

Horizon 2020 – The Framework Programme for Research and Innovation

Horizon 2020 commenced in January 2014 as the new Framework Programme to implement the [Innovation Union](#) with research and innovation funds of €80 billion from 2014 – 2020. Horizon 2020 addresses all research and innovation funding that was previously provided through the Framework Programmes for Research and Technical Development (e.g. FP7), Competitiveness and Innovation Programme (CIP) and European Institute of Innovation and Technology.

Support proposed for Research and Innovation under Horizon 2020 includes:

- Strengthening research in Science
- Strengthening Industrial leadership in Innovation, including investment in key technologies, access to capital and support for SMEs
- Address Societal challenges, such as climate change, sustainable transport and mobility, affordable renewable energy, food security, ageing population

This Guide to Horizon 2020 provides an overview of Calls, themes and deadlines from 2017 Calls for Proposals within the **Marie Curie, eInfrastructures, Leadership in Enabling and Industrial Technologies** (LEIT - Components and Systems, Advanced Computing, Future Internet, Content Technologies and Information Management, Robotics and Key enabling Technologies (Micro-nano-electronics and photonics)) and each of the **Societal Challenges** (Health, Food Security and Agriculture, Energy, Transport, Environment, Inclusive and Reflective Societies, Secure Societies) Work Programmes. The individual Work Programmes for 2016-2017 for each thematic area were initially published on 14 October 2015. Please find links to these work programmes within the relevant sections in this Guide.

Horizon 2020 is fully open to International Cooperation. African research institutions can participate as part of International Consortia with partners from Europe to apply for funding as part of an international project addressing the challenges published in the Work Programme.

ICT is a horizontal activity that is included across a number of Work Programmes within LEIT and within Societal Challenges Work Programmes. Download [Guide to ICT-related Activities in Work Programmes](#)

Please visit the [Horizon 2020 section within the Participants portal](#) to download the Proposers Guide and specific templates to prepare proposals for submission under Horizon 2020 2017 calls within specific Marie Curie, eInfrastructures, LEIT and Societal Challenges themes.

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| Innovation Union | http://ec.europa.eu/research/innovation-union/index_en.cfm |
| Guide to ICT-related Activities in H2020 2016-17 Work Programmes | http://www.ist-africa.org/home/files/GuideICTinWPs2016-17.pdf |
| Horizon 2020 Calls – Participants Portal | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/index.html |
| IST-Africa Guide to 2016 Calls within Horizon 2020 | http://www.ist-africa.org/home/files/IST-Africa_Guide_2016Calls_Horizon2020.pdf |

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I. Excellent Science

With the aim of increasing excellence in science, it is envisaged that Horizon 2020 will support frontier research, collaborative research on [Future and Emerging Technologies](#) (FET), training and career development through [Marie Curie Actions](#) and [research infrastructures](#) (including eInfrastructures).

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| Future and Emerging Technologies (FET) | http://cordis.europa.eu/fp7/ict/programme/fet_en.html |
| Marie Curie Actions | http://ec.europa.eu/research/mariecurieactions/ |
| Research infrastructures (including eInfrastructures) | http://ec.europa.eu/research/infrastructures/index_en.cfm |

Marie Curie

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| Marie Sklodowska-Curie Work Programme 2016 - 2017 | http://www.ist-africa.org/home/files/h2020-wp1617-msca_en.pdf |
| Marie Sklodowska-Curie Innovative Training Networks (ITN) | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-msca-itn-2017.html |
| Single Stage Calls 2017 - Deadline 10 January 2017 | |
| H2020-MSCA-ITN-2017 | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-msca-itn-2017.html |
| Marie Sklodowska-Curie Research and Innovation Staff Exchange (RISE) | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-msca-rise-2017.html |
| Single Stage Calls 2017 - Deadline 05 April 2017 | |
| H2020-MSCA-RISE-2017 | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-msca-rise-2017.html |
| Individual Fellowships (IF) | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-msca-if-2017.html |
| Single Stage Calls 2017 - Deadline 14 September 2017 | |
| H2020-MSCA-IF-2017 | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-msca-if-2017.html |

Research Infrastructures Work Programme

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| Infrastructures 2016 – 2017 Work Programme | http://www.ist-africa.org/home/files/h2020-wp1617-infrastructures_en.pdf |
| Single stage calls 2017 - Deadline 29 March 2017 | |
| E-Infrastructures (EINFRA) EINFRA-12-2017: Data and Distributed Computing e-infrastructures for Open Science EINFRA-21-2017: Platform-driven e-infrastructure innovation (RIA Research and Innovation action) | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-einfra-2016-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/einfra-12-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/einfra-21-2017.html |
| Development and long-term sustainability of new pan-European research infrastructures (INFRADEV) INFRADEV-01-2017: Design Studies | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-infradev-2016-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/infradev-01-2017.html |
| Fostering the innovation potential of Research Infrastructures (INFRAINNOV) INFRAINNOV-01-2017: Fostering co-innovation for future detection and imaging technologies | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-infrainnov-2016-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/infradev-01-2017.html |
| Support to policy and international cooperation (INFRASUPP) INFRASUPP-02-2017: Policy and international cooperation measures for research infrastructures | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-infrasupp-2016-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/infrasupp-02-2017.html |

II. Leadership in Enabling and Industrial Technologies

With the aim to make Europe a more attractive location for investment in research and innovation, it is envisaged that Horizon 2020 will build

- Leadership in enabling and industrial technologies with dedicated support for ICT, nanotechnologies, advanced materials, biotechnology, advanced manufacturing and processing, and space, while also providing support for cross-cutting actions to capture the accumulated benefits from combining several Key Enabling Technologies;
- Facilitate access to risk finance;
- Provide support for innovation in SMEs.

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| LEIT ICT Work Programme 2016 – 2017 | http://www.ist-africa.org/home/files/h2020-wp1617-leit-ict_en.pdf |
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ICT related challenges include Components and Systems, Advanced Computing, Future Internet, Content Technologies and Information Management, Robotics and Key enabling Technologies (Micro-nano-electronics and photonics). Pursuing the change initiated under Work Programme 2014-2015, activities will continue to promote more innovation-orientation to ensure that the EU industry remains strong in the core technologies that are at the roots of future value chains. The total budget available in 2017 is €830.85 million.

Leadership in Enabling and Industrial Technologies 2017 Calls

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| ICT 2017 - Information and Communications Technologies http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-ict-2016-2017.html | |
| Single Stage Calls 2016 - Deadline 14 March 2017 | |
| EU-Brazil Joint Call | |
| EUB-01-2017: Cloud Computing | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/eub-01-2017.html |
| EUB-02-2017: IoT Pilots | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/eub-02-2017.html |
| EUB-03-2017: 5G Networks | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/eub-03-2017.html |
| Single Stage Calls 2016 - Deadline 25 April 2017 | |
| International Cooperation Activities | |
| ICT-39-2016-2017: International partnership building in low and middle income countries | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ict-39-2016-2017.html |
| A new Generation of Components and Systems | |
| ICT-05-2017: Customised and low energy computing | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ict-05-2017.html |
| Future Internet | |
| ICT-11-2017: Collective Awareness Platforms for Sustainability and Social Innovation | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ict-11-2017.html |
| Content | |
| ICT-14-2016-2017: Big Data PPP: cross-sectorial and cross-lingual data integration and experimentation | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ict-14-2016-2017.html |
| ICT-15-2016-2017: Big Data PPP: Large Scale Pilot actions in sectors best benefitting from data-driven innovation | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ict-15-2016-2017.html |
| ICT-16-2017: Big data PPP: research addressing main technology challenges of the data economy | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ict-16-2017.html |
| ICT-17-2016-2017: Big data PPP: Support, industrial skills, benchmarking and evaluation | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ict-17-2016-2017.html |
| ICT-20-2017: Tools for smart digital content in the creative industries | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ict-20-2017.html |
| ICT-23-2017: Interfaces for accessibility | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ict-23-2017.html |
| Robotics and Autonomous Systems | |
| ICT-25-2016-2017: Advanced robot capabilities research and take-up | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ict-25-2016-2017.html |
| ICT-27-2017: System abilities, SME & benchmarking actions, safety certification | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ict-27-2017.html |
| ICT-28-2017: Robotics Competition, coordination and support | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ict-28-2017.html |

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| ICT Key Enabling Technologies | |
| ICT-30-2017: Photonics KET 2017 | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ict-30-2017.html |
| ICT-31-2017: Micro- and nanoelectronics technologies | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ict-31-2017.html |
| Innovation and Entrepreneurship support | |
| ICT-32-2017: Startup Europe for Growth and Innovation Radar | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ict-32-2017.html |
| ICT-33-2017: Innovation procurement networks | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ict-33-2017.html |
| Support Actions | |
| ICT-40-2017: Reinforcing European presence in international ICT standardisation | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ict-40-2017.html |
| ICT-41-2017: Next Generation Internet | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ict-41-2017.html |

III. Societal Challenges

As part of addressing the Europe 2020 strategy, funding will focus on the following challenges:

- Health, demographic change and wellbeing – Download [Work Programme](#)
- Food security, sustainable agriculture, marine and maritime research, and the bio-economy - Download [Work Programme](#)
- Secure, clean and efficient energy - Download [Work Programme](#)
- Smart, green and integrated transport - Download [Work Programme](#)
- Climate action, resource efficiency and raw materials - Download [Work Programme](#)
- Inclusive, innovative and reflective societies – Download [Work Programme](#)
- Secure Societies – Download [Work Programme](#)

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| Health, Demographic Change and Wellbeing Work Programme | http://www.ist-africa.org/home/files/h2020-wp1617-health_en.pdf |
| Food Security, Sustainable Agriculture, Marine and Maritime Research, and the Bio-Economy Work Programme | http://www.ist-africa.org/home/files/h2020-wp1617-food_en.pdf |
| Secure, Clean and Efficient Energy Work Programme | http://www.ist-africa.org/home/files/h2020-wp1617-energy_en.pdf |
| Smart, Green and Integrated Transport Work Programme | http://www.ist-africa.org/home/files/h2020-wp1617-transport_en.pdf |
| Climate Action, Resource Efficiency and Raw Materials Work Programme | http://www.ist-africa.org/home/files/h2020-wp1617-climate_en.pdf |
| Inclusive, Innovative and Reflective Societies Work Programme | http://www.ist-africa.org/home/files/h2020-wp1617-societies_en.pdf |
| Secure Societies Work Programme | http://www.ist-africa.org/home/files/h2020-wp1617-security_en.pdf |

Societal Challenge 1: Health Demographic Change and Wellbeing

The Horizon 2020 Societal Challenge of [‘Health, Demographic Change and Wellbeing’ \(SC1\)](#) for 2016 and 2017 includes 21 topics in the ‘Personalised Health’ focus area call (13 in 2016 only, 7 in 2017 only and 4 which are open in both years) and 16 topics in the ‘Co-ordination Activities’ call (12 in 2015 and 4 in 2017). The estimated budget available for 2017 is €486.44 million.

Topics in the 2017 calls are divided into 6 areas that reflect the need for a transnational and integrated approach to the challenge, providing support both to longer and mid-term research as well as to shorter-term innovation activities. The overall strategic orientation for the 'Health, Demographic Change and Well-being' Work Programme 2016-2017 is 'promoting healthy ageing and personalised healthcare'. The programme will implement several research priorities: personalised medicine, rare diseases, human biomonitoring, mental health, comparative effectiveness research, advanced technologies, e/mhealth, robotics, patient empowerment, active and healthy ageing, data security, big data, valorisation, anti-microbial resistance, infectious diseases including vaccines, maternal and child health and the silver economy under following areas:

- Understanding health, well-being and disease
- Preventing disease
- Treating and managing diseases
- Active ageing and self-management of health
- Methods and data
- Co-ordination Activities

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| Societal Challenge 1: Health Demographic Change and Wellbeing | http://ec.europa.eu/programmes/horizon2020/en/h2020-section/health-demographic-change-and-wellbeing |
| Personalised Medicine (PM &HCO) | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sc1-2016-2017.html |
| Single stage calls 2017 - Deadline 31 January 2017 | |
| 1.4 Active ageing and self-management of health SC1-PM-15-2017: Personalised coaching for well-being and care of people as they age | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc1-pm-15-2017.html |
| Coordination activities (HCO) SC1-HCO-17-2017: Support for large scale uptake of Digital Innovation for Active and Healthy Ageing | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc1-hco-17-2017.html |
| Single stage calls 2017 - Deadline 14 March 2017 | |
| 1.5 Methods and data SC1-PM-16-2017: In-silico trials for developing and assessing biomedical products | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc1-pm-16-2017.html |
| SC1-PM-17-2017: Personalised computer models and in-silico systems for well-being | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc1-pm-17-2017.html |

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| SC1-PM-19-2017: PPI for uptake of standards for the exchange of digitalised healthcare records | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc1-pm-19-2017.html |
| Two stage calls 2016-2017 - Stage 1 Deadline: 4 October 2016, Stage 2 Deadline: 11 April 2017 | |
| 1.1 Understanding health, well-being and disease SC1-PM-02-2017: New concepts in patient stratification | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc1-pm-02-2017.html |
| 1.2 Preventing disease SC1-PM-07-2017: Promoting mental health and well-being in the young | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc1-pm-07-2017.html |
| 1.3 Treating and managing diseases SC1-PM-08-2017: New therapies for rare diseases | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc1-pm-08-2017.html |
| SC1-PM-10-2017: Comparing the effectiveness of existing healthcare interventions in the adult population | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc1-pm-10-2017.html |
| Single stage calls 2017 - Deadline 11 April 2017 | |
| Coordination activities (HCO) SC1-HCO-03-2017: Implementing the Strategic Research Agenda on Personalised Medicine | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc1-hco-03-2017.html |
| SC1-HCO-07-2017: Global Alliance for Chronic Diseases (GACD) prevention and management of mental disorders | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc1-hco-07-2017.html |
| SC1-HCO-08-2017: Actions to bridge the divide in European health research and innovation | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc1-hco-08-2017.html |
| 1.1 Understanding health, well-being and disease SC1-PM-03-2017: Diagnostic characterisation of rare diseases | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc1-pm-03-2017.html |
| 1.3 Treating and managing diseases SC1-PM-11-2016-2017: Clinical research on regenerative medicine | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc1-pm-11-2016-2017.html |
| 1.5 Methods and data SC1-PM-20-2017: Methods research for improved health economic evaluation | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc1-pm-20-2017.html |

Societal Challenge 2: Food security, sustainable agriculture, marine and maritime research, and the bio-economy

The Horizon 2020 Societal Challenge of [‘Food Security, Sustainable Agriculture, Marine and Maritime Research and the Bio-economy’ \(SC2\)](#) for 2016 and 2017 is composed of four calls, addressing all the bioeconomy sectors from the sustainable exploration of the oceans and seas and the development of a blue economy, to climate-smart agriculture, new models for development in rural areas, new biobased goods and services.

This Work Programme will leverage research and innovation to address major societal challenges:

- Ensuring food and nutritional security, together with resource efficiency, and facing climate change
- Sustainably exploiting the potential of the oceans
- Promoting dynamic territorial development, through the mobilisation of rural and coastal economies
- Boosting investment, employment and economic growth in the European Union

Many of the challenges addressed in this Work Programme are of global nature, requiring the development of global solutions in cooperation with third countries and relevant international organisations or initiatives. Particular priorities for international cooperation are:

- Blue Growth, which will support the implementation of the Atlantic Ocean Research Alliance (focus on Arctic) and the BLUEMED Initiative on marine and maritime research and innovation activities in the Mediterranean area;
- Sustainable Food Security, which will support flagships initiatives with China and partnerships initiatives with East-Asian countries on aquaculture and Africa on Food and Nutrition Security, Sustainable Agriculture and the establishment of an International Research Consortium on animal health.

The “SFS-43-2017: Earth observation services for the monitoring of agricultural production in Africa” call specifically mentions Africa as a target region.

The estimated total budget available for 2016 is EUR 432.74 million.

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| Societal Challenge 2: Food security, sustainable agriculture, marine and maritime research, and the bio-economy | http://ec.europa.eu/programmes/horizon2020/en/h2020-section/food-security-sustainable-agriculture-and-forestry-marine-maritime-and-inland-water |
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Single stage calls 2017 - Deadline 14 February 2017

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| Sustainable Food Security (SFS) - Resilient and resource-efficient value chains | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sfs-2016-2017.html |
| More resilient and resource efficient value chains | |
| SFS-04-2017: New partnerships and tools to enhance European capacities for in-situ conservation | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-04-2017.html |
| SFS-05-2017: Robotics Advances for Precision Farming | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-05-2017.html |
| SFS-13-2017: Validation of diagnostic tools for animal and plant health | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-13-2017.html |
| SFS-18-2017: Support to the development and implementation of FOOD 2030 - a European research and innovation policy framework for food and nutrition security | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-18-2017.html |

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| SFS-19-2016-2017: ERA-NET Cofund: Public-Public Partnerships in the bioeconomy | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-19-2016-2017.html |
| SFS-22-2017: Smart fisheries technologies for an efficient, compliant and environmentally friendly fishing sector | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-22-2017.html |
| A competitive food industry | |
| SFS-35-2017: Innovative solutions for sustainable food packaging | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-35-2017.html |
| Healthy and safe foods and diets for all | |
| SFS-36-2017: Co-fund on "One Health" (zoonoses – emerging threats) | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-36-2017.html |
| Implementation of the EU-China FAB Flagship initiative | |
| SFS-48-2017: Resource-efficient urban agriculture for multiple benefits – contribution to the EU-China Urbanisation Partnership | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-48-2017.html |
| Environment-smart and climate-smart primary production | |
| SFS-49-2017: Better understanding the challenges facing agriculture and the impacts of policies - A European platform to support modelling in agriculture | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-49-2017.html |
| Support to the Implementation of the EU-Africa Partnership on Food and Nutrition Security and Sustainable Agriculture | |
| SFS-43-2017: Earth observation services for the monitoring of agricultural production in Africa | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-43-2017.html |
| SFS-50-2017: Supporting international cooperation activities on agriculture soil contribution to climate change mitigation and adaptation | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-50-2017.html |
| Blue Growth (BG) - Demonstrating an ocean of opportunities | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-bq-2016-2017.html |
| Boosting Innovation for emerging Blue Growth activities | |
| BG-02-2016-2017: High value-added specialised vessel concepts enabling more efficient servicing of emerging coastal and offshore activities | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/bg-02-2016-2017.html |
| BG-04-2017: Multi-use of the oceans marine space, offshore and near-shore: Enabling technologies | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/bg-04-2017.html |
| Linking healthy oceans and seas with healthy people | |
| BG-06-2017: Interaction between people, oceans and seas: a strategic approach towards healthcare and well-being | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/bg-06-2017.html |
| BG-07-2017: Blue green innovation for clean coasts and seas | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/bg-07-2017.html |
| BG-08-2017: Innovative sustainable solutions for improving the safety and dietary properties of seafood | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/bg-08-2017.html |

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| <p>The Arctic Dimension</p> <p>BG-11-2017: The effect of climate change on Arctic permafrost and its socio-economic impact, with a focus on coastal areas</p> | <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/bg-11-2017.html</p> |
| <p>Valorising the Mediterranean Sea Basin</p> <p>BG-14-2017: Monitoring and assessing fish stocks, other pelagic species and habitats with an automated, non-invasive, opto-acoustic system.</p> | <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/bg-14-2017.html</p> |
| <p>Rural Renaissance (RUR) - Fostering innovation and business opportunities</p> | <p>https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-rur-2016-2017.html</p> |
| <p>New approaches towards policies and governance</p> <p>RUR-05-2017: Novel public policies, business models and mechanisms for the sustainable supply of and payment for forest ecosystem services</p> | <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/rur-05-2017.html</p> |
| <p>Innovation and skill development</p> <p>RUR-10-2016-2017: Thematic Networks compiling knowledge ready for practice</p> <p>RUR-12-2017: Networking European farms to boost thematic knowledge exchanges and close the innovation gap</p> <p>RUR-15-2017: The benefits of working with others – fostering social capital in the farming sector</p> | <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/rur-10-2016-2017.html</p> <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/rur-12-2017.html</p> <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/rur-15-2017.html</p> |
| <p>Bio-based innovation for sustainable goods and services (BB) - Supporting the development of a European Bioeconomy</p> | <p>https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-bb-2016-2017.html</p> |
| <p>Building the "bio-based markets of the future"- mobilising stakeholders engagement</p> <p>BB-05-2017: Bio-based products: Mobilisation and mutual learning action plan</p> <p>BB-08-2017: Strategies for improving the bioeconomy knowledge of the general public</p> | <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/bb-05-2017.html</p> <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/bb-08-2017.html</p> |
| <p>Securing sustainable biomass supply for bio-based goods and services</p> <p>BB-07-2017: Plant Molecular Factory</p> | <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/bb-07-2017.html</p> |

| Two stage calls 2017 - Stage 1 Deadline: 14 February 2017, Stage 2 Deadline: 13 September 2017 | |
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| Sustainable Food Security (SFS) – Resilient and resource-efficient value chains | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sfs-2016-2017.html |
| More resilient and resource efficient value chains | |
| SFS-07-2016-2017: Organic breeding – Increasing the competitiveness of the organic breeding and farming sectors | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-07-2016-2017.html |
| SFS-08-2017: Organic inputs – contentious inputs in organic farming | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-08-2017.html |
| SFS-10-2017: Research and approaches for emerging diseases and pests in plants and terrestrial livestock | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-10-2017.html |
| SFS-15-2016-2017: Breeding livestock for resilience and efficiency | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-15-2016-2017.html |
| SFS-16-2017: Bee health and sustainable pollination | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-16-2017.html |
| SFS-17-2017: Innovations in plant protection | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-17-2017.html |
| SFS-20-2017: Towards a science-based regionalisation of the Common Fisheries Policy | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-20-2017.html |
| SFS-21-2016-2017: Advancing basic biological knowledge and improving management tools for commercially important fish and other seafood species | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-21-2016-2017.html |
| Environment-smart and climate-smart primary production | |
| SFS-27-2017: Permanent grassland – farming systems and policies | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-27-2017.html |
| SFS-28-2017: Functional biodiversity – productivity gains through functional biodiversity: effective interplay of crop pollinators and pest predators | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-28-2017.html |
| SFS-29-2017: Socio-eco-economics – socio-economics in ecological approaches | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-29-2017.html |
| Environment-smart and climate-smart primary production | |
| SFS-30-2017: Closing loops at farm and regional levels to mitigate GHG emissions and environmental contamination - focus on carbon, nitrogen and phosphorus cycling in agro-ecosystems | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-30-2017.html |
| SFS-32-2017: Promoting and supporting the eco-intensification of aquaculture production systems: inland (including fresh water), coastal zone, and offshore | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-32-2017.html |
| A competitive food industry | |
| SFS-34-2017: Innovative agri-food chains: unlocking the potential for competitiveness and sustainability | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-34-2017.html |

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| <p>Healthy and safe foods and diets for all</p> <p>SFS-39-2017: How to tackle the childhood obesity epidemic?</p> <p>SFS-40-2017: Sweeteners and sweetness enhancers</p> | <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-39-2017.html</p> <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-40-2017.html</p> |
| <p>Implementation of the EU-China FAB Flagship initiative</p> <p>SFS-46-2017: Alternative production system to address anti-microbial drug usage, animal welfare and the impact on health</p> <p>SFS-47-2017: Management of soil water resources in the EU and China and its impact on agro-ecosystem functions</p> | <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-46-2017.html</p> <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sfs-47-2017.html</p> |
| <p>Rural Renaissance (RUR) - Fostering innovation and business opportunities</p> | <p>https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-rur-2016-2017.html</p> |
| <p>New approaches towards policies and governance</p> <p>RUR-02-2017: Coastal-rural interactions: Enhancing synergies between land and sea-based activities</p> <p>RUR-03-2017: Towards 2030 - policies and decision support tools for an integrated approach to the management of land as a resource</p> | <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/rur-02-2017.html</p> <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/rur-03-2017.html</p> |
| <p>New value chains and business models</p> <p>RUR-09-2017: Business models for modern rural economies</p> | <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/rur-09-2017.html</p> |
| <p>Innovation and skill development</p> <p>RUR-13-2017: Building a future science and education system fit to deliver to practice</p> <p>RUR-16-2017: Optimising interactive innovation project approaches and the delivery of EU policies to speed up innovation in rural areas</p> | <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/rur-13-2017.html</p> <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/rur-16-2017.html</p> |
| <p>Bio-based innovation for sustainable goods and services (BB) - Supporting the development of a European Bioeconomy</p> | <p>https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-bb-2016-2017.html</p> |
| <p>Securing sustainable biomass supply for bio-based goods and services</p> <p>BB-02-2017: Towards a method for the collection of statistical data on bio-based industries and bio-based products</p> <p>BB-03-2017: Adaptive tree breeding strategies and tools for forest production systems resilient to climate change and natural disturbances</p> | <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/bb-02-2017.html</p> <p>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/bb-03-2017.html</p> |

Societal Challenge 3: Secure, Clean and Efficient Energy

The Horizon 2020 Societal Challenge of [“Secure, clean and efficient energy” \(SC3\)](#) for 2016 and 2017 is composed of two focus areas "Energy Efficiency" and "Competitive Low-Carbon Energy". These activities cover the full innovation cycle – from 'proof of concept' to applied research, pre-commercial demonstration and market uptake measures. They also exploit synergies with other relevant areas, e.g. information and communication technologies. In addition, the Energy Challenge contributes to the 'Blue Growth' focus area as well as to the Public Private Partnerships Energy-efficient Buildings and Sustainable Process Industries (SPIRE - Topic EE17).

International cooperation with strategic partner countries and global technology leaders will support European energy and climate objectives and contribute to the global efforts to mitigate climate change and reduce CO2 emissions. In line with the objectives of the EU's strategy for international cooperation in research and innovation, all activities are open for third country participants, while certain partner countries are also specifically targeted in a number of topics (Topics targeting third countries: LCE 27-2017, LCE 29-2017 and LCE 30-2017)

The estimated total budget available for 2017 is EUR 700.09 million.

| Societal Challenge 3: Secure, Clean and Efficient Energy http://ec.europa.eu/programmes/horizon2020/en/h2020-section/secure-clean-and-efficient-energy | |
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| Two stage calls 2017 - Stage 1 Deadline: 29 November 2016, Stage 2 Deadline: 22 August 2017 | |
| Competitive Low-Carbon Energy (LCE) | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-lce-2016-2017.html |
| Renewable energy technologies | |
| LCE-06-2017: New knowledge and technologies | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-03-2016.html |
| LCE-07-2016-2017: Developing the next generation technologies of renewable electricity and heating/cooling | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-04-2016-2017.html |
| Social, economic and human aspects of the energy system | |
| LCE-31-2016-2017: Social Sciences and Humanities Support for the Energy Union | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-31-2016-2017.html |
| Single stage calls 2017 - Deadline 5 January 2017 | |
| Renewable energy technologies | |
| LCE-08-2016-2017: Development of next generation biofuel technologies | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-08-2016-2017.html |
| LCE-21-2017: Market uptake of renewable energy technologies | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-21-2017.html |
| Enabling the decarbonisation of the use of fossil fuels during the transition to a lowcarbon | |
| LCE-27-2017: Measuring, monitoring and controlling the potential risks of subsurface operations related to CCS and unconventional hydrocarbons | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-27-2017.html |
| LCE-28-2017: Highly flexible and efficient fossil fuel power plants | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-28-2017.html |

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| LCE-29-2017: CCS in industry, including Bio-CCS | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-29-2017.html |
| LCE-30-2017: Geological storage pilots | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-30-2017.html |
| Single stage calls 2017 - Deadline 19 January 2017 | |
| Energy Efficiency (EE) | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-ee-2016-2017.html |
| Heating and cooling | |
| EE-01-2017: Waste heat recovery from urban facilities and re-use to increase energy efficiency of district or individual heating and cooling systems | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-01-2017.html |
| EE-04-2016-2017: New heating and cooling solutions using low grade sources of thermal energy | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-04-2016-2017.html |
| Engaging consumers towards sustainable energy | |
| EE-07-2016-2017: Behavioural change toward energy efficiency through ICT | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-07-2016-2017.html |
| Buildings | |
| EE-12-2017: Integration of Demand Response in Energy Management Systems while ensuring interoperability through Public Private Partnership (EeB PPP) | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-12-2017.html |
| Industry, services and products | |
| EE-17-2016-2017: Valorisation of waste heat in industrial systems (SPIRE PPP) | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-17-2016-2017.html |
| EE-20-2017: Bringing to market more energy efficient and integrated data centres | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-20-2017.html |
| Single stage calls 2017 - Deadline 14 February 2017 | |
| Competitive Low-Carbon Energy (LCE) | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-lce-2016-2017.html |
| Towards an integrated EU energy system | |
| LCE-01-2016-2017: Next generation innovative technologies enabling smart grids, storage and energy system integration with increasing share of renewables: distribution network | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-01-2016-2017.html |
| LCE-04-2017: Demonstration of system integration with smart transmission grid and storage technologies with increasing share of renewables | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-04-2017.html |
| LCE-05-2017: Tools and technologies for coordination and integration of the European energy system | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-05-2017.html |
| Multiple cut-off stage calls 2017 – Deadlines: 16 February; 7 September 2017 | |
| Competitive Low-Carbon Energy (LCE) | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-lce-2016-2017.html |
| Supporting the development of a European research area in the field of energy | |
| LCE-35-2017: Joint Actions to foster innovative energy solutions in renewable energy technologies | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-35-2017.html |

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| <p>Towards an integrated EU energy system LCE-37-2017: ERA-NET Co-Fund Enhanced cooperation in Smart Local and Regional Energy Networks of the European Energy System</p> | <p>https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-37-2017.html</p> |
| <p>Single stage calls 2017 - Deadline 16 February 2017</p> | |
| <p>Competitive Low-Carbon Energy (LCE)</p> | <p>https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-lce-2016-2017.html</p> |
| <p>Cross-cutting issues LCE-36-2016-2017: Support to the energy stakeholders to contribute to the SET-Plan</p> | <p>https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-36-2016-2017.html</p> |
| <p>Single stage calls 2017 - Deadline 7 June 2017</p> | |
| <p>Energy Efficiency (EE)</p> | <p>https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-ee-2016-2017.html</p> |
| <p>Heating and cooling EE-02-2017: Improving the performance of inefficient district heating networks</p> | <p>https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-02-2017.html</p> |
| <p>Engaging consumers towards sustainable energy EE-06-2016-2017: Engaging private consumers towards sustainable energy EE-09-2016-2017: Engaging and activating public authorities</p> | <p>https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-06-2016-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-09-2016-2017.html</p> |
| <p>Buildings EE-11-2016-2017: Overcoming market barriers and promoting deep renovation of buildings EE-14-2016-2017: Construction skills</p> | <p>https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-11-2016-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-14-2016-2017.html</p> |
| <p>Industry, services and products EE-15-2017: Increasing capacities for actual implementation of energy efficiency measures in industry and services EE-16-2016-2017: Effective implementation of EU product efficiency legislation EE-18-2017: Energy efficiency of industrial parks through energy cooperation and mutualised energy services EE-19-2017: Public Procurement of Innovative Solutions for energy efficiency</p> | <p>https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-15-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-16-2016-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-18-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-19-2017.html</p> |
| <p>Innovative financing for energy efficiency investments EE-22-2016-2017: Project Development Assistance EE-23-2017: Innovative financing schemes EE-24-2016-2017: Making the energy efficiency market investible</p> | <p>https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-22-2016-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-23-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ee-24-2016-2017.html</p> |

Single stage calls 2017 - Deadline 7 September 2017

| Energy Efficiency (EE) | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-ee-2016-2017.html |
|--|---|
| Renewable energy technologies | |
| LCE-10-2017: Reducing the cost of PV electricity | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-10-2017.html |
| LCE-11-2017: Near-to-market solutions for reducing the water consumption of CSP Plants | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-11-2017.html |
| LCE-12-2017: Near-to-market solutions for the use of solar heat in industrial processes | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-12-2017.html |
| LCE-14-2017: Demonstration of large >10MW wind turbine | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-14-2017.html |
| LCE-16-2017: 2nd Generation of design tools for ocean energy devices and arrays development and deployment | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-16-2017.html |
| LCE-17-2017: Easier to install and more efficient geothermal systems for retrofitting buildings | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-17-2017.html |
| LCE-18-2017: EGS in different geological conditions | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-18-2017.html |
| LCE-19-2016-2017: Demonstration of the most promising advanced biofuel pathways | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-19-2016-2017.html |
| LCE-20-2016-2017: Enabling pre-commercial production of advanced aviation biofuel | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/lce-20-2016-2017.html |

Societal Challenge 4: Smart, Green and Integrated Transport

The Horizon 2020 Societal Challenge of [‘Smart, green and integrated transport’ \(SC4\)](#) for 2016 and 2017 is structured in four broad lines of activities aiming at:

- a) Resource efficient transport that respects the environment.
- b) Better mobility, less congestion, more safety and security.
- c) Global leadership for the European transport industry.
- d) Socio-economic and behavioural research and forward-looking activities for policy making.

These activities are addressed in this Work Programme by three Calls for proposals:

1. Mobility for Growth
2. Green Vehicles
3. Automated Road Transport

The total 2017 budget available is EUR 495.36 million.

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| Societal Challenge 4: Smart, green and integrated transport http://ec.europa.eu/programmes/horizon2020/en/h2020-section/smart-green-and-integrated-transport | |
| Single stage calls 2017 - Deadline 1 February 2017 | |
| Mobility for Growth (MG) | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-mg-2016-2017.html |
| Aviation MG-1-2-2017: Reducing aviation noise MG-1-5-2016-2017: Identification of gaps, barriers and needs in the aviation research | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-1-2-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-1-5-2016-2017.html |
| Urban Mobility MG-4.3-2017: Innovative approaches for integrating urban nodes in the TEN-T core network corridors | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-4.3-2017.html |
| Logistics MG-5-4-2017: Potential of the Physical Internet | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-5-4-2017.html |
| Infrastructure MG-7-3-2017: The Port of the future | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-7-3-2017.html |
| Socio-Economic and Behavioural Research and Forward Looking Activities for Policy Making MG-8-2-2017: Big data in Transport: Research opportunities, challenges and limitations MG-8-4-2017: Improving accessibility, inclusive mobility and equity: new tools and business models for public transport in prioritised areas MG-8-5-2017: Shifting paradigms: Exploring the dynamics of individual preferences, behaviours and lifestyles influencing travel and mobility choices MG-8-7-2017: Future research needs and priorities in the area of transport | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-8-2-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-8-4-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-8-5-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-8-7-2017.html |
| Green Vehicles (GV) | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-gv-2016-2017.html |
| GV-01-2017: Optimisation of heavy duty vehicles for alternative fuels use GV-04-2017: Next generation electric drivetrains for fully electric vehicles, focusing on high efficiency and low cost GV-05-2017: Electric vehicle user-centric design for optimised energy efficiency GV-06-2017: Physical integration of hybrid and electric vehicle batteries at pack level aiming at increased energy density and efficiency GV-07-2017: Multi-level modelling and testing of electric vehicles and their components GV-08-2017: Electrified urban commercial vehicles integration | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/gv-01-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/gv-04-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/gv-05-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/gv-06-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/gv-07-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/gv-08-2017.html |

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| with fast charging infrastructure GV-09-2017: Aerodynamic and flexible trucks GV-10-2017: Demonstration (pilots) for integration of electrified L-category vehicles in the urban transport system GV-13-2017: Production of next generation battery cells in Europe for transport applications | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/gv-09-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/gv-10-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/gv-13-2017.html |
| Two stage calls 2017 - Stage 1 Deadline: 26 January 2017, Stage 2 Deadline: 27 September 2017 | |
| Automated Road Transport (ART) | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-art-2016-2017.html |
| ART-01-2017: ICT infrastructure to enable the transition towards road transport automation ART-03-2017: Multi-Brand platooning in real traffic conditions ART-07-2017: Full-scale demonstration of urban road transport automation | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/art-01-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/art-03-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/art-07-2017.html |
| Two stage calls 2017 - Stage 1 Deadline: 26 January 2017, Stage 2 Deadline: 19 October 2017 | |
| Mobility for Growth (MG) | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-mg-2016-2017.html |
| Aviation MG-1.3-2017: Maintaining industrial leadership in aeronautics MG-1-4-2016-2017: Breakthrough innovation | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-1.3-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-1-4-2016-2017.html |
| Waterborne MG-2.1-2017: Innovations for energy efficiency and emission control in waterborne transport MG-2.4-2017: Complex and value-added specialised vessels | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-2.1-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-2.4-2017.html |
| Safety MG-3.2-2017: Protection of all road users in crashes | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-3.2-2017.html |
| Urban Mobility MG-4.1-2017: Increasing the take up and scale-up of innovative solutions to achieve sustainable mobility in urban areas MG-4.2-2017: Supporting 'smart electric mobility' in cities | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-4.1-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-4.2-2017.html |
| Logistics MG-5-2-2017: Innovative ICT solutions for future logistics operations MG-5-4-2017: Potential of the Physical Internet | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-5-2-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-5-4-2017.html |
| Infrastructure MG-7-1-2017: Resilience to extreme (natural and man-made) events MG-7-2-2017: Optimisation of transport infrastructure including terminals MG-7-3-2017: The Port of the future | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-7-1-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-7-2-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/mg-7-3-2017.html |

Societal Challenge 5: Climate action, resource efficiency and raw materials

The Horizon 2020 Societal Challenge of '[Climate action, resource efficiency and raw materials](#)' (SC5) for 2016 and 2017 is composed of following topics, under the "Greening the Economy" call:

- Climate services
- Towards a low-carbon Europe
- Nature-based solutions for territorial resilience
- Water
- Raw materials
- Earth Observation
- Cultural heritage for sustainable growth
- Support to policy and preparing for innovation procurement

Within the overall objective of taking a systemic approach to moving towards a more resource efficient, greener and more competitive economy, this call addresses the priority areas of climate services, moving towards a low-carbon Europe, nature-based solutions for territorial resilience, water, raw materials, Earth observation and cultural heritage for sustainable growth. The calls listed below specifically mention Africa as a target region:

- SC5-30-2017: ERA-NET on Climate Services Roadmap: assessments (evaluation, comparison and integration)
- SC5-31-2017: Widening international cooperation activities on climate adaptation and mitigation
- SC5-32-2017: Biodiversity scenarios

The total budget available for Societal Challenge 5 in 2017 is EUR 401.75 million.

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| Societal Challenge 5: Climate action, resource efficiency and raw materials | | http://ec.europa.eu/programmes/horizon2020/en/h2020-section/climate-action-environment-resource-efficiency-and-raw-materials |
| Single stage calls 2017 - Deadline 24 January 2017 | | |
| Support to policy and preparing for innovation procurement | | |
| SC5-23-2016-2017: Support to confirmed Presidency events (conferences) – Malta, United Kingdom, Estonia | | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-23-2016-2017.html |
| Single stage calls 2017 - Deadline 7 March 2017 | | |
| Climate services | | |
| SC5-01-2016-2017: Exploiting the added value of climate services | | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-01-2016-2017.html |
| SC5-02-2017: Integrated European regional modelling and climate prediction system | | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-02-2017.html |
| SC5-04-2017: Towards a robust and comprehensive greenhouse gas verification system | | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-04-2017.html |
| SC5-30-2017: ERA-NET on Climate Services Roadmap: Cross-sector impact assessments (evaluation, comparison | | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-30-2017.html |

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| and integration) SC5-31-2017: Widening international cooperation activities on climate adaptation and mitigation | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-31-2017.html |
| Towards a low-carbon Europe SC5-06-2016-2017: Pathways towards the decarbonisation and resilience of the European economy in the timeframe 2030-2050 and beyond SC5-07-2017: Coordinating and supporting research and innovation actions on the decarbonisation of the EU economy | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-06-2016-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-07-2017.html |
| Raw materials SC5-13-2016-2017: New solutions for sustainable production of raw materials SC5-15-2016-2017: Raw materials policy support actions SC5-16-2016-2017: Raw materials international co-operation | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-13-2016-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-15-2016-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-16-2016-2017.html |
| Earth Observation SC5-18-2017: Novel in-situ observation systems SC5-19-2017: Coordination of citizens' observatories initiatives | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-18-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-19-2017.html |
| Cultural heritage for sustainable growth SC5-22-2017: Innovative financing, business and governance models for adaptive re-use of cultural heritage | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-22-2017.html |
| Support to policy and preparing for innovation procurement SC5-26-2017: Pre-commercial procurement on soil decontamination | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-26-2017.html |
| Nature-based solutions for territorial resilience SC5-32-2017: Biodiversity scenarios | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-32-2017.html |
| Water SC5-33-2017: Closing the water gap | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-33-2017.html |
| Two stage calls 2017 - Stage 1 Deadline: 7 March, Stage 2 Deadline: 5 September 2017 | |
| Nature-based solutions for territorial resilience SC5-08-2017: Large-scale demonstrators on nature-based solutions for hydro-meteorological risk reduction | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-08-2017.html |
| Raw materials SC5-14-2016-2017: Raw materials Innovation actions | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-14-2016-2017.html |
| Cultural heritage for sustainable growth SC5-21-2016-2017: Cultural heritage as a driver for sustainable growth | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sc5-21-2016-2017.html |

Societal Challenge 6: Inclusive, innovative and reflective societies

The Horizon 2020 Societal Challenge of [‘Europe in a changing world – Inclusive, innovative and reflective societies’ \(SC6\)](#) for 2016 and 2016 is composed of four calls,

- Co-Creation for Growth and Inclusion
- Reversing Inequalities and Promoting Fairness
- Engaging Together Globally
- Understanding Europe - Promoting the European Public and Cultural Space

This Societal Challenge 6 Work Programme addresses key challenges of the beginning of 21st century like radicalisation and migration that appear in cross-cutting way in several Topics throughout the Work Programme and complementarily with Societal Challenge 7 - Secure societies "Protecting freedom and security of Europe and its citizens". Many of the Topics of this Work Programme aim also to reduce the gap between institutions and citizens - through better understanding, analysis and practical solutions - in order to build a more trustful European society. Many Topics also integrate the gender dimension as a key element of inclusive societies.

The total budget available for 2017 is EUR 176.54 million

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| Societal Challenge 6: Inclusive, innovative and reflective societies | | http://ec.europa.eu/programmes/horizon2020/en/h2020-section/europe-changing-world-inclusive-innovative-and-reflective-societies |
| Single stage calls 2016 - Deadline 15 November 2016 | | |
| Co-Creation for Growth and Inclusion | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sc6-co-creation-2016-2017.html | |
| CO-CREATION-02-2016: User-driven innovation: value creation through design-enabled innovation | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/co-creation-02-2016.html | |
| CO-CREATION-03-2016: Piloting demand-driven collaborative innovation models in Europe | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/co-creation-03-2016.html | |
| Single stage calls 2017 - Deadline 2 February 2017 | | |
| CO-CREATION-01-2017: Education and skills: empowering Europe’s young innovators | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/co-creation-01-2017.html | |
| CO-CREATION-04-2017: Applied co-creation to deliver public services | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/co-creation-04-2017.html | |
| CO-CREATION-06-2017: Policy-development in the age of big data: data-driven policy-making, policy-modelling and policy-implementation | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/co-creation-06-2017.html | |
| CO-CREATION-07-2017: Towards a new growth strategy in Europe - Improved economic and social measurement, data and official statistics | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/co-creation-07-2017.html | |
| CO-CREATION-08-2016-2017: Better integration of evidence on the impact of research and innovation in policy making | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/co-creation-08-2016-2017.html | |

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| <p>Understanding Europe - Promoting the European Public and Cultural Space</p> | <p>https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sc6-cult-coop-2016-2017.html</p> |
| <p>CULT-COOP-06-2017: Participatory approaches and social innovation in culture CULT-COOP-10-2017: Culture, integration and European public space CULT-COOP-11-2016-2017: Understanding the transformation of European public administrations</p> | <p>https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/cult-coop-06-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/cult-coop-10-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/cult-coop-11-2016-2017.html</p> |
| <p>Engaging Together Globally</p> | <p>https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sc6-eng-globally-2016-2017.html</p> |
| <p>ENG-GLOBALLY-01-2017: Strengthening Europe's position in the global context: science diplomacy and intercultural relations ENG-GLOBALLY-02-2017: Shifting global geopolitics and Europe's preparedness for managing risks, mitigation actions and fostering peace ENG-GLOBALLY-03-2017: The European Union and the global challenge of migration ENG-GLOBALLY-04-2017: Science diplomacy for EU neighbourhood policies ENG-GLOBALLY-05-2017: The strategic potential of EU external trade policy ENG-GLOBALLY-06-2017: The Asia-Pacific as a strategic region for Europe ENG-GLOBALLY-07-2017: The European Union and Central Asia ENG-GLOBALLY-08-2016-2017: EU-China cooperation on sustainable urbanisation ENG-GLOBALLY-10-2017: Migration and asylum systems</p> | <p>https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/eng-globally-01-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/eng-globally-02-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/eng-globally-03-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/eng-globally-04-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/eng-globally-05-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/eng-globally-06-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/eng-globally-07-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/eng-globally-08-2016-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/eng-globally-10-2017.html</p> |
| <p>Reversing Inequalities and Promoting Fairness</p> | <p>https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sc6-rev-inequal-2016-2017.html</p> |
| <p>REV-INEQUAL-09-2017: Boosting inclusiveness of ICT-enabled research and innovation REV-INEQUAL-11-2017: Current European and cross-national comparative research and research actions on Migration REV-INEQUAL-12-2017: Research Social Platform on Migration and Asylum REV-INEQUAL-13-2017: Research on employability, skills and labour market integration of migrants</p> | <p>https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/rev-inequal-09-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/rev-inequal-11-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/rev-inequal-12-2017.html https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/rev-inequal-13-2017.html</p> |

Two stage calls 2017 - Stage 1 Deadline: 2 February 2017, Stage 2 Deadline: 13 September 2017

| Co-Creation for Growth and Inclusion | |
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| CULT-COOP-01-2017: Democratic discourses and the rule of law | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sc6-co-creation-2016-2017.html |
| CULT-COOP-02-2017: Improving mutual understanding among Europeans by working through troubled pasts | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/cult-coop-01-2017.html |
| CULT-COOP-03-2017: Cultural literacy of young generations in Europe | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/cult-coop-02-2017.html |
| CULT-COOP-04-2017: Contemporary histories of Europe in artistic and creative practices | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/cult-coop-03-2017.html |
| CULT-COOP-05-2017: Religious diversity in Europe - past, present and future | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/cult-coop-04-2017.html |
| CULT-COOP-06-2017: Participatory approaches and social innovation in culture | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/cult-coop-05-2017.html |
| CULT-COOP-07-2017: Cultural heritage of European coastal and maritime regions | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/cult-coop-06-2017.html |
| CULT-COOP-09-2017: European cultural heritage, access and analysis for a richer interpretation of the past. | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/cult-coop-07-2017.html |
| CULT-COOP-12-2017: The significance of cultural and core values for the migration challenge | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/cult-coop-09-2017.html |
| | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/cult-coop-12-2017.html |

Societal Challenge 7: Secure Societies

The Horizon 2020 Societal Challenge of [‘Secure Societies - Protecting freedom and security of Europe and its citizens’ \(SC7\)](#) for 2016 and 2017 is composed of three calls:

- Critical Infrastructure Protection
- Security, addressing following topics:
 - Disaster-resilience: safeguarding and securing society
 - Fight against crime and Terrorism
 - Border Security and External Security
 - General Matters
- Digital Security Focus Area

The primary aims of the Secure Societies Challenge are: to enhance the resilience of our society against natural and man-made disasters, ranging from the development of new crisis management tools to communication interoperability, and to develop novel solutions for the protection of critical infrastructure; to fight crime and terrorism ranging from new forensic tools to protection against explosives; to improve border security, ranging from improved maritime border protection to supply chain security and to support the Union's external security policies including through conflict prevention and peace building and to provide enhanced cyber-security, ranging from secure information sharing to new assurance models.

The total budget available for 2017 is approximately EUR 204.92 million.

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| Societal Challenge 7: Secure Societies | http://ec.europa.eu/programmes/horizon2020/en/h2020-section/secure-societies-%E2%80%93-protecting-freedom-and-security-europe-and-its-citizens |
| Single stage calls 2017 - Deadline 25 April 2017 | |
| Digital Security Focus Area (DS) | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-ds-2016-2017.html |
| DS-06-2017: Cybersecurity PPP: Cryptography | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ds-06-2017.html |
| Single stage calls 2017 - Deadline 24 August 2017 | |
| Critical Infrastructure Protection (CIP) | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-cip-2016-2017.html |
| CIP-01-2016-2017: Prevention, detection, response and mitigation of the combination of physical and cyber threats to the critical infrastructure of Europe | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/cip-01-2016-2017.html |
| Digital Security Focus Area (DS) | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-ds-2016-2017.html |
| DS-07-2017: Cybersecurity PPP: Addressing Advanced Cyber Security Threats and Threat Actors | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ds-07-2017.html |
| DS-08-2017: Cybersecurity PPP: Privacy, Data Protection, Digital Identities | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/ds-08-2017.html |
| Security (SEC) | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-sec-2016-2017.html |
| Disaster-resilience: safeguarding and securing society | |
| SEC-04-DRS-2017: Broadband communication systems | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sec-04-drs-2017.html |
| SEC-05-DRS-2016-2017: Chemical, biological, radiological and nuclear (CBRN) cluster | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sec-05-drs-2016-2017.html |
| Fight against crime and Terrorism | |
| SEC-07-FCT-2016-2017: Human Factor for the Prevention, Investigation, and Mitigation of criminal and terrorist acts | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sec-07-fct-2016-2017.html |
| SEC-09-FCT-2017: Toolkits integrating tools and techniques for forensic laboratories | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sec-09-fct-2017.html |
| SEC-10-FCT-2017: Integration of detection capabilities and data fusion with utility providers' networks | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sec-10-fct-2017.html |
| SEC-12-FCT-2016-2017: Technologies for prevention, investigation, and mitigation in the context of fight against crime and terrorism | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sec-12-fct-2016-2017.html |
| Border Security and External Security | |
| SEC-13-BES-2017: Next generation of information systems to support EU external policies | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sec-13-bes-2017.html |
| SEC-15-BES-2017: Risk-based screening at border crossing | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sec-15-bes-2017.html |
| SEC-16-BES-2017: Through-foliage detection, including in the outermost regions of the EU | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sec-16-bes-2017.html |

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| SEC-17-BES-2017: Architectures and organizations, big data and data analytics for customs risk management of the international goods supply chain trade movements | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sec-17-bes-2017.html |
| SEC-18-BES-2017: Acceptance of "no gate crossing point solutions" | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sec-18-bes-2017.html |
| General Matters | |
| SEC-21-GM-2016-2017: Pan European Networks of practitioners and other actors in the field of security | https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/sec-21-gm-2016-2017.html |

Relevant Links

Please visit the **Horizon 2020** section within the Participants portal to download the Proposers Guide and specific templates to prepare proposals for submission under calls open in 2016-2017 within specific Societal Challenges and LEIT themes:

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/index.html>

| Relevant Links to get more information | |
|---|---|
| Horizon 2020 Official site | http://ec.europa.eu/programmes/horizon2020/ |
| Horizon 2020 Calls on Participants Portal | http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/index.html |
| Frequently Asked Questions on Horizon 2020 | http://ec.europa.eu/programmes/horizon2020/en/faq |
| Call for Experts for Horizon 2020 Advisory Groups | http://ec.europa.eu/research/horizon2020/index_en.cfm?pg=h2020-experts |
| International Cooperation in Research and Innovation, Communication COM (2012) 497 Sept 2012 | http://www.ist-africa.org/home/files/InternationalCooperation_ResearchInnovation_Com_2012_497_Sept2012.pdf |
| International Cooperation Presentation on Horizon 2020 Presentation June 2012 | http://www.ist-africa.org/home/files/InternationalCooperation_Horizon2020_June2012.pdf |
| Horizon 2020 Communication from European Commission November 2011 | http://www.ist-africa.org/home/files/Horizon2020_EC_Communication_Nov2011.pdf |
| Innovation Union Europe 2020 Initiative | http://ec.europa.eu/research/innovation-union/index_en.cfm |
| International Cooperation in Horizon 2020 Presentation May 2013 | http://www.ist-africa.org/home/files/ISTAfrica_Horizon2020_310513.pdf |
| ICT in Horizon 2020 Presentation June 2013 | http://www.ist-africa.org/home/files/ICT_Horizon2020_MMoller_260613.pdf |
| ICT in Horizon 2020 - presentation by Mr Morten Moller, DG CONNECT; Nov 2013 | http://www.ist-africa.org/home/files/ICT_Horizon_2020_DGCONNECT_311012_v2.1.pdf |
| Participation and Instruments in Horizon 2020 - presentation by Ingrid Mariën-Dusak, DG CONNECT, Nov 2013 | http://www.ist-africa.org/home/files/Horizon2020_Participation_Instruments.pdf |