and novel ways for human-machine interaction;
- the development of emerging and potentially disruptive biotechnologies;
- the development of medical technologies for diagnosis and treatment.

It complements the call 'Foundations for Tomorrow's Industry', and contributes to the focus area on Digitising and Transforming European Industry and Services, by combining digital and physical advances for innovative new products and services.

Proposals for Research and Innovation Actions and Innovation Actions submitted under this call should include a business case and exploitation strategy, as outlined in the Introduction to the LEIT part of this Work Programme.

FACTORIES OF THE FUTURE (FOF)

Manufacturing is a key driver of employment and wealth creation in Europe, thus contributing significantly to improving the quality of life of citizens. Manufacturing industry produces more than three-quarters of Europe's exports and generates more than 15% of European GDP. The fundamental challenge for European manufacturing is to shift from a cost-based to a high-value-added competitive advantage. Factories of the Future delivers European added value by helping manufacturing enterprises, including SMEs, to make the necessary adaptations in terms of manufacturing excellence and flexibility, including skills development, to capitalise on the increasing demand for more customised and higher-quality products. This necessitates a transition to a flexible, digitalised and

demand-driven manufacturing sector with lower energy consumption and waste generation, which characterises the fourth industrial revolution.

Topics under Factories of the Future (FOF) will support industry to develop new manufacturing technologies, optimise work environments so that its workforce can drive the transition to new technologies, enable more customised products and underlying production flexibility, optimise environmentally sustainable production and increase accuracy, efficiency and reliability in various fields of production ranging from micro assemblies to very large parts.

Proposals are invited against the following topic(s): from DT-FOF-01-2018 to DT-FOF-12-2019; DT-NMBP-18-2019; DT-NMBP-19-2019; DT-NMBP-20-2018

BIOTECHNOLOGY

The exponential development of emerging and potentially disruptive biotechnologies has broadened their applicability, improving the quality and quantity of products in a wide variety of sectors (wellbeing, environment, food, etc.), improving quality of life and becoming an important economic engine. Given that biotechnology has become crucial for industrial growth, an important objective is to deliver added value by securing an important market share for leading European industries. In addition, Europe continues to excel in its scientific know-how and the means to discover new biotechnological ideas. However, for Europe to retain its comparative advantage in biotechnology, sustained investments are needed both for feeding its research base and for translating knowledge into tangible industrial innovation. Moreover, streamlined governance for new biotechnologies will facilitate reaching their full potential.

These biotechnology topics will support European industry through the continued development of cutting-edge biotechnologies, new biotechnologies for the global challenge of environmental protection and breakthrough solutions to transform industrial processes using environmentally friendly and sustainable methods outcompeting conventional alternatives.

Proposals are invited against the following topic(s): BIOTEC-01-2018; BIOTEC-02-2019; BIOTEC-03-2018; CE-BIOTEC-04-2018; CE-BIOTEC-05-2019; BIOTEC-06-2020; BIOTEC-07-2020

MEDICAL TECHNOLOGY INNOVATIONS

EU demographic change requires innovation to enhance healthcare delivery, quality of life and active ageing, being also an industrial opportunity and a growing market. To respond to these challenges and opportunities, the topics in this section will develop innovative design, development and manufacture of user-centric medical technologies, including implants, tissue regeneration, and smart nano-

or bio-materials. The EU medical industrial sector ecosystem is currently fragmented into diverse approaches and technologies; developing and tuning innovative medical technologies performances to the patients' needs is essential to enable the translatability of inclusive "bench to bedside" solutions into personalised clinical applications. This development could result in a major improvement on the quality of life of patients.

Proposals are invited against the following topic(s):

NMBP-21-2020; NMBP-22-2018; DT-NMBP-23-2020

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Call updates

- **25 January 2018 11:20**

Deadline (first stage) of 2018 two-stage topics: 23.01.2018

A total of 122 proposals were submitted in response to this call.
The number of proposals for each topic is shown below:

BIOTEC-03-2018: 31

NMBP-22-2018: 71

- **28 November 2017 16:42** The submission session is now available for: DT-NMBP-20-2018(IA-LS)
- **31 October 2017 00:31** The submission session is now available for: BIOTEC-01-2018(CSA)
- **31 October 2017 00:30** The submission session is now available for: DT-FOF-01-2018(CSA), DT-FOF-03-2018(RIA), DT-FOF-02-2018(RIA), DT-FOF-04-2018(IA)
- **31 October 2017 00:30** The submission session is now available for: NMBP-22-2018(RIA)
- **31 October 2017 00:30** The submission session is now available for: BIOTEC-03-2018(RIA)

- **31 October 2017 00:30** The submission session is now available for: CE-BIOTEC-04-2018(RIA)

Topic: <u>BIOTEC-01-2018: Standardisation in Synthetic Biology (CSA)</u>		Open	
Publication date:	27 October 2017		
<hr/>			
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	22 February 2018 17:00:00
Opening date:	31 October 2017		
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			Time Zone : (Brussels time)
Topic: <u>BIOTEC-02-2019: Boosting the efficiency of photosynthesis (RIA)</u>		Forthcoming	
Publication date:	27 October 2017		
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Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	22 January 2019 17:00:00
Opening date:	16 October 2018	2nd stage Deadline:	03 September 2019 17:00:00
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			Time Zone : (Brussels time)
Topic: <u>BIOTEC-03-2018: Synthetic biology to expand diversity of nature's chemical production (RIA)</u>		Closed	
Publication date:	27 October 2017		
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Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	23 January 2018 17:00:00
Opening date:	31 October 2017	2nd stage Deadline:	28 June 2018 17:00:00
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			Time Zone : (Brussels time)

Topic:	<u>CE-BIOTEC-04-2018: New biotechnologies for environmental remediation (RIA)</u>			Open
Publication date:	27 October 2017			
Focus area:	Connecting economic and environmental gains - the Circular Economy (CE)			
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Types of action:	RIA Research and Innovation action			
DeadlineModel:	single-stage	Deadline:	25 April 2018 17:00:00	
Opening date:	31 October 2017			
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				Time Zone : (Brussels time)
Topic:	<u>CE-BIOTEC-05-2019: Microorganism communities for plastics bio-degradation (RIA)</u>			Forthcoming
Publication date:	27 October 2017			
Focus area:	Connecting economic and environmental gains - the Circular Economy (CE)			
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Types of action:	RIA Research and Innovation action			
DeadlineModel:	single-stage	Deadline:	24 April 2019 17:00:00	
Opening date:	16 October 2018			
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				Time Zone : (Brussels time)
Topic:	<u>DT-FOF-01-2018: Skills needed for new Manufacturing jobs (CSA)</u>			Open
Publication date:	27 October 2017			
Focus area:	Digitising and transforming European industry and services (DT)			
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Types of action:	CSA Coordination and support action			
DeadlineModel:	single-stage	Deadline:	22 February 2018 17:00:00	
Opening date:	31 October 2017			
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				Time Zone : (Brussels time)

Topic: <u>DT-FOF-02-2018: Effective Industrial Human-Robot Collaboration (RIA)</u>		Open	
Publication date:	27 October 2017		
Focus area:	Digitising and transforming European industry and services (DT)		
<hr/>			
Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	22 February 2018 17:00:00
Opening date:	31 October 2017		
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			Time Zone : (Brussels time)
Topic: <u>DT-FOF-03-2018: Innovative manufacturing of opto-electrical parts (RIA)</u>		Open	
Publication date:	27 October 2017		
Focus area:	Digitising and transforming European industry and services (DT)		
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Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	22 February 2018 17:00:00
Opening date:	31 October 2017		
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			Time Zone : (Brussels time)
Topic: <u>DT-FOF-04-2018: Pilot lines for metal Additive Manufacturing (IA 50%)</u>		Open	
Publication date:	27 October 2017		
Focus area:	Digitising and transforming European industry and services (DT)		
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Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	22 February 2018 17:00:00
Opening date:	31 October 2017		
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			Time Zone : (Brussels time)

Topic:	<u>DT-FOF-05-2019: Open Innovation for collaborative production engineering (IA)</u>			Forthcoming
Publication date:	27 October 2017			
Focus area:	Digitising and transforming European industry and services (DT)			
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Types of action:	IA Innovation action			
DeadlineModel:	single-stage	Deadline:	21 February 2019 17:00:00	
Opening date:	16 October 2018			
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				Time Zone : (Brussels time)
Topic:	<u>DT-FOF-06-2019: Refurbishment and re-manufacturing of large industrial equipment (IA)</u>			Forthcoming
Publication date:	27 October 2017			
Focus area:	Digitising and transforming European industry and services (DT)			
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Types of action:	IA Innovation action			
DeadlineModel:	single-stage	Deadline:	21 February 2019 17:00:00	
Opening date:	16 October 2018			
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				Time Zone : (Brussels time)
Topic:	<u>DT-FOF-08-2019: Pilot lines for modular factories (IA 50%)</u>			Forthcoming
Publication date:	27 October 2017			
Focus area:	Digitising and transforming European industry and services (DT)			
<hr/>				
Types of action:	IA Innovation action			
DeadlineModel:	single-stage	Deadline:	21 February 2019 17:00:00	
Opening date:	16 October 2018			
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				Time Zone : (Brussels time)

Topic:	<u>DT-FOF-12-2019: Handling systems for flexible materials (RIA)</u>			Forthcoming
Publication date:	27 October 2017			
Focus area:	Digitising and transforming European industry and services (DT)			
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Types of action:	RIA Research and Innovation action			
DeadlineModel:	single-stage	Deadline:	21 February 2019 17:00:00	
Opening date:	16 October 2018			
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				Time Zone : (Brussels time)
Topic:	<u>DT-NMBP-18-2019: Materials, manufacturing processes and devices for organic and large area electronics (IA)</u>			Forthcoming
Publication date:	27 October 2017			
Focus area:	Digitising and transforming European industry and services (DT)			
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Types of action:	IA Innovation action			
DeadlineModel:	two-stage	Deadline:	22 January 2019 17:00:00	
Opening date:	16 October 2018	2nd stage Deadline:	03 September 2019 17:00:00	
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				Time Zone : (Brussels time)
Topic:	<u>DT-NMBP-19-2019: Advanced materials for additive manufacturing (IA)</u>			Forthcoming
Publication date:	27 October 2017			
Focus area:	Digitising and transforming European industry and services (DT)			
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Types of action:	IA Innovation action			
DeadlineModel:	two-stage	Deadline:	22 January 2019 17:00:00	
Opening date:	16 October 2018	2nd stage Deadline:	03 September 2019 17:00:00	

Time Zone : (Brussels time)

Topic: [DT-NMBP-20-2018: A digital 'plug and produce' online equipment platform for manufacturing \(IA\)](#) Open

Publication date: 27 October 2017

Focus area: Digitising and transforming European industry and services (DT)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 28 November 2017

Deadline: 08 March 2018 17:00:00

Time Zone : (Brussels time)

Topic: [NMBP-22-2018: Osteoarticular tissues regeneration \(RIA\)](#) Closed

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Opening date: 31 October 2017

Deadline: 23 January 2018 17:00:00

2nd stage Deadline: 28 June 2018 17:00:00

Time Zone : (Brussels time)

CALL: FOUNDATIONS FOR TOMORROW'S INDUSTRY

Call identifier: H2020-NMBP-TO-IND-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Industrial Leadership

Work Programme Year: H2020-2018-2020

Work Programme Part: [Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing](#)
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Call summary and aims

The purpose of this call is to lay the foundations for tomorrow's industry in Europe, and to create jobs and growth through an innovation ecosystem for the design, development, testing, and upscaling of advanced materials and nanotechnologies. This should enable a vast array of applications and facilitate innovators to bring their disruptive ideas to the market. Success will be seen in an effective eco-system allowing innovators to overcome the technological and regulatory barriers.

The call covers:

- Open Innovation Test Beds will provide the development and upscaling of advanced materials and nanotechnologies, combining digital, chemical and physical advances for innovative new products and services.
- Advanced characterisation tools, predictive modelling of materials at different scales, and support for a framework to ensure public safety in nanotechnology.

The call is expected to create about 20 Open Innovation Test Beds for materials development and upscaling in six technology domains, four Open Innovation Test Beds for materials characterisation and four Open Innovation Test Beds for modelling, in addition to the already existing NanoSafety Platform[<http://www.nanosafetycluster.eu>]]. These are expected to collaborate in order to create a European ecosystem.

The call will contribute to the focus area on Digitising and Transforming European Industry and Services, by supplying the innovation test beds for upscaling, characterisation and modelling that will complement the digital innovation hubs.

Proposals for Research and Innovation Actions and Innovation Actions submitted under this call should include a business case and exploitation strategy, as outlined in the Introduction to the LEIT part of this Work Programme except for topics under chapters 1.2 and 1.3.

OPEN INNOVATION TEST BEDS

Open Innovation Test Beds are physical facilities, established in at least three Member States and Associated Countries, offering technology access and services. The objective of Open Innovation Test Beds is to bring nanotechnology and advanced materials within the reach of companies and users in order to advance from validation in a laboratory (TRL 4) to prototypes in industrial environments (TRL 7).

These test beds will allow European industry and SMEs to develop leadership in nanotechnologies and advanced materials across the whole value chain with significant impact on jobs creation and growth.

This should be achieved by developing new or upgrading existing facilities, both private and public, and making them accessible to users for the development, testing and upscaling of nanotechnologies and advanced materials in industrial environments. The Open Innovation Test Beds will also set up networks amongst them to offer complementary services, share experiments and knowledge and offer a single entry point to users.

The Open Innovation Test Beds are expected to form European networks of competences along the entire value chain matching the demands of industry. These networks should reach out to all regions of Europe and create a sustainable ecosystem. This is especially important to European regions that are building or improving their capacities. They will also offer the necessary support environments for users who are planning to set up viable ventures.

They will be expected to become sustainable, by making their facilities and services accessible to industry at fair costs and conditions, and to demonstrate their ability to attract, and interact with, a community of users, investors and other stakeholders from regional to European level.

Proposals should therefore include a business case and exploitation strategy, as outlined in the LEIT Introduction in this Work Programme. In particular, they should demonstrate the likelihood of an additional turnover of at least 4 times the requested EU funding, within 5 years after the end of the grant.

Appropriate disciplines of Social Sciences and Humanities should be included from the outset, including broader forms of expertise at early stages of the innovation process, to consider relevant socio-economic, ethical and environmental considerations in the relevant research decisions.

The Open Innovation Test Beds will help users including SMEs to:

- Minimise costs and lower technological risks when adopting new materials and new technologies;

- Tap into relevant competencies and services (including those provided by other test beds and similar initiatives), like computational modelling; characterisation; risk-benefit assessment to ensure regulatory compliance; and the implementation of standardisation efforts early in the technology development process;
- Gain access to services driven by their business needs, such as mentoring, IPR and market analysis.

Open Innovation Test Beds for upscaling nanotechnology and materials will be funded in the following technology domains:

- Lightweight nano-enabled multifunctional materials and components
- Safety Testing of Medical Technologies for Health
- Nano-enabled surfaces and membranes
- Bio-based nano-materials and solutions
- Functional materials for building envelopes
- Nano-pharmaceuticals production

The activities will be supported through the establishment of Open Innovation Test Beds in Characterisation and Modelling (see section 1.2), as well as the already established NanoSafety Platform^{1[1]}.

Proposals are invited against the following topic(s): DT-NMBP-01-2018; DT-NMBP-02-2018; DT-NMBP-03-2019; DT-NMBP-04-2020; DT-NMBP-05-2020; DT-NMBP-06-2020

MATERIALS CHARACTERISATION and COMPUTATIONAL MODELLING

The next generation of industrial products will require further advances in state-of-the-art characterisation tools as well as computational modelling. This can be achieved through the development of new techniques and a new generation of instrumentation,

^{1[1]} <http://www.nanosafetycluster.eu>

responding to industrial demands. Multi-scale, multi-technique and real-time characterisation and integration with the latest knowledge in materials modelling would lead to a better understanding of and/or discovery of new phenomena and complex functional material systems that are essential for new breakthrough products and industrial competitiveness.

Material characterisation determines materials properties, structure and performance. These activities are central to materials research and development, upscaling and manufacturing of such materials and to materials performance validation in products, to comply with regulation, safety and quality requirements. With the recent growth in available computational power, predictive modelling of materials is now in a position to be used to predict trends, to design new materials, to understand phenomena occurring in measurements and reduce the need of massive experimental testing. This can accelerate innovation and favour economically viable paths to new technological solutions for manufacturing. This is a key application area of High-Performance Computing (HPC) and closely linked with the Digital Single Market (DSM) strategy as a driver for growth.

Materials characterisation and modelling should become an integrated part of industrial R&D, leading the way to the reliable design of new and safe materials and processes, rapid upscaling, and effective quality control. This requires support for the coordination of a wide range of actors and disciplines, covering standards, data quality, Open Research Data, information management, and advances in characterisation tools and modelling.

There is the need to provide industrial users with central access to models and characterisation tools that can meet their specific requirements throughout the value chain. This should be achieved via user-driven Open Innovation Test Beds dedicated to characterisation and to modelling.

All funded projects should contribute actively to the on-going relevant European initiatives, in particular to the EMCC (European Materials Characterisation Council), the EMMC (European Materials Modelling Council), the EPPN (European Pilot Production Network), and similar European clusters and networks.

Proposals are invited against the following topic(s): DT-NMBP-07-2018; DT-NMBP-08-2019; DT-NMBP-09-2018; DT-NMBP-10-2019; DT-NMBP-11-2020; DT-NMBP-12-2019

GOVERNANCE, SCIENCE-BASED RISK ASSESSMENT AND REGULATORY ASPECTS

Managing the risks of every emerging technology is of key importance for its societal acceptance and consequent possible success. The overall challenge is to establish a suitable form of nanotechnology risk governance and to ensure that beyond the state of the art technologies are accepted by stakeholders (civil society, industry, regulators).

This requires working on three different layers: (i) a scientific research layer for sound foundations, (ii) a regulatory research layer to validate and translate the scientific findings into appropriate regulatory frameworks and implementation, and (iii) a market layer dealing with the daily management of risks and safety. These three distinct layers should be integrated through actions for risk governance, risk assessment and safe by design. Notably nano-informatics approaches offer good chances for innovation. These will include the challenge of ensuring consistency in all EU Member States in terms of risk management.

The present convergence of several sciences and the rapid evolution of novel technologies in the healthcare sector create a need for fast advance in regulatory science in that sector. Development and adoption of reference methods and of technical standards should be based on solid scientific foundation, hence the need for additional activities within regulatory science for medical technology products.

In terms of resources, the regulatory layer should be jointly supported by Horizon 2020, Member States governments and industry whereas at market level, Horizon 2020 should support only the networking and coordination. Proposals in all layers can foresee modalities for integrating additional public or private funding or foresee specific calls for proposals funded by these additional sources. Costs for the organisation of the calls and coordination of the work can be foreseen in proposals' budgets. Such calls can also be used to foster international cooperation in nanosafety.

Proposals in this area should apply the Open Access and the Open Data Access policies and strongly support the activities of EU regulatory bodies and agencies, and of international organisations like ISO, CEN and OECD. To maximise overall synergy and joint impact, projects should take account of the strategy and roadmaps in place, respect and complement the established ontology and the data logging format (ISA-TAB-NANO^{2[1]}), contribute to the objectives of relevant platforms (such as the EU NanoSafety Cluster^{3[2]} or The Nanomedicine Translation Hub) and foresee the necessary resources to this effect.

Nanosafety issues are global and, therefore, international collaboration is strongly encouraged. In particular, all projects in this area are expected to collaborate with similar projects under the established scheme of Communities of Research with the USA NNI programme^{4[3]} and/or to include direct participation of relevant USA entities. In addition, participation from countries actively

^{3[2]} <http://www.nanosafetycluster.eu>

^{4[3]} <http://www.us-eu.org/>

involved in the work of OECD -WPMN, the NanoSafety Cluster and the NANoREG^{5[4]} project (e.g. South Korea, Brazil, Canada, Australia, China, Japan, South Africa) is strongly encouraged.

Proposals should consider risk-assessment procedures for both men and women, where relevant, and enable a reduction of animal testing in the regulatory compliance.

Proposals are invited against the following topic(s): NMBP-13-2018; NMBP-14-2018; NMBP-15-2019; NMBP-16-2020; NMBP-17-2020

Call updates

- **25 January 2018 11:18**

Deadline (first stage) of 2018 two-stage topics: 23.01.2018

A total of 122 proposals were submitted in response to this call.
The number of proposals for each topic is shown below:

- DT-NMBP-01-2018: 26
- DT-NMBP-02-2018: 10
- DT-NMBP-07-2018: 33
- DT-NMBP-09-2018: 42
- NMBP-13-2018: 7
- NMBP-14-2018: 4

31 October 2017 00:35 The submission session is now available for: DT-NMBP-01-2018(IA), DT-NMBP-02-2018(IA)

- **31 October 2017 00:35** The submission session is now available for: NMBP-13-2018(RIA), DT-NMBP-07-2018(IA), NMBP-14-2018(RIA), DT-NMBP-09-2018(IA)

^{5[4]} <http://www.nanoreg.eu/>

Topic: [DT-NMBP-01-2018: Open Innovation Test Beds for Lightweight, nano-enabled multifunctional composite materials and components \(IA\)](#) Closed

Publication date: 27 October 2017

Focus area: Digitising and transforming European industry and services (DT)

Types of action: IA Innovation action

DeadlineModel: two-stage

Opening date: 31 October 2017

Deadline: 23 January 2018 17:00:00

2nd stage Deadline: 28 June 2018 17:00:00

Time Zone : (Brussels time)

Topic: [DT-NMBP-02-2018: Open Innovation Test Beds for Safety Testing of Medical Technologies for Health \(IA\)](#) Closed

Publication date: 27 October 2017

Focus area: Digitising and transforming European industry and services (DT)

Types of action: IA Innovation action

DeadlineModel: two-stage

Opening date: 31 October 2017

Deadline: 23 January 2018 17:00:00

2nd stage Deadline: 28 June 2018 17:00:00

Time Zone : (Brussels time)

Topic: [DT-NMBP-03-2019: Open Innovation Test Beds for nano-enabled surfaces and membranes \(IA\)](#) Forthcoming

Publication date: 27 October 2017

Focus area: Digitising and transforming European industry and services (DT)

Types of action: IA Innovation action

DeadlineModel: two-stage

Opening date: 16 October 2018

Deadline: 22 January 2019 17:00:00

2nd stage Deadline: 03 September 2019 17:00:00

Opening date:	31 October 2017	2nd stage Deadline:	28 June 2018 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>DT-NMBP-10-2019: Adopting materials modelling to challenges in manufacturing processes (RIA)</u>		Forthcoming
Publication date:	27 October 2017		
Focus area:	Digitising and transforming European industry and services (DT)		
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	22 January 2019 17:00:00
Opening date:	16 October 2018	2nd stage Deadline:	03 September 2019 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>DT-NMBP-12-2019: Sustainable Nano-Fabrication (CSA)</u>		Forthcoming
Publication date:	27 October 2017		
Focus area:	Digitising and transforming European industry and services (DT)		
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	03 September 2019 17:00:00
Opening date:	16 October 2018		
Time Zone : (Brussels time)			
Topic:	<u>NMBP-13-2018: Risk Governance of nanotechnology (RIA)</u>		Closed
Publication date:	27 October 2017		
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	23 January 2018 17:00:00

Opening date:	31 October 2017	2nd stage Deadline:	28 June 2018 17:00:00	
Time Zone : (Brussels time)				
Topic:	NMBP-14-2018: Nanoinformatics: from materials models to predictive toxicology and ecotoxicology (RIA)			Closed
Publication date:	27 October 2017			
Types of action:	RIA Research and Innovation action			
DeadlineModel:	two-stage	Deadline:	23 January 2018 17:00:00	
Opening date:	31 October 2017	2nd stage Deadline:	28 June 2018 17:00:00	
Time Zone : (Brussels time)				
Topic:	NMBP-15-2019: Safe by design, from science to regulation: metrics and main sectors (RIA)			Forthcoming
Publication date:	27 October 2017			
Types of action:	RIA Research and Innovation action			
DeadlineModel:	two-stage	Deadline:	22 January 2019 17:00:00	
Opening date:	16 October 2018	2nd stage Deadline:	03 September 2019 17:00:00	
Time Zone : (Brussels time)				

CALL: INFORMATION AND COMMUNICATION TECHNOLOGIES

Call identifier: H2020-ICT-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Industrial Leadership

Work Programme Year: H2020-2018-2020

Work Programme Part: [Information and Communication Technologies](#)
[- Less](#)

Call summary and aims

It is expected that this call will continue in 2020.

Drawing on the success of actions of previous work programmes leveraging cascading grants to enable agility and reach out to new or key actors in the innovation chain (such as SMEs and mid-caps) not necessarily involved in standard EU R&I projects, part of the budget allocated to several actions of the Next Generation Internet topics will be dedicated to the support of experiments and smaller projects funded through financial support to third parties (in accordance with article 137 of the Financial Regulation). While their size will be small in comparison with standard Horizon 2020 actions, in line with article 23 (7) of the Rules for Participation the budget to be allocated per third party may exceed the default maximum amount foreseen in the Financial Regulation. Specific limits corresponding to the specific objectives to be addressed, and to the consequent expected scale and duration of the activities to be carried out by third parties are provided for the topics ICT-24-2018-2019, ICT-25-2018-2020, ICT-26-2018-2020, ICT-29-2018, and ICT-30-2019-2020.

Technologies for Digitising European Industry

The following two paragraphs are relevant for the entire 'Technologies for Digitising European Industry' section of the Work Programme, i.e. topics **ICT-01 to ICT-10** inclusive.

[The Digitising European Industry initiative](#) aims to establish next generation digital platforms and re-build the underlying digital supply chain on which all economic sectors are dependent. The initiative should enable all sector and application areas to adapt, transform and benefit from digitisation, notably by allowing also smaller players to capture value. Digital Platforms are becoming a key factor in one sector after another, enabling new types of services and applications, altering business models and creating new marketplaces. Actions under this heading will provide extensive support to key DEI components in Photonics, Robotics, Manufacturing technologies and Cyber-Physical Systems. Support to Micro-electronics, in particular for higher TRLs, will continue through the ECSEL Joint Undertaking. In addition, innovation hubs and platforms, two key DEI objectives, will be supported through a Focus Area on Digitisation and Transformation of the EU industry, implemented in cooperation with other programme parts.

Progress in technologies such as photonics, micro- and nanoelectronics, smart systems and robotics is changing the way we design, produce, commercialise and generate value from products and related services. Recent studies [PwC, opportunities and Challenges of

the industrial internet (2015), and Boston Consulting Group: the future of productivity and growth in manufacturing industries (2015)] *estimate that digitisation of products and services will add more than 110 B€ of revenue for industry per year in Europe in the next 5 years. Close to a third of the growth of the overall industrial output in Europe is already due to the uptake of digital technologies [estimates by LIFE + series of studies 2016.] The challenge ahead is for the European industry to seize fully and swiftly these opportunities. This is essential to ensure Europe's mid and long term competitiveness with implications for overall welfare. The purpose of the topics proposed under this heading is to ensure European industry is supported in further developing the building blocks of the digital transformation.*

European Data Infrastructure: HPC, Big Data and Cloud technologies

The following three paragraphs are relevant for the entire 'European Data Infrastructure: HPC, Big Data and Cloud technologies' section of the Work Programme, i.e. topics **ICT-11 to ICT-16** inclusive.

The European Cloud Initiative calls for the creation of a leading-class European Data Infrastructure (EDI) as an essential component to exploit the data revolution in Europe and contribute to global growth. The aim of the activities under this heading is to enable the creation of a world-class High Performance Computing (HPC) / Big Data (BD) ecosystem based on European leadership in HPC, Cloud and Big Data technologies. This ecosystem will strengthen the European technology supply in these areas and will provide innovative, usable and competitive solutions that satisfy the demands of users of the European Data Infrastructure.

A synergetic approach to support the creation of a European Data Infrastructure and a European Data Economy is promoted, complementing the relevant activities in the e-Infrastructures and FET work programmes 2018-2020.

The Copernicus Data and Information Access Services (DIAS) will contribute to EDI by making Copernicus' huge amount of data available within an efficient computing environment.

5G

The following three paragraphs are relevant for the entire '5G' section of the Work Programme, i.e. topics **ICT-17 to ICT-23** inclusive.

5G cPPP phases 1 and 2 have supported R&I on technologies and architectures for 5G. Phase 3 targets their validation in a system context and for multiple use cases, with performances well beyond those of early 5G trials planned over the 2018-20 period with "non standalone" 5G implementations, and supporting innovative "vertical" use cases as per the 5G Action Plan adopted by the

Commission. It also aims at leveraging 5G technologies towards downstream innovation both at service and product levels, at maintaining a significant long term commitment to prepare for 5G "Long Term Evolution", and at leveraging international cooperation towards industrial consensus on 5G key aspects such as interoperability, architecture, standards, and spectrum.

Activities under this heading are intended to support EU 5G policy as outlined in the context of the 5G Action Plan[[Doc COM(2016) 588: 5G for Europe, an Action Plan]] whilst implementing the last phase of the 5G cPPP roadmap. They should significantly contribute to building a first class European industrial supply side for core 5G technologies with global market footprints and notably for network technologies and systems. They will support the emergence of new innovative market players taking advantage of the growing adoption of distributed cloud computing technologies in 5G networks and making possible open innovation at service level. In that context, the work also supports the needed transformation of the telecom industry with a growing part of the activities moving from hardware to software in the context of an increased virtualisation of networks. In the context of the EU standardisation and Spectrum policies, the work contributes to the emergence of global standards and globally harmonised frequency bands for 5G, in view of the important decision milestones planned at the level of global relevant bodies like 3G PP and ITU. This 5G PPP phase also develops the "lead" demand side with support to partnerships with key vertical sectors like automotive, healthcare, energy, media, smart factories in view of developing new connected digital markets contributing to the wider policy objectives of industry digitisation of the Digital Single Market.

Complementary grant agreements will be implemented across projects originating from RIA, IA and CSA implemented under ICT-17-2018, ICT-18-2018, ICT-19-2019, ICT-20-2019 through use of the respective options of Article 2, Article 31.6 and Article 41.4 of the Model Grant Agreement.

Next Generation Internet (NGI)

The following five paragraphs are relevant for the entire 'Next Generation Internet (NGI)' section of the Work Programme, i.e. topics **ICT-24 to ICT-31** inclusive.

A number of technological trends will thoroughly reshape the internet over the next 10-15 years. Europe should drive this technology revolution while contributing to making the future internet more human-centric. An internet for the people, that contributes to a more sustainable and inclusive society.

Increasingly these technological trends influence each other and a programme targeted towards the Next Generation Internet must consider them in a holistic way.

- Future **Interactive Technologies** will allow users to access, process and deliver information in more natural, efficient and less intrusive ways, providing enhanced and personalized experiences;
- Advances in **Artificial Intelligence** are critical to turn information into knowledge and to embed autonomy and intelligence into networks, robots and other connected devices;
- **Internet of Things** technologies and applications are changing the way users, services and applications interact with the real world environment in a trusted way.
- **Future social networks, media and platforms** will transform the way we produce, consume and interact with content, services and objects, within and across users' groups and will become the way our societies operate for communication, exchange, business, creation and knowledge acquisition.
- The Next Generation Internet will be **multilingual** and **inclusive**. Advances in **language technologies** will help eliminate language barriers. NGI technologies will also help to provide a new quality in Digital Learning as smart, open, inclusive and **personalised learning** solutions will be tailored to each individual's needs, competences and abilities.

In addition, cutting across technologies, the **Open Internet Initiative**, based on an agile and flexible programme approach, will focus on research teams, hi-tech start-ups, SMEs and social innovators, and will rapidly explore promising avenues for the Internet of the future.

The topics addressed here form a coherent and integrated package. Coordination and support actions will be called upon to cut across topics and benefit from synergies.

The upcoming 'digital era' and 'hyper-connected society' must be based on principles that are in line with our values like openness, neutrality, cooperation, inclusion, transparency, protection of data and privacy. The topics proposed under this heading will contribute ensuring that, through the Next Generation Internet, the immense potential of artificial intelligence, the connection with the physical world, the interactive technologies and immersive environments, as well as the massive networks of people and machines are used to empower people and contribute to sustainable and inclusive societies. The Next Generation Internet should be an Internet that is dependable and trustable, creating new usage and new business opportunities making Europe a trusted hub globally. It also has to be a source of creativity, directly supporting the cultural and creative industries [Cultural and Creative Industries are mainly composed by the following sectors: advertising, architecture, arts, craft, design, fashion, films, music, press, publishing, radio, TV and video games] and its media sector. It has to be at the heart of the industry 4.0 revolution and the digitization of industry, being an essential driver for the competitiveness of European industry.

- **31 October 2017 00:30** The submission session is now available for: ICT-17-2018(RIA), ICT-22-2018(RIA)

Topic: [ICT-01-2019: Computing technologies and engineering methods for cyber-physical systems of systems](#) Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action
CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 16 October 2018

Deadline: 28 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-02-2018: Flexible and Wearable Electronics](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 17 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-03-2018-2019: Photonics Manufacturing Pilot Lines for Photonic Components and Devices](#)

Forthcoming

Publication date: 27 October 2017

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 16 October 2018

Deadline: 28 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-03-2018-2019: Photonics Manufacturing Pilot Lines for Photonic Components and Devices](#)

Open

Publication date: 27 October 2017

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 17 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-04-2018: Photonics based manufacturing, access to photonics, datacom photonics and connected lighting](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

IA Innovation action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 17 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-05-2019: Application driven Photonics components](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

IA Innovation action

CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 16 October 2018

Deadline: 28 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: <u>ICT-06-2019: Unconventional Nanoelectronics</u>		Forthcoming	
Publication date: 27 October 2017			
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Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	28 March 2019 17:00:00
Opening date:	16 October 2018		
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			Time Zone : (Brussels time)
Topic: <u>ICT-07-2018: Electronic Smart Systems (ESS)</u>		Open	
Publication date: 27 October 2017			
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Types of action:	RIA Research and Innovation action IA Innovation action CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	17 April 2018 17:00:00
Opening date:	31 October 2017		
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			Time Zone : (Brussels time)
Topic: <u>ICT-08-2019: Security and resilience for collaborative manufacturing environments</u>		Forthcoming	
Publication date: 27 October 2017			
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Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	28 March 2019 17:00:00
Opening date:	16 October 2018		
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			Time Zone : (Brussels time)
Topic: <u>ICT-09-2019-2020: Robotics in Application Areas</u>		Forthcoming	

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action
IA Innovation action
CSA Coordination and support action

DeadlineModel: single-stage
Opening date: 16 October 2018
Deadline: 28 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-10-2019-2020: Robotics Core Technology](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action
DeadlineModel: single-stage
Opening date: 16 October 2018

Deadline: 28 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-11-2018-2019: HPC and Big Data enabled Large-scale Test-beds and Applications](#)

Forthcoming

Publication date: 27 October 2017

Types of action: IA Innovation action
DeadlineModel: single-stage
Opening date: 26 July 2018

Deadline: 14 November 2018 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-11-2018-2019: HPC and Big Data enabled Large-scale Test-beds and Applications](#)

Open

Publication date: 27 October 2017

Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	17 April 2018 17:00:00
Opening date:	31 October 2017		
Time Zone : (Brussels time)			
Topic:	<u>ICT-12-2018-2020: Big Data technologies and extreme-scale analytics</u>		Open
Publication date:	27 October 2017		
Types of action:	RIA Research and Innovation action CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	17 April 2018 17:00:00
Opening date:	31 October 2017		
Time Zone : (Brussels time)			
Topic:	<u>ICT-13-2018-2019: Supporting the emergence of data markets and the data economy</u>		Forthcoming
Publication date:	27 October 2017		
Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	28 March 2019 17:00:00
Opening date:	16 October 2018		
Time Zone : (Brussels time)			
Topic:	<u>ICT-13-2018-2019: Supporting the emergence of data markets and the data economy</u>		Open
Publication date:	27 October 2017		

Types of action: RIA Research and Innovation action
CSA Coordination and support action

DeadlineModel: single-stage
Opening date: 31 October 2017

Deadline: 17 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-14-2019: Co-designing Extreme Scale Demonstrators \(EsD\)](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage
Opening date: 26 July 2018

Deadline: 14 November 2018 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-15-2019-2020: Cloud Computing](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action
CSA Coordination and support action

DeadlineModel: single-stage
Opening date: 16 October 2018

Deadline: 28 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-16-2018: Software Technologies](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

	IA Innovation action CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	17 April 2018 17:00:00
Opening date:	31 October 2017		
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			Time Zone : (Brussels time)
Topic:	<u>ICT-17-2018: 5G End to End Facility</u>		Closed
Publication date:	27 October 2017		
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Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	31 January 2018 17:00:00
Opening date:	31 October 2017		
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			Time Zone : (Brussels time)
Topic:	<u>ICT-18-2018: 5G for cooperative, connected and automated mobility (CCAM)</u>		Open
Publication date:	27 October 2017		
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Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	17 April 2018 17:00:00
Opening date:	31 October 2017		
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			Time Zone : (Brussels time)
Topic:	<u>ICT-19-2019: Advanced 5G validation trials across multiple vertical industries</u>		Forthcoming
Publication date:	27 October 2017		
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Types of action:	RIA Research and Innovation action CSA Coordination and support action		

DeadlineModel:	single-stage	Deadline:	14 November 2018 17:00:00
Opening date:	26 July 2018		
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		Time Zone : (Brussels time)	
Topic:	<u>ICT-20-2019-2020: 5G Long Term Evolution</u>		Forthcoming
Publication date:	27 October 2017		
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Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	28 March 2019 17:00:00
Opening date:	16 October 2018		
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		Time Zone : (Brussels time)	
Topic:	<u>ICT-21-2018: EU-US Collaboration for advanced wireless platforms</u>		Open
Publication date:	27 October 2017		
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Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	17 April 2018 17:00:00
Opening date:	31 October 2017		
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		Time Zone : (Brussels time)	
Topic:	<u>ICT-22-2018: EU-China 5G Collaboration</u>		Closed
Publication date:	27 October 2017		
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Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	31 January 2018 17:00:00
Opening date:	31 October 2017		
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Time Zone : (Brussels time)

Topic: [ICT-23-2019: EU-Taiwan 5G collaboration](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 05 September 2018

Deadline: 15 January 2019 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-24-2018-2019: Next Generation Internet - An Open Internet Initiative](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 16 October 2018

Deadline: 28 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-24-2018-2019: Next Generation Internet - An Open Internet Initiative](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action
CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 17 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-25-2018-2020: Interactive Technologies](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 26 July 2018

Deadline: 14 November 2018 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-25-2018-2020: Interactive Technologies](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 17 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-26-2018-2020: Artificial Intelligence](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 17 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-27-2018-2020: Internet of Things](#)

Open

Publication date: 27 October 2017

Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	17 April 2018 17:00:00
Opening date:	31 October 2017		
			Time Zone : (Brussels time)
Topic:	<u>ICT-28-2018: Future Hyper-connected Sociality</u>		Open
Publication date:	27 October 2017		
Types of action:	RIA Research and Innovation action IA Innovation action CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	17 April 2018 17:00:00
Opening date:	31 October 2017		
			Time Zone : (Brussels time)
Topic:	<u>ICT-29-2018: A multilingual Next Generation Internet</u>		Open
Publication date:	27 October 2017		
Types of action:	RIA Research and Innovation action IA Innovation action		
DeadlineModel:	single-stage	Deadline:	17 April 2018 17:00:00
Opening date:	31 October 2017		
			Time Zone : (Brussels time)
Topic:	<u>ICT-30-2019-2020: An empowering, inclusive Next Generation Internet</u>		Forthcoming
Publication date:	27 October 2017		

Types of action:	IA Innovation action CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	28 March 2019 17:00:00
Opening date:	16 October 2018		
			Time Zone : (Brussels time)
Topic:	<u>ICT-31-2018-2019: EU-US collaboration on NGI</u>		Forthcoming
Publication date:	27 October 2017		
Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	28 March 2019 17:00:00
Opening date:	16 October 2018		
			Time Zone : (Brussels time)
Topic:	<u>ICT-31-2018-2019: EU-US collaboration on NGI</u>		Open
Publication date:	27 October 2017		
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	17 April 2018 17:00:00
Opening date:	31 October 2017		
			Time Zone : (Brussels time)
Topic:	<u>ICT-32-2018: STARTS – The Arts stimulating innovation</u>		Open
Publication date:	27 October 2017		

Types of action: RIA Research and Innovation action
CSA Coordination and support action

DeadlineModel: single-stage
Opening date: 31 October 2017

Deadline: 17 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-33-2019: Startup Europe for Growth and Innovation Radar](#)

Forthcoming

Publication date: 27 October 2017

Types of action: IA Innovation action
CSA Coordination and support action

DeadlineModel: single-stage
Opening date: 16 October 2018

Deadline: 28 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-34-2018-2019: Pre-Commercial Procurement open](#)

Forthcoming

Publication date: 27 October 2017

Types of action: PCP Pre-Commercial Procurement

DeadlineModel: single-stage
Opening date: 16 October 2018

Deadline: 28 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-34-2018-2019: Pre-Commercial Procurement open](#)

Open

Publication date: 27 October 2017

Types of action: PCP Pre-Commercial Procurement

DeadlineModel: single-stage
Opening date: 31 October 2017

Deadline: 17 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [ICT-35-2018: Fintech: Support to experimentation frameworks and regulatory compliance](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 17 April 2018 17:00:00

Time Zone : (Brussels time)

CALL: INDUSTRIAL SUSTAINABILITY

Call identifier: H2020-NMBP-ST-IND-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Industrial Leadership

Work Programme Year: H2020-2018-2020

Work Programme Part: [Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing](#)

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Call summary and aims

The purpose of this call is to further strengthen the global leadership of Europe's industry in environmental sustainability, through a combination of mature and disruptive technologies. Success will be seen in making measurable contributions to identified sustainable development goals.

This call contributes to the focus area 'Connecting economic and environmental gains – the Circular Economy' through:

- new technologies for the process industries such as industrial symbiosis and adaptation to new feedstock and sources of energy; and
- radical advances in catalysis.

It also contributes to the focus area 'Building a low-carbon, climate resilient future' through:

- the development of new materials and new technologies for renewable energy and energy storage; and
- new technologies for energy-efficient buildings.

The choice of topics supporting energy innovation reflects the four strategic priorities in Accelerating Clean Energy Innovation[[COM(2016) 763 final]]

- Strengthening EU leadership on renewables;
- Decarbonising the EU building stock by 2050: From nearly zero-energy buildings to energy-plus districts;
- Developing affordable and integrated energy storage solutions; and
- Electro-mobility.

The Research Fund for Coal and Steel Programme complements the Horizon 2020 Framework Programme in the sectors related to coal and steel industry.

Some topics under this call contribute to the objectives of the European Innovation Partnerships (EIPs) on Raw Materials and Water Efficiency.

Proposals for Research and Innovation Actions and Innovation Actions submitted under this call should include a business case and exploitation strategy, as outlined in the Introduction to the LEIT part of this Work Programme.

SUSTAINABLE PROCESS INDUSTRY (SPIRE)

The process industry embraces cement, ceramics, chemicals, engineering, minerals and ores, non-ferrous metals, steel and water sectors. Together, these sectors form a key part of Europe's manufacturing base, representing 20% of European industry in terms of both employment and turnover. These sectors are also characterised by a high dependence on raw materials and energy in their production and processing technologies. With these becoming increasingly scarce, resource efficiency, including the use of renewable resources, is now a key factor driving the competitiveness and sustainability of the European process industry. Accordingly, the

central objectives in relation to the process industry are to optimise industrial processing, reduce energy and resource consumption and minimise waste in order to deliver European added value by making significant contributions to the Circular Economy and to fighting climate change.

Where relevant, actions under SPIRE are expected to take into account the Industrial Emissions Directive and provide input to the relevant Best Available Techniques reference documents. Research targeting for instance greenhouse gas or energy use reduction should also consider reduction of other emissions such as NO_x and PM in order to avoid undesired side effects.

Topics under SPIRE will support the European industry towards improved integration of industrial operations leading to better valorisation of energy and material streams, sustainable raw materials and enhanced performance and efficiency of particularly high energy-intensive processes.

In line with the strategy for EU international cooperation in research and innovation (COM(2012)497), international cooperation may be particularly appropriate in some areas of the Sustainable Process Industry, in particular with Eastern Partnership countries (Ukraine, Moldova, Georgia, Armenia, Azerbaijan and Belarus).

Proposals are invited against the following topic(s): from CE-SPIRE-01-2020 to CE-SPIRE-10-2018

CATALYSING THE CIRCULAR ECONOMY

Catalysis is ubiquitous in the chemical industry, and a key technology in all future scenarios for a sustainable economy. The progressive substitution of products derived from fossil fuels, at all steps along the industrial value-chain, plays a crucial role to successfully decarbonise industrial processes. Moreover, carbon dioxide (CO₂) or C1 building blocks are promising alternative feedstocks for chemicals, materials and fuels; and breakthroughs in reusing it have attracted strong industry interest. These future disruptive technologies could play a very significant role in lowering the carbon footprint of industry and the entire economy. The foreseen activities will help make the circular economy an industrial reality, and will help decarbonise industry. By making industrial processes more efficient and sustainable, they will also enhance European competitiveness. The activities will reflect the need for integrated research activities at a European level, to bring the limited or fragmented resources in Europe to bear upon the most promising topics. In addition, contributions to the Circular Economy will also be sought through the development of new materials and structures with in-built recycling properties

The ambition is that Europe becomes the world-leader in developing sustainable chemistry, smart materials and intelligent recycling, through a combination of mature and disruptive technologies.

Proposals are invited against the following topic(s): CE-NMBP-24-2018; CE-NMBP-25-2019; CE-NMBP-26-2018

CLEAN ENERGY THROUGH INNOVATIVE MATERIALS

To deliver on the Paris agreement (COP21), the updated Europe 2020 targets and the Energy Union policies including the SET-Plan, significant reductions in CO₂ and greenhouse gas emissions are needed in a short time span. Significant reductions will be obtained by electrifying the road transport sector and integrating sustainable energy sources, like wind energy and photovoltaics, in the electricity grid. Both areas need specific energy production technologies, as well as energy storage solutions, based on innovative advanced materials and nanotechnologies, in line with the Communication on Accelerating Clean Energy Innovation.^{6[1]}

Materials for energy storage: Electric vehicles (EVs) are a solution for a rapid decarbonisation of the transport sector and for solving the problem of polluted city centres. Current EVs however still use heavy and costly batteries, and fast charging is another problem. Significant effort is needed in this area to improve the battery technology and in particular specific battery materials. Materials for energy storage are also needed beyond the transport sector: some industrial and economic sectors will face significant change coming from the more systematic use of sustainable energy production and from digitisation. All this will be based on a more distributed energy supply and decentralised storage. The respective energy storage challenges have to be solved in order to facilitate the transformation towards the use of non-fossil based energy sources. Europe has to search for better performance, and force the development of more price competitive storage solutions, including, where relevant, use of energy magnetic materials. This can be achieved by the development of new improved battery materials and chemistries.

Materials for sustainable energy production: Sustainable energy is offering one of the highest potential to reach climate goals and reduce dependence from fossil fuels. The deployment of respective sustainable energy technology offers thus a possibility to obtain a cleaner air and environment, and at the same time will create new markets and a potential for economic increase. The sustainable energy technologies however are competing with more traditional ones and a key element for their use is energy production cost. European market leadership has to be regained and one way is to invest in advanced materials and nanotechnologies for being able to offer technologically advanced solutions at adequate and competitive cost, with strongly improved performances compared to the available commercial low cost solutions.

Proposals are invited against the following topic(s): LC-NMBP-27-2019; LC-NMBP-28-2020; LC-NMBP-29-2019; LC-NMBP-30-2018; LC-NMBP-31-2020; LC-NMBP-32-2019

^{6[1]} COM(2016) 763 final

CULTURAL HERITAGE

Proposals are invited against the following topic:

NMBP-33-2018

ENERGY-EFFICIENT BUILDINGS (EEB)

To deliver on the Paris agreement (COP21), the updated Europe 2020 targets and the Energy Union policies including the SET-Plan, significant reductions in CO₂ and greenhouse gas emissions are needed in a short time span. The construction sector has a crucial impact on energy consumption and carbon emissions in the European Union: buildings account for 40% of the total energy consumption and are responsible for 36% of greenhouse gas emissions in Europe. The challenge in 2018-2020 is therefore to develop further, demonstrate and validate key breakthrough technologies for energy-efficient buildings and districts, in line with the Communication on Accelerating Clean Energy Innovation.^{7[1]} European added value will result from the impact, on decarbonising the EU building stock and developing affordable and integrated energy storage solutions. Implementation of the activities under EeB should comply with EU, national, regional and local regulations and legislation, in particular regarding health, safety and environmental impact.

Proposals are invited against the following topic(s): LC-EEB-01-2019; LC-EEB-02-2018; LC-EEB-03-2019; LC-EEB-04-2020; LC-EEB-05-2019; LC-EEB-05-2020; LC-EEB-06-2018; LC-EEB-06-2020

Call updates

- **25 January 2018 11:25**

Deadline (first stage) of 2018 two-stage topics: 23.01.2018

A total of 87 proposals were submitted in response to this call.
The number of proposals for each topic is shown below:

^{7[1]} COM(2016) 763 final

- CE-NMBP-24-2018 : 13
- CE-NMBP-26-2018 : 30
- LC-NMBP-30-2018 : 16
- NMBP-33-2018: 28

31 October 2017 00:34 The submission session is now available for: NMBP-33-2018(IA), CE-NMBP-26-2018(RIA), CE-NMBP-24-2018(RIA), LC-NMBP-30-2018(RIA)

- **31 October 2017 00:34** The submission session is now available for: LC-EEB-06-2018-20(IA), LC-EEB-02-2018(RIA)
- **31 October 2017 00:32** The submission session is now available for: CE-SPIRE-02-2018(IA), CE-SPIRE-03-2018(IA), CE-SPIRE-10-2018(IA)

Topics and submission service

To access the **Submission Service**, please **select the TOPIC** of your interest and then open the Submission Service tab.

To access **existing draft proposals**, please login to the portal and select My Proposals from the My Area menu.

Topic: [CE-NMBP-24-2018: Catalytic transformation of hydrocarbons \(RIA\)](#)

Closed

Publication date: 27 October 2017

Focus area: Connecting economic and environmental gains - the Circular Economy (CE)

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline:

23 January 2018 17:00:00

Opening date: 31 October 2017

2nd stage Deadline:

28 June 2018 17:00:00

Time Zone : (Brussels time)

Topic: [CE-NMBP-25-2019: Photocatalytic synthesis \(RIA\)](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Connecting economic and environmental gains - the Circular Economy (CE)

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 22 January 2019 17:00:00

Opening date: 16 October 2018

2nd stage Deadline: 03 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [CE-NMBP-26-2018: Smart plastic materials with intrinsic recycling properties by design \(RIA\)](#)

Closed

Publication date: 27 October 2017

Focus area: Connecting economic and environmental gains - the Circular Economy (CE)

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 23 January 2018 17:00:00

Opening date: 31 October 2017

2nd stage Deadline: 28 June 2018 17:00:00

Time Zone : (Brussels time)

Topic: [CE-SPIRE-02-2018: Processing of material feedstock using non-conventional energy sources \(IA\)](#)

Open

Publication date: 27 October 2017

Focus area: Connecting economic and environmental gains - the Circular Economy (CE)

Types of action: IA Innovation action

DeadlineModel: single-stage

Deadline: 22 February 2018 17:00:00

Opening date: 31 October 2017

Time Zone : (Brussels time)

Topic: [CE-SPIRE-03-2018: Energy and resource flexibility in highly energy intensive industries \(IA 50%\)](#)

Open

Publication date: 27 October 2017
Focus area: Connecting economic and environmental gains - the Circular Economy (CE)

Types of action: IA Innovation action
DeadlineModel: single-stage
Opening date: 31 October 2017
Deadline: 22 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [CE-SPIRE-04-2019: Efficient integrated downstream processes \(IA\)](#) Forthcoming

Publication date: 27 October 2017
Focus area: Connecting economic and environmental gains - the Circular Economy (CE)

Types of action: IA Innovation action
DeadlineModel: single-stage
Opening date: 16 October 2018
Deadline: 21 February 2019 17:00:00

Time Zone : (Brussels time)

Topic: [CE-SPIRE-05-2019: Adaptation to variable feedstock through retrofitting \(IA 50%\)](#) Forthcoming

Publication date: 27 October 2017
Focus area: Connecting economic and environmental gains - the Circular Economy (CE)

Types of action: IA Innovation action
DeadlineModel: single-stage
Opening date: 16 October 2018
Deadline: 21 February 2019 17:00:00

Time Zone : (Brussels time)

Topic: [CE-SPIRE-10-2018: Efficient recycling processes for plastic containing materials \(IA\)](#)

Open

Publication date: 27 October 2017

Focus area: Connecting economic and environmental gains - the Circular Economy (CE)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 22 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [DT-SPIRE-06-2019: Digital technologies for improved performance in cognitive production plants \(IA\)](#) Forthcoming

Publication date: 27 October 2017

Focus area: Digitising and transforming European industry and services (DT)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 16 October 2018

Deadline: 21 February 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-EEB-01-2019: Integration of energy smart materials in non-residential buildings \(IA\)](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 16 October 2018

Deadline: 21 February 2019 17:00:00

Time Zone : (Brussels time)

Topic: LC-EEB-02-2018: Building information modelling adapted to efficient renovation (RIA)		Open	
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
<hr/>			
Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	22 February 2018 17:00:00
Opening date:	31 October 2017		
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			Time Zone : (Brussels time)
Topic: LC-EEB-03-2019: New developments in plus energy houses (IA)		Forthcoming	
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
<hr/>			
Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	21 February 2019 17:00:00
Opening date:	16 October 2018		
<hr/>			
			Time Zone : (Brussels time)
Topic: LC-EEB-05-2019-20: Integrated storage systems for residential buildings (IA)		Forthcoming	
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
<hr/>			
Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	21 February 2019 17:00:00
Opening date:	16 October 2018		
<hr/>			
			Time Zone : (Brussels time)

Topic: [LC-EEB-06-2018-20: ICT enabled, sustainable and affordable residential building construction, design to end of life \(IA 50%\)](#) Open

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 22 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-NMBP-27-2019: Strengthening EU materials technologies for non-automotive battery storage \(RIA\)](#) Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Opening date: 16 October 2018

Deadline: 22 January 2019 17:00:00

2nd stage Deadline: 03 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-NMBP-29-2019: Materials for non-battery based energy storage \(RIA\)](#) Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Opening date: 16 October 2018

Deadline: 22 January 2019 17:00:00

2nd stage Deadline: 03 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-NMBP-30-2018: Materials for future highly performant electrified vehicle batteries \(RIA\)](#) Closed

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 23 January 2018 17:00:00

Opening date: 31 October 2017

2nd stage Deadline: 28 June 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-NMBP-32-2019: Smart materials, systems and structures for energy harvesting \(RIA\)](#) Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 22 January 2019 17:00:00

Opening date: 16 October 2018

2nd stage Deadline: 03 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [NMBP-33-2018: Innovative and affordable solutions for the preventive conservation of cultural heritage \(IA\)](#) Closed

Publication date: 27 October 2017

Types of action: IA Innovation action

DeadlineModel: two-stage

Deadline: 23 January 2018 17:00:00

Opening date: 31 October 2017

2nd stage Deadline: 28 June 2018 17:00:00

CALL: 2018-2020 DIGITISING AND TRANSFORMING EUROPEAN INDUSTRY AND SERVICES: AUTOMATED ROAD TRANSPORT

Call identifier: H2020-DT-ART-2018-2019-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Societal Challenges

Work Programme Year: H2020-2018-2020

Work Programme Part: [Smart, green and integrated transport](#)
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Call summary and aims

Significant progress has been made in key technologies for innovative connected and automated driving (CAD) functions and applications (e.g. advanced vehicle control, vehicle localization systems, data processing, artificial intelligence, user interfaces, etc.). Many demonstration projects are already ongoing where automated driving functions are tested in different use cases. The previous call on "Automated Road Transport" in the Transport Workprogramme 2016/17 focused on vehicles with functions for automated driving level 3, which are expected to enter the market in the next few years.

The overall objective of this call is to promote a wide market introduction of highly automated driving systems towards SAE level 4[[Definition of SAE Level 4 – High Automation: "the driving mode-specific performance by an automated driving system of all aspects of the dynamic driving task, even if a human driver does not respond appropriately to a request to intervene".]]. The call will focus on large-scale demonstrations to test the performance and safety of innovative highly automated driving systems for passenger cars, efficient freight transport operations and shared mobility services in urban areas. Furthermore the changing role of the driver and how to account for it by human centred design of automated vehicles will be addressed.

The Call 2018-2020 Automated Road Transport is part of the Focus Area "Digitising and transforming European industry and services". Demonstrations will look at testing the use of digital, connectivity as well as satellite navigation technologies for optimised connected and automated driving functions (including the EGNOS and Galileo). Digital technologies, such as Big Data, the Internet of Things and Artificial Intelligence techniques provide a great potential for developing innovative automated driving functions and

mobility solutions for the future. Communication and cooperation of automated vehicles with other vehicles, infrastructure and other road users can increase the safety, comfort, productivity and the enabling of innovative business models of automated vehicles and improve the efficiency of the overall transport system.

By supporting innovative connected and automated driving technologies and mobility solutions, the call will help to create new global market opportunities for European industry and strengthen the position of Europe as a world leader in innovative mobility. Actions under this call are expected to contribute to more road safety as well as to better traffic flow, less congestion, fuel efficiency and reduce carbon emissions. New shared and fully automated mobility services can help decrease the total number of cars on the road, alleviating the overall traffic. Actions will contribute to UN's Sustainable Development Goals 11 (Make cities and human settlements inclusive, safe, resilient and sustainable) and 3.6 (By 2020, halve the number of global deaths and injuries from road traffic accidents).

In addition to the topics of this call, actions related to "Automated Road Transport" are included in the "Mobility for Growth" call of this part of the Work Programme as well as in other parts of the Horizon 2020 Work Programme 2018-2020. The call "Mobility for Growth" includes topics on "Human Factors in Transport Safety" (MG-2.1-2018), "Safety in an evolving road and mobility environment" (MG-2.4-2019), "New regulatory frameworks to enable effective deployment of emerging technologies and business models" (MG-4.2-2018) and "Driver behaviour and acceptance of connected, cooperative and automated transport" (MG-3.4-2019), which refer to connected and automated systems and technologies of all transport modes. Cooperation and cross-fertilisation of concepts and technologies across transport modes developed in the different proposals is strongly encouraged. The LEIT/ICT work programme includes a topic on "5G for connected and automated driving". This topic addresses the applicability of 5G connectivity to "Connected and Automated Driving" use cases.

Call updates

- **31 October 2017 00:35** The submission session is now available for: DT-ART-02-2018(RIA), DT-ART-01-2018(RIA), DT-ART-02-2018(CSA)

Topic: [DT-ART-01-2018: Testing, validation and certification procedures for highly automated driving functions under various traffic scenarios based on pilot test data](#)

Open

Publication date: 27 October 2017

Focus area: Digitising and transforming European industry and services (DT)

Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	04 April 2018 17:00:00
Opening date:	31 October 2017		
Time Zone : (Brussels time)			
Topic:	<u>DT-ART-02-2018: Support for networking activities and impact assessment for road automation</u>		Open
Publication date:	27 October 2017		
Focus area:	Digitising and transforming European industry and services (DT)		
Types of action:	RIA Research and Innovation action CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	04 April 2018 17:00:00
Opening date:	31 October 2017		
Time Zone : (Brussels time)			
Topic:	<u>DT-ART-03-2019: Human centred design for the new driver role in highly automated vehicles</u>		Forthcoming
Publication date:	27 October 2017		
Focus area:	Digitising and transforming European industry and services (DT)		
Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	24 April 2019 17:00:00
Opening date:	04 December 2018		
Time Zone : (Brussels time)			
Topic:	<u>DT-ART-04-2019: Developing and testing shared, connected and cooperative automated vehicle fleets in urban areas for the mobility of all</u>		Forthcoming

Publication date: 27 October 2017
Focus area: Digitising and transforming European industry and services (DT)

Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	24 April 2019 17:00:00
Opening date:	04 December 2018		

Time Zone : (Brussels time)

CALL: 2018-2020 MOBILITY FOR GROWTH

Call identifier: H2020-MG-2018-2019-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Societal Challenges

Work Programme Year: H2020-2018-2020

Work Programme Part: [Smart, green and integrated transport](#)
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Call summary and aims

Transport is changing at an accelerating pace as a result of several factors in many diverse but interconnected fields: cutting edge technological innovations such as for example the increasing penetration of digital and space-based technologies in automated, connected and cooperative vehicles, transport infrastructure, logistics operations, aeronautics and safety applications; major socio-economic trends such as ageing population, migration and urbanisation; global targets such as those set by the COP 21 Paris Agreement on the fight against climate change and by the UN in support of Sustainable Development Goals; increased international competition for the European transport industry across all modes; new operations and business models based on increased connectivity between infrastructure, transport means, travellers and goods which can contribute to seamless door-to-door mobility.

In order to address these new challenges, targeted efforts are needed to develop and validate new solutions that can be rapidly deployed. They will address in a systemic way transport means, infrastructure and operation models and integrate them into a user

friendly European transport system of smart connected mobility for passengers and freight and with significantly reduced impact on climate and environment. A user-centred approach taking into account the evolving needs of transport users is necessary in order to assess the impact of transport solutions on society and economy, while it will also contribute to the competitiveness of European transport industry. Simultaneously a perspective is needed that acknowledges the broader impact of the transport system, not only on its users, but also on non-users in cities and regions.

A number of topics (particularly in section 4 "Accounting for the people") have been informed by European citizens' visions of the future and research and innovation priorities identified as part of the CIMULACT [[CIMULACT is funded under Horizon 2020's Science with and for Society programme]]project (<http://www.cimulact.eu>). As indicated in the Specific Programme, the “activities will be organised in such a way as to allow for an integrated and mode-specific approach as appropriate”. Therefore, the contents of the ‘Mobility for Growth’ call have been structured as follows:

1. 'Building a low-carbon, climate resilient future: Low-carbon and sustainable transport
2. Safe, integrated and resilient transport systems
3. Global leadership and competitiveness
4. Accounting for the people.

In addition to the topics of this Call, transport-related actions are also included in the other two Calls of this part of the Work Programme as well as in other parts of Horizon 2020 Work Programme 2018-2020, particularly in the LEIT/NMBP call 'Nanotechnologies, Advanced Materials, Biotechnology and Production'; LEIT/Space call 'Applications in Satellite Navigation – EGNOS/Galileo'; LEIT/ICT; and SC/Energy calls 'Competitive Low-Carbon Energy' and 'Smart Cities and Communities'.

1. BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: LOW-CARBON AND SUSTAINABLE TRANSPORT

Transport represents almost a quarter of Europe's greenhouse gas emissions and is the main cause of noise and air pollution in cities, many of which are often in breach of air pollution limits. Significant progress towards low-emission mobility is therefore an essential component of the broader shift to the low-carbon economy needed for Europe.

Research and innovation activities under this section will support the long-term transition towards zero-emission and quieter mobility across all transport modes. They will adopt a systemic approach which, in addition to technological innovations of vehicles, systems

and infrastructure, places emphasis on socio-economic and regulatory aspects such as increased public awareness, sustainable spatial planning integrating new forms of mobility and improved control and detection mechanisms. International cooperation is an essential element in many of the research topics in this section. Proposed actions can take advantages of the current state of the art modelling activities in the field and of the wealth of Earth Observation data and information provided by the Copernicus programme, especially by the Copernicus Atmosphere Monitoring Service.

Research and innovation activities will support the transition towards zero-emission and quieter mobility across all transport modes. Grounded on a people's perspective, it will lead to improved tools and mechanisms for monitoring and detection of emissions and noise in road vehicles, ships and aircrafts and will provide cities, regional and national authorities and spatial planners with evidence of long term impacts of the current developments in transport technologies and business models on spatial planning to support decision making processes in policy and planning.

The topics included under this section are the following: LC-MG-1-1-2018; LC-MG-1-2-2018; LC-MG-1-3-2018; LC-MG-1-4-2018; LC-MG-1-5-2019; LC-MG-1-6-2019; LC-MG-1-7-2019; LC-MG-1-8-2019; LC-MG-1-9-2019; LC-MG-1-10-2019

2. SAFE, INTEGRATED AND RESILIENT TRANSPORT SYSTEMS

The overall performance of the transport system depends on the performance of infrastructure, means of transport, traffic management systems and on user behaviour. This includes vehicles, aircraft and vessels and their respective infrastructures. Further knowledge is needed on safety in relation to accident response and to the new mobility environment (increased automation, drones applications, etc) as well as on door-to-door integration of different modes for short and long distance travel in both the passenger and the freight transport. The incorporation of economic, social and environmental dimensions is important in order to improve the current transport system, increase its robustness and support safety, security and quality of life. It is also essential to consider aspects of infrastructure construction and maintenance based on innovative solutions.

Research under this section is expected to contribute significantly to transport safety across transport modes and more particularly to the goals set by the Transport White Paper on close to zero road fatalities by 2050, as well as to Sustainable Development Goals 3.6 and 11. It is also expected to contribute to the decongestion of road/city infrastructure by modernising and increasing the reliability and competitiveness of Intra-European Waterborne transport, as well as to the integration of the European network for logistics into the global one by supporting the sustainable development of new logistics routes and their links with national/regional markets.

The topics included under this section are the following: MG-2-1-2018; MG-2-2-2018; MG-2-3-2018; MG-2-4-2018; MG-2-5-2018; MG-2-6-2019; MG-2-7-2019; MG-2-8-2019; MG-2-9-2019

3. GLOBAL LEADERSHIP AND COMPETITIVENESS

Global leadership and competitiveness are core objectives of the Transport work programme. They address directly the Commission's priority on "Jobs, growth and investment" and they are linked to export, trade and global markets. Europe is world leader in the design and manufacturing of transport vehicles despite the fierce competition, even from non-established new players. This work programme aims to maintain and extend the European industrial leadership worldwide, promoting the penetration of the latest developments in new materials, innovative processes, advanced automation and digital technologies into all transport sectors. It also aims to contribute to new transport business models that are changing the way innovation, research and technology is applied.

In addition to technological developments, competitiveness increasingly relies also on organizational framework conditions, including cooperation frameworks. Synergies on collaborative design and processes as well as manufacturing methods and supply chains in all transport modes should enable innovation breakthroughs that will keep the European industry, including SME, competitive in the decades to come.

Actions under these topics will contribute to the development of advanced technological capabilities in transport exploiting both evolutionary and disruptive technologies which will result in strengthened global leadership, environmental protection and enhanced travel comfort and safety. In particular, the research topics will reinforce and streamline European global leadership and competitiveness in advanced (both evolutionary and disruptive) technologies for the design and manufacturing of vehicles with the highest level of safety, comfort, connectivity, automation and life-cycle performance. Advanced multidisciplinary and collaborative capabilities for the design and manufacturing of vehicles along their life cycle as well as to the development of visualisation methods and big-data analytics tools. They will also investigate further passenger-centric business cases, spanning multiple transport stakeholders.

The topics included under this section are the following: MG-3-1-2018; MG-3-2-2018; MG-3-3-2018

4. ACCOUNTING FOR THE PEOPLE

Social sciences and humanities are integrated in the Transport work programme at several layers. They are embedded both as an essential component of several topics and research questions as well as distinct topics of socio-economic relevance in other parts of the work programme, including in the "Other Actions" part, where a number of relevant public procurement actions are foreseen.

In addition, the present section addresses issues which are intended to complement and underpin the activities covered in the other sections of this work programme. It includes topics examining issues such as: an inclusive digitally interconnected transport system,

regulatory frameworks to enable effective deployment of emerging technologies and business/operating models, demographic changes and women's participation, digitisation of the transport system, Open Science, Big data and updated frameworks to evaluate, monitor and assess the impact of new mobility solutions.

The overall objectives are to create an innovative and inclusive digital travel environment that improves accessibility and social inclusion, travel experience and citizen well-being. This environment should be created around accessible, protected and socially acceptable mobility solutions together with appropriate regulatory frameworks and policies for all.

In doing so, the research topics will contribute to a smooth adoption of new and emerging transport mobility solutions, ensuring equity and societal acceptance. They will aid decision-makers design, monitor and evaluate appropriate regulatory frameworks and policies that accommodate these new solutions for the benefit of society and economy taking into account the necessary levels of social and personal protection. They will contribute towards improving the competitiveness of European industry and SMEs and the attainment of the UN's Sustainable Development Goals.

The topics included under this section are the following: MG-4-1-2018; MG-4-2-2018; MG-4-3-2018; MG-4-4-2018-2019; MG-4-5-2019; MG-4-6-2019

Call updates

- **30 January 2018 12:44** The submission session is now available for: MG-2-1-2018(RIA), MG-2-2-2018(RIA), MG-3-2-2018(IA), MG-3-3-2018(RIA), LC-MG-1-2-2018(RIA), MG-3-1-2018(RIA), LC-MG-1-3-2018(RIA), LC-MG-1-4-2018(RIA), MG-2-2-2018(IA), LC-MG-1-1-2018(RIA)

- **30 January 2018 12:03**

Due to an IT issue in the submission system yesterday, the first stage deadline for call H2020-MG-2018-TwoStages has been postponed to 31 January 2018, 17:00:00 Brussels Local Time.

We strongly advise you not to wait until the last moment for submitting your application.

- **15 December 2017 17:09**

The proposal template for stage 1 topics is available after entering the submission tool.

- **31 October 2017 10:50** The submission session is now available for: MG-4-4-2018-2019(CSA)
- **31 October 2017 00:31** The submission session is now available for: MG-2-1-2018(RIA), MG-2-2-2018(RIA), MG-3-2-2018(IA), MG-3-3-2018(RIA), LC-MG-1-2-2018(RIA), MG-3-1-2018(RIA), LC-MG-1-3-2018(RIA), LC-MG-1-4-2018(RIA), MG-2-2-2018(IA), LC-MG-1-1-2018(RIA)
- **31 October 2017 00:30** The submission session is now available for: MG-2-3-2018(CSA), MG-2-4-2018(CSA), MG-4-2-2018(CSA), MG-4-1-2018(CSA), MG-2-5-2018(RIA), MG-4-3-2018(RIA), MG-BG-01-2018(RIA), LC-MG-1-3-2018(CSA)

Topic: [LC-MG-1-1-2018: InCo flagship on reduction of transport impact on air quality](#)

Closed

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 31 January 2018 17:00:00

Opening date: 31 October 2017

2nd stage Deadline: 19 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-MG-1-10-2019: Logistics solutions that deal with requirements of the 'on demand economy' and for shared-connected and low-emission logistics operations](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 16 January 2019 17:00:00

Opening date: 05 September 2018

2nd stage Deadline: 12 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-MG-1-2-2018: Sustainable multi-modal inter-urban transport, regional mobility and spatial planning.](#) Closed

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 31 January 2018 17:00:00

Opening date: 31 October 2017

2nd stage Deadline: 19 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-MG-1-3-2018: Harnessing and understanding the impacts of changes in urban mobility on policy making by city-led innovation for sustainable urban mobility](#) Closed

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 31 January 2018 17:00:00

Opening date: 31 October 2017

2nd stage Deadline: 19 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-MG-1-3-2018: Harnessing and understanding the impacts of changes in urban mobility on policy making by city-led innovation for sustainable urban mobility](#) Open

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Deadline: 04 April 2018 17:00:00

Opening date: 31 October 2017

Time Zone : (Brussels time)

Topic: [LC-MG-1-4-2018: Hardening vehicle environmental protection systems against tampering](#)

Closed

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 31 January 2018 17:00:00

Opening date: 31 October 2017

2nd stage Deadline: 19 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-MG-1-5-2019: Advancements in aerodynamics and innovative propulsion systems for quieter and greener aircrafts](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 16 January 2019 17:00:00

Opening date: 05 September 2018

2nd stage Deadline: 12 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-MG-1-6-2019: Aviation operations impact on climate change \(InCo flagship\)](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action
DeadlineModel: single-stage
Opening date: 04 December 2018

Deadline: 24 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-MG-1-7-2019: Future propulsion and integration: towards a hybrid/electric aircraft \(InCo flagship\)](#) Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action
DeadlineModel: single-stage
Opening date: 04 December 2018

Deadline: 24 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-MG-1-8-2019: Retrofit Solutions and Next Generation Propulsion for Waterborne Transport](#) Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action
IA Innovation action

DeadlineModel: two-stage
Opening date: 05 September 2018

Deadline: 16 January 2019 17:00:00
2nd stage Deadline: 12 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-MG-1-9-2019: Upgrading transport infrastructure in order to monitor noise and emissions](#) Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	16 January 2019 17:00:00
Opening date:	05 September 2018	2nd stage Deadline:	12 September 2019 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>MG-2-1-2018: Human Factors in Transport Safety</u>		
Publication date:	27 October 2017		
Closed			
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	31 January 2018 17:00:00
Opening date:	31 October 2017	2nd stage Deadline:	19 September 2018 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>MG-2-2-2018: Marine Accident Response</u>		
Publication date:	27 October 2017		
Closed			
Types of action:	RIA Research and Innovation action IA Innovation action		
DeadlineModel:	two-stage	Deadline:	31 January 2018 17:00:00
Opening date:	31 October 2017	2nd stage Deadline:	19 September 2018 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>MG-2-3-2018: Airworthiness of mass-market drones</u>		
Publication date:	27 October 2017		
Open			

Types of action: CSA Coordination and support action
DeadlineModel: single-stage
Opening date: 31 October 2017

Deadline: 04 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [MG-2-4-2018: Coordinating national efforts in modernizing transport infrastructure and provide innovative mobility services](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action
DeadlineModel: single-stage
Opening date: 31 October 2017

Deadline: 04 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [MG-2-5-2018: Innovative technologies for improving aviation safety and certification in icing conditions \(InCo flagship\)](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action
DeadlineModel: single-stage
Opening date: 31 October 2017

Deadline: 04 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [MG-2-6-2019: Moving freight by Water: Sustainable Infrastructure and Innovative Vessels](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel:	two-stage	Deadline:	16 January 2019 17:00:00
Opening date:	05 September 2018	2nd stage Deadline:	12 September 2019 17:00:00
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			Time Zone : (Brussels time)
Topic:	<u>MG-2-7-2019: Safety in an evolving road mobility environment</u>		Forthcoming
Publication date:	27 October 2017		
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Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	16 January 2019 17:00:00
Opening date:	05 September 2018	2nd stage Deadline:	12 September 2019 17:00:00
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			Time Zone : (Brussels time)
Topic:	<u>MG-2-8-2019: Innovative applications of drones for ensuring safety in transport</u>		Forthcoming
Publication date:	27 October 2017		
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Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	16 January 2019 17:00:00
Opening date:	05 September 2018	2nd stage Deadline:	12 September 2019 17:00:00
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			Time Zone : (Brussels time)
Topic:	<u>MG-2-9-2019: InCo Flagship on Integrated multimodal, low-emission freight transport systems and logistics</u>		Forthcoming
Publication date:	27 October 2017		
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Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	16 January 2019 17:00:00
Opening date:	05 September 2018	2nd stage Deadline:	12 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [MG-3-1-2018: Multidisciplinary and collaborative aircraft design tools and processes](#)

Closed

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 31 January 2018 17:00:00

Opening date: 31 October 2017

2nd stage Deadline: 19 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [MG-3-2-2018: The Autonomous Ship](#)

Closed

Publication date: 27 October 2017

Types of action: IA Innovation action

DeadlineModel: two-stage

Deadline: 31 January 2018 17:00:00

Opening date: 31 October 2017

2nd stage Deadline: 19 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [MG-3-3-2018: Driver behaviour and acceptance of connected, cooperative and automated transport](#)

Closed

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 31 January 2018 17:00:00

Opening date: 31 October 2017

2nd stage Deadline: 19 September 2018 17:00:00

Time Zone : (Brussels time)

Topic:	<u>MG-4-1-2018: New regulatory frameworks to enable effective deployment of emerging technologies and business/operating models for all transport modes</u>			Open
Publication date:	27 October 2017			
<hr/>				
Types of action:	CSA Coordination and support action			
DeadlineModel:	single-stage	Deadline:	04 April 2018 17:00:00	
Opening date:	31 October 2017			
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				Time Zone : (Brussels time)
Topic:	<u>MG-4-2-2018: Building Open Science platforms in transport research</u>			Open
Publication date:	27 October 2017			
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Types of action:	CSA Coordination and support action			
DeadlineModel:	single-stage	Deadline:	04 April 2018 17:00:00	
Opening date:	31 October 2017			
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				Time Zone : (Brussels time)
Topic:	<u>MG-4-3-2018: Demographic change and participation of women in transport</u>			Open
Publication date:	27 October 2017			
<hr/>				
Types of action:	RIA Research and Innovation action			
DeadlineModel:	single-stage	Deadline:	04 April 2018 17:00:00	
Opening date:	31 October 2017			
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				Time Zone : (Brussels time)
Topic:	<u>MG-4-4-2018-2019: Support for dissemination events in the field of Transport Research</u>			Forthcoming

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 04 December 2018

Deadline: 24 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [MG-4-4-2018-2019: Support for dissemination events in the field of Transport Research](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 04 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [MG-4-5-2019: An inclusive digitally interconnected transport system meeting citizens' needs](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 04 December 2018

Deadline: 24 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [MG-4-6-2019: Supporting Joint Actions on sustainable urban accessibility and connectivity](#)

Forthcoming

Publication date: 27 October 2017

Types of action: ERA-NET-Cofund ERA-NET Cofund

DeadlineModel: single-stage

Opening date: 04 December 2018

Deadline: 24 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [MG-BG-01-2018: Unmanned and autonomous survey activities at sea:](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 04 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [MG-BG-02-2019: Ship emission control scenarios, marine environmental impact and mitigation](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 04 December 2018

Deadline: 24 April 2019 17:00:00

Time Zone : (Brussels time)

CALL: BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: GREEN VEHICLES

Call identifier: H2020-LC-GV-2018-2019-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Societal Challenges

Work Programme Year: H2020-2018-2020

Work Programme Part: [Smart, green and integrated transport](#)
[- Less](#)

Call summary and aims

The demand for electrified vehicles is progressively increasing thanks to significant technological advances achieved in recent years. Awareness of the ever growing impact of noxious and particulate emissions on health and significant progress in battery technology and production will lead to an acceleration of their market penetration. The Calls will focus on the most critical aspects supporting a massive introduction of electrified vehicles: 1) advances in electric batteries (production of elementary cells and pack assembly), 2) new architectures, concepts and components to support the advent of the 3rd generation of electrified vehicles, 3) improve the recharging experience from the view-point of the end-users, 4) supporting the competitiveness of European industries through the development of digitalised production environments and the use of advanced material, 5) addressing the urban dimension of introducing electrified vehicles.

In addition to the topics of this call, a topic on the next generation and realisation of battery electrochemistries for BEV and PHEV is included in “Nanotechnologies, Advanced materials, Biotechnology and Advanced Manufacturing and Processing” under the “Leadership in Enabling and Industrial Technologies” (LEIT) part of HORIZON 2020.

The strategic objective of the Green Vehicles Calls for proposals for the years 2018, 2019 and 2020 will be to prepare the ground for this potential massive increase of electrified vehicles and to support European industries to maintain their leading world position in supplying automotive products. The major impact of the research will be to promote the development of a new generation of electric vehicles with a minimum of 400 km range that meets customer expectations, progress and demonstration in urban and regional electric vehicles (light and smart vehicles for passengers, delivery vehicles and buses) and support the production of batteries, components and electrified vehicles in Europe. Wide user acceptance shall be stimulated by accessibility and ease of use of all types of charging infrastructure – public, semi-public and private.

Call updates

- **31 October 2017 00:34** The submission session is now available for: LC-GV-01-2018(IA), LC-GV-02-2018(RIA)

Topic: [LC-GV-01-2018: Integrated, brand-independent architectures, components and systems for next](#)

Open

generation electrified vehicles optimised for the infrastructure

Publication date: 27 October 2017

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 04 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: **LC-GV-02-2018: Virtual product development and production of all types of electrified vehicles and components**

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 04 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: **LC-GV-03-2019: User centric charging infrastructure**

Forthcoming

Publication date: 27 October 2017

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 04 December 2018

Deadline: 24 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: **LC-GV-04-2019: Low-emissions propulsion for long-distance trucks and coaches**

Forthcoming

Publication date: 27 October 2017

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 04 December 2018

Deadline: 24 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-GV-05-2019: InCo flagship on “Urban mobility and sustainable electrification in large urban areas in developing and emerging economies”](#) Forthcoming

Publication date: 27 October 2017

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 04 December 2018

Deadline: 24 April 2019 17:00:00

CALL: DIGITAL TRANSFORMATION IN HEALTH AND CARE

Call identifier: H2020-SC1-DTH-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Societal Challenges

Work Programme Year: H2020-2018-2020

Work Programme Part: [Health, demographic change and wellbeing - Less](#)

Call summary and aims

This call aims at supporting the management of health and wellbeing while empowering the participation of citizens and facilitating

the transformation of health and care services to more digitised, person-centred and community-based care models, thereby enabling better access to healthcare and the sustainability of health and care systems. It is relevant to the Commission priorities 'A new boost for jobs, growth and investment' and 'A connected Digital Single Market'[[Updated by the DSM mid-term review: http://europa.eu/rapid/press-release_IP-17-1232_en.htm]], as well as to the European Cloud Initiative and the European Free Flow of Data Initiative. It will contribute to maximising the potential of the digital economy in the health and care sectors aiming at sustainable development to the benefit of society, environment and citizens. This call will address eHealth, mobile health (mHealth) and Information and Communication Technologies (ICT) for Active and Healthy Ageing.

In recognition of the opening of the US National Institutes of Health's programmes to European researchers, any legal entity established in the United States of America is eligible to receive Union funding to support its participation in projects supported under the following topics: SC1-DTH-01-2019, SC1-DTH-03-2018, SC1-DTH-05-2019, SC1-DTH-07-2018, SC1-DTH-08-2018, SC1-DTH-09-2019, SC1-DTH-10-2019, SC1-DTH-11-2019, SC1-HCC-01-2018, SC1-HCC-02-2019, SC1-HCC-03-2018, SC1-HCC-04-2018, SC1-HCC-05-2018.

Call updates

- **07 November 2017 00:30** The submission session is now available for: SC1-DTH-08-2018(RIA), SC1-HCC-05-2018(CSA), SC1-DTH-07-2018(RIA), SC1-HCC-04-2018(CSA), SC1-HCC-03-2018(CSA), SC1-DTH-03-2018(RIA), SC1-HCC-01-2018(CSA)

Topic: [SC1-DTH-01-2019: Big data and Artificial Intelligence for monitoring health status and quality of life after the cancer treatment](#) Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 16 October 2018

Deadline: 24 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-DTH-03-2018: Adaptive smart working and living environments supporting active and healthy ageing](#) Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 07 November 2017 **Deadline:** 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-DTH-05-2019: Large scale implementation of digital innovation for health and care in an ageing society](#) Forthcoming

Publication date: 27 October 2017

Types of action: PPI Public Procurement of Innovative solutions

DeadlineModel: single-stage

Opening date: 16 October 2018 **Deadline:** 24 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-DTH-07-2018: Exploiting the full potential of in-silico medicine research for personalised diagnostics and therapies in cloud-based environments](#) Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel:	single-stage	Deadline:	24 April 2018 17:00:00
Opening date:	07 November 2017		
<hr/>			
			Time Zone : (Brussels time)
Topic:	<u>SC1-DTH-08-2018: Prototyping a European interoperable Electronic Health Record (EHR) exchange</u>		Open
Publication date:	27 October 2017		
<hr/>			
Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	24 April 2018 17:00:00
Opening date:	07 November 2017		
<hr/>			
			Time Zone : (Brussels time)
Topic:	<u>SC1-DTH-09-2019: Scaling up the univocal Identification of Medicinal Products</u>		Forthcoming
Publication date:	27 October 2017		
<hr/>			
Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	24 April 2019 17:00:00
Opening date:	16 October 2018		
<hr/>			
			Time Zone : (Brussels time)
Topic:	<u>SC1-DTH-10-2019-2020: Digital health and care services</u>		Forthcoming
Publication date:	27 October 2017		
<hr/>			
Types of action:	PCP Pre-Commercial Procurement		
DeadlineModel:	single-stage	Deadline:	14 November 2018 17:00:00
Opening date:	26 July 2018		
<hr/>			

Time Zone : (Brussels time)

Topic: [SC1-DTH-11-2019: Large Scale pilots of personalised & outcome based integrated care](#)

Forthcoming

Publication date: 27 October 2017

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 16 October 2018

Deadline: 24 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-HCC-01-2018: Supporting investment in smart living environments for ageing well through certification](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 07 November 2017

Deadline: 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-HCC-02-2019: Support for the large scale uptake of open service platforms in the Active and Healthy Ageing domain](#)

Forthcoming

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 16 October 2018

Deadline: 24 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-HCC-03-2018: Support to further development of international cooperation in digital transformation of health and care](#) Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action
DeadlineModel: single-stage
Opening date: 07 November 2017 **Deadline:** 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-HCC-04-2018: Digital health and care services – support for strategy and \(early\) adoption](#) Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action
DeadlineModel: single-stage
Opening date: 07 November 2017 **Deadline:** 24 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-HCC-05-2018: Support to a Digital Health and Care Innovation initiative in the context of Digital Single Market strategy](#) Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action
DeadlineModel: single-stage
Opening date: 07 November 2017 **Deadline:** 24 April 2018 17:00:00

CALL: BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: CLIMATE ACTION IN SUPPORT OF THE PARIS AGREEMENT

Call identifier: H2020-LC-CLA-2018-2019-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Societal Challenges

Work Programme Year: H2020-2018-2020

Work Programme Part: [Climate action, environment, resource efficiency and raw materials - Less](#)

Call summary and aims

The COP21 Paris Agreement[http://unfccc.int/paris_agreement/items/9485.php] (PA) marked the beginning of a new era in the fight against climate change. Governments agreed to limit global temperature rise to well below 2°C and to make efforts to limit this to 1.5°C, as well as to enhance adaptive capacity, strengthening resilience and reducing vulnerabilities. This call contributes in its entirety to the Focus Area "Building a low-carbon climate-resilient future", which brings together funding to support the goals of the PA.

Actions in this call aim to produce solutions for the achievement of the PA's mitigation and adaptation goals, and to further relevant scientific knowledge for the implementation of the Nationally Determined Contributions (NDCs) and in advance of key PA-related milestones, such as the publication of national mid-century strategies (2020), the 6th IPCC assessment cycle (2018-2022) and the first global stocktake in 2023. Actions also support relevant EU policies and objectives, such as the Energy Union, Arctic policy, EU Adaptation Strategy and EU climate diplomacy efforts. Special consideration will be given to cooperation with strategic partner countries/regions. Specific efforts have to be paid to communicating research results to a broader audience, including the larger public. Ultimately, the actions are expected to support Europe's endeavours to implement not only the PA but also the Sustainable Development Goals (SDGs), particularly SDG 13 'Climate action', SDG 6 'Ensure availability and sustainable management of water and sanitation for all', SDG 11 'Sustainable cities and communities', SDG 14 'Life below water' and SDG 15 'Life on land'.

Call updates

- **07 November 2017 00:30** The submission session is now available for: LC-CLA-04-2018(RIA), LC-CLA-03-2018(RIA), LC-CLA-08-2018(RIA), LC-CLA-01-2018(RIA)

Topic: [LC-CLA-01-2018: Supporting the development of climate policies to deliver on the Paris Agreement, through Integrated Assessment Models \(IAMs\)](#) Open

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 27 February 2018 17:00:00

Opening date: 07 November 2017

2nd stage Deadline: 04 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-CLA-02-2019: Negative emissions and land-use based mitigation assessment](#) Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 19 February 2019 17:00:00

Opening date: 14 November 2018

2nd stage Deadline: 04 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-CLA-03-2018: Climate change impacts in Europe](#) Open

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action

DeadlineModel:	two-stage	Deadline:	27 February 2018 17:00:00
Opening date:	07 November 2017	2nd stage Deadline:	04 September 2018 17:00:00
<hr/>			
Time Zone : (Brussels time)			
Topic:	<u>LC-CLA-04-2018: Resilience and sustainable reconstruction of historic areas to cope with climate change and hazard events</u>		
	Open		
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
<hr/>			
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	27 February 2018 17:00:00
Opening date:	07 November 2017	2nd stage Deadline:	04 September 2018 17:00:00
<hr/>			
Time Zone : (Brussels time)			
Topic:	<u>LC-CLA-05-2019: Human dynamics of climate change</u>		
	Forthcoming		
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
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Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	19 February 2019 17:00:00
Opening date:	14 November 2018	2nd stage Deadline:	04 September 2019 17:00:00
<hr/>			
Time Zone : (Brussels time)			
Topic:	<u>LC-CLA-06-2019: Inter-relations between climate change, biodiversity and ecosystem services</u>		
	Forthcoming		
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		

Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	19 February 2019 17:00:00
Opening date:	14 November 2018	2nd stage Deadline:	04 September 2019 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>LC-CLA-07-2019: The changing cryosphere: uncertainties, risks and opportunities</u>		
	Forthcoming		
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	19 February 2019 17:00:00
Opening date:	14 November 2018	2nd stage Deadline:	04 September 2019 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>LC-CLA-07-2019: The changing cryosphere: uncertainties, risks and opportunities</u>		
	Forthcoming		
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	19 February 2019 17:00:00
Opening date:	14 November 2018		
Time Zone : (Brussels time)			
Topic:	<u>LC-CLA-08-2018: Addressing knowledge gaps in climate science, in support of IPCC reports</u>		
	Open		
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		

Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	27 February 2018 17:00:00
Opening date:	07 November 2017	2nd stage Deadline:	04 September 2018 17:00:00

Time Zone : (Brussels time)

CALL: SCIENCE WITH AND FOR SOCIETY

Call identifier: H2020-SWAFS-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Science with and for Society

Work Programme Year: H2020-2018-2020

Work Programme Part: [Science with and for Society](#)
[- Less](#)

Call summary and aims

Science with and for society will help citizens, organisations and territories to open a new chapter of their development through joint research and innovation activities in five strategic orientations. It will contribute to the implementation of Responsible Research and Innovation through institutional governance changes in Research Performing (RPOs) and Funding Organisations (RFOs), focusing on developing new partnerships and involving researchers, policy makers, citizens and industry. It will step up support for gender equality in R&I policy by promoting institutional changes and focusing on key areas of research to advance gender equality. It will build on the territorial dimension of SWAFS partnerships by opening up R&I broadly to society according to specific territorial contexts, where territories are understood as geographical areas sharing common features (e.g. economic, social, cultural, environmental). It will explore and support citizen science in a broad sense, encouraging citizens and other stakeholders to participate in all stages of R&I. Finally, it will build the knowledge base for SwafS through a combination of totally bottom-up and open topics and targeted topics including two looking for the first time at science communication and due and proportionate precaution.

Strategic orientation 1. Accelerating and catalysing processes of institutional change (relevant for all 8 topics in this section of the SwafS Work Programme i.e. SwafS-01-2018-2019 to SwafS-08-2019 inclusive)

This part will contribute to implementing the RRI keys (public engagement, science education, ethics including research integrity, gender equality, and open access) through institutional governance changes in Research Funding and Performing Organisations (RFPOs) in an integrated way and to disseminate good practices. In this strategic orientation, RFPOs should be understood broadly as organisations developing or funding activities in the field of R&I as one of their objectives (e.g. a civil society organisation engaged in R&I could be eligible). It will also allow projects to be developed that involve researchers, policy makers, citizens and industry and to monitor impact and progress. Developing new partnerships will be a priority. Results should contribute to the implementation of ERA priorities, a greater involvement of all stakeholders in R&I, and a better and more sustainable engagement with society.

Strategic orientation 2. Stepping up support to Gender Equality in Research & Innovation policy *(relevant for all 5 topics in this section of the SwafS Work Programme i.e. SwafS-09-2018-2019 to SwafS-13-2019 inclusive)*

Gender Equality Plans are the main policy instruments promoted through the European Research Area to advance gender equality in research organisations and universities. Based on progress so far, actions will be adapted to catalyse the changes in response to the three objectives: gender equality in scientific careers, gender balance in decision making, and the integration of the gender dimension in research content. Additionally, considering the evolution of the research systems in Europe, gender aspects of scientific careers and decision-making processes will be investigated to gather updated evidence for future policy action. Finally, a major and recent challenge is to better integrate the gender dimension in research and innovation programmes and projects. Following the uptake of the gender dimension in Horizon 2020 and in some national research agencies, it is time to take stock of what has been done so far, and design the next steps in terms of process and knowledge. This will enhance the societal relevance of the produced knowledge, technologies and innovations and contribute to the production of goods and services better suited to potential markets.

Strategic orientation 3. Building the territorial dimension of SwafS partnerships *(relevant for both topics in this section of the SwafS Work Programme i.e. SwafS-14-2018-2019 and SwafS-22-2018)*

SwafS will encourage partnerships between universities, formal and informal education institutions (including primary and secondary schools), science museums and centres, governments and public authorities (including regional and local administrations), businesses (including industry and the service sector) and CSOs operating at local, national and European levels. Connecting these different levels with a view to sharing scientific knowledge and supporting user-led innovation will require new working methods and governance relations. New ways of opening up R&I broadly to society according to specific contexts will be developed, thus ensuring the involvement of communities in different territorial contexts (e.g. rural vs. urban areas), promotion of gender equality, and consideration and involvement of all people, irrespective of their age, gender, ethnicity and socio-economic background. Territories are understood as geographical areas sharing common features (e.g. economic, social, cultural, environmental).

Strategic orientation 4. Exploring and supporting citizen science *(relevant for both topics in this section of the SwafS Work Programme i.e. SwafS-15-2018-2019 and SwafS-16-2019)*

Citizen science is emerging as an important policy orientation but is still largely unexplored. It covers a range of different levels of participation: from raising public knowledge about science, encouraging citizens to participate in the scientific process by observing, gathering and processing data, right up to setting scientific agenda and co-designing and implementing science-related policies. SwafS will focus on the meanings, mechanisms and challenges facing citizen science from local to European and global levels, learning from on-going experiences and innovative grassroots initiatives. Potential aspects to explore include how citizen science can act as a catalyst to develop scientific skills and competences, act as a tool for informal and formal science education of young people and adults, counter perceived anti-intellectual attitudes in society, raise the scientific literacy of European citizens, and promote social inclusion and employability. Moreover, the backdrop of deep and profound implications on science as a discipline, a profession and as a practice, and also on science's relationship with and for society, should also be considered.

Strategic orientation 5. Building the knowledge base for SwafS *(relevant for all 5 topics in this section of the SwafS Work Programme i.e. SwafS-17-2019 to SwafS-21-2018 inclusive)*

Understanding the co-evolution of science and society will help proactive and anticipatory policy making. SwafS will examine how societal actors, including young people, behave, understand, react to and interact with science and scientific developments, and their motives for engaging in science-related activities. This includes investigating science communication and science advocacy in the digital world and how science and technology studies and different disciplines (e.g. behavioural sciences, communication studies, gender studies, linguistics, and social anthropology) – and multi/transdisciplinary approaches – can help explain interactions between science and society. This will include a focus on blind spots of research and innovation in relation to people's needs and concerns, in particular due and proportional precaution, scientific uncertainty, means of measuring the integration of RRI in science and innovation, and the gender dimension in research content. Moreover, consideration could be given to rewarding achievement in RRI in its various dimensions to signal the organisations that are more RRI-aware (answering questions such as how such a reward could work and based on which criteria). Another area is implications of deep changes in science and innovation and its interactions with society and the economy, such as the transition to open science and open innovation, and resultant changes in the relationships between science and society.

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Call updates

- **21 December 2017 11:08**

A **policy briefing** for the 2018 topics of the H2020-SwafS-2018-2020 call (Science with and for Society) has been recorded and is accessible together with the slides under 'Topic conditions and documents', section '8. Additional documents'."

- **05 December 2017 00:30** The submission session is now available for: SwafS-18-2018(RIA), SwafS-14-2018-2019(CSA), SwafS-21-2018(RIA), SwafS-13-2018(CSA), SwafS-19-2018-2019(RIA), SwafS-09-2018-2019(CSA), SwafS-15-2018-2019(RIA), SwafS-06-2018(CSA), SwafS-15-2018-2019(CSA), SwafS-05-2018-2019(CSA), SwafS-02-2018(CSA), SwafS-03-2018(CSA), SwafS-22-2018(CSA), SwafS-10-2018(RIA), SwafS-04-2018(RIA)
- **05 December 2017 00:30** The submission session is now available for: SwafS-01-2018-2019(CSA), SwafS-20-2018-2019(RIA)

Topic: [SwafS-01-2018-2019: Open schooling and collaboration on science education](#)

Forthcoming

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: two-stage

Deadline: 02 April 2019 17:00:00

Opening date: 11 December 2018

2nd stage Deadline: 07 November 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SwafS-01-2018-2019: Open schooling and collaboration on science education](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: two-stage

Deadline: 10 April 2018 17:00:00

Opening date: 05 December 2017

2nd stage Deadline: 13 November 2018 17:00:00

Time Zone : (Brussels time)

Topic: SwafS-02-2018: Innovative methods for teaching ethics and research integrity		Open	
Publication date:	27 October 2017		
<hr/>			
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	10 April 2018 17:00:00
Opening date:	05 December 2017		
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			Time Zone : (Brussels time)
Topic: SwafS-03-2018: Developing research integrity standard operating procedures		Open	
Publication date:	27 October 2017		
<hr/>			
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	10 April 2018 17:00:00
Opening date:	05 December 2017		
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			Time Zone : (Brussels time)
Topic: SwafS-04-2018: Encouraging the re-use of research data generated by publically funded research projects		Open	
Publication date:	27 October 2017		
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Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	10 April 2018 17:00:00
Opening date:	05 December 2017		
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			Time Zone : (Brussels time)
Topic: SwafS-05-2018-2019: Grounding RRI practices in research and innovation funding and performing organisations		Forthcoming	

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 11 December 2018

Deadline: 02 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SwafS-05-2018-2019: Grounding RRI practices in research and innovation funding and performing organisations](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 05 December 2017

Deadline: 10 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SwafS-06-2018: Science4Refugees](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 05 December 2017

Deadline: 10 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SwafS-07-2019: EURAXESS TOP V](#)

Forthcoming

Publication date: 27 October 2017

Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	02 April 2019 17:00:00
Opening date:	11 December 2018		
			Time Zone : (Brussels time)
Topic:	<u>SwafS-08-2019: Research innovation needs & skills training in PhD programmes</u>		Forthcoming
Publication date:	27 October 2017		
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	02 April 2019 17:00:00
Opening date:	11 December 2018		
			Time Zone : (Brussels time)
Topic:	<u>SwafS-09-2018-2019: Supporting research organisations to implement gender equality plans</u>		Forthcoming
Publication date:	27 October 2017		
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	02 April 2019 17:00:00
Opening date:	11 December 2018		
			Time Zone : (Brussels time)
Topic:	<u>SwafS-09-2018-2019: Supporting research organisations to implement gender equality plans</u>		Open
Publication date:	27 October 2017		
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	10 April 2018 17:00:00

Opening date: 05 December 2017

Time Zone : (Brussels time)

Topic: [SwafS-10-2018: Analysing gender gaps and biases in the allocation of grants](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 05 December 2017

Deadline: 10 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SwafS-11-2019: Scenarios for an award/certification system for gender equality in research organisations and universities in Europe](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 11 December 2018

Deadline: 02 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SwafS-12-2019: The gender perspective of science, technology and innovation \(STI\) in dialogue with third countries](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 11 December 2018

Deadline: 02 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SwafS-13-2018: Gender Equality Academy and dissemination of gender knowledge across Europe](#)

Open

Publication date:

27 October 2017

Types of action:

CSA Coordination and support action

DeadlineModel:

single-stage

Opening date:

05 December 2017

Deadline:

10 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SwafS-14-2018-2019: Supporting the development of territorial Responsible Research and Innovation](#)

Forthcoming

Publication date:

27 October 2017

Types of action:

CSA Coordination and support action

DeadlineModel:

single-stage

Opening date:

11 December 2018

Deadline:

02 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SwafS-14-2018-2019: Supporting the development of territorial Responsible Research and Innovation](#)

Open

Publication date:

27 October 2017

Types of action:

CSA Coordination and support action

DeadlineModel:

single-stage

Opening date:

05 December 2017

Deadline:

10 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: <u>SwafS-15-2018-2019: Exploring and supporting citizen science</u>		Forthcoming	
Publication date: 27 October 2017			
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Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	02 April 2019 17:00:00
Opening date:	11 December 2018		
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			Time Zone : (Brussels time)
Topic: <u>SwafS-15-2018-2019: Exploring and supporting citizen science</u>		Open	
Publication date: 27 October 2017			
<hr/>			
Types of action:	RIA Research and Innovation action CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	10 April 2018 17:00:00
Opening date:	05 December 2017		
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			Time Zone : (Brussels time)
Topic: <u>SwafS-16-2019: Ethics of Innovation: the challenge of new interaction modes</u>		Forthcoming	
Publication date: 27 October 2017			
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Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	02 April 2019 17:00:00
Opening date:	11 December 2018		
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			Time Zone : (Brussels time)
Topic: <u>SwafS-17-2019: Consolidating and expanding the knowledge base on citizen science</u>		Forthcoming	

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 11 December 2018

Deadline: 02 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SwafS-18-2018: Taking stock of the application of the precautionary principle in R&I](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 05 December 2017

Deadline: 10 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SwafS-19-2018-2019: Taking stock and re-examining the role of science communication](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 11 December 2018

Deadline: 02 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SwafS-19-2018-2019: Taking stock and re-examining the role of science communication](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action
DeadlineModel: single-stage
Opening date: 05 December 2017

Deadline: 10 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SwafS-20-2018-2019: Building the SwafS knowledge base](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action
DeadlineModel: two-stage
Opening date: 11 December 2018

Deadline: 02 April 2019 17:00:00
2nd stage Deadline: 07 November 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SwafS-20-2018-2019: Building the SwafS knowledge base](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action
DeadlineModel: two-stage
Opening date: 05 December 2017

Deadline: 10 April 2018 17:00:00
2nd stage Deadline: 13 November 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SwafS-21-2018: Advancing the Monitoring of the Evolution and Benefits of Responsible Research and Innovation](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action
DeadlineModel: single-stage

Deadline: 10 April 2018 17:00:00

Opening date: 05 December 2017

Time Zone : (Brussels time)

Topic: [SwafS-22-2018: Mobilising Research Excellence in EU Outermost Regions \(OR\)](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 05 December 2017

Deadline: 10 April 2018 17:00:00

Time Zone : (Brussels time)

CALL: GREENING THE ECONOMY IN LINE WITH THE SUSTAINABLE DEVELOPMENT GOALS (SDGS)

Call identifier: H2020-SC5-2018-2019-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Societal Challenges

Work Programme Year: H2020-2018-2020

Work Programme Part: [Climate action, environment, resource efficiency and raw materials
- Less](#)

Call summary and aims

This call focuses on moving to a greener, more resource efficient and climate-resilient economy in sync with the natural environment, demonstrating a strong commitment to supporting the UN's Sustainable Development Goals (SDGs).

Connecting economic and environmental gains - the circular economy (topics: CE-SC5-01-2018, CE-SC5-02-2018, CE-SC5-03-2018, CE-SC5-04-2019 and CE-SC5-05-2018)

Further development of a sustainable, resource efficient and competitive economy will require a transition to a more circular economic model with products, processes, services and business models that are designed to maintain the value and utility of materials and resources in the economy for as long as possible. The circular economy solutions should combine a strong environmental rationale with a convincing business logic.

Actions in this part of the call aim in the medium term to substantially improve the efficiency of resource use (including energy and water), to minimise the production of waste and increase the use of resources originating from secondary sources – while avoiding adverse health effects – and to reduce pollution and greenhouse gas emissions. They intend to elucidate the role of design in product durability, enhance the capacity of cities to embrace circular economy approaches and support the transition to systemic, integrated solutions closing the cycles of resource use in the water sector. They will contribute to implementing the Circular Economy Action Plan[[COM(2015) 614 final]] and key high-level EU priorities, including those addressing jobs, growth and investment, climate and energy, and a strengthened industrial base. Ultimately, they are expected to support Europe's endeavours to implement the Sustainable Development Goals (SDGs), particularly SDG 12 'Responsible consumption and production', SDG 6 'Ensure availability and sustainable management of water and sanitation for all', SDG 11 'Sustainable cities and communities' and SDG 13 'Take urgent action to combat climate change and its impacts' (and the goals of the Paris Agreement on climate change), together with the Habitat III New Urban Agenda.

The topics in this part of the call contribute to the focus area 'Connecting economic and environmental gains - the circular economy'.

It should be noted that a number of topics (with "CE-" in the topic identifier) in the 'Raw Materials' section of this call also contribute to the circular economy.

Raw materials (topics: CE-SC5-06-2018, CE-SC5-07-2018-2019-2020, CE-SC5-08-2018-2019-2020, SC5-09-2018-2019 and SC5-10-2019-2020)

The EU is highly dependent on raw materials that are crucial for a strong European industrial base, an essential building block of the EU's growth and competitiveness. The main aim of this part of the call will be on achieving the objectives and meeting the targets of the EIP on Raw Materials. A wide range of actions will cover the entire EU raw materials value chain, from sustainable exploration, extraction, processing to recycling. Actors from the whole EU raw materials innovation chain will be involved, including researchers, industry, end-users, public authorities and civil society.

In the short to medium term, innovation actions are expected to deliver pilot actions demonstrating sustainable production of primary and secondary raw materials, particularly CRM or other scarce high-tech metals. Breakthrough research concepts, as the basis of tomorrow's innovations, are also tackled through smaller, lower-TRL actions. Actions will also contribute to building the EU knowledge base of primary and secondary raw materials for solid decision making, and particularly to the further development of the EC Raw Materials Information System – RMIS[[<https://ec.europa.eu/jrc/en/scientific-tool/raw-materials-information-system>]], responding to the Circular Economy Action Plan and the objectives of the Strategic Implementation Plan of the EIP on Raw Materials. Policy-related actions aim at improving framework conditions for the sustainable development of and investment in innovative solutions in the EU. In the long term, actions should positively impact on: downstream industries' access to raw materials; employment in and competitiveness of the EU raw materials and related manufacturing industries, including SMEs; the environmental and social performance of the raw materials sector; and improved public awareness, acceptance and trust. International co-operation is encouraged in all actions. Ultimately, the actions on raw materials are expected to support Europe's endeavours to implement the Sustainable Development Goals (SDGs), notably SDG 12 'Responsible Consumption and Production'.

Topics relevant to bio-based materials (e.g. wood) and the bio-economy can be also found in Societal Challenge 2 'Food security, sustainable agriculture and forestry, marine, maritime and inland water research, and the bio-economy' and the Joint Undertaking for Bio-Based Industries (BBI). Innovation actions with relevance to raw materials can be found in the calls under the SPIRE PPP.

Topics in this part of the call that contribute to the focus area 'Connecting economic and environmental gains - the circular economy' (prefix 'CE') will contribute to the implementation of the EU Circular Economy Action Plan.

Water for our environment, economy and society (topics: SC5-11-2018 and SC5-12-2018)

Changes in water availability, the frequency of floods and droughts due to climate and other environmental changes, pollution trends, increased competition in water use including for industry, energy, agriculture and food production, land-use changes and increasing urbanisation all require the development and implementation of robust, smart, effective and tailored water management systems, solutions and multi-sectoral governance models in Europe and globally. The transformative potential of digital technologies can play an important role in doing so.

This part of the call supports and aims to accelerate the implementation of EU policies[[http://ec.europa.eu/environment/water/index_en.htm]] and initiatives[[e.g. EIP Water, <http://ec.europa.eu/environment/water/innovationpartnership/>]] relating to water, resource efficiency and water-dependent industries, while also contributing to policy relating to the Energy Union, climate action and the digital economy. Overall, actions are expected to lead in the medium term to: digital solutions for improved public- and private-sector decision-making on water-related risks, efficiency and resilience; substantial reductions in water and energy consumption; and the development of new markets for water-

smart technologies and services. A further action focuses on EU-India cooperation to improve wastewater efficiency and quality of and access to drinking water in India. Ultimately, actions are expected to support Europe's endeavours to implement the Sustainable Development Goals (SDGs), particularly SDG 6 'Clean water and sanitation' and SDG 13 'Climate action'.

It should be noted that topic CE-SC5-04-2019 'Building a water-smart economy and society' in this call, as well as topics in the call 'Building a low-carbon, climate resilient future: climate action in support of the Paris Agreement' also contribute to this priority. Relevant actions are also called for under the SPIRE cPPP in the LEIT-NMBP part of this Work Programme.

Innovating cities for sustainability and resilience (topics: SC5-13-2018-2019 and SC5-14-2019)

Most of the challenges Europe is facing today, such as climate change, water and waste management, health, social cohesion and immigration, have a strong urban dimension. However cities are also hubs of technological and social innovation, the places where capital investments, high productivity and high-skilled jobs are located. In this sense, cities not only contribute and are exposed to global challenges but they are also key players in providing solutions.

Actions in this part of the call have the medium-term objective of enabling cities to design and implement transition pathways to becoming inclusive, resilient, sustainable, low-carbon and resource efficient by enhancing their innovation capacity and enabling them to act as hubs of innovation. Further actions aim to strengthen the sustainability of urban areas globally, and particularly in China and CELAC countries. Ultimately, they are expected to support Europe's endeavours to implement the Sustainable Development Goals (SDGs), particularly SDG 11 'Sustainable cities and communities' and SDG 3 'Ensure healthy lives and promote well-being for all at all ages', together with the Habitat III New Urban Agenda, and the EU Urban Agenda[[<https://ec.europa.eu/futurium/en/urban-agenda>]].

It should be noted that topic CE-SC5-03-2018 'Demonstrating systemic urban development for circular and regenerative cities' in this call also contributes to this priority.

Protecting and leveraging the value of our natural and cultural assets: Earth observation (topics: SC5-15-2018 and SC5-16-2019)

The Commission, together with the European GEO nations, is committed to implementing GEOSS in line with the new GEO Strategic Plan 2016-2025 and to developing an approach towards GEOSS for the European region (supporting the EuroGEOSS initiative of the European GEO caucus[[For information on the European GEO caucus, please see the GEO High-Level Working Group at: http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=1781&news=1&mod_groups=1&month=09&year=2017]]) that facilitates and steers national contributions while accelerating the use of GEOSS resources. At the same time,

the capacity to observe the planet is evolving rapidly, leading to higher volumes of and more diverse data flows produced at European and national level by private and public operators (including from citizens).

Actions in this part of the call aim to capitalise on these trends, in collaboration with the Copernicus programme, to develop new mass-market applications for businesses, citizens and public authorities. Overall, actions are expected in the medium term to stimulate growth and jobs in Europe in the context of the digital economy (through open innovation) and to lead to better informed decision-making in environmental policy and management and in disaster management. Actions will also contribute to implementing EU space policy and to international agreements such as the 2030 Agenda for Sustainable Development, particularly Sustainable Development Goals (SDGs) 9 'Industry, innovation and infrastructure', 11 'Sustainable cities and communities', 13 'Climate action', 14 'Life below water' and 15 'Life on land'.

It should be noted that topics addressing Earth observation can also be found in other parts of the Horizon 2020 Work Programme 2018-2020, notably:

- in a dedicated part of the call 'Space 2018-2020' (H2020-SPACE-2018-2020) in the Work Programme part 'Leadership in Enabling and Industrial Technologies - Space'
- certain topics in the call 'Blue Growth' (H2020-BG-2018-2020) in the Work Programme part 'Food security, sustainable agriculture and forestry, marine, maritime and inland water research and the bioeconomy'
- the EIC Prize 'Early Warning for Epidemics' in the Work Programme part 'Towards the next EU Framework Programme for Research and Innovation: European Innovation Council (EIC) Pilot'.

Protecting and leveraging the value of our natural and cultural assets: Nature-based solutions, disaster risk reduction and natural capital accounting (topics: SC5-17-2018, SC5-18-2018)

Predicting earthquakes reliably and enhancing early warning capacity prior to an earthquake would enable the timely rolling out of emergency plans and actions and prevent the loss of human lives. Similarly, mainstreaming the actual value of nature into our economic transactions would fostered a wiser use and management of our natural capital and sustained biodiversity and ecosystems' productive capacity for our benefit but also for the benefit of the future generations. Actions under this section will help create economic, social and environmental resilience in our societies.

Actions under this section of the call aim to improve decision making, early warning, preparedness and communication among relevant actors to better cope with earthquakes through enhanced forecasting capacity. Furthermore, they aim to enhance the capacity of authorities and the private sector to better assess and value biodiversity, ecosystems and their services to enable them to

incorporate and mainstream these values into their accounting and decision making frameworks. Ultimately, they are expected to support Europe's endeavours to implement the Sustainable Development Goals (SDGs), particularly SDG 3 'Ensure healthy lives and promote well-being for all at all ages', SDG 6 'Ensure availability and sustainable management of water and sanitation for all', SDG 8 'Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all', SDG 11 'Make cities and human settlements inclusive, safe, resilient and sustainable', SDG 13 'Take urgent action to combat climate change and its impacts' and SDG 15 'Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss'.

It should be noted that topic LC-CLA-06-2019 'Inter-relations between climate change, biodiversity and ecosystem services' in the call 'Building a low-carbon, climate resilient future: climate action in support of the Paris Agreement' also contributes to this priority.

Protecting and leveraging the value of our natural and cultural assets: Heritage alive (topics: SC5-19-2018 and SC5-20-2019)

Cultural heritage is a non-renewable, irreplaceable resource and a common good, but is frequently under threat from environmental challenges and climate change, disaster risks, neglect, decay and under-funding. It can play a crucial and catalytic role in well-being, cultural diversity, sustainable development and social cohesion and as such it needs to be protected and preserved through leveraging its innovation potential.

Actions in this part of the call have the medium-term objective of positioning cultural heritage at the centre of sustainable development and unlocking its potential as a strategic living resource and driver for economic growth and job creation, social cohesion and environmental sustainability. By doing so, they will also contribute to the protection and preservation of cultural and historic heritage in Europe and beyond and will mobilise investments in the sector leading to the emergence of a global market for heritage-led innovative solutions and services. Ultimately, they are expected to support Europe's endeavours to implement the Sustainable Development Goals (SDGs), particularly SDG 11 'Sustainable cities and communities' and its target of strengthening efforts to protect and safeguard the world's cultural and natural heritage.

It should be noted that topic 'LC-CLA-04-2018: Resilience and sustainable reconstruction of historic areas to cope with climate change and hazard events' in the call 'Building a low-carbon, climate resilient future: climate action in support of the Paris Agreement' also contributes to this priority.

Call updates

- **07 November 2017 09:18** The submission session is now available for: SC5-12-2018(RIA), CE-SC5-08-2018-2019-2020(CSA), SC5-18-2018(CSA), SC5-19-2018(CSA), CE-SC5-05-2018(CSA)
- **07 November 2017 08:59** The submission session is now available for: CE-SC5-01-2018(RIA), CE-SC5-02-2018(RIA), SC5-13-2018-2019(RIA), CE-SC5-06-2018(RIA), SC5-17-2018(RIA), SC5-15-2018(IA), SC5-11-2018(IA), SC5-09-2018-2019(RIA), CE-SC5-07-2018-2019-2020(IA), CE-SC5-03-2018(IA)

Topic: <u>CE-SC5-01-2018: Methods to remove hazardous substances and contaminants from secondary raw materials</u>		Open	
Publication date:	27 October 2017		
Focus area:	Connecting economic and environmental gains - the Circular Economy (CE)		
<hr/>			
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	27 February 2018 17:00:00
Opening date:	07 November 2017	2nd stage Deadline:	04 September 2018 17:00:00
<hr/>			
			Time Zone : (Brussels time)
Topic: <u>CE-SC5-02-2018: Independent testing programme on premature obsolescence</u>		Open	
Publication date:	27 October 2017		
Focus area:	Connecting economic and environmental gains - the Circular Economy (CE)		
<hr/>			
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	27 February 2018 17:00:00
Opening date:	07 November 2017	2nd stage Deadline:	04 September 2018 17:00:00
<hr/>			
			Time Zone : (Brussels time)
Topic: <u>CE-SC5-03-2018: Demonstrating systemic urban development for circular and regenerative cities</u>		Open	

Publication date: 27 October 2017
Focus area: Connecting economic and environmental gains - the Circular Economy (CE)

Types of action: IA Innovation action
DeadlineModel: two-stage
Opening date: 07 November 2017
Deadline: 27 February 2018 17:00:00
2nd stage Deadline: 04 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [CE-SC5-04-2019: Building a water-smart economy and society](#) Forthcoming

Publication date: 27 October 2017
Focus area: Connecting economic and environmental gains - the Circular Economy (CE)

Types of action: IA Innovation action
DeadlineModel: two-stage
Opening date: 14 November 2018
Deadline: 19 February 2019 17:00:00
2nd stage Deadline: 04 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [CE-SC5-05-2018: Coordinated approaches to funding and promotion of research and innovation for the circular economy](#) Open

Publication date: 27 October 2017
Focus area: Connecting economic and environmental gains - the Circular Economy (CE)

Types of action: CSA Coordination and support action
DeadlineModel: single-stage
Opening date: 07 November 2017
Deadline: 27 February 2018 17:00:00

Time Zone : (Brussels time)

Topic:	<u>CE-SC5-06-2018: New technologies for the enhanced recovery of by-products</u>			Open
Publication date:	27 October 2017			
Focus area:	Connecting economic and environmental gains - the Circular Economy (CE)			
<hr/>				
Types of action:	RIA Research and Innovation action			
DeadlineModel:	two-stage	Deadline:	27 February 2018 17:00:00	
Opening date:	07 November 2017	2nd stage Deadline:	04 September 2018 17:00:00	
<hr/>				
Time Zone : (Brussels time)				
Topic:	<u>CE-SC5-07-2018-2019-2020: Raw materials innovation for the circular economy: sustainable processing, reuse, recycling and recovery schemes</u>			Forthcoming
Publication date:	27 October 2017			
Focus area:	Connecting economic and environmental gains - the Circular Economy (CE)			
<hr/>				
Types of action:	IA Innovation action			
DeadlineModel:	two-stage	Deadline:	19 February 2019 17:00:00	
Opening date:	14 November 2018	2nd stage Deadline:	04 September 2019 17:00:00	
<hr/>				
Time Zone : (Brussels time)				
Topic:	<u>CE-SC5-07-2018-2019-2020: Raw materials innovation for the circular economy: sustainable processing, reuse, recycling and recovery schemes</u>			Open
Publication date:	27 October 2017			
Focus area:	Connecting economic and environmental gains - the Circular Economy (CE)			
<hr/>				
Types of action:	IA Innovation action			
DeadlineModel:	two-stage	Deadline:	27 February 2018 17:00:00	
Opening date:	07 November 2017	2nd stage Deadline:	04 September 2018 17:00:00	

Time Zone : (Brussels time)

Topic: [CE-SC5-08-2018-2019-2020: Raw materials policy support actions for the circular economy](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Connecting economic and environmental gains - the Circular Economy (CE)

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 14 November 2018

Deadline: 19 February 2019 17:00:00

Time Zone : (Brussels time)

Topic: [CE-SC5-08-2018-2019-2020: Raw materials policy support actions for the circular economy](#)

Open

Publication date: 27 October 2017

Focus area: Connecting economic and environmental gains - the Circular Economy (CE)

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 07 November 2017

Deadline: 27 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SC5-09-2018-2019: New solutions for the sustainable production of raw materials](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Opening date: 14 November 2018

Deadline: 19 February 2019 17:00:00

2nd stage Deadline: 04 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SC5-09-2018-2019: New solutions for the sustainable production of raw materials](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 27 February 2018 17:00:00

Opening date: 07 November 2017

2nd stage Deadline: 04 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SC5-10-2019-2020: Raw materials innovation actions: exploration and Earth observation in support of sustainable mining](#)

Forthcoming

Publication date: 27 October 2017

Types of action: IA Innovation action

DeadlineModel: two-stage

Deadline: 19 February 2019 17:00:00

Opening date: 14 November 2018

2nd stage Deadline: 04 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SC5-11-2018: Digital solutions for water: linking the physical and digital world for water solutions](#)

Open

Publication date: 27 October 2017

Types of action: IA Innovation action

DeadlineModel: two-stage

Deadline: 27 February 2018 17:00:00

Opening date: 07 November 2017

2nd stage Deadline: 04 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SC5-12-2018: EU-India water co-operation](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 07 November 2017

Deadline: 27 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SC5-13-2018-2019: Strengthening international cooperation on sustainable urbanisation: nature-based solutions for restoration and rehabilitation of urban ecosystems](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Opening date: 14 November 2018

Deadline: 19 February 2019 17:00:00

2nd stage Deadline: 04 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SC5-13-2018-2019: Strengthening international cooperation on sustainable urbanisation: nature-based solutions for restoration and rehabilitation of urban ecosystems](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Opening date: 07 November 2017

Deadline: 27 February 2018 17:00:00

2nd stage Deadline: 04 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SC5-14-2019: Visionary and integrated solutions to improve well-being and health in cities](#)

Forthcoming

Publication date: 27 October 2017

Types of action: IA Innovation action

DeadlineModel: two-stage

Opening date: 14 November 2018

Deadline: 19 February 2019 17:00:00

2nd stage Deadline: 04 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SC5-15-2018: Strengthening the benefits for Europe of the Global Earth Observation System of Systems \(GEOSS\) - establishing 'EuroGEOSS'](#) Open

Publication date: 27 October 2017

Types of action: IA Innovation action

DeadlineModel: two-stage

Opening date: 07 November 2017

Deadline: 27 February 2018 17:00:00

2nd stage Deadline: 04 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SC5-16-2019: Development of commercial activities and services through the use of GEOSS and Copernicus data](#) Forthcoming

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 14 November 2018

Deadline: 19 February 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SC5-16-2019: Development of commercial activities and services through the use of GEOSS and Copernicus data](#) Forthcoming

Publication date: 27 October 2017

Types of action: IA Innovation action

DeadlineModel: two-stage

Opening date: 14 November 2018

Deadline: 19 February 2019 17:00:00

2nd stage Deadline: 04 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SC5-17-2018: Towards operational forecasting of earthquakes and early warning capacity for more resilient societies](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Opening date: 07 November 2017

Deadline: 27 February 2018 17:00:00

2nd stage Deadline: 04 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SC5-18-2018: Valuing nature: mainstreaming natural capital in policies and in business decision-making](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 07 November 2017

Deadline: 27 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SC5-19-2018: International network to promote cultural heritage innovation and diplomacy](#)

Open

Publication date: 27 October 2017

Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	27 February 2018 17:00:00
Opening date:	07 November 2017		
Time Zone : (Brussels time)			
Topic:	<u>SC5-20-2019: Transforming historic urban areas and/or cultural landscapes into hubs of entrepreneurship and social and cultural integration</u>		Forthcoming
Publication date:	27 October 2017		
Types of action:	IA Innovation action		
DeadlineModel:	two-stage	Deadline:	19 February 2019 17:00:00
Opening date:	14 November 2018	2nd stage Deadline:	04 September 2019 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>SC5-21-2019-2020: ERA-NET Cofund action(s) for climate action, environment, resource efficiency and raw materials</u>		Forthcoming
Publication date:	27 October 2017		
Types of action:	ERA-NET-Cofund ERA-NET Cofund		
DeadlineModel:	single-stage	Deadline:	19 February 2019 17:00:00
Opening date:	14 November 2018		
Time Zone : (Brussels time)			

CALL: MARIE SKŁODOWSKA-CURIE RESEARCH AND INNOVATION STAFF EXCHANGE

Call identifier: H2020-MSCA-RISE-2018

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Excellent Science

Work Programme Year: H2020-2018-2020

Work Programme Part: [Marie Skłodowska-Curie actions](#)
[+ More](#)

Call updates

- **22 November 2017 00:30** The submission session is now available for: MSCA-RISE-2018(MSCA-RISE)

Topic: [MSCA-RISE-2018: Research and Innovation Staff Exchange](#)

Open

Publication date: 27 October 2017

Types of action: MSCA-RISE RISE

DeadlineModel: single-stage

Opening date: 22 November 2017

Deadline: 21 March 2018 17:00:00

Time Zone : (Brussels time)

CALL: DEVELOPMENT AND LONG-TERM SUSTAINABILITY OF NEW PAN-EUROPEAN RESEARCH INFRASTRUCTURES

Call identifier: H2020-INFRADEV-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Excellent Science

Work Programme Year: H2020-2018-2020

Work Programme Part: [European research infrastructures \(including e-Infrastructures\)](#)
[- Less](#)

Call summary and aims

This call will support the development of new world-class research infrastructures which will help Europe to respond to grand challenges in science, industry and society. It will facilitate and support the implementation and long-term sustainability of the research infrastructures identified by the European Strategy Forum on Research Infrastructures (ESFRI) and of other world-class research infrastructures. In addition it will identify, through the design studies, the next generation of new research infrastructures.

[+ More](#)

Call updates

- **05 December 2017 00:30** The submission session is now available for: INFRADEV-03-2018-2019(RIA)

Topic: [INFRADEV-01-2019-2020: Design Studies](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 25 July 2019

Deadline: 12 November 2019 17:00:00

Time Zone : (Brussels time)

Topic: [INFRADEV-02-2019-2020: Preparatory Phase of new ESFRI projects](#)

Forthcoming

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 16 October 2018

Deadline: 29 January 2019 17:00:00

Time Zone : (Brussels time)

Topic: [INFRADEV-03-2018-2019: Individual support to ESFRI and other world-class research infrastructures](#) Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 14 November 2018

Deadline: 20 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [INFRADEV-03-2018-2019: Individual support to ESFRI and other world-class research infrastructures](#) Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 05 December 2017

Deadline: 22 March 2018 17:00:00

Time Zone : (Brussels time)

CALL: IMPLEMENTING THE EUROPEAN OPEN SCIENCE CLOUD

Call identifier: H2020-INFRAEOSC-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Excellent Science

Work Programme Year: H2020-2018-2020

Work Programme Part: [European research infrastructures \(including e-Infrastructures\)](#)
[- Less](#)

Call summary and aims

This call will achieve the vision put forward by the European Cloud Initiative[[COM(2016) 178 final]] and it will make the European Open Science Cloud (EOSC) a reality. In order to realise an EOSC that truly supports interdisciplinary research and Open Science, a new pan-European model for research data and related services that is both scalable and flexible needs to be put in place, so that it can be adapted to the emerging needs of the scientific community and support the whole research data lifecycle. The new model will build on a pan-European service access mechanism – the EOSC hub[[EOSC hub refers to the single entry access mechanism to EOSC services that will be provided by the successful proposal resulting from the call EINFRA-12-2017.]] – providing access primarily to public e-infrastructure services supplied at national, regional and institutional levels. The Call will support the setup of an appropriate governance for such a relevant endeavour, which takes into account the outcomes of previous efforts and the active contribution of all scientific stakeholders. The Call will ensure strong positioning of EOSC in the context of similar initiatives in other world regions to enhance and ‘open to the world’ international collaboration.

The Call will develop the EOSC ecosystem providing all European researchers with seamless[[Work on interoperability will take in due consideration the [European Interoperability Framework](#).]], non-discriminatory and secure access to public and commercial services and appropriate access modalities to a wider user community like industry, public sector, citizen scientists, etc. Capacity building for this ecosystem, in particular concerning storage, computing, software and other resources and services, could in the future allow piloting of innovative financial schemes and/or consider pan-European joint procurement facilitated by the EOSC governance - and implemented in close conjunction with the funders - for aggregation of demand. The coordination between national initiatives aiming at making data FAIR[[Findable, Accessible, Interoperable and Re-usable]] as well as the connection[[As indicated in the European Cloud Initiative Communication “The Commission will work with Member States to connect the priority European research infrastructures to the European Open Science Cloud”. This will include the federation of the priority European research infrastructures with and accessibility through the EOSC.]] to the EOSC of priority European Research Infrastructures, in particular the ESFRI ones, will provide access from the EOSC entry point, to a wealth of services and curated resources in a wide range of scientific domains.

Call updates

- **09 January 2018 15:36**

Please be informed that the call opening for the subtopic INFRAEOSC-05-2018-2019 (CSA) has been postponed to 08/02/2018 and the call deadline to 19/06/2018

- **05 December 2017 00:30** The submission session is now available for: INFRAEOSC-01-2018(RIA)
- **05 December 2017 00:30** The submission session is now available for: INFRAEOSC-04-2018(RIA)

Topic: <u>INFRAEOSC-01-2018: Access to commercial services through the EOSC hub</u>		Open	
Publication date:	27 October 2017		
<hr/>			
Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	22 March 2018 17:00:00
Opening date:	05 December 2017		
<hr/>			
			Time Zone : (Brussels time)
Topic: <u>INFRAEOSC-02-2019: Prototyping new innovative services</u>		Forthcoming	
Publication date:	27 October 2017		
<hr/>			
Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	29 January 2019 17:00:00
Opening date:	16 October 2018		
<hr/>			
			Time Zone : (Brussels time)
Topic: <u>INFRAEOSC-04-2018: Connecting ESFRI infrastructures through Cluster projects</u>		Open	
Publication date:	27 October 2017		
<hr/>			
Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	22 March 2018 17:00:00
Opening date:	05 December 2017		
<hr/>			
			Time Zone : (Brussels time)
Topic: <u>INFRAEOSC-05-2018-2019: Support to the EOSC Governance</u>		Forthcoming	

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 26 July 2018

Deadline: 21 November 2018 17:00:00

Time Zone : (Brussels time)

Topic: [INFRAEOSC-05-2018-2019: Support to the EOSC Governance](#)

Forthcoming

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 08 February 2018

Deadline: 19 June 2018 17:00:00

Time Zone : (Brussels time)

Topic: [INFRAEOSC-06-2019-2020: Enhancing the EOSC portal and connecting thematic clouds](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 14 November 2018

Deadline: 20 March 2019 17:00:00

ALL: MARIE SKŁODOWSKA-CURIE INDIVIDUAL FELLOWSHIPS

Call identifier: H2020-MSCA-IF-2018

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Excellent Science

Work Programme Year: H2020-2018-2020

Work Programme Part: [Marie Skłodowska-Curie actions](#)

Topic: [MSCA-IF-2018: Individual Fellowships](#)

Forthcoming

Publication date: 27 October 2017

Types of action: MSCA-IF-GF Global Fellowships
MSCA-IF-EF-ST Standard European Fellowships
MSCA-IF-EF-SE Society and Enterprise panel
MSCA-IF-EF-RI Reintegration panel
MSCA-IF-EF-CAR Career Restart panel

DeadlineModel: single-stage

Opening date: 12 April 2018

Deadline: 12 September 2018 17:00:00

Time Zone : (Brussels time)

CALL: MARIE SKŁODOWSKA-CURIE CO-FUNDING OF REGIONAL, NATIONAL AND INTERNATIONAL PROGRAMMES

Call identifier: H2020-MSCA-COFUND-2018

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Excellent Science

Work Programme Year: H2020-2018-2020

Work Programme Part: [Marie Skłodowska-Curie actions](#)

Topic: [MSCA-COFUND-2018: Co-funding of regional, national and international programmes](#)

Forthcoming

Publication date: 27 October 2017

Types of action:	MSCA-COFUND-FP Fellowship programmes MSCA-COFUND-DP Doctoral programmes		
DeadlineModel:	single-stage	Deadline:	27 September 2018 17:00:00
Opening date:	12 April 2018		

CALL: DEMONSTRATING THE ROLE OF RESEARCH INFRASTRUCTURES IN THE TRANSLATION OF OPEN SCIENCE INTO OPEN INNOVATION

Call identifier: H2020-INFRAINNOV-2019-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Excellent Science

Work Programme Year: H2020-2018-2020

Work Programme Part: [European research infrastructures \(including e-Infrastructures\)](#)
[- Less](#)

Call summary and aims

This call will foster the innovation potential of research infrastructures by increasing the involvement of industry (including SMEs) in the development of research infrastructures, and making industry more aware of the opportunities offered by research infrastructure to improve their products, e.g. as experimental test facilities, innovation hubs, knowledge-based centres. By working with research infrastructures on the development of advanced technologies industry can raise its technological level and competitiveness.

Innovation activities by research infrastructures are, in addition to this call, also supported in all relevant parts of the work programme.

Topic: [INFRAINNOV-01-2019: Stimulate the innovation potential of SMEs](#)

Forthcoming

Publication date: 27 October 2017

Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	29 January 2019 17:00:00
Opening date:	16 October 2018		
<hr/>			
			Time Zone : (Brussels time)
Topic:	<u>INFRAINNOV-02-2019: Network of research infrastructure Industrial Liaison and Contact Officers</u>		Forthcoming
Publication date:	27 October 2017		
<hr/>			
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	20 March 2019 17:00:00
Opening date:	14 November 2018		
<hr/>			

CALL: FET PROACTIVE – BOOSTING EMERGING TECHNOLOGIES

Call identifier: H2020-FETPROACT-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Excellent Science

Work Programme Year: H2020-2018-2020

Work Programme Part: [Future and Emerging Technologies](#)
[- Less](#)

Call summary and aims

FET Proactive aims to identify the future and emerging technological paradigms with highest potential for Europe's economy and society. For each of them, it looks to establish a broad and solid European basis in terms of knowledge, key technological building blocks and interdisciplinary communities. By reaching out well beyond the research world, it ensures that Europe has the best 'first mover' position to capitalise rapidly and effectively on emerging societal and industrial opportunities.

The indicative funding budgets per sub-topic under FETPROACT-01-2018 are as follows: EUR 15.00 million for sub-topic a., EUR 13 million for sub-topic b., EUR 20 million for sub-topic c., EUR 15 million for sub-topic d., EUR 15 million for sub-topic e., and EUR 10 million for sub-topic f.

It is expected that this call will continue in 2020.

[+ More](#)

Call updates

- **31 October 2017 14:26** The submission session is now available for: FETPROACT-01-2018(RIA), FETPROACT-02-2018(CSA)

Topics and submission service

To access the **Submission Service**, please **select the TOPIC** of your interest and then open the Submission Service tab.
To access **existing draft proposals**, please login to the portal and select My Proposals from the My Area menu.

Topic: FETPROACT-01-2018: FET Proactive: emerging paradigms and communities		Open	
Publication date:	27 October 2017		
<hr/>			
Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	22 March 2018 17:00:00
Opening date:	31 October 2017		
<hr/>			
			Time Zone : (Brussels time)
Topic: FETPROACT-02-2018: Community building in Neuromorphic Computing Technologies		Open	
Publication date:	27 October 2017		

Types of action: CSA Coordination and support action
DeadlineModel: single-stage
Opening date: 31 October 2017

Deadline: 22 March 2018 17:00:00

Time Zone : (Brussels time)

Topic: [FETPROACT-03-2018: FET ERA-NET Cofund](#)

Forthcoming

Publication date: 27 October 2017

Types of action: ERA-NET-Cofund ERA-NET Cofund
DeadlineModel: single-stage
Opening date: 05 June 2018

Deadline: 18 December 2018 17:00:00

Time Zone : (Brussels time)

CALL: DIGITISING AND TRANSFORMING EUROPEAN INDUSTRY AND SERVICES: DIGITAL INNOVATION HUBS AND PLATFORMS

Call identifier: H2020-DT-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Industrial Leadership

Work Programme Year: H2020-2018-2020

Work Programme Part: [Information and Communication Technologies](#)
[- Less](#)

Call summary and aims

It is expected that this call will continue in 2020.

Drawing on the success of actions of previous work programmes leveraging cascading grants to enable agility and reach out to new or key actors in the innovation chain (such as SMEs and mid-caps) not necessarily involved in standard EU R&I projects, part of the budget allocated to digital innovation hubs as well as to platforms and pilots actions under this call will be dedicated to the support of experiments and smaller projects funded through financial support to third parties (in accordance with article 137 of the Financial Regulation). While their size will be small in comparison with standard Horizon 2020 actions, in line with article 23 (7) of the Rules for Participation the budget to be allocated per third party may exceed the default maximum amount foreseen in the Financial Regulation. Specific limits corresponding to the specific objectives to be addressed, and to the consequent expected scale and duration of the activities to be carried out by third parties are provided for the topics DT-ICT-01-2019, DT-ICT-02-2018, DT-ICT-07-2018-2019, DT-ICT-08-2019, DT-ICT-10-2018-2019, DT-ICT-11-2018-2019.

Introduction

In April 2016, the Commission issued a communication[[COM(2016)180 final – 'Digitising European Industry - Reaping the full benefits of a Digital Single Market']] outlining its strategy for allowing the European Union to fully seize the opportunities offered by digitisation across industrial and services sectors. Beyond the support to key technological areas, an essential aspect is to foster the uptake of digital technologies and innovations, as well as synergies with other key enabling technologies.

The '**digitising and transforming European industry and services**' focus area ambitions to support Horizon 2020's contribution to the implementation of this strategy, through projects cutting across technological boundaries and reinforcing links between LEIT and Societal Challenges.

To that end, the focus area will be mainly implemented with the two following types of activities:

1. **digital innovation hubs**, which provide easy access to the latest digital innovations and experimentation facilities to potential users,
2. **cross-sectorial and integrated digital platforms and large-scale pilots** for experimentation and co-creation with users.

For more details about the impact of the focus area, please refer to the annex 1 of the general introduction to the work programme.

Support to Hubs

The following information is relevant for the entire 'Support to Hubs' section of the Work Programme, i.e. topics **DT-ICT-01 to DT-ICT-06** inclusive.

[The Digitising European Industry Strategy](#) aims to ensure that any business in Europe has access to a Digital Innovation Hub at ‘a working distance’. A Digital Innovation Hub (DIH) helps companies become more competitive by improving their business/production processes as well as products and services by means of digital technology. DIHs offer services to test and experiment with advanced technologies, to manufacture innovative products or act as broker between user companies and technology suppliers.

Many components of Digital Innovation Hubs already exist supported for examples by Member States, regions or the knowledge and innovation communities (KIC) of EIT. Through the focus area on 'digitising and transforming European industry and services', the European Commission is adding value to these investments by supporting highly innovative experimentation with a cross-border dimension. To qualify for support, the following is required:

1. Consortia participating in the call should demonstrate that they are deeply rooted in innovation ecosystems that offer digital transformation services to companies in their proximity. They should provide a clear analysis how the proposed project will add value to an already existing service offer, and how it is aligned with the national or regional digitisation of industry initiative .
2. Every project should support a critical mass of dedicated highly innovative, cross border experiments bringing together technology suppliers and users. At least 50% of the budget should directly benefit SMEs or slightly bigger companies. For grants awarded under topics DT-ICT-01-2019, DT-ICT-02-2018, DT-ICT-03-2020, DT-ICT-04-2020, DT-ICT-05-2020 beneficiaries may provide support to third parties as described in part K of the General Annexes of the Work Programme. The support to third parties can only be provided in the form of grants. The respective options of Article 15.1 and Article 15.3 of the Model Grant Agreement will be applied.
3. Activities should aim at long-term sustainability and include a business plan for the digital innovation hubs, a plan to attract investors, to address training and skills development needs and dissemination. Established networks reaching out to SMEs like the Enterprise Europe Network and the NCP network should be used.
4. Selected projects are expected to collaborate on building a network of Digital Innovation Hubs, covering most regions in Europe.

In addition to the topics described underneath hubs will also be called in the topic **DT-RUR-12-2018: ICT Innovation agriculture – Digital Innovation Hubs for Agriculture** [Topic published under the Societal Challenge 2 Work Programme "Food Security, sustainable agriculture and forestry, marine, maritime and inland water research and the bio economy"].

Platforms and Pilots

The following information is relevant for the entire 'Platforms and Pilots' section of the Work Programme, i.e. topics **DT-ICT-07 to DT-ICT-13** inclusive.

The Digitising European Industry initiative includes the launch of a set of initiatives supporting the building of the digital industrial platforms of the future [COM(2016) 180 final, 19 April 2016]. European industry needs to come to agreements on functions and interfaces for those platforms, reference architectures and interaction protocols that have the potential to create markets and market opportunities leading to ecosystems and standards.

Proposals are expected to make a significant step forward in platform building, interoperability between existing platforms, integration of relevant digital technologies such as IoT, AI, photonics, robotics, cloud and Big Data, and validation via pilots and experimentation facilities. Starting from suitable reference architectures, platform interfaces are defined, tested via piloting, supported via ecosystem building to prepare their roll-out, and evolved into standards.

Various platform development activities exist at EU or national level, e.g. the Reference Architectural Model Industrie 4.0 (RAMI 4.0) and the Industrial Data Space. To develop the next-generation digital platforms, proposals need to bring various initiatives together and act as linking pins. Proposals should build on existing platforms, pilot sites, testbeds, and experimental environments that have been developed in these various initiatives when applicable [Relevant ongoing initiatives at EU level include the set of Large Scale Pilots called for under the Internet of Things Focus Area in 2016 (IoT-01-2016) and the Factories of the Future projects under FoF-11-2016.].

Proposals need to address all of the following four activities, namely platform building, large-scale piloting, ecosystem building, and standardisation.

In platform building, proposals need to develop next-generation digital platforms, which build on the state-of-the-art, reuse what is available, and integrate different technologies, such as IoT, AI, robotics, cloud and Big Data. Platforms should aim at openness and interoperability between platforms to avoid lock-in, preventing dominant positions of individual players, and comply with standards and regulation. Proposals need to target solutions for SMEs and mid-caps, taking into account interoperability with emerging and future solutions. This may require the mapping of reference architecture models for integrating existing sectorial platforms. The interfaces of the platform need to be described via open specifications and reference implementations need to be developed. A major aim is to offer platform functionalities that can be generically reused in multiple contexts to support various types of applications and services.

In large-scale piloting, pilots are set up that make use of the digital platforms, develop prototype applications on top of the platforms, and validate the platforms in both reduced, controlled environments and in real-life use cases. Pilots may adapt platforms to specific application needs and validate their relevance for such needs, in order to foster take-up and large scale deployment. The pilots should cover innovative application scenarios with high socio-economic impact. Demonstration of cooperation between large-scale pilots in different domains and combination of services from different sectors/domains are welcome. The key need is to deliver interoperable solutions that provide an experience that customers or businesses require, to test them in complex regulatory environments, and to give guidance for secure and safe implementation.

In ecosystem building, the take-up of digital platforms is fostered by expanding the ecosystem of players involved and through opportunities for entrepreneurs by promoting new market openings allowing also smaller and newer players to capture value. For instance, small and innovative ICT players can develop services/applications with a clear societal and economic value, on top of the digital platforms. Moreover, additional small-scale pilots can be conducted by SMEs, validating the digital platforms and prototype applications. Experiments running on top of the pilots, under specific scenarios, will allow for the validation and acceptance by any actors in the ecosystem and users in particular.

In standardisation, contributions should be made to suitable standardisation bodies or pre-normative activities, as outlined in the Communication on Priorities of ICT Standardisation for the Digital Single Market [COM(2016) 176 final, 19 April 2016].

Projects for grants awarded under topics DT-ICT-07-2018-2019, DT-ICT-08-2019, DT-ICT-09-2020, DT-ICT-10-2019, DT-ICT-11-2019, DT-ICT-12-2020, and DT-TDS-01-2019 (located in the SC1-Health, demographic change and wellbeing part of the Work programme) should support a critical mass of large-scale piloting and ecosystem building activities. For these grants, beneficiaries may strengthen these activities by providing financial support to third parties in line with the conditions set out in part K of the General Annexes of the Work Programme. Consortia need to define the selection process of organisations, for which financial support will be granted (typically in the order of EUR 50 000 – 150 000 per third party [In line with Article 23 (7) of the Rules for Participation the amounts referred to in Article 137 of the Financial Regulation may be exceeded when this is necessary to achieve the objectives of the action.]). Maximum 20% of the EU funding can be allocated to this purpose. The financial support to third parties can only be provided in the form of grants. The respective options of Article 15.1 and Article 15.3 of the Model Grant Agreement will be applied.

Proposals should contain an outline business case and industrial exploitation strategy. They also need to define clear business models and justify how the results support those business models.

Expected Impact

Projects are expected to have a high impact on citizens, industry, businesses or public services. In particular:

- Increased prospects for future digital industrial platforms by validation of technological choices, sustainability and reproducibility, of architecture models, standards, and interoperability, as well as of verification of non-functional characteristics such as security and privacy.
- Strengthened links with other, bottom-up programmes and initiatives, supported by regional, national and European policies and funds.
- Increased number of services and applications operated by European companies, especially small businesses and entrepreneurs.
- Significant and measureable contribution to standards or pre-normative activities.
- Increased number of platforms, applications, business processes and innovative business models validated via large-scale piloting.
- Emergence of sustainable ecosystems around digital platforms.

Proposals should describe how the proposed work will contribute to the impact criteria above, in addition to the expected impacts under the specific topic addressed, and provide KPIs, the baseline and targets to measure impact.

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Call updates

- **18 January 2018 14:14**

The proposal templates part B section 4-5, related to the innovation actions of the topics DT-ICT-02-2018 and DT-ICT-07-2018, have been amended to include point 4.3. Financial support to third parties (FSTP). We kindly request you to use this new version of the templates for your proposals.

- **31 October 2017 00:34** The submission session is now available for: DT-ICT-07-2018-2019(IA), DT-ICT-02-2018(IA-CSA), DT-ICT-06-2018(CSA)

Topic: [DT-ICT-01-2019: Smart Anything Everywhere](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Digitising and transforming European industry and services (DT)

Types of action: IA Innovation action
CSA Coordination and support action

DeadlineModel: single-stage
Opening date: 16 October 2018
Deadline: 02 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [DT-ICT-02-2018: Robotics - Digital Innovation Hubs \(DIH\)](#) Open

Publication date: 27 October 2017

Focus area: Digitising and transforming European industry and services (DT)

Types of action: IA Innovation action
CSA Coordination and support action

DeadlineModel: single-stage
Opening date: 31 October 2017
Deadline: 17 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [DT-ICT-06-2018: Coordination and Support Activities for Digital Innovation Hub network](#) Open

Publication date: 27 October 2017

Focus area: Digitising and transforming European industry and services (DT)

Types of action: CSA Coordination and support action

DeadlineModel: single-stage
Opening date: 31 October 2017
Deadline: 17 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: <u>DT-ICT-07-2018-2019: Digital Manufacturing Platforms for Connected Smart Factories</u>		Forthcoming	
Publication date:	27 October 2017		
Focus area:	Digitising and transforming European industry and services (DT)		
<hr/>			
Types of action:	IA Innovation action CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	02 April 2019 17:00:00
Opening date:	16 October 2018		
<hr/>			
			Time Zone : (Brussels time)
Topic: <u>DT-ICT-07-2018-2019: Digital Manufacturing Platforms for Connected Smart Factories</u>		Open	
Publication date:	27 October 2017		
Focus area:	Digitising and transforming European industry and services (DT)		
<hr/>			
Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	17 April 2018 17:00:00
Opening date:	31 October 2017		
<hr/>			
			Time Zone : (Brussels time)
Topic: <u>DT-ICT-08-2019: Agricultural digital integration platforms</u>		Forthcoming	
Publication date:	27 October 2017		
Focus area:	Digitising and transforming European industry and services (DT)		
<hr/>			
Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	14 November 2018 17:00:00
Opening date:	26 July 2018		

Time Zone : (Brussels time)

Topic: [DT-ICT-10-2018-19: Interoperable and smart homes and grids](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Digitising and transforming European industry and services (DT)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 26 July 2018

Deadline: 14 November 2018 17:00:00

Time Zone : (Brussels time)

Topic: [DT-ICT-11-2019: Big data solutions for energy](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Digitising and transforming European industry and services (DT)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 16 October 2018

Deadline: 02 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [DT-ICT-13-2019: Digital Platforms/Pilots Horizontal Activities](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Digitising and transforming European industry and services (DT)

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 26 July 2018

Deadline: 14 November 2018 17:00:00

CALL: FET PROACTIVE – HIGH PERFORMANCE COMPUTING

Call identifier: H2020-FETHPC-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Excellent Science

Work Programme Year: H2020-2018-2020

Work Programme Part: [Future and Emerging Technologies](#)

Call summary and aims

The HPC FET Proactive initiative aims to create a world-class European HPC ecosystem, by developing leading-class technology and solutions towards exascale performance for ambitious scientific/engineering applications and services. By benefiting from the convergence of HPC, Big Data and Cloud Computing technologies, the HPC ecosystem will provide innovative, usable and competitive solutions that will upraise Europe's scientific capabilities and industrial competitiveness.

In April 2016, as part of its Digitising European Industry[[COM(2016) 180 final]] strategy, the Commission adopted the communication *European Cloud Initiative - Building a competitive data and knowledge economy in Europe*[[COM(2016) 178 final]], which was endorsed by the European Council in June 2016. The initiative aims to create, a **leading European High Performance Computing and Big Data (HPC/BD) research and industrial ecosystem by 2023** underpinned by a world-class European Data Infrastructure offering high performance computing and data capabilities, fast connectivity and high-capacity cloud solutions.

A synergetic approach for HPC technologies is promoted, which is complementary to relevant activities covered in the LEIT and eINFRA work programmes 2018-2020 and are called in the framework of the Public Private Partnership (PPP) on HPC with the ETP4HPC Association (European Technology Platform in HPC).

It is expected that this call will continue in 2020.

Topic: [FETHPC-01-2018: International Cooperation on HPC](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 01 February 2018

Deadline: 15 May 2018 17:00:00

Time Zone : (Brussels time)

Topic: [FETHPC-02-2019: Extreme scale computing technologies, methods and algorithms for key applications and support to the HPC ecosystem](#) Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action
CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 07 May 2019

Deadline: 24 September 2019 17:00:00

Time Zone : (Brussels time)

CALL: FET OPEN – NOVEL IDEAS FOR RADICALLY NEW TECHNOLOGIES

Call identifier: H2020-FETOPEN-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Excellent Science

Work Programme Year: H2020-2018-2020

Work Programme Part: [Future and Emerging Technologies](#)
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Call summary and aims

FET Open aims to establish European leadership in the early exploration of future technologies. It looks for opportunities of long-term benefit for citizens, the economy and society. It aims to mobilise Europe's most creative and forward thinking researchers from all disciplines to work together and explore what may become the leading technology paradigms of the future.

FET Open supports early stage science and technology research exploring new foundations for radically new future technologies by challenging current paradigms and venturing into unknown areas. A bottom-up selection process widely open to any research idea builds up a diverse portfolio of new research directions. Early detection of promising new areas, developments and trends, along with attracting new and high-potential research and innovation players, are key factors.

FET Open combines high scientific ambition with concrete technological implications. It aims to attract interdisciplinary consortia that do not shy away from exploring connections between remote disciplines in order to open-up new and potentially game changing technological directions that FET as a whole aims to develop into the leading technology paradigms of the future, including through FET-Proactive projects and FET-Flagship initiatives. In spite of the high initial risk, the long-term impact can be enormous: these new technologies can become the core for new high-growth companies, for new industries or for radically new ways of tackling societal challenges.

The FET-Open call is a part of the European Innovation Council (EIC) pilot. It provides the EIC with a bold exploratory engine that shatters the frontiers of current thinking. All FET-Open projects, even if far from today's markets, are full of great ideas to inspire the entrepreneurial minds that the EIC attracts. While keeping its own identity of excellence in science and technology research, the exposure of FET Open within the EIC allows new and sometimes unexpected opportunities to be detected and picked up early on. For those cases, the FET Innovation Launchpad is designed to assist in the first steps to accelerate the real-world impact of a result from FET research – a win-win for both research and innovation. Other parts of the EIC provide further tools for achieving high impact on society and/or the economy. Furthermore, by being part of the EIC pilot, FET-Open participants have access to the assistance, networking and financing possibilities offered by the EIC thus further increasing the leverage and increased impact from the initial high-risk investment in FET projects.

The call opens at 17.00.00 Brussels local time on the opening date.

The total indicative budget for the FET-Open topic FETOPEN-01-2018-2019-2020 is EUR 647,50 million. The indicative funding budgets available per cut-off date for this topic are as follows:

1. Cut-off date 16/05/2018: EUR 123,70 M€
2. Cut-off date 24/01/2019: EUR 160,40 M€
3. Cut-off date 18/09/2019: EUR 160,40 M€
4. Cut-off date 13/05/2020: EUR 203,00 M€

EUR 57,50 million from the 2018 budget will be used to fund in part the last cut-off of the Horizon 2020 FETOPEN-2016-2017 call under the FET workprogramme 2016-2017.

It is expected that this call will continue in 2020.

The indicative budget available for the FET-Open topic FETOPEN-02-2018 is EUR 2,00 million with the cut-off date 11/04/2018.

The total indicative budget for the FET-Open topic FETOPEN-03-2018-2019-2020 is EUR 8,20 million. The indicative funding budgets available per cut-off date for this topic are as follows:

1. Cut-off date 16/10/2018: EUR 2,50 M€
2. Cut-off date 08/10/2019: EUR 2,70 M€
3. Cut-off date 14/10/2020: EUR 3,00 M€

Call updates

- **07 November 2017 17:36** The submission session is now available for: FETOPEN-03-2018-2019-2020(CSA)
- **07 November 2017 17:02** The submission session is now available for: FETOPEN-02-2018(CSA)
- **07 November 2017 17:01** The submission session is now available for: FETOPEN-01-2018-2019-2020(RIA)

Topic: [FETOPEN-01-2018-2019-2020: FET-Open Challenging Current Thinking](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel:	multiple cut-off	Cut-off dates:	16 May 2018 17:00:00
Opening date:	07 November 2017		24 January 2019 17:00:00
			18 September 2019 17:00:00
			13 May 2020 17:00:00
<hr/>			
			Time Zone : (Brussels time)
Topic:	<u>FETOPEN-02-2018: FET-Open Coordination and Support Actions</u>		Open
Publication date:	27 October 2017		
<hr/>			
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	11 April 2018 17:00:00
Opening date:	07 November 2017		
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			Time Zone : (Brussels time)
Topic:	<u>FETOPEN-03-2018-2019-2020: FET Innovation Launchpad</u>		Open
Publication date:	27 October 2017		
<hr/>			
Types of action:	CSA Coordination and support action		
DeadlineModel:	multiple cut-off	Cut-off dates:	16 October 2018 17:00:00
Opening date:	07 November 2017		08 October 2019 17:00:00
			14 October 2020 17:00:00
<hr/>			
			Time Zone : (Brussels time)

CALL: BETTER HEALTH AND CARE, ECONOMIC GROWTH AND SUSTAINABLE HEALTH SYSTEMS

Call identifier: H2020-SC1-BHC-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Societal Challenges

Work Programme Year: H2020-2018-2020

Work Programme Part: [Health, demographic change and wellbeing](#)
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Call summary and aims

This call will aim at reconciling better health and healthy ageing with the need to develop sustainable health and care systems and growth opportunities for the health and care related industries. The scope of the call may range from prevention, diagnosis, stratified approaches, predictive toxicology, the development of novel and repurposed therapeutic approaches, including medical technologies and advanced therapies, cohorts and registries-based research, to integration of care and systemic digital solutions for health and ageing well. It aims to translate new knowledge into innovative applications and accelerate large-scale uptake and deployment in different health and care settings, making health and care systems and services more accessible, responsive and efficient in Europe and beyond. To this end, the inclusion of private companies and other innovators in the projects is encouraged.

Research areas to be addressed under this priority will implement and provide the evidence base for global and EU policies mentioned as 'policy drivers in the Introduction'. .

This call will be implemented through five main priorities:

1. Personalised medicine
2. Innovative health and care industry
3. Infectious diseases and improving global health
4. Innovative health and care systems - Integration of care
5. Decoding the role of the environment, including climate change, for health and well-being

In recognition of the opening of the US National Institutes of Health's programmes to European researchers, any legal entity established in the United States of America is eligible to receive Union funding to support its participation in projects supported under the following topics: SC1-BHC-01-2019, SC1-BHC-02-2019, SC1-BHC-03-2018, SC1-BHC-04-2018, SC1-BHC-05-2018, SC1-HCO-01-2018-2019-2020, SC1-HCO-02-2018, SC1-HCO-04-2018, SC1-BHC-07-2019, SC1-BHC-09-2018, SC1-BHC-10-2019, SC1-HCO-05-2018, SC1-BHC-13-2019, SC1-BHC-14-2019, SC1-BHC-15-2018, SC1-BHC-16-2018, SC1-BHC-18-2018, SC1-BHC-19-2019, SC1-BHC-21-2018, SC1-HCO-06-2018, SC1-HCO-08-2018, SC1-HCO-09-2018, SC1-HCO-10-2018, SC1-HCO-11-

2018, SC1-BHC-22-2019, SC1-BHC-23-2018, SC1-BHC-25-2019, SC1-BHC-26-2018, SC1-HCO-12-2018, SC1-BHC-27-2018, SC1-BHC-28-2019, and SC1-HCO-13-2018

Beneficiaries in grants signed under this call will be allowed to charge the cost of clinical studies on the basis of unit costs established in line with a methodology set up in the Commission Decision C(2016) 7553, which is available on the Participant Portal.

Beneficiaries in grants signed under this call may be required by the European Commission, in the context of a public health emergency, to provide timely open access or access rights to research data which are relevant for addressing a public health emergency. Therefore the relevant option of Article 29.3 of the Horizon 2020 Model Grant Agreement will be applied. It is expected that quality-controlled data are shared in accordance with the FAIR[[<https://www.force11.org/group/fairgroup/fairprinciples>]] principles.

[- Less](#)

Call updates

- **07 November 2017 00:30** The submission session is now available for: SC1-HCO-02-2018(CSA), SC1-HCO-13-2018(CSA), SC1-HCO-05-2018(CSA), SC1-HCO-06-2018(CSA), SC1-HCO-08-2018(CSA), SC1-HCO-09-2018(CSA), SC1-HCO-10-2018(CSA), SC1-HCO-11-2018(CSA), SC1-BHC-16-2018(RIA), SC1-HCO-01-2018-2019-2020(CSA), SC1-BHC-21-2018(RIA), SC1-BHC-18-2018(RIA), SC1-BHC-27-2018(RIA), SC1-BHC-26-2018(RIA), SC1-BHC-23-2018(RIA), SC1-BHC-05-2018(RIA), SC1-HCO-04-2018(ERA-NET-Cofund), SC1-BHC-09-2018(RIA), SC1-HCO-12-2018(CSA), SC1-BHC-03-2018(RIA), SC1-BHC-04-2018(COFUND-EJP)
- **07 November 2017 00:30** The submission session is now available for: SC1-BHC-15-2018(RIA)

Topic: [SC1-BHC-01-2019: Understanding causative mechanisms in co- and multimorbidities](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline:

02 October 2018 17:00:00

Opening date: 26 July 2018

2nd stage Deadline: 16 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-BHC-02-2019: Systems approaches for the discovery of combinatorial therapies for complex disorders](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 02 October 2018 17:00:00

Opening date: 26 July 2018

2nd stage Deadline: 16 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-BHC-03-2018: Exploiting research outcomes and application potential of the human microbiome for personalised prediction, prevention and treatment of disease](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Deadline: 18 April 2018 17:00:00

Opening date: 07 November 2017

Time Zone : (Brussels time)

Topic: [SC1-BHC-04-2018: Rare Disease European Joint Programme Cofund](#)

Open

Publication date: 27 October 2017

Types of action: COFUND-EJP COFUND (European Joint Programme)

DeadlineModel: single-stage

Deadline: 18 April 2018 17:00:00

Opening date: 07 November 2017

Time Zone : (Brussels time)

Topic:

[SC1-BHC-05-2018: International flagship collaboration with Canada for human data storage, integration and sharing to enable personalised medicine approaches](#)

Open

Publication date:

27 October 2017

Types of action:

RIA Research and Innovation action

DeadlineModel:

single-stage

Deadline:

18 April 2018 17:00:00

Opening date:

07 November 2017

Time Zone : (Brussels time)

Topic:

[SC1-BHC-07-2019: Regenerative medicine: from new insights to new applications](#)

Forthcoming

Publication date:

27 October 2017

Types of action:

RIA Research and Innovation action

DeadlineModel:

single-stage

Deadline:

16 April 2019 17:00:00

Opening date:

26 July 2018

Time Zone : (Brussels time)

Topic:

[SC1-BHC-09-2018: Innovation platforms for advanced therapies of the future](#)

Open

Publication date:

27 October 2017

Types of action:

RIA Research and Innovation action

DeadlineModel:

single-stage

Deadline:

18 April 2018 17:00:00

Opening date:

07 November 2017

Time Zone : (Brussels time)

Topic: [SC1-BHC-10-2019: Innovation Procurement: Next generation sequencing \(NGS\) for routine diagnosis](#) Forthcoming

Publication date: 27 October 2017

Types of action: PCP Pre-Commercial Procurement

DeadlineModel: single-stage

Opening date: 26 July 2018

Deadline: 16 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-BHC-13-2019: Mining big data for early detection of infectious disease threats driven by climate change and other factors](#) Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 26 July 2018

Deadline: 16 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-BHC-14-2019: Stratified host-directed approaches to improve prevention, treatment and/or cure of infectious diseases](#) Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Opening date: 26 July 2018

Deadline: 02 October 2018 17:00:00

2nd stage Deadline: 16 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-BHC-15-2018: New anti-infective agents for prevention and/or treatment of neglected infectious](#) Open

[diseases \(NID\)](#)

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Deadline: 06 February 2018 17:00:00

Opening date: 07 November 2017

2nd stage Deadline: 04 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-BHC-16-2018: Global Alliance for Chronic Diseases \(GACD\) - Scaling-up of evidence-based health interventions at population level for the prevention and management of hypertension and/or diabetes](#) Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Deadline: 18 April 2018 17:00:00

Opening date: 07 November 2017

Time Zone : (Brussels time)

Topic: [SC1-BHC-18-2018: Translational collaborative cancer research between Europe and the Community of Latin American and Caribbean States \(CELAC\)](#) Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Deadline: 18 April 2018 17:00:00

Opening date: 07 November 2017

Time Zone : (Brussels time)

Topic: [SC1-BHC-19-2019: Implementation research for maternal and child health](#) Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Opening date: 26 July 2018

Deadline: 02 October 2018 17:00:00

2nd stage Deadline: 16 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-BHC-21-2018: Research on HIV, tuberculosis \(TB\) and/or hepatitis C \(HCV\) in patients with mono-, co-infections and/or comorbidities in the context of fostering collaboration with the Russian Federation](#) Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 07 November 2017

Deadline: 18 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-BHC-22-2019: Mental health in the workplace](#) Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Opening date: 26 July 2018

Deadline: 02 October 2018 17:00:00

2nd stage Deadline: 16 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-BHC-23-2018: Novel patient-centred approaches for survivorship, palliation and/or end-of-life care](#) Open

Publication date: 27 October 2017

Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	18 April 2018 17:00:00
Opening date:	07 November 2017		
Time Zone : (Brussels time)			
Topic:	<u>SC1-BHC-25-2019: Demonstration pilots for implementation of personalised medicine in healthcare</u>		Forthcoming
Publication date:	27 October 2017		
Types of action:	IA Innovation action		
DeadlineModel:	two-stage	Deadline:	02 October 2018 17:00:00
Opening date:	26 July 2018	2nd stage Deadline:	16 April 2019 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>SC1-BHC-26-2018: HTA research to support evidence-based healthcare</u>		Open
Publication date:	27 October 2017		
Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	18 April 2018 17:00:00
Opening date:	07 November 2017		
Time Zone : (Brussels time)			
Topic:	<u>SC1-BHC-27-2018: New testing and screening methods to identify endocrine disrupting chemicals</u>		Open
Publication date:	27 October 2017		
Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	18 April 2018 17:00:00

Opening date: 07 November 2017

Time Zone : (Brussels time)

Topic: [SC1-BHC-28-2019: The Human Exposome Project: a toolbox for assessing and addressing the impact of environment on health](#) Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 26 July 2018

Deadline: 16 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-HCO-01-2018-2019-2020: Actions in support of the International Consortium for Personalised Medicine](#) Forthcoming

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 26 July 2018

Deadline: 16 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-HCO-01-2018-2019-2020: Actions in support of the International Consortium for Personalised Medicine](#) Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Deadline: 18 April 2018 17:00:00

Opening date: 07 November 2017

Time Zone : (Brussels time)

Topic: [SC1-HCO-02-2018: Data integration and data-driven in-silico models for enabling personalised medicine - a European standardization framework](#) Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 07 November 2017

Deadline: 18 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-HCO-04-2018: ERA-NET to support the Joint Programming in Neurodegenerative Diseases strategic plan \(JPND\)](#) Open

Publication date: 27 October 2017

Types of action: ERA-NET-Cofund ERA-NET Cofund

DeadlineModel: single-stage

Opening date: 07 November 2017

Deadline: 18 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SC1-HCO-05-2018: Strengthening regulatory sciences and supporting regulatory scientific advice](#) Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 07 November 2017

Deadline: 18 April 2018 17:00:00

Time Zone : (Brussels time)

Topic:	<u>SC1-HCO-06-2018: Establishment of an International Network of Social Sciences Research Centres to help address governance and other challenges in the preparedness for and the response to infectious threats</u>			Open
Publication date:	27 October 2017			
Types of action:	CSA Coordination and support action			
DeadlineModel:	single-stage	Deadline:	18 April 2018 17:00:00	
Opening date:	07 November 2017			

Time Zone : (Brussels time)

Topic:	<u>SC1-HCO-08-2018: Creation of a European wide sustainable clinical research network for infectious diseases</u>			Open
Publication date:	27 October 2017			
Types of action:	CSA Coordination and support action			
DeadlineModel:	single-stage	Deadline:	18 April 2018 17:00:00	
Opening date:	07 November 2017			

Time Zone : (Brussels time)

Topic:	<u>SC1-HCO-09-2018: Building international efforts on population and patient cohorts</u>			Open
Publication date:	27 October 2017			
Types of action:	CSA Coordination and support action			
DeadlineModel:	single-stage	Deadline:	18 April 2018 17:00:00	
Opening date:	07 November 2017			

Topic: [SC1-HCO-13-2018: Setting the priorities for a European environment, climate and health research agenda](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 07 November 2017

Deadline: 18 April 2018 17:00:00

Time Zone : (Brussels time)

CALL: EUROPEAN DATA INFRASTRUCTURE

Call identifier: H2020-INFRAEDI-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Excellent Science

Work Programme Year: H2020-2018-2020

Work Programme Part: [European research infrastructures \(including e-Infrastructures\)](#)

Call summary and aims

This call will support the creation of a world-class European Data Infrastructure (EDI) offering high performance computing and data capabilities, and fast connectivity.

A synergetic approach for EDI technologies is promoted, which is complementary to relevant activities covered in the LEIT-ICT and FET work programmes 2018-2020, and implemented around the following topics:

- *Support to a Pan-European High Performance Computing (HPC) infrastructure and services (PRACE)*
- *Supporting Centres of Excellence that promote the use of upcoming exascale computing capabilities*

- *Supporting the governance of the HPC and data infrastructure*
- *Support to Public Procurement of innovative HPC infrastructure systems*

[+ More](#)

Call updates

- **05 December 2017 00:30** The submission session is now available for: INFRAEDI-01-2018(RIA), INFRAEDI-02-2018(RIA-CSA), INFRAEDI-03-2018(CSA)

Topic: [INFRAEDI-01-2018: Pan-European High Performance Computing infrastructure and services \(PRACE\)](#) Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 05 December 2017

Deadline: 22 March 2018 17:00:00

Time Zone : (Brussels time)

Topic: [INFRAEDI-02-2018: HPC PPP - Centres of Excellence on HPC](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 05 December 2017

Deadline: 22 March 2018 17:00:00

Time Zone : (Brussels time)

Topic: [INFRAEDI-03-2018: Support to the governance of High Performance Computing Infrastructures](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 05 December 2017

Deadline: 22 March 2018 17:00:00

Time Zone : (Brussels time)

CALL: FAST TRACK TO INNOVATION (FTI)

Call identifier: H2020-EIC-FTI-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Industrial Leadership

Work Programme Year: H2020-2018-2020

Work Programme Part: [Towards the next EU Framework Programme for Research and Innovation: European Innovation Council \(EIC\) Pilot](#)

[- Less](#)

Call summary and aims

Innovation is fostered when new ideas can emerge and easily translate into socio-economic value, shaping new markets and laying the foundations of a stronger, high-tech industrial base for Europe.

Working together, partners with complementary backgrounds, knowledge and skills, in both new and established value-chains, can turn ideas into world-beating products, processes and services that tackle societal challenges.

FTI accelerates the market uptake of ground-breaking innovations by providing funding in an open, accessible scheme that nurtures ideas from consortia of innovators of all types and sizes from across Europe.

Proposals must relate to any field of H2020 under the specific objective "Leadership in enabling and industrial technologies" and/or to any of the specific objectives under the priority "Societal challenge".

Budget Information: The budget available will be divided equally between each cut-off date.

Call updates

- **13 December 2017 09:46**

Following the update of the proposal template part B in the proposal submission system, the proposal template as part of the reference documents for the call (part 5. under 'Topic conditions and documents') has also been updated, in line with the changes in the submission system.

- **12 December 2017 11:09**

IMPORTANT UPDATE!

The proposal submission template for the Fast Track to Innovation (FTI) – part B has been updated in the submission system.

Modifications have been made to sections 1, 2 and 3.

The changes in wording, in particular in the sections on 'Excellence' and 'Impact', now reflect:

- Better the specific objectives of the FTI in respect to standard innovation actions
- The integration of the FTI into the European Innovation Council pilot pursuing more market-creating innovation and resulting company scale-ups in Europe.

In light of the changes, we recommend you to review and adapt your proposal as appropriate.

- **07 November 2017 00:30** The submission session is now available for: EIC-FTI-2018-2020(IA)

Topic: [EIC-FTI-2018-2020: Fast Track to Innovation \(FTI\)](#)

Open

Publication date: 27 October 2017

Types of action: IA Innovation action

DeadlineModel: multiple cut-off

Opening date: 07 November 2017

Cut-off dates: 21 February 2018 17:00:00
31 May 2018 17:00:00
23 October 2018 17:00:00
21 February 2019 17:00:00
23 May 2019 17:00:00
22 October 2019 17:00:00
19 February 2020 17:00:00
09 June 2020 17:00:00
27 October 2020 17:00:00

Time Zone : (Brussels time)

CALL: SME INSTRUMENT

Call identifier: H2020-EIC-SMEINST-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Industrial Leadership

Work Programme Year: H2020-2018-2020

Work Programme Part: [Towards the next EU Framework Programme for Research and Innovation: European Innovation Council \(EIC\) Pilot](#)
[- Less](#)

- 11 January 2018 15:39

A total number of 1,163 proposals were submitted in response to the SME-2 (Phase II) January 10th 2018 cut-off (H2020-EIC-SMEINST-2-2018_10-01-2018).

- **07 November 2017 17:03** The submission session is now available for: EIC-SMEInst-2018-2020(SME-2)
- **07 November 2017 17:03** The submission session is now available for: EIC-SMEInst-2018-2020(SME-1)

Topic: [EIC-SMEInst-2018-2020: SME instrument](#)

Open

Publication date: 27 October 2017

Types of action: SME-1 SME instrument phase 1

DeadlineModel: multiple cut-off

Opening date: 07 November 2017

Cut-off dates: 08 February 2018 17:00:00
03 May 2018 17:00:00
05 September 2018 17:00:00
07 November 2018 17:00:00
13 February 2019 17:00:00
07 May 2019 17:00:00
05 September 2019 17:00:00
06 November 2019 17:00:00
12 February 2020 17:00:00
06 May 2020 17:00:00
02 September 2020 17:00:00
04 November 2020 17:00:00

Time Zone : (Brussels time)

Topic: [EIC-SMEInst-2018-2020: SME instrument](#)

Open

Publication date: 27 October 2017

Types of action: SME-2 SME instrument phase 2

DeadlineModel: multiple cut-off
Opening date: 07 November 2017

Cut-off dates: 10 January 2018 17:00:00
14 March 2018 17:00:00
23 May 2018 17:00:00
10 October 2018 17:00:00
09 January 2019 17:00:00
03 April 2019 17:00:00
05 June 2019 17:00:00
09 October 2019 17:00:00
08 January 2020 17:00:00
18 March 2020 17:00:00
19 May 2020 17:00:00
07 October 2020 17:00:00

Time Zone : (Brussels time)

CALL: CYBERSECURITY

Call identifier: H2020-SU-ICT-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Industrial Leadership

Work Programme Year: H2020-2018-2020

Work Programme Part: [Information and Communication Technologies](#)

Call summary and aims

Within the next decade cybersecurity and privacy technologies should become complementary enablers of the EU digital economy, ensuring a trusted networked ICT environment for governments, businesses and individuals. The EU ambition is to become a world leader in secure digital economy. The compliance of the European infrastructures, products and services with relevant directives/regulations (e.g. NIS[[Directive (EU) 2016/1148 of the European Parliament and of the Council of 6 July 2016 concerning measures for a high common level of security of network and information systems across the Union.]], eIDAS[[Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic

transactions in the internal market and repealing Directive 1999/93/EC.]], GDPR[[Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).]], proposal for an e-Privacy regulation) and standards will promote trust and confidence to the European consumers and providers/suppliers, paving the way for a competitive, trustworthy Digital Single Market.

The Communication on Strengthening Europe's Cyber Resilience System and Fostering a Competitive and Innovative Cybersecurity Industry[[Brussels, 5.7.2016 COM(2016) 410 final.]] shaped the main related challenges and several strategic initiatives to address them. The Cybersecurity contractual Public Private Partnership (cPPP) was established in July 2016 aiming at building trust among Member States and industry by fostering cooperation at early stages in the research and innovation process and helping to align demand and supply. It has been an important mean of consultation providing input for H2020 WP2018-2020 and it will facilitate the engagement of end-users in sectors that are important beneficiaries and customers of cybersecurity solutions (e.g. energy, transport, health, finance) towards defining and providing to the industry their sector-specific digital security, privacy and data protection common requirements. The topics below belonging to this Cybersecurity call are part of the contribution of the Commission to the cybersecurity cPPP. They also contribute to the Focus Area "Boosting the effectiveness of the Security Union".

For more details about the impact of the focus area, please refer to the annex I of the general introduction to the work programme.

Proposals under this call may be subject to security scrutiny if they could potentially lead to security-sensitive results that should be classified (see guide for classification).

Proposals under this call should consider the relevant human factor and social aspects when developing innovative solutions.

It is expected that this call will continue in 2020.

Topic: [SU-ICT-01-2018: Dynamic countering of cyber-attacks](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 15 March 2018

Deadline: 28 August 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SU-ICT-02-2020: Building blocks for resilience in evolving ICT systems](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 25 July 2019

Deadline: 19 November 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SU-ICT-03-2018: Establishing and operating a pilot for a Cybersecurity Competence Network to develop and implement a common Cybersecurity Research & Innovation Roadmap](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 01 February 2018

Deadline: 29 May 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SU-ICT-04-2019: Quantum Key Distribution testbed](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 26 July 2018

Deadline: 14 November 2018 17:00:00

Time Zone : (Brussels time)

CALL: FET FLAGSHIPS – TACKLING GRAND INTERDISCIPLINARY SCIENCE AND TECHNOLOGY CHALLENGES

Call identifier: H2020-FETFLAG-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Excellent Science

Work Programme Year: H2020-2018-2020

Work Programme Part: [Future and Emerging Technologies](#)

Call summary and aims

FET Flagships tackle grand Science and Technology challenges expected to result in 'game changing' impacts on economy and society, benefitting European citizens and paving the way for global technological and industrial leadership. Because of their ambition, their scale and their interdisciplinary nature, FET Flagships can only be realised through a long-term and sustained effort at European level, by building on large scale research cooperation across academia and industry and across national research programmes, and by mobilising Europe's best researchers around an ambitious R&D roadmap.

Under the first work programme of Horizon 2020, a Framework Partnership Agreement (FPA) has been established for each of the two running Flagships, Graphene and the Human Brain Project (HBP).

Activities in this work programme will: (i) further support the two running Flagships on the basis of their FPAs, following Specific Grant Agreements (SGAs) and other actions launched under previous work programmes; (ii) kick-start the support to the new Flagship on Quantum Technologies (QT); (iii) further support the FLAGERA and QUANTERA ERA-NETs that bring together national and

regional funding agencies from the Member States and Associated Countries in support respectively of the two running Flagships and the QT one; and (iv) include preparatory actions to prepare the ground for new candidate FET Flagship initiatives.

The indicative funding budget for area e. – Fundamental Science – under FETFLAG-03-2018 (RIA) is up to EUR 20 million.

It is expected that this call will continue in 2020.

Call updates

- **31 October 2017 00:30** The submission session is now available for: FETFLAG-02-2018(ERA-NET-Cofund)
- **31 October 2017 00:30** The submission session is now available for: FETFLAG-03-2018(RIA-CSA)
- **31 October 2017 00:30** The submission session is now available for: FETFLAG-01-2018(CSA)

Topic: [FETFLAG-01-2018: Preparatory Actions for new FET Flagships](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: two-stage

Deadline:

20 February 2018 17:00:00

Opening date: 31 October 2017

2nd stage Deadline:

18 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [FETFLAG-02-2018: ERA-NET Cofund for FET Flagships](#)

Open

Publication date: 27 October 2017

Types of action: ERA-NET-Cofund ERA-NET Cofund

DeadlineModel: single-stage

Deadline:

17 April 2018 17:00:00

Opening date: 31 October 2017

Time Zone : (Brussels time)

Topic: [FETFLAG-03-2018: FET Flagship on Quantum Technologies](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action
CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 20 February 2018 17:00:00

Time Zone : (Brussels time)

CALL: FOR A BETTER INNOVATION SUPPORT TO SMES

Call identifier: H2020-INNOSUP-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Industrial Leadership

Work Programme Year: H2020-2018-2020

Work Programme Part: [Innovation in small and medium-sized enterprises](#)

Call summary and aims

(The first part outlines the topics for 2018 and 2019 and the second part those for 2020)

Small, innovative, companies create the majority of new jobs in the European economy. Technological advances are making it easier and cheaper to start enterprises with limited own resources - but SMEs often struggle to scale up and create new jobs, including recruiting talent.

There is a wide range of public sector support through grants, subsidised loans, equity, and innovation support services. Yet SMEs are often dissatisfied with these, while at the same time the public expects a higher return from the support provided.

The following call for proposals is one element of a broader action to address these challenges and develop the ecosystem of innovation support to SMEs in Europe. Generally, the actions are designed to provide opportunities to Member States and regions to enhance their services through collaboration, and peer-learning. The emphasis is on further testing new approaches for better innovation support, such as blockchain technologies, workplace innovation, a network for Open Innovation, training on advanced manufacturing, experimentation in innovation agencies and a tool for investors in financing SMEs. These large pilot actions will consolidate the results and provide recommendations for the preparation of the next framework programme. The Enterprise Europe Network, the National Contact Points (NCPs) and the Member States are expected to continue playing an important role in implementing these pilot actions and transferring the result 'in-real-time' to their regions and managing authorities of their European Structural and Investment Funds (ESI Funds).

Call updates

- **01 February 2018 00:30** The submission session is now available for: INNOSUP-03-2018(CSA)
- **07 November 2017 18:10** The submission session is now available for: INNOSUP-09-2018(CSA)
- **07 November 2017 17:29** The submission session is now available for: INNOSUP-05-2018-2020(CSA-LS)
- **07 November 2017 09:25** The submission session is now available for: INNOSUP-01-2018-2020(IA)
- **07 November 2017 00:30** The submission session is now available for: INNOSUP-06-2018(CSA-CSA-LS)

Topic: [INNOSUP-01-2018-2020: Cluster facilitated projects for new industrial value chains](#)

Forthcoming

Publication date: 27 October 2017

Types of action: IA Innovation action

DeadlineModel: two-stage

Deadline: 03 April 2019 17:00:00

Opening date: 06 November 2018

2nd stage Deadline: 12 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [INNOSUP-01-2018-2020: Cluster facilitated projects for new industrial value chains](#)

Open

Publication date: 27 October 2017

Types of action: IA Innovation action

DeadlineModel: two-stage

Opening date: 07 November 2017

Deadline: 12 April 2018 17:00:00

2nd stage Deadline: 13 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [INNOSUP-02-2019-2020: European SME innovation Associate - pilot](#)

Forthcoming

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: multiple cut-off

Opening date: 16 October 2018

Cut-off dates: 17 January 2019 17:00:00

Time Zone : (Brussels time)

Topic: [INNOSUP-03-2018: Blockchain and distributed ledger technologies for SMEs](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 01 February 2018

Deadline: 15 May 2018 17:00:00

Time Zone : (Brussels time)

Topic: [INNOSUP-04-2019: Workplace innovation uptake by SMEs](#)

Forthcoming

Publication date: 27 October 2017

Types of action: CSA Coordination and support action
DeadlineModel: single-stage
Opening date: 16 October 2018

Deadline: 17 January 2019 17:00:00

Time Zone : (Brussels time)

Topic: [INNOSUP-05-2018-2020: Peer learning of innovation agencies](#)

Open

Publication date: 27 October 2017

Types of action: CSA-LS CSA Lump sum
DeadlineModel: multiple cut-off
Opening date: 07 November 2017

Cut-off dates: 15 March 2018 17:00:00
18 October 2018 17:00:00
13 March 2019 17:00:00
16 October 2019 17:00:00

Time Zone : (Brussels time)

Topic: [INNOSUP-06-2018: Supporting experimentation in innovation agencies](#)

Open

Publication date: 27 October 2017

Types of action: CSA-LS CSA Lump sum
CSA Coordination and support action

DeadlineModel: two-stage
Opening date: 07 November 2017

Deadline: 27 March 2018 17:00:00
2nd stage Deadline: 13 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [INNOSUP-07-2019: European Open Innovation network in advanced technologies](#)

Forthcoming

Publication date: 27 October 2017

Types of action: CSA Coordination and support action
DeadlineModel: single-stage
Opening date: 05 February 2019

Deadline: 01 August 2019 17:00:00

Time Zone : (Brussels time)

Topic: [INNOSUP-09-2018: Design and development of a tool to support and improve the decision making process of investors for financing high-growth potential innovative SMES](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action
DeadlineModel: single-stage
Opening date: 07 November 2017

Deadline: 28 February 2018 17:00:00

Time Zone : (Brussels time)

CALL: DIGITAL SECURITY

Call identifier: H2020-SU-DS-2018-2019-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Societal Challenges

Work Programme Year: H2020-2018-2020

Work Programme Part: [Secure societies - Protecting freedom and security of Europe and its citizens](#)

Call summary and aims

This Call deals with R&D and innovation towards enhancing digital security.

Proposals under this call should consider the relevant human factor and social aspects when developing innovative solutions. Where relevant, proposals should also describe how the gender dimension is taken into account in their content.

Whereas activities will have an exclusive focus on civil applications, coordination with the activities of the European Defence Agency (EDA) may be considered with possible synergies being established with projects funded by the EDA programmes[[<http://eda.europa.eu/what-we-do/eda-priorities/research-technology>]]. The complementarity of such synergies should be described comprehensively. On-going cooperation should be taken into account. Only an explicit and firm commitment from EDA-funded projects to contribute to a project may positively impact the evaluation of a proposal submitted under this work programme part.

In this Call, "standards" and "standardisation" are used in a broad sense, except where they are specifically referred to as "European standards" or "European standardisation".

For grants awarded under these topics for Innovation Action and/or Research and Innovation Action, the Commission or Agency may object to a transfer of ownership or the exclusive licensing of results to a third party established in a third country not associated to Horizon 2020. The respective option of Article 30.3 of the Model Grant Agreement will be applied.

All topics in this work programme part will be subject to security scrutiny.

It is expected that this call will continue in 2020.

Cybersecurity, Digital Privacy and data protection

The aim of this Call is to ensure society as a whole benefits from user-friendly systems on cybersecurity, digital privacy and personal data protection, enabling an active participation of citizens and organisations to their own security, privacy and personal data protection.

Trust and security are at the core of the Digital Single Market Strategy[[Communication "A Digital Single Market Strategy for Europe" of 6.5.2015 - COM(2015) 192 final]], while the fight against cybercrime is one of the three pillars of the European Agenda on Security[[Communication "The European Agenda on Security" of 28.4.2015 – COM (2015) 185 final]]. The new set of measures in the area of cybersecurity building on previous actions has been recently announced in the Joint Communication to the European Parliament and the Council "Resilience, Deterrence and Defence: Building strong cybersecurity for the EU"[[JOIN(2017) 450 final, Brussels, 13.9.2017]].

The compliance of the European infrastructures, products and services with relevant directives (e.g. NIS[[Directive (EU) 2016/1148 of the European Parliament and of the Council of 6 July 2016 concerning measures for a high common level of security of network and

information systems across the Union (NIS Directive)], Data Protection Directive for Police and Criminal Justice Authorities[[Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and on the free movement of such data, and repealing Council Framework Decision 2008/977/JHA]], regulations (e.g. eIDAS[[Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC]], GDPR[[Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)], proposal for an e-Privacy regulation[[Proposal for a Regulation of the European Parliament and of the Council - COM(2017) 10 final of 10.1.2017]] and standards (e.g. ISO27001, ISO27005) will promote trust and confidence to the European consumers and providers/suppliers, paving the way for a competitive, trustworthy Digital Single Market. Innovative solutions and services in digital security, privacy and personal data protection will open new market opportunities for the EU companies and will ensure a secure and trusted networked environment for the governments, businesses, individuals and smart things. Cybersecurity and privacy technologies will significantly contribute to strengthen the competitiveness of the EU industry and will enable its development as world leader in the global market.

The Communication on "Strengthening Europe's Cyber Resilience System and Fostering a Competitive and Innovative Cybersecurity Industry"[[COM(2016) 410 final, Brussels, 5.7.2016]] shaped the main related challenges and several strategic initiatives to address them. Established in July 2016, the contractual Public Private Partnership (cPPP) on Cybersecurity aims at building trust among Member States and industry by fostering cooperation at early stages in the research and innovation process and helping to align demand and supply. It has been an important mean of consultation for defining research and innovation priorities for 2018-2020 and it will facilitate the engagement of end-users in sectors that are important beneficiaries and customers of cybersecurity solutions (e.g. energy, transport, health, finance) towards defining and providing to the industry their sector-specific digital security, privacy and personal data protection common requirements. The topics below belonging to this Digital Security call are part of the contribution of the Commission to the Cybersecurity cPPP.

Topic: [SU-DS01-2018: Cybersecurity preparedness - cyber range, simulation and economics](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: IA Innovation action

DeadlineModel: single-stage

Deadline: 23 August 2018 17:00:00

Opening date: 15 March 2018

Time Zone : (Brussels time)

Topic: [SU-DS03-2019-2020: Digital Security and privacy for citizens and Small and Medium Enterprises and Micro Enterprises](#) Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 14 March 2019

Deadline: 22 August 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SU-DS04-2018-2020: Cybersecurity in the Electrical Power and Energy System \(EPES\): an armour against cyber and privacy attacks and data breaches](#) Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 15 March 2018

Deadline: 23 August 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SU-DS05-2018-2019: Digital security, privacy, data protection and accountability in critical sectors](#) Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 15 March 2018

Deadline: 23 August 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SU-DS05-2018-2019: Digital security, privacy, data protection and accountability in critical sectors](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: RIA Research and Innovation action
IA Innovation action

DeadlineModel: single-stage

Opening date: 14 March 2019

Deadline: 22 August 2019 17:00:00

Time Zone : (Brussels time)

CALL: PROTECTING THE INFRASTRUCTURE OF EUROPE AND THE PEOPLE IN THE EUROPEAN SMART CITIES

Call identifier: H2020-SU-INFRA-2018-2019-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Societal Challenges

Work Programme Year: H2020-2018-2020

Work Programme Part: [Secure societies - Protecting freedom and security of Europe and its citizens](#)

Call summary and aims

Threats against crowded areas and disruptions in the operation of our countries' infrastructure may limit the liberties of our citizens and put at risk the functioning of our societies and their economies. The security and resilience of Europe critical infrastructure needs to be ensured because disruptions in their operations may entail the collapse of large sectors of our activities. Threats to soft targets such as crowded areas may have less long-term physical impact, but may be highly damaging due to potentially large numbers of victims and subsequent psychological and sociological impacts.

The topics below in this Call "Protecting the infrastructure in Europe" are part of the contribution of the Commission to the Cybersecurity contractual Public Private Partnership (cPPP), established in July 2016. This cPPP will facilitate the engagement of end-user operators in sectors that are important beneficiaries and customers of cybersecurity solutions towards defining and providing to the industry their sector-specific digital security, privacy and personal data protection common requirements.

When a topic has eligibility and admissibility conditions which require the active involvement of specific entities (e.g.: operators), this means that these entities have to be participants and should be directly involved in the carrying out of the tasks foreseen in the grant. When a reference is made to "practitioners", the text refers to someone who is qualified or registered to practice a particular occupation, profession in the field of security or civil protection. Applicants should identify clearly which members of the consortium they consider "practitioners" in the specific context of their proposal, and to include a clear description of their respective role and added-value as practitioners in section 4.3 of proposal part B4-6.

Whereas activities will have an exclusive focus on civil applications, coordination with the activities of the European Defence Agency (EDA) may be considered with possible synergies being established with projects funded by the EDA programmes[[<http://eda.europa.eu/what-we-do/eda-priorities/research-technology>]]. The complementarity of such synergies should be described comprehensively. On-going cooperation should be taken into account. Only an explicit and firm commitment from EDA-funded projects to contribute to a project may positively impact the evaluation of a proposal submitted under this work programme part.

In this Call, "standards" and "standardisation" are used in a broad sense, except where they are specifically referred to as "European standards" or "European standardisation".

All topics in this work programme part will be subject to security scrutiny.

The aim of this Call is to protect and improve the resilience of critical infrastructures and soft targets.

The Commission reserves the possibility under this call to exclude a specific project from the delegation to the REA if it appears that that project would necessarily have a close link to the development of EU policies in the field of security.

Topic: [SU-INFRA01-2018-2019-2020: Prevention, detection, response and mitigation of combined physical and cyber threats to critical infrastructure in Europe](#) Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 15 March 2018

Deadline: 23 August 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SU-INFRA01-2018-2019-2020: Prevention, detection, response and mitigation of combined physical and cyber threats to critical infrastructure in Europe](#) Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 14 March 2019

Deadline: 22 August 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SU-INFRA02-2019: Security for smart and safe cities, including for public spaces](#) Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 14 March 2019

Deadline: 22 August 2019 17:00:00

Time Zone : (Brussels time)

CALL: BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: SECURE, CLEAN AND EFFICIENT ENERGY

Call identifier: H2020-LC-SC3-2018-2019-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Societal Challenges

Work Programme Year: H2020-2018-2020

Work Programme Part: [Secure, clean and efficient energy](#)

Call summary and aims

This call includes the contribution of the Horizon 2020 Societal Challenge "Secure, clean and efficient energy" to the focus area "Building a low-carbon, climate resilient future" which underpins the goals of the Paris Agreement and the "Clean Energy for all European" package, including the Communication "Accelerating Clean Energy Innovation" (COM (2016) 736) and the SET-Plan priorities, with concrete R&I actions focussing on the accelerated transformation of the energy system, and other sectors, towards carbon neutrality and climate resilience. Activities also fully contribute to the Sustainable Development Goals and the Horizon 2020 spending targets on Sustainable Development and climate action.

Achieving climate neutrality in the energy sector – while ensuring at the same time a more efficient energy use, a secure supply of energy, affordable prices and low environmental impact – is a complex endeavour which requires R&I activities on multiple fronts. Activities supported in this call should deliver:

- *on the supply side, cheaper and more performant generation technologies (e.g. renewable energy technologies) which are better integrated in various levels of the energy system;*

- *a smarter, more flexible and resilient energy system (including affordable and integrated energy storage solutions), taking into account current and future climate change adverse impacts;*
- *on the demand side, increased overall energy efficiency (e.g. in the EU's building stock) and provision of means to enable consumers to play a more active role in the energy transition;*
- *a better understanding of the specific socio-economic contexts in which the energy transition takes place which will allow to address obstacles in a more effective way;*
- *increased market-uptake of innovations, including the implementation of energy policy, the preparation for rolling-out investments, and the support for capacity-building.*

Energy efficiency

Energy efficiency needs to be considered as a source of energy in its own right. It is one of the most cost effective ways to support the transition to a low carbon economy, to prompt further investment opportunities and to create growth and employment. Putting energy efficiency first will bring down costs for consumers, reduce our import dependency and redirect investments towards the kind of infrastructure that are smart and sustainable.

An ambitious approach to energy efficiency is needed across all the sectors, but the major challenge of the next decade – in line with the ACEI priority to decarbonise the EU building stock by 2050[[COM (2016) 763]] – lies in buildings. Buildings represent 40% of energy used in the EU and the construction industry provides 18 million direct jobs in Europe, while SMEs contribute to 70% of the value added in the EU building sector. Renovating buildings adds almost twice as much value as the construction of new buildings and represents multiple benefits for building owners, occupants and the whole society. Proper valuation of these multiple benefits, supported under this call, will help to change business approach to buildings renovation ensuring flows of financing and massive investments. This, in turn, will improve living/working conditions of the Europeans, spur economic growth and create jobs.

With the transition to a decentralised and decarbonised energy system, digital smart technologies will be playing an increasingly important role. Not only that they will enable buildings and equipment in buildings to become interactive elements by optimising energy consumption, distributed generation and storage in the home and vis-à-vis the energy system. They will also trigger new business opportunities and revenue streams for up-graded, innovative energy services which valorise energy savings and flexible consumption. This call supports both technology and business development and test it in real market & regulatory conditions to pave the way towards the uptake of innovative energy services enabled by energy decarbonisation, decentralisation and digitalisation. That way, active consumers will not only be able to benefit from cost reductions but also from a bigger variety of services that bring along a more comfortable, convenient and healthier living environment.

Innovation is however also needed in the financing of energy efficiency where innovative financing schemes and approaches can help bridge the gap between project development and financing.

Actions included in this call contribute to the specific objectives, targets and relevant Implementation Plans[[For further information please consult the SETIS website: <https://setis.ec.europa.eu/actions-towards-implementing-integrated-set-plan>]] of the SET Plan action 5.1 and 5.2. In particular, topic LC-SC3-EE-1-2018-2019-2020 aims at development and deployment of the materials and technologies for energy efficiency solutions for buildings renovation including renovation of buildings heating and cooling systems. As regards industrial energy efficiency, topic LC-SC3-EE-6-2018-2019-2020 has been designed to address the cross-cutting priority of SET Plan Action 6: maximising the recovery of industrial excess heat/cold in a cost efficient manner. The choice of a cross-cutting priority rather than a sector-specific one has been taken in order to maximise EU added value of the funded projects.

(The above text is applicable to these groups of topics and shall be taken into account during the evaluation of proposals:

Upgrading buildings" energy performance and smartness:

LC-SC3-EE-1-2018-2019-2020; LC-SC3-EE-2-2018-2019; LC-SC3-EE-3-2019-2020; LC-SC3-EE-4-2019-2020; LC-SC3-EE-5-2018-2019-2020.

Energy efficient industry and services:

LC-SC3-EE-6-2018-2019-2020; LC-SC3-EE-8-2018-2019; LC-SC3-EE-7-2020.

Energy efficiency is an investment:

LC-SC3-EE-9-2018-2019; LC-SC3-EE-10-2018-2019-2020; LC-SC3-EE-11-2018-2019-2020; LC-SC3-EE-12-2020.

Energy efficiency is an energy source:

LC-SC3-EE-13-2018-2019-2020; LC-SC3-EE-14-2018-2019-2020.

Support for policy-driven innovations:

LC-SC3-EE-15-2018; LC-SC3-EE-16-2018-2019-2020; LC-SC3-EE-17-2019.

Global leadership in renewables

The Energy Union Strategy has set the target for the EU to achieve global leadership in renewable energies. Increased R&I efforts for renewable energy are indispensable hence renewables are identified as a core R&I priority in the Energy Union Strategy and the "Accelerating Clean Energy Innovation" Communication. The "Clean Energy for all Europeans" package underpins the EU's ambition by a number of legislative proposals and non-legislative initiatives, notably the recast of the Renewable Energy Directive which creates the enabling framework for Member States to unlock their renewables' potential and collectively reach a share of at least 27 % in the Union final energy consumption by 2030 in a cost-effective way.

The Energy Union priorities, also in the area of renewable energy, are jointly implemented by the stakeholder community, national authorities and the Commission through the key actions of the EU Strategic Energy Technology Plan (SET Plan), notably action 1 ("Performant renewable technologies integrated in the system) and action 2 ("Reduce costs of technologies"). To attain these goals, ambitious R&I targets have been set in agreement with the sectorial stakeholders, for renewable technologies with great potential for cost-reductions, performance improvements and large-scale deployment worldwide – off-shore wind energy, the next generation of solar photovoltaics (PVs), ocean energy, concentrated solar power (CSP), deep geothermal energy and bioenergy. Furthermore, goals were set to increase renewable penetration in the heating and cooling sector and to strengthen market take-up of renewable fuels needed for sustainable transport solutions. While it is expected that the Member States will take coordinated actions towards the priorities and targets set by the SET-Plan, a strong and concerted effort also from the EU is needed to sustain the technological and economic leading position in some renewable technologies and to catch up in areas where the EU is lagging behind. Projects supported in this area contribute to the specific objectives, targets and relevant Implementation Plans of the SET Plan actions 1, 2 and 8[[For further information please consult the SETIS website: <https://setis.ec.europa.eu/actions-towards-implementing-integrated-set-plan>]].

Activities fully reflect the "Open Science, Open Innovation and Open to the World Strategy" – supporting open science and the new approach of the European Open Science Cloud (EOSC) by providing access to relevant research results while moving up the TRL scale innovative solutions; providing support opportunities for opening markets to innovative solutions and for turning research results into successful products; being open to the world, proactively exploring international cooperation activities in the precompetitive research phase, and fostering local market adaption via frugal innovation of available technologies for emerging global markets.

The challenge is to create an EU industrial renewable energy sector which is economically sustainable and competitive in European and global markets in the long-term. For this purpose, this area supports activities across the full innovation chain, from identifying breakthrough technologies to supporting the entire portfolio of renewable energy technologies at laboratory scale, dedicating support to validation in relevant environment of most promising technologies, finally supporting market up take introduction with

collaborative and not purely technological activities. It features tailored approaches, taking into account technology-specific challenges, potential, cultural aspects, levels of maturity, risk, and competitiveness aspects.

This call includes 4 lines of interventions:

1. breakthrough technology development,
2. renewable energy solutions for implementation at consumer scale (encompassing generation of energy in all its form, starting from electricity only generation to also encompass combined heating and cooling solutions, from domestic to industrial and district scale),
3. renewable energy solutions for implementation at the energy system level (oriented to reduce the costs of electricity generated, to optimise system operation and improve processes and components manufacturing, to provide flexibility to the system), and
4. renewable fuels for transport (aiming both feedstock and process improvements and supporting road, aviation and shipping sectors in particular).

In addition, specific actions with an international dimension are set out, notably in the context of the "Mission Innovation" initiative. A special focus is also on adapting emerging renewable energy technologies to the African context by fostering cooperation and concerted actions with the Member States and Associated countries (see area "Joint actions" of this work programme part). Activities are complemented by the Horizon Prize on Artificial Photosynthesis which is included in the "European Innovation Council (EIC) Pilot" part of the work programme.

Actions in this area aim to produce solutions to support the worldwide large-scale deployment of renewable energy, its broader penetration in the energy and transport mix to significantly contribute to the decarbonisation of the global economy of the future. Actions will make renewable energy solutions in the broader sense (i.e. including the use of the renewable source and all the features needed for performing in a complex and integrated energy system) cost competitive with their fossil equivalents, allowing them to participate in the energy and transport markets on a level playing field. They will support the transition to a decentralized energy system where the citizens are empowered to take an active role and become prosumers. In addition to the Energy Union strategy, actions will contribute to the broader EU policies and objectives of growth and jobs, promoting production of more affordable energy in Europe and sustaining European players to succeed in the global energy and transport markets, giving special consideration to cooperation with strategic partner countries/regions.

(The above text is applicable to these groups of topics and shall be taken into account during the evaluation of proposals:

Next Renewable energy solutions:

The focus of these actions is to support research activities aiming at identifying renewable energy breakthroughs that will feed the innovation cycle and become the basis of the next generation of EU technologies.

LC-SC3-RES-1-2019-2020; LC-SC3-RES-2-2018; LC-SC3-RES-3-2020.

Renewable energy solutions for implementation at consumer scale:

The focus of these actions will vary, depending on the number of consumers involved, from individual and residential buildings, to industrial sites and district systems. Solutions explored under this line of intervention consider holistically the consumer energy needs, from electricity generation to heating and cooling services, aiming to develop near-zero fossil energy solutions for buildings and districts. The solutions should allow for a significant part of the energy to be consumed at the place of production, fostering the emergence of the energy prosumers and therefore enabling the consumer participation into the energy transformation.

- Energy generation at building scale:

LC-SC3-RES-4-2018; LC-SC3-RES-5-2018; LC-SC3-RES-6-2018.

- Renewable energy solutions at the district level and for industrial processes:

LC-SC3-RES-7-2019; LC-SC3-RES-8-2019; LC-SC3-RES-9-2020; LC-SC3-RES-10-2020.

Renewable energy solutions for energy system level implementation:

The focus of these actions is to reduce capital and operational costs, to increase reliability and to provide flexibility to the energy system. Solutions should be implemented at the system level, namely in those cases where the renewable energy that is inserted into the network, is to be transmitted and distributed to the end user and not, or only in minimal part, used for self-consumption.

- Reduce costs of key technologies for renewable energy conversion:

LC-SC3-RES-11-2018; LC-SC3-RES-12-2018; LC-SC3-RES-13-2018.

- Optimize processes and manufacturing:

LC-SC3-RES-14-2019; LC-SC3-RES-15-2019.

- Provide flexibility to the energy system:

LC-SC3-RES-16-2019; LC-SC3-RES-17-2019; LC-SC3-RES-18-2020; LC-SC3-RES-19-2020; LC-SC3-RES-20-2020.

Renewable Fuels for transport:

The actions address the competitiveness of the next generation of biofuels and renewable fuel technologies as well as the up-scaling of advanced biofuels for specific transport needs in a cost-effective way. Furthermore, they aim at achieving European leadership in global development of specific disruptive technologies for a complete ultimate replacement of fossil fuels.

- Drop-in renewable fuel solutions for fossil-fuel substitutions:

LC-SC3-RES-21-2018; LC-SC3-RES-22-2018.

- Upscaling renewable fuels production:

LC-SC3-RES-23-2019; LC-SC3-RES-24-2019.

- Diversifying feedstock:

LC-SC3-RES-25-2020; LC-SC3-RES-26-2020; LC-SC3-RES-27-2020.

Market Uptake Support:

LC-SC3-RES-28-2018-2019-2020.

Smart and clean energy for consumers

The Clean Energy for all Europeans package places consumers firmly at the centre of the energy transition, with consumers considered as active market players in the energy system. The future consumer should be better informed and more aware, and have an increased capacity to fully engage in energy markets.

Such a transition requires consumers to change their energy consumption behaviour and increase their uptake of different forms of active demand solutions and services, including collective actions. To this end, remaining regulatory and market barriers for consumers should be addressed and innovative engagement and support schemes should be made more readily available to consumers, allowing for improved understanding of the benefits of engaging actively in the energy system. At the same time, it is important to develop a better understanding of the drivers of consumer acceptance and behaviour change in relation to energy efficiency.

Although the energy transition is expected to lead to a number of benefits for consumers, energy poverty continues to affect the quality of life of a significant number of European citizens. In combination with financial interventions and building retrofitting, low-cost measures at the household level and use of renewable energy are key solutions in alleviating energy poverty. Energy distributors under the energy efficiency obligation schemes, and public authorities play a central role in delivering energy efficiency measures and providing sustainable solutions to affected households.

Consumers may also play in the future an important role in engaging in clean energy, in particular in the decarbonisation of the electricity system which currently integrates 30% of production from renewable energy sources. We should therefore already test today what are the right incentives that can be put in place so as to reward them when playing a role in increasing the share of variable renewables in the electricity mix by, for example, by differing their consumption depending on the availability of this 'green' electricity. To be successful, the R&I community should not look only at consumers from an electricity grid perspective but make particular effort to understand how consumers consider, use and value the electricity grid and the services it provides to them.

Activities supported in this area contribute to the specific objectives, targets and relevant Implementation Plans of the SET Plan action 3 (For further information please consult the SETIS website: <https://setis.ec.europa.eu/actions-towards-implementing-integrated-set-plan>).

(The above text is applicable to this group of topics and shall be taken into account during the evaluation of proposals:

LC-SC3-EC-1-2018-2019-2020; LC-SC3-EC-2-2018-2019-2020; LC-SC3-EC-3-2020.

Smart citizen-centred energy system

The EU's energy policy package "Clean Energy for all Europeans" (adopted by the Commission on 30 November 2016) puts the citizen in the centre of the EU's energy system. Actions are needed to support the best implementation of this ambitious legislative proposal. Therefore this section of the Work Programme on Integrated Energy Systems aims, among others, at preparing and testing

solutions to support the new proposals for directives and regulations which are shaping the energy system of the future. In addition, the energy transition proposed in "Clean Energy for all European" insists on the importance to decarbonise heating and cooling, electricity and transport.

Therefore two main lines of actions are proposed:

1. Electricity markets and consumers, interacting with other energy vectors with topics LC-SC3 EC-3-2020 (in the "Smart and clean energy for consumer" area) as well as topics LC-SC3-ES-1-2019, LC-SC3-ES-2-2019, LC-SC3-ES-5-2018-2020 and LC-SC3-ES-6-2019;
2. Decarbonisation of local energy systems whether on islands or on the continent with topics LC-SC3-ES-3 2018-2020, LC-SC3-ES-4-2018-2020 and LC-SC3-ES-8-2019.

These two lines of actions also contribute to the specific objectives, targets and relevant Implementation Plans of the SET Plan action 4.1 on "An optimised power grid" and 4.2 on "Integrated local and regional energy systems"[[For further information please consult the SETIS website: <https://setis.ec.europa.eu/actions-towards-implementing-integrated-set-plan>]].

Common requirements regarding proposals relevant to "Electricity markets and consumers, interacting with other energy vectors" (topic LC-SC3-EC-3-2020 of the previous section, as well as topics LC-SC3-ES-1-2019, LC-SC3-ES-2-2019, LC-SC3-ES-5-2018-2020 and LC-SC3-ES-6-2019)

Since the associated directives and regulations will be negotiated with the Parliament and the Council in the coming years, it is important to ensure coherence and organise a feedback from the R&I projects towards policy makers. We will therefore pursue the BRIDGE initiative[[<http://www.h2020-bridge.eu/>]] which integrates and structures feedback of projects along, for the time being, four lines:

1. Business models
2. Customer engagement
3. Data management
4. Regulation

Ongoing projects of the 2014, 2015 and 2016 calls have delivered first results and the relevant Innovation Actions from the 2018 to 2020 will also be asked to contribute (i.e. topic LC-SC3-ES-6-2019-2020 is a priori not concerned). Relevant regulatory issues should be analysed also in the context of the future electricity market design.

Proposers should demonstrate in the content of their proposal a good knowledge and compatibility with current regulations, available or emerging standards and interoperability issues applying to their technologies, in particular in connection to ongoing work in the Smart Grid Task Force and its Experts Groups in the field of Standardization (e.g. follow-up activities to the CEN-CLC-ETSI M/490), regulatory environment for privacy, data protection, data management and alignment of data formats (e.g. the work of the ad-hoc group on “My Energy Data” and its respective follow-up), cyber security, smart grid deployment, infrastructure and industrial policy (<http://ec.europa.eu/energy/en/topics/markets-and-consumers/smart-grids-and-meters/smart-grids-task-force>).

Projects dealing with data handling and management should comply with the provisions of the General Data Protection Regulation[[Regulation (EU) 2016/679]] and industry standards, especially the Data Protection Impact Assessment Template[[Supported by the Commission Recommendation 2014/724/EU]]. A high level of cyber security should be guaranteed in compliance with relevant EU security legislation[[Directive (EU) 2016/1148]] and with due regard of best available techniques for ensuring the highest level of protection[[Best Available Techniques for data protection and security regarding the ten minimum functional requirements for smart metering which were proposed in the Commission Recommendation 2012/148/EU.]].

The topics in this area should contribute to test a certain number of approaches proposed in the legislative package "Clean Energy for All European" and develop technologies and solutions which will enable these approaches to be implemented under economic conditions.

Overall, the topics proposed should also contribute to the 2030 Climate-Energy objectives (40% GHG reduction with respect to 1990, at least 27% of renewables by 2030).

A first group of topics (LC-SC3-ES-1-2019, LC-SC3-ES-2-2019 and ES-5-2018-2020) is expected to increase the capacity of the European electricity grid to host a larger share of variable renewables so as to accelerate its decarbonisation. For this purpose, stronger engagement of consumers is needed, more flexibility services for both distribution and the transmission grids, higher levels of regional cooperation (i.e. cooperation between a group of neighbouring countries) at transmission levels and well-functioning retail and wholesale markets that are capable of financing necessary investments.

A second group of topics (LC-SC3-ES-3-2018-2020, LC-SC3-ES-4-2018-2020 and LC-SC3-ES-8-2019) is expected to impact on the decarbonisation of energy systems on geographical islands and at local levels on the mainland taking advantage of the availability of local renewables resources, the specificity of the demand and of the local energy networks to design and demonstrate low carbon local energy system.

(The above text is applicable to this group of topics and shall be taken into account during the evaluation of proposals:

LC-SC3-ES-1-2019; LC-SC3-ES-2-2019; LC-SC3-ES-3-2018-2020; LC-SC3-ES-4-2018-2020; LC-SC3-ES-5-2018-2020; LC-SC3-ES-6-2019; LC-SC3-ES-7-2018; LC-SC3-ES-8-2019.

Smart Cities and Communities

See topic LC-SC3-SCC-1-2018-2019-2020.

Enabling near-zero CO₂ emissions from fossil fuel power plants and carbon intensive industries

CCS is one of the key promising technologies that can reduce CO₂ emissions in the power generation sector and the only pathway for very stringent GHG emission reductions from energy and/or carbon intensive industries that generate CO₂ as part of their production processes.

In order to realise its potential, CCS needs to become a cost-competitive technology and prove its safety (mainly regarding pipeline transportation and storage), so that it could start to be commercially deployed and thus contribute to the low-carbon transition of the European economy. Key challenges are the demonstration of the full CCS chain, the reduction of the energy penalty and cost of capture, the detailed appraisal of cost-effective storage capacity in selected regions, and establishing the necessary infrastructure for CO₂ transport.

New solutions for the conversion of captured CO₂ (CCU) to useful products such as fuels or chemicals will create new markets for innovative industrial sectors and can play a role in supporting the deployment of CCS by offsetting the high costs of capture and storage.

The integration of flexible fossil fuel power generation and storage (including through power-to-X-to-power) will contribute to a smart, secure and more resilient power system.

The Energy Union priorities, also in the area of enabling near-zero CO₂ emissions from fossil fuel power plants and carbon intensive industries, are jointly implemented by the stakeholder community, national authorities and the Commission through the key actions of the EU Strategic Energy Technology Plan (SET Plan), notably action 9 (CCUS) and action 4 (resilience, security and smartness of the energy system). To attain these goals, ambitious R&I targets have been set in agreement with the sectorial stakeholders. In action 9, the focus is on cost-reductions, new technologies and proliferation of pilots and demonstrators. In action 4, goals were set to increase the flexibility of fossil fuel power plants. While it is expected that the Member States will take coordinated actions towards the priorities and targets set by the SET-Plan, a strong and concerted effort also from the EU is needed to sustain the technological and

economic leading position in some technologies and to catch up in areas where the EU is lagging behind. Activities supported in this area contribute to the specific objectives, targets and relevant Implementation Plans of the SET Plan action 9 and 4 (For further information please consult the SETIS website: <https://setis.ec.europa.eu/actions-towards-implementing-integrated-set-plan>).

(The above text is applicable to this group of topics and shall be taken into account during the evaluation of proposals:

LC-SC3-NZE-1-2018; CE-SC3-NZE-2-2018; LC-SC3-NZE-3-2018; LC-SC3-NZE-4-2019; LC-SC3-NZE-5-2019-2020; LC-SC3-NZE-6-2020.

Joint Actions

The Commission Communication "Towards an Integrated Strategic Energy Technology (SET) Plan"[[C(2015) 6317]] reiterates that achieving the objectives and ambitions of the Energy Union requires more effective coordination of research and innovation (R&I) activities to avoid unnecessary duplication of funding and efforts. Partnerships between organisations in the public sector, or between public and private sector entities involved in funding energy R&I activities, are a crucial means of achieving this goal. The Communication also calls for more joint actions, and specifically mentions Horizon 2020 instruments as a concrete way to support this objective.

Public funding is essential in supporting new technologies in their early stages, and has been fundamental in the past in providing the EU with a competitive edge in various energy technologies. But public funding accounts for only around 19% of all energy R&I funding in the EU (excluding the nuclear sector), with the rest provided by the private sector. And of this, only 4% is funding from EU R&I programmes, with the rest coming from national R&I programmes[[SWD(2017) 32, 2014 figures.]]. It is therefore crucial that public funding is used as effectively as possible.

The SET Plan provides the strategic framework for the best possible use of this funding. Topics in this section complement the activities of other public funders in Europe by focusing on activities with clear European Union added value, and in particular on those with a high potential to leverage funding from other sources and therefore maximise the reach of Horizon 2020. This is a crucial objective of the SET Plan as well as the overall goal of the European Research Area.

This section of the Work Programme provides support for joint actions and public partnerships between European, national and regional funding agencies and procurers through the use of several Horizon 2020 instruments.

Topic LC-SC3-JA-1-2018 supports ERA-NET Cofund actions. Topic LC-SC3-JA-2-2018 provides support for the execution of the Implementation Plans produced by of the SET Plan Temporary Working Groups, which are expected to be endorsed by the SET Plan Steering Group during 2017 and the beginning of 2018. Topic LC-SC3-JA-3-2018 makes use of procurement to push forward the research and development of wave energy solutions.

Topics LC-SC3-JA-4-2018 and LC-SC3-JA-5-2019 are linked to Africa and the opportunities it presents for European research and industry. R&I cooperation in this area will reinforce the EU commitments under the Paris Agreement, the Agenda 2030 on Sustainable Development and the Cotonou Agreement. This initiative contributes to achieving the Sustainable Development Goal on energy by ensuring access to affordable, reliable, sustainable and modern energy for all. It will also contribute to the priorities set up by the EU-Africa High Level Policy Dialogue on Science, Technology and Innovation.

The objective of topics included in this area is to facilitate the creation or continuation of energy R&I public partnerships between the European Commission and/or countries and regions in Europe and beyond. These public partnerships will have as a goal to contribute to the objectives and ambitions of the Energy Union and the Strategic Energy Technology (SET) Plan, and to continue developing a European Research Area in energy.

(The above text is applicable to this group of topics and shall be taken into account during the evaluation of proposals:

LC-SC3-JA-1-2018; LC-SC3-JA-2-2018; LC-SC3-JA-3-2019; LC-SC3-JA-4-2018; LC-SC3-JA-5-2019.

Cross-cutting issues

See topics LC-SC3-CC-1-2018-2019-2020; LC-SC3-CC-2-2018; LC-SC3-CC-3-2019; LC-SC3-CC-4-2018; LC-SC3-CC-5-2018; LC-SC3-CC-6-2018.

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Call updates

- **25 January 2018 00:30** The submission session is now available for: LC-SC3-EE-16-2018-2019-2020(CSA), LC-SC3-EE-1-2018-2019-2020(IA), LC-SC3-EE-11-2018-2019-2020(CSA), LC-SC3-EE-15-2018(CSA), LC-SC3-EE-5-2018-2019-2020(CSA), LC-SC3-EE-2-2018-2019(CSA), LC-SC3-EE-14-2018-2019-2020(RIA), LC-SC3-EE-8-2018-2019(CSA), LC-

SC3-EE-9-2018-2019(CSA), LC-SC3-EE-13-2018-2019-2020(CSA), LC-SC3-EE-6-2018-2019-2020(IA), LC-SC3-EC-2-2018-2019-2020(CSA), LC-SC3-EC-1-2018-2019-2020(CSA), LC-SC3-EE-10-2018-2019-2020(CSA)

- **05 December 2017 00:30** The submission session is now available for: LC-SC3-RES-2-2018(RIA), LC-SC3-CC-4-2018(CSA)
- **05 December 2017 00:30** The submission session is now available for: LC-SC3-ES-5-2018-2020(IA), LC-SC3-ES-3-2018-2020(IA), LC-SC3-RES-22-2018(IA), LC-SC3-ES-4-2018-2020(IA), LC-SC3-ES-7-2018(CSA), LC-SC3-SCC-1-2018-2019-2020(IA)
- **31 October 2017 00:31** The submission session is now available for: LC-SC3-RES-11-2018(RIA), LC-SC3-RES-4-2018(RIA)
- **31 October 2017 00:31** The submission session is now available for: LC-SC3-JA-4-2018(CSA)
- **31 October 2017 00:30** The submission session is now available for: LC-SC3-RES-6-2018(IA), LC-SC3-RES-5-2018(IA), LC-SC3-RES-28-2018-2019-2020(CSA), LC-SC3-RES-21-2018(RIA), LC-SC3-RES-12-2018(IA), LC-SC3-RES-13-2018(IA)

Topic: [CE-SC3-NZE-2-2018: Conversion of captured CO2](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Connecting economic and environmental gains - the Circular Economy (CE)

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 15 May 2018

Deadline: 06 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-CC-1-2018-2019-2020: Social Sciences and Humanities \(SSH\) aspects of the Clean-Energy](#)

Forthcoming

Transition

Publication date: 27 October 2017
Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action
DeadlineModel: single-stage
Opening date: 07 May 2019 **Deadline:** 27 August 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-CC-1-2018-2019-2020: Social Sciences and Humanities \(SSH\) aspects of the Clean-Energy Transition](#) Forthcoming

Publication date: 27 October 2017
Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action
DeadlineModel: single-stage
Opening date: 15 May 2018 **Deadline:** 06 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-CC-2-2018: Modelling in support to the transition to a Low-Carbon Energy System in Europe](#) Forthcoming

Publication date: 27 October 2017
Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action
DeadlineModel: single-stage
Opening date: 15 May 2018 **Deadline:** 06 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-CC-3-2019: Support for the opening of low-carbon energy research databases in Europe](#) Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 14 November 2018

Deadline: 27 August 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-CC-4-2018: Support to sectorial fora](#) Open

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 05 December 2017

Deadline: 19 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-CC-5-2018: Research, innovation and educational capacities for energy transition](#) Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 15 May 2018

Deadline: 06 September 2018 17:00:00

DeadlineModel:	single-stage	Deadline:	04 September 2018 17:00:00
Opening date:	25 January 2018		
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			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-EC-2-2018-2019-2020: Mitigating household energy poverty</u>		Forthcoming
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
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Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	03 September 2019 17:00:00
Opening date:	24 January 2019		
<hr/>			
			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-EC-2-2018-2019-2020: Mitigating household energy poverty</u>		Open
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
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Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	04 September 2018 17:00:00
Opening date:	25 January 2018		
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			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-EE-1-2018-2019-2020: Decarbonisation of the EU building stock: innovative approaches and affordable solutions changing the market for buildings renovation</u>		Forthcoming
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
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Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	03 September 2019 17:00:00
Opening date:	24 January 2019		
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			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-EE-1-2018-2019-2020: Decarbonisation of the EU building stock: innovative approaches and affordable solutions changing the market for buildings renovation</u>		Open
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
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Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	04 September 2018 17:00:00
Opening date:	25 January 2018		
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			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-EE-10-2018-2019-2020: Mainstreaming energy efficiency finance</u>		Forthcoming
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
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Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	03 September 2019 17:00:00
Opening date:	24 January 2019		
<hr/>			
			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-EE-10-2018-2019-2020: Mainstreaming energy efficiency finance</u>		Open
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		

Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	04 September 2018 17:00:00
Opening date:	25 January 2018		
			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-EE-11-2018-2019-2020: Aggregation - Project Development Assistance</u>		Forthcoming
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	03 September 2019 17:00:00
Opening date:	24 January 2019		
			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-EE-11-2018-2019-2020: Aggregation - Project Development Assistance</u>		Open
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	04 September 2018 17:00:00
Opening date:	25 January 2018		
			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-EE-13-2018-2019-2020: Enabling next-generation of smart energy services valorising energy efficiency and flexibility at demand-side as energy resource</u>		Forthcoming
Publication date:	27 October 2017		

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 24 January 2019

Deadline: 03 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-EE-13-2018-2019-2020: Enabling next-generation of smart energy services valorising energy efficiency and flexibility at demand-side as energy resource](#)

Open

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 25 January 2018

Deadline: 04 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-EE-14-2018-2019-2020: Socio-economic research conceptualising and modelling energy efficiency and energy demand](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 24 January 2019

Deadline: 03 September 2019 17:00:00

Time Zone : (Brussels time)

Topic:	<u>LC-SC3-EE-14-2018-2019-2020: Socio-economic research conceptualising and modelling energy efficiency and energy demand</u>			Open
Publication date:	27 October 2017			
Focus area:	Building a low-carbon, climate resilient future (LC)			
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Types of action:	RIA Research and Innovation action			
DeadlineModel:	single-stage	Deadline:	04 September 2018 17:00:00	
Opening date:	25 January 2018			
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				Time Zone : (Brussels time)
Topic:	<u>LC-SC3-EE-15-2018: New energy label driving and boosting innovation in products energy efficiency</u>			Open
Publication date:	27 October 2017			
Focus area:	Building a low-carbon, climate resilient future (LC)			
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Types of action:	CSA Coordination and support action			
DeadlineModel:	single-stage	Deadline:	04 September 2018 17:00:00	
Opening date:	25 January 2018			
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				Time Zone : (Brussels time)
Topic:	<u>LC-SC3-EE-16-2018-2019-2020: Supporting public authorities to implement the Energy Union</u>			Forthcoming
Publication date:	27 October 2017			
Focus area:	Building a low-carbon, climate resilient future (LC)			
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Types of action:	CSA Coordination and support action			
DeadlineModel:	single-stage	Deadline:	03 September 2019 17:00:00	
Opening date:	24 January 2019			

Time Zone : (Brussels time)

Topic: [LC-SC3-EE-16-2018-2019-2020: Supporting public authorities to implement the Energy Union](#)

Open

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 25 January 2018

Deadline: 04 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-EE-17-2019: European City facility - European Cities as key innovation hubs to unlock finance for energy efficiency](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 01 August 2018

Deadline: 05 February 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-EE-2-2018-2019: Integrated home renovation services](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Deadline: 03 September 2019 17:00:00

Opening date: 24 January 2019

Time Zone : (Brussels time)

Topic: [LC-SC3-EE-2-2018-2019: Integrated home renovation services](#)

Open

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 25 January 2018

Deadline: 04 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-EE-3-2019-2020: Stimulating demand for sustainable energy skills in the construction sector](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 24 January 2019

Deadline: 03 September 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-EE-4-2019-2020: Upgrading smartness of existing buildings through innovations for legacy equipment](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	03 September 2019 17:00:00
Opening date:	24 January 2019		
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			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-EE-5-2018-2019-2020: Next-generation of Energy Performance Assessment and Certification</u>		Forthcoming
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
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Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	03 September 2019 17:00:00
Opening date:	24 January 2019		
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			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-EE-5-2018-2019-2020: Next-generation of Energy Performance Assessment and Certification</u>		Open
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
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Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	04 September 2018 17:00:00
Opening date:	25 January 2018		
<hr/>			
			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-EE-6-2018-2019-2020: Business case for industrial waste heat/cold recovery</u>		Forthcoming
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		

Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	03 September 2019 17:00:00
Opening date:	24 January 2019		
			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-EE-6-2018-2019-2020: Business case for industrial waste heat/cold recovery</u>		Open
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	04 September 2018 17:00:00
Opening date:	25 January 2018		
			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-EE-8-2018-2019: Capacity building programmes to support implementation of energy audits</u>		Forthcoming
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	03 September 2019 17:00:00
Opening date:	24 January 2019		
			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-EE-8-2018-2019: Capacity building programmes to support implementation of energy audits</u>		Open
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		

Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	04 September 2018 17:00:00
Opening date:	25 January 2018		
			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-EE-9-2018-2019: Innovative financing for energy efficiency investments</u>		Forthcoming
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	03 September 2019 17:00:00
Opening date:	24 January 2019		
			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-EE-9-2018-2019: Innovative financing for energy efficiency investments</u>		Open
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	04 September 2018 17:00:00
Opening date:	25 January 2018		
			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-ES-1-2019: Flexibility and retail market options for the distribution grid</u>		Forthcoming
Publication date:	27 October 2017		

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 05 September 2018

Deadline: 05 February 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-ES-2-2019: Solutions for increased regional cross-border cooperation in the transmission grid](#) Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 05 September 2018

Deadline: 05 February 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-ES-3-2018-2020: Integrated local energy systems \(Energy islands\)](#) Open

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 05 December 2017

Deadline: 05 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-ES-4-2018-2020: Decarbonising energy systems of geographical Islands](#) Open

Publication date: 27 October 2017
Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: IA Innovation action
DeadlineModel: single-stage
Opening date: 05 December 2017
Deadline: 05 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-ES-5-2018-2020: TSO – DSO – Consumer: Large-scale demonstrations of innovative grid services through demand response, storage and small-scale \(RES\) generation](#) Open

Publication date: 27 October 2017
Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: IA Innovation action
DeadlineModel: single-stage
Opening date: 05 December 2017
Deadline: 05 April 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-ES-6-2019: Research on advanced tools and technological development](#) Forthcoming

Publication date: 27 October 2017
Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action
DeadlineModel: single-stage
Opening date: 05 September 2018
Deadline: 05 February 2019 17:00:00

Time Zone : (Brussels time)

Topic:	<u>LC-SC3-ES-7-2018: Pan-European Forum for R&I on Smart Grids, Flexibility and Local Energy Networks</u>			Open
Publication date:	27 October 2017			
Focus area:	Building a low-carbon, climate resilient future (LC)			
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Types of action:	CSA Coordination and support action			
DeadlineModel:	single-stage	Deadline:	05 April 2018 17:00:00	
Opening date:	05 December 2017			
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				Time Zone : (Brussels time)
Topic:	<u>LC-SC3-ES-8-2019: European Islands Facility - Unlock financing for energy transitions and supporting islands to develop investment concepts</u>			Forthcoming
Publication date:	27 October 2017			
Focus area:	Building a low-carbon, climate resilient future (LC)			
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Types of action:	CSA Coordination and support action			
DeadlineModel:	single-stage	Deadline:	05 February 2019 17:00:00	
Opening date:	05 September 2018			
<hr/>				
				Time Zone : (Brussels time)
Topic:	<u>LC-SC3-JA-1-2018: Joint programming actions to foster innovative energy solutions</u>			Forthcoming
Publication date:	27 October 2017			
Focus area:	Building a low-carbon, climate resilient future (LC)			
<hr/>				
Types of action:	ERA-NET-Cofund ERA-NET Cofund			
DeadlineModel:	single-stage	Deadline:	11 September 2018 17:00:00	
Opening date:	15 May 2018			

DeadlineModel: single-stage
Opening date: 31 October 2017

Deadline: 31 January 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-JA-5-2019: Joint Programming with EU and African partners for a R&I actions in the area of renewable energy](#) Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: COFUND-EJP COFUND (European Joint Programme)

DeadlineModel: single-stage
Opening date: 14 November 2018

Deadline: 27 August 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-NZE-1-2018: Advanced CO2 capture technologies](#) Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage
Opening date: 15 May 2018

Deadline: 06 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-NZE-3-2018: Strategic planning for CCUS development](#) Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: CSA Coordination and support action
DeadlineModel: single-stage
Opening date: 15 May 2018

Deadline: 06 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-NZE-4-2019: Integrated solutions for flexible operation of fossil fuel power plants through power-to-X-to-power and/or energy storage](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: IA Innovation action
DeadlineModel: single-stage
Opening date: 07 May 2019

Deadline: 27 August 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-NZE-5-2019-2020: Low carbon industrial production using CCUS](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: IA Innovation action
DeadlineModel: single-stage
Opening date: 07 May 2019

Deadline: 27 August 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-RES-1-2019-2020: Developing the next generation of renewable energy technologies](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	16 October 2018 17:00:00
Opening date:	01 August 2018	2nd stage Deadline:	25 April 2019 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>LC-SC3-RES-11-2018: Developing solutions to reduce the cost and increase performance of renewable technologies</u>		
	Closed		
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	31 January 2018 17:00:00
Opening date:	31 October 2017	2nd stage Deadline:	23 August 2018 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>LC-SC3-RES-12-2018: Demonstrate highly performant renewable technologies for combined heat and power (CHP) generation and their integration in the EU's energy system</u>		
	Open		
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	13 February 2018 17:00:00
Opening date:	31 October 2017		
Time Zone : (Brussels time)			
Topic:	<u>LC-SC3-RES-13-2018: Demonstrate solutions that significantly reduce the cost of renewable power</u>		
	Open		

generation

Publication date: 27 October 2017
Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: IA Innovation action
DeadlineModel: single-stage
Opening date: 31 October 2017
Deadline: 13 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-RES-14-2019: Optimising manufacturing and system operation](#) Forthcoming
Publication date: 27 October 2017
Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action
DeadlineModel: two-stage
Opening date: 01 August 2018
Deadline: 16 October 2018 17:00:00
2nd stage Deadline: 25 April 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-RES-15-2019: Increase the competitiveness of the EU PV manufacturing industry](#) Forthcoming
Publication date: 27 October 2017
Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: IA Innovation action
DeadlineModel: single-stage
Opening date: 05 September 2018
Deadline: 11 December 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-RES-16-2019: Development of solutions based on renewable sources that provide flexibility to the energy system](#) Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 07 May 2019

Deadline: 27 August 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-RES-17-2019: Demonstration of solutions based on renewable sources that provide flexibility to the energy system](#) Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 05 September 2018

Deadline: 11 December 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-RES-2-2018: Disruptive innovation in clean energy technologies](#) Open

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 05 December 2017

Deadline: 19 April 2018 17:00:00

Time Zone : (Brussels time)

Topic:	<u>LC-SC3-RES-21-2018: Development of next generation biofuels and alternative renewable fuel technologies for road transport</u>			Open
Publication date:	27 October 2017			
Focus area:	Building a low-carbon, climate resilient future (LC)			
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Types of action:	RIA Research and Innovation action			
DeadlineModel:	single-stage	Deadline:	13 February 2018 17:00:00	
Opening date:	31 October 2017			
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Time Zone : (Brussels time)

Topic:	<u>LC-SC3-RES-22-2018: Demonstration of cost effective advanced biofuel pathways in retrofitted existing industrial installations</u>			Open
Publication date:	27 October 2017			
Focus area:	Building a low-carbon, climate resilient future (LC)			
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Types of action:	IA Innovation action			
DeadlineModel:	single-stage	Deadline:	05 April 2018 17:00:00	
Opening date:	05 December 2017			
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Time Zone : (Brussels time)

Topic:	<u>LC-SC3-RES-23-2019: Development of next generation biofuel and alternative renewable fuel technologies for aviation and shipping</u>			Forthcoming
Publication date:	27 October 2017			
Focus area:	Building a low-carbon, climate resilient future (LC)			

Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	27 August 2019 17:00:00
Opening date:	07 May 2019		
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			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-RES-24-2019: Boosting pre-commercial production of advanced aviation biofuels</u>		Forthcoming
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
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Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	11 December 2018 17:00:00
Opening date:	05 September 2018		
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			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-RES-28-2018-2019-2020: Market Uptake support</u>		Forthcoming
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
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Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	11 December 2018 17:00:00
Opening date:	05 September 2018		
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			Time Zone : (Brussels time)
Topic:	<u>LC-SC3-RES-28-2018-2019-2020: Market Uptake support</u>		Open
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		

Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	13 February 2018 17:00:00
Opening date:	31 October 2017		
Time Zone : (Brussels time)			
Topic:	<u>LC-SC3-RES-4-2018: Renewable energy system integrated at the building scale</u>		Closed
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
Types of action:	RIA Research and Innovation action		
DeadlineModel:	two-stage	Deadline:	31 January 2018 17:00:00
Opening date:	31 October 2017	2nd stage Deadline:	23 August 2018 17:00:00
Time Zone : (Brussels time)			
Topic:	<u>LC-SC3-RES-5-2018: Increased performance of technologies for local heating and cooling solutions</u>		Open
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	13 February 2018 17:00:00
Opening date:	31 October 2017		
Time Zone : (Brussels time)			
Topic:	<u>LC-SC3-RES-6-2018: Demonstrate significant cost reduction for Building Integrated PV (BIPV) solutions</u>		Open
Publication date:	27 October 2017		

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 31 October 2017

Deadline: 13 February 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-RES-7-2019: Solar Energy in Industrial Processes](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 07 May 2019

Deadline: 27 August 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-RES-8-2019: Combining Renewable Technologies for a Renewable District Heating and/or Cooling System](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 05 September 2018

Deadline: 11 December 2018 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-SCC-1-2018-2019-2020: Smart Cities and Communities](#)

Forthcoming

Publication date: 27 October 2017
Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: IA Innovation action
DeadlineModel: single-stage
Opening date: 05 September 2018
Deadline: 05 February 2019 17:00:00

Time Zone : (Brussels time)

Topic: [LC-SC3-SCC-1-2018-2019-2020: Smart Cities and Communities](#) Open

Publication date: 27 October 2017
Focus area: Building a low-carbon, climate resilient future (LC)

Types of action: IA Innovation action
DeadlineModel: single-stage
Opening date: 05 December 2017
Deadline: 05 April 2018 17:00:00

Time Zone : (Brussels time)

CALL: WIDENING FELLOWSHIPS

Call identifier: H2020-WF-2018-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Spreading excellence and widening participation

Work Programme Year: H2020-2018-2020

Work Programme Part: [Spreading Excellence and Widening Participation](#)

Call summary and aims

The goal of the Individual Fellowships is to enhance the creative and innovative potential of experienced researchers, wishing to diversify their individual competence in terms of skill acquisition through advanced training, international and intersectoral mobility. Widening fellowships, in particular, provide specific support to researchers to undertake their fellowship in a widening country. This will help spread excellence and close the still apparent research and innovation gap within Europe.

Topic: [WF-01-2018: Widening Fellowships](#)

Forthcoming

Publication date: 27 October 2017

Types of action: MSCA-IF-EF-ST Standard European Fellowships
 MSCA-IF-EF-SE Society and Enterprise panel
 MSCA-IF-EF-RI Reintegration panel
 MSCA-IF-EF-CAR Career Restart panel

DeadlineModel: single-stage

Opening date: 12 April 2018

Deadline: 12 September 2018 17:00:00

Time Zone : (Brussels time)

Topic: [WF-02-2019: Widening Fellowships](#)

Forthcoming

Publication date: 27 October 2017

Types of action: MSCA-IF-EF-ST Standard European Fellowships
 MSCA-IF-EF-SE Society and Enterprise panel
 MSCA-IF-EF-RI Reintegration panel
 MSCA-IF-EF-CAR Career Restart panel

DeadlineModel: single-stage

Opening date: 11 April 2019

Deadline: 11 September 2019 17:00:00

Time Zone : (Brussels time)

CALL: SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS IN THE CONTEXT OF THE FOURTH INDUSTRIAL REVOLUTION

Call identifier: H2020-SC6-TRANSFORMATIONS-2018-2019-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Societal Challenges

Work Programme Year: H2020-2018-2020

Work Programme Part: [Europe in a changing world – Inclusive, innovative and reflective societies](#)

Call summary and aims

The aim of the call is to address the challenges linked to the compounded socioeconomic and cultural origins and effects in Europe of the fourth industrial revolution in a context of globalisation and digitisation and to provide alternative policy options. R&I activities will provide new evidence and policy options in order to mitigate or support these transformations with a view to enhancing the diversity of cultures and social bonds, the existing or nascent social and cultural strengths of Europe, as well as reinforcing the social, cultural and economic benefits of the fourth industrial revolution where relevant. They will thus contribute to fostering equitable and sustainable prosperity and culture in the broad sense through objective scientific evaluations, social, cultural and technological innovation, co-creation and bottom-up solutions. The call's activities will also contribute to the objectives and the legacy of the European Year of Cultural Heritage 2018 and to the UN's Sustainable Development Goals (SDGs).

[- Less](#)

Call updates

- **07 November 2017 08:45** The submission session is now available for: DT-TRANSFORMATIONS-12-2018-2020(IA), SU-TRANSFORMATIONS-09-2018(CSA), TRANSFORMATIONS-14-2018(RIA), TRANSFORMATIONS-01-2018(RIA), TRANSFORMATIONS-03-2018-2019(CSA), TRANSFORMATIONS-06-2018(RIA), TRANSFORMATIONS-05-2018(CSA), DT-TRANSFORMATIONS-02-2018-2019-2020(RIA)

Topic: [DT-TRANSFORMATIONS-02-2018-2019-2020: Transformative impact of disruptive technologies in public services](#)

Forthcoming

Publication date: 27 October 2017
Focus area: Digitising and transforming European industry and services (DT)

Types of action: RIA Research and Innovation action
DeadlineModel: single-stage
Opening date: 06 November 2018
Deadline: 14 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [DT-TRANSFORMATIONS-02-2018-2019-2020: Transformative impact of disruptive technologies in public services](#) Open

Publication date: 27 October 2017
Focus area: Digitising and transforming European industry and services (DT)

Types of action: RIA Research and Innovation action
DeadlineModel: single-stage
Opening date: 07 November 2017
Deadline: 13 March 2018 17:00:00

Time Zone : (Brussels time)

Topic: [DT-TRANSFORMATIONS-07-2019: The impact of technological transformations on children and youth](#) Forthcoming

Publication date: 27 October 2017
Focus area: Digitising and transforming European industry and services (DT)

Types of action: RIA Research and Innovation action
CSA Coordination and support action
DeadlineModel: single-stage
Opening date: 06 November 2018
Deadline: 14 March 2019 17:00:00

Time Zone : (Brussels time)

Topic:

DT-TRANSFORMATIONS-11-2019: Collaborative approaches to cultural heritage for social cohesion

Forthcoming

Publication date:

27 October 2017

Focus area:

Digitising and transforming European industry and services (DT)

Types of action:

RIA Research and Innovation action

DeadlineModel:

single-stage

Deadline:

14 March 2019 17:00:00

Opening date:

06 November 2018

Time Zone : (Brussels time)

Topic:

DT-TRANSFORMATIONS-12-2018-2020: Curation of digital assets and advanced digitisation

Open

Publication date:

27 October 2017

Focus area:

Digitising and transforming European industry and services (DT)

Types of action:

IA Innovation action

DeadlineModel:

single-stage

Deadline:

13 March 2018 17:00:00

Opening date:

07 November 2017

Time Zone : (Brussels time)

Topic:

SU-TRANSFORMATIONS-09-2018: Social platform on endangered cultural heritage and on illicit trafficking of cultural goods

Open

Publication date:

27 October 2017

Focus area:

Boosting the effectiveness of the Security Union (SU)

Types of action:

CSA Coordination and support action

DeadlineModel: single-stage
Opening date: 07 November 2017

Deadline: 13 March 2018 17:00:00

Time Zone : (Brussels time)

Topic: [TRANSFORMATIONS-01-2018: Research for inclusive growth: addressing the socioeconomic effects of technological transformations](#) Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage
Opening date: 07 November 2017

Deadline: 13 March 2018 17:00:00

Time Zone : (Brussels time)

Topic: [TRANSFORMATIONS-03-2018-2019: Innovative solutions for inclusive and sustainable urban environments](#) Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage
Opening date: 06 November 2018

Deadline: 14 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [TRANSFORMATIONS-03-2018-2019: Innovative solutions for inclusive and sustainable urban environments](#) Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage
Opening date: 07 November 2017

Deadline: 13 March 2018 17:00:00

Time Zone : (Brussels time)

Topic: [TRANSFORMATIONS-04-2019-2020: Innovative approaches to urban and regional development through cultural tourism](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage
Opening date: 06 November 2018

Deadline: 14 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [TRANSFORMATIONS-05-2018: Cities as a platform for citizen-driven innovation](#)

Open

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage
Opening date: 07 November 2017

Deadline: 13 March 2018 17:00:00

Time Zone : (Brussels time)

Topic: [TRANSFORMATIONS-06-2018: Inclusive and sustainable growth through cultural and creative industries and the arts](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Deadline: 13 March 2018 17:00:00

Opening date: 07 November 2017

Time Zone : (Brussels time)

Topic: [TRANSFORMATIONS-08-2019: The societal value of culture and the impact of cultural policies in Europe](#) Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 06 November 2018

Deadline: 14 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [TRANSFORMATIONS-13-2019: Using big data approaches in research and innovation policy making](#) Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 06 November 2018

Deadline: 14 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [TRANSFORMATIONS-14-2018: Supply and demand-oriented economic policies to boost robust growth in Europe – Addressing the social and economic challenges in Europe](#) Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 07 November 2017

Deadline: 13 March 2018 17:00:00

CALL: MIGRATION

Call identifier: H2020-SC6-MIGRATION-2018-2019-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Societal Challenges

Work Programme Year: H2020-2018-2020

Work Programme Part: [Europe in a changing world – Inclusive, innovative and reflective societies](#)

Call summary and aims

The aim of the call is to produce evidence-based recommendations for the global and European governance of migration of third country nationals as well as innovative (including ICT) solutions for the successful integration of migrants into European host societies. The call will contribute to promoting sustainable development, demonstrating a strong commitment to supporting the UN's Sustainable Development Goals (SDGs), and contribute to strengthening international cooperation, as well as a better understanding and awareness of the role of international development and regional policies. It will foster improved responses for the international protection of refugees, the management of forced displacement, and the promotion of more fact-based and accurate discourses and adapted strategies for addressing concerns in host communities. The call will also provide evidence based knowledge on the effects of migration on social systems, the access to and impact on labour markets and the cultural integration of third country nationals, in particular in urban settings. Solutions will be developed to enhance access to factual information on migration and the regulation of migration of third country nationals, also by involving migrants and their individual experiences in the shaping of narratives, including the gender dimension, and by promoting international cooperation where relevant.

Call updates

- **07 November 2017 00:30** The submission session is now available for: MIGRATION-05-2018-2020(RIA), MIGRATION-02-2018(RIA), DT-MIGRATION-06-2018-2019(IA), MIGRATION-08-2018(RIA)

Topic: [DT-MIGRATION-06-2018-2019: Addressing the challenge of migrant integration through ICT-enabled solutions](#) Forthcoming

Publication date: 27 October 2017

Focus area: Digitising and transforming European industry and services (DT)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 06 November 2018

Deadline: 14 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [DT-MIGRATION-06-2018-2019: Addressing the challenge of migrant integration through ICT-enabled solutions](#) Open

Publication date: 27 October 2017

Focus area: Digitising and transforming European industry and services (DT)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 07 November 2017

Deadline: 13 March 2018 17:00:00

Time Zone : (Brussels time)

Topic: [MIGRATION-01-2019: Understanding migration mobility patterns: elaborating mid and long-term migration scenarios](#) Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 06 November 2018

Deadline: 14 March 2019 17:00:00

Time Zone : (Brussels time)

Topic:

[MIGRATION-02-2018: Towards forward-looking migration governance: addressing the challenges, assessing capacities and designing future strategies](#)

Open

Publication date:

27 October 2017

Types of action:

RIA Research and Innovation action

DeadlineModel:

single-stage

Deadline:

13 March 2018 17:00:00

Opening date:

07 November 2017

Time Zone : (Brussels time)

Topic:

[MIGRATION-03-2019: Social and economic effects of migration in Europe and integration policies](#)

Forthcoming

Publication date:

27 October 2017

Types of action:

RIA Research and Innovation action

DeadlineModel:

single-stage

Deadline:

14 March 2019 17:00:00

Opening date:

06 November 2018

Time Zone : (Brussels time)

Topic:

[MIGRATION-05-2018-2020: Mapping and overcoming integration challenges for migrant children](#)

Open

Publication date:

27 October 2017

Types of action:

RIA Research and Innovation action

DeadlineModel:

single-stage

Deadline:

13 March 2018 17:00:00

Opening date:

07 November 2017

Time Zone : (Brussels time)

Topic: [MIGRATION-07-2019: International protection of refugees in a comparative perspective](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 06 November 2018

Deadline: 14 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [MIGRATION-08-2018: Addressing the challenge of forced displacement](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 07 November 2017

Deadline: 13 March 2018 17:00:00

Time Zone : (Brussels time)

CALL: GOVERNANCE FOR THE FUTURE

Call identifier: H2020-SC6-GOVERNANCE-2018-2019-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Societal Challenges

Work Programme Year: H2020-2018-2020

Work Programme Part: [Europe in a changing world – Inclusive, innovative and reflective societies](#)

Call summary and aims

The aim of the call is to enhance the evidence base and provide sound policy and technological options in order to develop adapted governance structures at various relevant levels. The call addresses the very foundations of governance and democracy by supporting the collection of new evidence and the development of policy options in key constitutional and institutional areas such as social rights in Europe, trust, citizenship, differentiation in the EU, open innovation, security and defence policy, digital democracy and also the delivery of public goods and the governance of the digital single market and of the European cloud infrastructure for public administration. Populism, polarisation and radicalisation are addressed from the angle of inclusive and reflective societies. International cooperation is also required in topics on global governance and violent extremism in the broader MENA region and the Balkans.

[- Less](#)

Call updates

- **07 November 2017 00:30** The submission session is now available for: SU-GOVERNANCE-11-2018(CSA), GOVERNANCE-02-2018-2019(RIA), GOVERNANCE-06-2018(RIA), GOVERNANCE-14-2018(ERA-NET-Cofund), GOVERNANCE-03-2018(RIA), GOVERNANCE-15-2018(CSA), DT-GOVERNANCE-05-2018-2019-2020(CSA), GOVERNANCE-08-2018(CSA)

Topic: DT-GOVERNANCE-05-2018-2019-2020: New forms of delivering public goods and inclusive public services		Forthcoming	
Publication date:	27 October 2017		
Focus area:	Digitising and transforming European industry and services (DT)		
<hr/>			
Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	14 March 2019 17:00:00
Opening date:	06 November 2018		
<hr/>			
Time Zone : (Brussels time)			
Topic: DT-GOVERNANCE-05-2018-2019-2020: New forms of delivering public goods and inclusive public services		Open	

Publication date: 27 October 2017
Focus area: Digitising and transforming European industry and services (DT)

Types of action: CSA Coordination and support action
DeadlineModel: single-stage
Opening date: 07 November 2017
Deadline: 13 March 2018 17:00:00

Time Zone : (Brussels time)

Topic: [DT-GOVERNANCE-12-2019-2020: Pilot on using the European cloud infrastructure for public administrations](#) Forthcoming

Publication date: 27 October 2017
Focus area: Digitising and transforming European industry and services (DT)

Types of action: IA Innovation action
DeadlineModel: single-stage
Opening date: 06 November 2018
Deadline: 14 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [DT-GOVERNANCE-13-2019: Digitisation, Digital Single Market and European culture: new challenges for creativity, intellectual property rights and copyright](#) Forthcoming

Publication date: 27 October 2017
Focus area: Digitising and transforming European industry and services (DT)

Types of action: RIA Research and Innovation action
DeadlineModel: single-stage
Opening date: 06 November 2018
Deadline: 14 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [GOVERNANCE-01-2019: Trust in governance](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 06 November 2018

Deadline: 14 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [GOVERNANCE-02-2018-2019: Past, present and future of differentiation in European governance](#)

Forthcoming

Publication date: 27 October 2017

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 06 November 2018

Deadline: 14 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [GOVERNANCE-02-2018-2019: Past, present and future of differentiation in European governance](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 07 November 2017

Deadline: 13 March 2018 17:00:00

Time Zone : (Brussels time)

Topic: [GOVERNANCE-03-2018: Addressing populism and boosting civic and democratic engagement](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 07 November 2017

Deadline: 13 March 2018 17:00:00

Time Zone : (Brussels time)

Topic: [GOVERNANCE-04-2019: Enhancing social rights and EU citizenship](#)

Forthcoming

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 06 November 2018

Deadline: 14 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [GOVERNANCE-06-2018: Trends and forward-looking scenarios in global governance](#)

Open

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 07 November 2017

Deadline: 13 March 2018 17:00:00

Time Zone : (Brussels time)

Topic: [GOVERNANCE-08-2018: Partnering for viability assessments of innovative solutions for markets outside Europe](#)

Open

Publication date: 27 October 2017

Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	13 March 2018 17:00:00
Opening date:	07 November 2017		
Time Zone : (Brussels time)			
Topic:	<u>GOVERNANCE-14-2018: ERA-Net Co-fund - Renegotiating democratic governance in times of disruptions</u>		Open
Publication date:	27 October 2017		
Types of action:	ERA-NET-Cofund ERA-NET Cofund		
DeadlineModel:	single-stage	Deadline:	13 March 2018 17:00:00
Opening date:	07 November 2017		
Time Zone : (Brussels time)			
Topic:	<u>GOVERNANCE-15-2018: Taking lessons from the practices of interdisciplinarity in Europe</u>		Open
Publication date:	27 October 2017		
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	Deadline:	13 March 2018 17:00:00
Opening date:	07 November 2017		
Time Zone : (Brussels time)			
Topic:	<u>SU-GOVERNANCE-10-2019: Drivers and contexts of violent extremism in the broader MENA region and the Balkans</u>		Forthcoming
Publication date:	27 October 2017		
Focus area:	Boosting the effectiveness of the Security Union (SU)		

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 06 November 2018

Deadline: 14 March 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SU-GOVERNANCE-11-2018: Extreme ideologies and polarisation](#)

Open

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 07 November 2017

Deadline: 13 March 2018 17:00:00

Time Zone : (Brussels time)

CALL: MARIE SKŁODOWSKA-CURIE INNOVATIVE TRAINING NETWORKS

Call identifier: H2020-MSCA-ITN-2019

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Excellent Science

Work Programme Year: H2020-2018-2020

Work Programme Part: [Marie Skłodowska-Curie actions](#)

Topic: [MSCA-ITN-2019: Innovative Training Networks](#)

Forthcoming

Publication date: 27 October 2017

Types of action: MSCA-ITN-ETN European Training Networks

	MSCA-ITN-EJD European Joint Doctorates		
	MSCA-ITN-EID European Industrial Doctorates		
DeadlineModel:	single-stage	Deadline:	15 January 2019 17:00:00
Opening date:	13 September 2018		

Time Zone : (Brussels time)

CALL: SECURITY

Call identifier: H2020-SU-SEC-2018-2019-2020

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Societal Challenges

Work Programme Year: H2020-2018-2020

Work Programme Part: [Secure societies - Protecting freedom and security of Europe and its citizens](#)

Call summary and aims

This Call deals with R&D and innovation towards establishing disaster-resilient societies, fighting against crime and terrorism, and improving border and external security.

When a topic has eligibility and admissibility conditions which require the active involvement of specific entities (e.g.: '3 Law Enforcement Agencies (LEA) from at least 3 different EU or Associated countries'), this means that these entities have to be participants and should be directly involved in the carrying out of the tasks foreseen in the grant. When a reference is made to "practitioners", the text refers to someone who is qualified or registered to practice a particular occupation, profession in the field of security or civil protection. Applicants should identify clearly which members of the consortium they consider "practitioners" in the specific context of their proposal, and to include a clear description of their respective role and added-value as practitioners in section 4.3 of proposal part B4-6.

Whereas activities will have an exclusive focus on civil applications, coordination with the activities of the European Defence Agency (EDA) may be considered with possible synergies being established with projects funded by the EDA

programmes[[<http://eda.europa.eu/what-we-do/eda-priorities/research-technology>]]. The complementarity of such synergies should be described comprehensively. On-going cooperation should be taken into account. Only an explicit and firm commitment from EDA-funded projects to contribute to a project may positively impact the evaluation of a proposal submitted under this work programme part.

In this Call, "standards" and "standardisation" are used in a broad sense, except where they are specifically referred to as "European standards" or "European standardisation".

All topics in this work programme part will be subject to security scrutiny.

The Commission reserves the possibility under this call to exclude a specific project from the delegation to the REA if it appears that that project would necessarily have a close link to the development of EU policies in the field of security.

Disaster-Resilient Societies

The following two paragraphs are relevant for the Disaster-Resilient Societies section of the Work Programme, .i.e. topics **DRS-01 to DRS-05**.

Securing itself against, and being prepared for, disasters is one of the central elements of the functioning of any society. There are hardly any societal functions which are not to some extent exposed to natural or man-made disasters and related resilience and security issues.

The aim of this section is to advance innovation in the society at large, and among first responders (as acknowledged within the International Forum to Advance First Responder Innovation[[<http://www.internationalresponderforum.org/>]] in which the Commission has decided to participate) to reduce the loss of human life and to reduce environmental, economic and material damage from natural and man-made disasters, including from climate-related weather events, earthquakes and volcanic events, space weather events, industrial disasters, crime and terrorism threats.

Fight against Crime and Terrorism

The following paragraph is relevant for the *Fight against Crime and Terrorism* section of the Work Programme, .i.e. topics **FCT-01 to FCT-04**.

The ambition of the activities under "Fight against Crime and Terrorism" is to mitigate potential consequences of crime- and/or terrorism-related incidents or to avoid them. To this end, new technologies and capabilities are required. They should address the fight against and the prevention of crime (including cyber-crime), illegal trafficking and terrorism (including cyber-terrorism and CBRN-E attacks), along with understanding and tackling terrorist ideas and beliefs. Human factors and the societal context should be taken into account, whilst respecting fundamental rights, including privacy, protection of personal data and the free movement of persons.

Border and External Security

The following two paragraphs are relevant for the Border and External Security section of the Work Programme, .i.e. topics **BES-01 to BES-03**.

This section concerns strengthening security through border management. This includes both control and surveillance issues, on land and in the maritime domain. It contributes to the further development of the European Border Surveillance System (EUROSUR), its interoperability with other systems, and to enhance the use of new technology for border checks, also in relation to the Smart Borders legislative initiative. It also addresses supply chain security in the context of the EU's customs policy, and migrant smuggling.

The aim of this section is to develop technologies and capabilities which are required to enhance systems and their interoperability, equipment, tools, processes, and methods for rapid identification to improve border security, whilst respecting fundamental rights including free movement of persons, protection of personal data, and privacy. New technologies, capabilities and solutions are also required to support the Union's external security policies in civilian tasks, ranging from civil protection to humanitarian relief, border management, law enforcement, or peace-keeping and post-crisis stabilisation, including conflict prevention, peace-building and mediation. This will also require research on conflict resolution and restoration of peace and justice, early identification of factors leading to conflict and on the impact of restorative justice processes.

Topic:	<u>SU-BES01-2018-2019-2020: Human factors, and social, societal, and organisational aspects of border and external security</u>	Forthcoming
Publication date:	27 October 2017	
Focus area:	Boosting the effectiveness of the Security Union (SU)	

Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	23 August 2018 17:00:00
Opening date:	15 March 2018		

Time Zone : (Brussels time)

Topic:	<u>SU-BES01-2018-2019-2020: Human factors, and social, societal, and organisational aspects of border and external security</u>	Forthcoming
Publication date:	27 October 2017	
Focus area:	Boosting the effectiveness of the Security Union (SU)	

Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	22 August 2019 17:00:00
Opening date:	14 March 2019		

Time Zone : (Brussels time)

Topic: [SU-BES02-2018-2019-2020: Technologies to enhance border and external security](#) Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	22 August 2019 17:00:00
Opening date:	14 March 2019		

Time Zone : (Brussels time)

Topic: [SU-BES02-2018-2019-2020: Technologies to enhance border and external security](#) Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	23 August 2018 17:00:00
Opening date:	15 March 2018		

Time Zone : (Brussels time)

Topic: [SU-BES03-2018-2019-2020: Demonstration of applied solutions to enhance border and external security](#) Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	22 August 2019 17:00:00
Opening date:	14 March 2019		

Time Zone : (Brussels time)

Topic: [SU-BES03-2018-2019-2020: Demonstration of applied solutions to enhance border and external security](#) Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action:	IA Innovation action		
DeadlineModel:	single-stage	Deadline:	23 August 2018 17:00:00
Opening date:	15 March 2018		

Time Zone : (Brussels time)

Topic: [SU-DRS01-2018-2019-2020: Human factors, and social, societal, and organisational aspects for disaster-resilient societies](#) Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage	Deadline:	23 August 2018 17:00:00
Opening date:	15 March 2018		

Time Zone : (Brussels time)

Topic: [SU-DRS01-2018-2019-2020: Human factors, and social, societal, and organisational aspects for disaster-resilient societies](#) Forthcoming

Publication date: 27 October 2017
Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: RIA Research and Innovation action
DeadlineModel: single-stage
Opening date: 14 March 2019
Deadline: 22 August 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SU-DRS02-2018-2019-2020: Technologies for first responders](#) Forthcoming
Publication date: 27 October 2017
Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: RIA Research and Innovation action
DeadlineModel: single-stage
Opening date: 14 March 2019
Deadline: 22 August 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SU-DRS02-2018-2019-2020: Technologies for first responders](#) Forthcoming
Publication date: 27 October 2017
Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: RIA Research and Innovation action
DeadlineModel: single-stage
Opening date: 15 March 2018
Deadline: 23 August 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SU-DRS03-2018-2019-2020: Pre-normative research and demonstration for disaster-resilient societies](#) Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 15 March 2018

Deadline: 23 August 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SU-DRS03-2018-2019-2020: Pre-normative research and demonstration for disaster-resilient societies](#) Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: IA Innovation action

DeadlineModel: single-stage

Opening date: 14 March 2019

Deadline: 22 August 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SU-DRS04-2019-2020: Chemical, biological, radiological and nuclear \(CBRN\) cluster](#) Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Opening date: 14 March 2019

Deadline: 22 August 2019 17:00:00

Time Zone : (Brussels time)

Topic:	<u>SU-DRS05-2019: Demonstration of novel concepts for the management of pandemic crises</u>			Forthcoming
Publication date:	27 October 2017			
Focus area:	Boosting the effectiveness of the Security Union (SU)			
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Types of action:	IA Innovation action			
DeadlineModel:	single-stage	Deadline:	22 August 2019 17:00:00	
Opening date:	14 March 2019			
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				Time Zone : (Brussels time)
Topic:	<u>SU-FCT01-2018-2019-2020: Human factors, and social, societal, and organisational aspects to solve issues in fighting against crime and terrorism</u>			Forthcoming
Publication date:	27 October 2017			
Focus area:	Boosting the effectiveness of the Security Union (SU)			
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Types of action:	RIA Research and Innovation action			
DeadlineModel:	single-stage	Deadline:	23 August 2018 17:00:00	
Opening date:	15 March 2018			
<hr/>				
				Time Zone : (Brussels time)
Topic:	<u>SU-FCT01-2018-2019-2020: Human factors, and social, societal, and organisational aspects to solve issues in fighting against crime and terrorism</u>			Forthcoming
Publication date:	27 October 2017			
Focus area:	Boosting the effectiveness of the Security Union (SU)			
<hr/>				
Types of action:	RIA Research and Innovation action			
DeadlineModel:	single-stage	Deadline:	22 August 2019 17:00:00	
Opening date:	14 March 2019			

DeadlineModel: single-stage
Opening date: 15 March 2018

Deadline: 23 August 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SU-FCT03-2018-2019-2020: Information and data stream management to fight against \(cyber\)crime and terrorism](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: IA Innovation action

DeadlineModel: single-stage
Opening date: 14 March 2019

Deadline: 22 August 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SU-GM01-2018-2019-2020: Pan-European networks of practitioners and other actors in the field of security](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: CSA Coordination and support action

DeadlineModel: single-stage
Opening date: 15 March 2018

Deadline: 23 August 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SU-GM01-2018-2019-2020: Pan-European networks of practitioners and other actors in the field of security](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 14 March 2019

Deadline: 22 August 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SU-GM02-2018-2020: Strategic pre-commercial procurements of innovative, advanced systems to support security](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: CSA Coordination and support action

DeadlineModel: single-stage

Opening date: 15 March 2018

Deadline: 23 August 2018 17:00:00

Time Zone : (Brussels time)

Topic: [SU-GM03-2018-2019-2020: Pre-commercial procurements of innovative solutions to enhance security](#)

Forthcoming

Publication date: 27 October 2017

Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: PCP Pre-Commercial Procurement

DeadlineModel: single-stage

Opening date: 14 March 2019

Deadline: 22 August 2019 17:00:00

Time Zone : (Brussels time)

Topic: [SU-GM03-2018-2019-2020: Pre-commercial procurements of innovative solutions to enhance security](#)

Forthcoming

Publication date: 27 October 2017
Focus area: Boosting the effectiveness of the Security Union (SU)

Types of action: PCP Pre-Commercial Procurement
DeadlineModel: single-stage
Opening date: 15 March 2018
Deadline: 23 August 2018 17:00:00

Time Zone : (Brussels time)

CALL: MARIE SKŁODOWSKA-CURIE CO-FUNDING OF REGIONAL, NATIONAL AND INTERNATIONAL PROGRAMMES

Call identifier: H2020-MSCA-COFUND-2019

Publication date: 27 October 2017

Horizon 2020 [H2020 website](#)

Pillar: Excellent Science

Work Programme Year: H2020-2018-2020

Work Programme Part: [Marie Skłodowska-Curie actions](#)

Topic: [MSCA-COFUND-2019: Co-funding of regional, national and international programmes](#)

Forthcoming

Publication date: 27 October 2017

Types of action: MSCA-COFUND-FP Fellowship programmes
MSCA-COFUND-DP Doctoral programmes
DeadlineModel: single-stage
Opening date: 04 April 2019
Deadline: 26 September 2019 17:00:00

Time Zone : (Brussels time)