Annex - Detailed list of topics

Note: **For deadlines:** **- shaded cells in the table correspond to two-stage calls,**

- dates are in format dd/mm/yy.

Topic ID	Topic title	Budget (M€)	Opening	Deadline 2020
Excellent Science				
Future and Emerging Technologies (FET)				
FET Open: novel ideas for radically new technologies				
FETOPEN-01-2018- 2019-2020	FET-Open Challenging Current Thinking	354.2	07.11.17	13.05.20
FETOPEN-03-2018- 2019-2020	FET Innovation Launchpad	3.0	09.10.19	14.10.20
FET Proactive topics in the EIC Enhanced Pilot (2019-2020)				
FETPROACT-EIC-07- 2020	FET Proactive: emerging paradigms and communities	50.0	19.11.19	22.04.20
FETPROACT-EIC-08- 2020	Environmental Intelligence	18.0	19.11.19	22.04.20
The topic(s) below are not part of the European Innovation Council Enhanced Pilot				
FETPROACT-09-2020	Neuromorphic computing technologies	15.0	19.11.19	22.04.20
FET Proactive - High Performance Computing				
FETHPC-04-2020	International Cooperation on HPC	0.5	19.11.19	22.04.20
FET Flagships - Tackling grand interdisciplinary science and technology challenges				
FETFLAG-04-2020	Quantum Flagship - ERA-NET Cofund	15.0	06.02.20	07.05.20
Research Infrastructures				
Implementing the European Open Science Cloud				
INFRAEOSC-03-2020	Integration and consolidation of the existing pan-European access mechanism to public research infrastructures and commercial services through the EOSC Portal	40.9	19.11.19	22.04.20
INFRAEOSC-07-2020	Increasing the service offer of the EOSC Portal	24.0	19.11.19	22.04.20
Integrating and opening research infrastructures of European interest				
INFRAIA-02-2020	Integrating Activities for Starting Communities	115.0	28.11.19	17.03.20
INFRAIA-03-2020	Pilot for a new model of Integrating Activities	45.0	28.11.19	17.03.20
Demonstrating the role of Research Infrastructures in the translation of Open Science into Open Innovation				
INFRAINNOV-03-2020	Co-Innovation platform for research infrastructure technologies	35.0	28.11.19	17.03.20
INFRAINNOV-04-2020	Innovation pilots	30.0	28.11.19	17.03.20
Industrial Leadership				
LEIT - Information and Communication Technologies				
Information and Communication Technologies				

Artificial Intelligence and Technologies for Digitising European Industry and Economy

ICT-46-2020	Robotics in Application Areas and Coordination & Support	83.0	19.11.19	22.04.20
ICT-47-2020	Research and Innovation boosting promising robotics applications	20.0	19.11.19	22.04.20
ICT-49-2020	Artificial Intelligence on demand platform	20.0	19.11.19	22.04.20
ICT-38-2020	Artificial intelligence for manufacturing	48.0	09.07.19	16.01.20
ICT-36-2020	Disruptive photonics technologies	47.5	19.11.19	22.04.20
ICT-37-2020	Advancing photonics technologies and application driven photonics components and the innovation ecosystem	48.0	19.11.19	22.04.20
ICT-50-2020	Software Technologies	30.0	09.07.19	16.01.20

European Data Infrastructure: HPC, Big Data and Cloud technologies

ICT-51-2020	Big Data technologies and extreme-scale analytics	31.5	09.07.19	16.01.20
ICT-40-2020	Cloud Computing: towards a smart cloud computing continuum	20.0	19.11.19	22.04.20

5G

ICT-52-2020	5G PPP – Smart Connectivity beyond 5G	55.0	19.11.19	22.04.20
ICT-41-2020	5G PPP – 5G innovations for verticals with third party services	49.0	19.11.19	22.04.20
ICT-42-2020	5G PPP – 5G core technologies innovation	49.0	09.07.19	16.01.20

Next Generation Internet (NGI)

ICT-54-2020	Blockchain for the Next Generation Internet	20.0	09.07.19	16.01.20
ICT-56-2020	Next Generation Internet of Things	48.5	09.07.19	16.01.20
ICT-57-2020	An empowering, inclusive Next Generation Internet	7.0	19.11.19	22.04.20
ICT-44-2020	Next Generation Media	17.5	09.07.19	16.01.20

International Cooperation activities

ICT-58-2020	International partnership building between European and African innovation hubs	11.0	19.11.19	22.04.20

Digitising and transforming European industry and services: digital innovation hubs and platforms

Support to Hubs

DT-ICT-04-2020	Photonics Innovation Hubs	19.0	19.11.19	22.04.20

Platforms and Pilots

DT-ICT-09-2020	Digital service platforms for rural economies	30.0	19.11.19	22.04.20
DT-ICT-12-2020	The smart hospital of the future	40.0	19.11.19	22.04.20

LEIT - Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing

Foundations for tomorrow's industry

Materials characterisation and computational modelling

DT-NMBP-11-2020	Open Innovation Platform for Materials Modelling	12.0	03.07.19	05.02.20

Industry Commons

DT-NMBP-40-2020	Creating an open market place for industrial data	4.0	03.07.19	12/12/19 *14/05/20*

Transforming European Industry

Factories of the Future

DT-FOF-07-2020	Assembly of micro parts	100		
DT-FOF-09-2020	Energy-efficient manufacturing system management	(incl. one other topic)	03.07.19	05.02.20
DT-FOF-11-2020	Quality control in smart manufacturing			

Biotechnology

BIOTEC-07-2020	Multi-omics for genotype-phenotype associations	56 (incl. one other topic)	03.07.19	12/12/19 *14/05/20*

Industrial sustainability

Sustainable Process Industry (SPIRE)

LC-SPIRE-08-2020	Novel high performance materials and components	31.9	03.07.19	05.02.20
DT-SPIRE-11-2020	Artificial Intelligence and Big Data Technologies for Process Industries	0.6	03.07.19	05.02.20
LC-EEB-07-2020	Smart Operation of Proactive Residential Buildings	52.5 (incl. one other topic)	03.07.19	05.02.20
LC-EEB-08-2020	Digital Building Twins			

LEIT - Space

Space

Artificial Intelligence and Space

DT-SPACE-25-EO-2020	Big data technologies and Artificial Intelligence for Copernicus	10.0	05.11.19	05.03.20

Space business, entrepreneurship, outreach and education

DT-SPACE-26-BIZ-2020	Space hubs (support to start-ups)	2.0	05.11.19	05.03.20

Space technologies, science and exploration

SPACE-29-TEC-2020	Satellite communication technologies	9.0	05.11.19	05.03.20
SPACE-30-SCI-2020	Scientific data exploitation	9.0	05.11.19	05.03.20

Artificial Intelligence and Space

SPACE-27-TEC-2020	SRC - Space robotics technologies	9.0	05.11.19	05.03.20

Societal Challenges

Health, demographic change and wellbeing

Better Health and care, economic growth and sustainable health systems

Personalised medicine

SC1-BHC-06-2020	Digital diagnostics – developing tools for supporting clinical decisions by integrating various diagnostic data	40.0	04.07.19	07.04.20

Innovative health and care industry

SC1-HCO-18-2020	Developing methodological approaches for improved clinical investigation and evaluation of high-risk medical devices	2.0	04.07.19	07.04.20

Infectious diseases and improving global health

SC1-BHC-20A-2020	Pre-commercial procurement (PCP) for integrated care solutions	25.0 (incl. one other topic)	04.07.19	07.04.20

Supporting the digital transformation in health and care

SC1-DTH-12-2020	Use of Real-World Data to advance research on the management of complex chronic conditions	41.0	04.07.19	07.04.20
SC1-DTH-13-2020	Implementation research for scaling up and transfer of innovative solutions involving digital tools for people-centred care	20.0	04.07.19	24/09/19 07/04/20

Digital transformation in Health and Care

SC1-DTH-01-2019	Big data and Artificial Intelligence for monitoring health status and quality of life after the cancer treatment	35.0	16.10.18	
SC1-DTH-02-2020	Personalised early risk prediction, prevention and intervention based on Artificial Intelligence and Big Data technologies	32.0	19.11.19	22.04.20
SC1-DTH-04-2020	International cooperation in smart living environments for ageing people	8.0	19.11.19	22.04.20
SC1-DTH-06-2020	Accelerating the uptake of computer simulations for testing medicines and medical devices	32.0	19.11.19	22.04.20
SC1-DTH-14-2020	Pre-commercial Procurement for Digital Health and Care Solutions	9.0	19.11.19	22.04.20
SC1-HCC-08-2020	Scaling up innovation for active and healthy ageing	2.0	19.11.19	22.04.20
SC1-HCC-09-2020	Supporting deployment of eHealth in low and lower middle income countries in Africa for better health outcomes	2.0	19.11.19	22.04.20

Trusted digital solutions and Cybersecurity in Health and Care

Focus Area on Digitising and transforming European industry and services

DT-TDS-04-2020	AI for Genomics and Personalised Medicine	35.0	19.11.19	22.04.20

Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy

Food and Natural Resources

FNR-02-2020	Developing long-term monitoring and evaluation frameworks for the Common Agricultural Policy	2.0	15.10.19	22.01.20

Secure, Clean and Efficient Energy

Building a low-carbon, climate resilient future: secure, clean and efficient energy

Energy efficiency

Buildings in energy transition (B4E)

LC-SC3-B4E-3-2020	Upgrading smartness of existing buildings through innovations for legacy equipment	8.0	05.03.20	10.09.20
LC-SC3-B4E-5-2020	Integrated design concepts for energy-efficient ICT in buildings	3.0	16.07.19	15.01.20
LC-SC3-B4E-6-2020	Big data for buildings	12.0	16.07.19	15.01.20
LC-SC3-B4E-7-2020	European building stock data 4.0	4.0	16.07.19	15.01.20
LC-SC3-B4E-10-2020	Self-assessment and self-optimisation of buildings and appliances for a better energy performance	6.0	16.07.19	15.01.20
LC-SC3-B4E-14-2020	Enabling next-generation of smart energy services valorising energy efficiency and flexibility at demand-side	6.0	05.03.20	10.09.20

Global leadership in renewables

LC-SC3-RES-31-2020	Offshore wind basic science and balance of plant	8.0	03.12.19	21.04.20

Smart and clean energy for consumers

LC-SC3-EC-3-2020	Consumer engagement and demand response	16.0	03.09.19	29.01.20

Smart citizen-centred energy system

LC-SC3-ES-3-2018-2020	Integrated local energy systems (Energy islands)	15.0	03.09.19	29.01.20
LC-SC3-ES-4-2018-2020	Decarbonising energy systems of geographical Islands	40.0	03.09.19	29.01.20
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	22.0	03.09.19	29.01.20
LC-SC3-ES-10-2020	DC – AC/DC hybrid grid for a modular, resilient and high RES share grid development	14.0	03.09.19	29.01.20

Smart Cities and Communities

LC-SC3-SCC-2-2020	Positive Energy Districts and Neighbourhoods for urban energy transitions	5.0	05.05.20	01.09.20

Smart, green and integrated transport

Mobility for growth

Building a Low-Carbon, Climate Resilient Future: Low-Carbon and Sustainable Transport

LC-MG-1-12-2020	Cities as climate-resilient, connected multimodal nodes for smart and clean mobility: new approaches towards demonstrating and testing innovative solutions	18.0	03.09.19	09/01/20 08/09/20

Safe, integrated and resilient transport systems

MG-2-11-2020	Network and traffic management for future mobility	20.0	03.09.19	09/01/20 08/09/20
MG-2-13-2020	Coordination and support for an integrated freight transport and logistics system	1.0	03.12.19	21.04.20

Global leadership and competitiveness

MG-3-4-2020	Innovative electric network architectures and systems, optimising global energy, electrical power, data and communication for aviation	10.0	03.12.19	21.04.20
MG-3-6-2020	Towards sustainable urban air mobility	15.0	03.12.19	21.04.20
MG-3-7-2020	Improved Production and Maintenance Processes in Shipyards	15.0	03.12.19	21.04.20

Accounting for the people

MG-4-7-2020	Digitalisation of the transport system: data sharing	3.0	03.12.19	21.04.20
MG-4-8-2020	Advanced research methods and tools in support of transport/mobility researchers, planners and policy makers	3.0	03.12.19	21.04.20

Digitising and Transforming European Industry and Services: Automated Road Transport

DT-ART-05-2020	Efficient and safe connected and automated heavy-duty vehicles in real logistics operations	20.0	03.12.19	21.04.20
DT-ART-06-2020	Large-scale, cross-border demonstration of connected and highly automated driving functions for passenger cars	30.0	03.12.19	21.04.20

Climate action, environment, resource efficiency and raw materials

Building a low-carbon, climate resilient future: climate action in support of the Paris Agreement

Decarbonisation

LC-CLA-11-2020	Innovative nature-based solutions for carbon neutral cities and improved air quality	30.0	12.11.19	13.02.20 03.09.20

Climate adaptation, impacts and services

LC-CLA-12-2020	Advancing climate services	22.0	12.11.19	13/02/20 03/09/20

Inter-relations between climate change, biodiversity and ecosystem services

LC-CLA-16-2020	Multi-hazard risk management for risk-informed decision-making in the E.U.	5.0	12.11.19	13.02.20 03.09.20

Earth Observation

LC-CLA-19-2020	Integrated GEOSS climate applications to support adaptation and mitigation measures of the Paris Agreement	10.0	12.11.19	13.02.2020 03.09.2020

Greening the economy in line with the Sustainable Development Goals (SDGs)

Raw materials

SC5-10-2019-2020	Raw materials innovation actions: exploration and Earth observation in support of sustainable mining 41.86		12.11.19	13/02/20 03/09/20

Protecting and leveraging the value of our natural and cultural assets: Nature-based solutions, disaster risk reduction and natural capital

SC5-33-2020	Monitoring ecosystems through research, innovation and technology	3.0	12.11.19	13.02.20

Europe in a changing world - inclusive, innovative and reflective Societies

Socioeconomic and cultural transformations in the context of the fourth industrial revolution

DT-TRANSFORMATIONS-02-2018-2019-2020	Transformative impact of disruptive technologies in public services	11.0	05.11.19	12.03.20
DT- TRANSFORMATIONS- 20-2020	European Competence Centre for the preservation and conservation of Monuments and Site	3.0	05.11.19	12.03.20
DT- TRANSFORMATIONS- 21-2020	Mentoring scheme for schools: mainstreaming innovation by spreading the advanced ICT-based teaching practices to a wide circle of schools	2.0	05.11.19	12.03.20
DT- TRANSFORMATIONS- 23-2020	To set up a digital accessibility observatory as a forum to take stock of market and technological developments, monitor progress in digital accessibility and provide opportunities for exchange of best practices	1.5	05.11.19	12.03.20

Governance for the future

DT-GOVERNANCE-05- 2018-2019-2020	New forms of delivering public goods and inclusive public services	20.0	05.11.19	12.03.20
DT-GOVERNANCE-12-2019-2020	Pilot on using the European cloud infrastructure for public administrations	10.0	05.11.19	12.03.20
DT-GOVERNANCE-22- 2020	Citizen-centric public services in local and regional administrations	1.5	05.11.19	12.03.20

Secure societies - Protecting freedom and security of Europe and its citizens

Protecting the infrastructure of Europe and the people in the European smart cities

SU-INFRA01-2018- 2019-2020	Prevention, detection, response and mitigation of combined physical and cyber threats to critical infrastructure in Europe	20.7	12.03.20	27.08.20

Artificial Intelligence and security: providing a balanced assessment of opportunities and challenges for Law Enforcement in Europe

SU-AI01-2020	Developing a research roadmap regarding Artificial Intelligence in support of Law Enforcement	1.5	12.03.20	27.08.20
SU-AI02-2020	Secure and resilient Artificial Intelligence technologies, tools and solutions in support of Law Enforcement and citizen protection, cybersecurity operations and prevention and protection against adversarial Artificial Intelligence	17.0	12.03.20	27.08.20
SU-AI03-2020	Human factors, and ethical, societal, legal and organisational aspects of using Artificial Intelligence in support of Law Enforcement	1.5	12.03.20	27.08.20

Security

Disaster-Resilient Societies

SU-DRS02-2018-2019- 2020	Technologies for first responders	21.0	12.03.20	27.08.20

Fight against Crime and Terrorism

SU-FCT02-2018-2019- 2020	Technologies to enhance the fight against crime and terrorism	28.0	12.03.20	27.08.20
SU-FCT03-2018-2019- 2020	Information and data stream management to fight against (cyber)crime and terrorism	8.0	12.03.20	27.08.20

Border and External Security

SU-BES02-2018-2019- 2020	Technologies to enhance border and external security	21.0	12.03.20	27.08.20
SU-BES03-2018-2019- 2020	Demonstration of applied solutions to enhance border and external security	10.0	12.03.20	27.08.20

Digital security

Cybersecurity, Digital Privacy and data protection

SU-DS02-2020	Intelligent security and privacy management	38.0	12.03.20	27.08.20
SU-DS03-2019-2020	Digital Security and privacy for citizens and Small and Medium Enterprises and Micro Enterprises	10.8	12.03.20	27.08.20
SU-DS04-2018-2020	Cybersecurity in the Electrical Power and Energy System (EPES): an armour against cyber and privacy attacks and data breaches	20.0	12.03.20	27.08.20

European Innovation Council (EIC) Pilot

EIC Accelerator pilot (SME Instrument)

EIC-SMEInst-2018-2020	SME instrument	654.0	07.11.17	Phase 2: 08.01.20 18.03.20 19.05.20 07.10.20

Fast Track to Innovation (FTI)

EIC-FTI-2018-2020	Fast Track to Innovation (FTI)	100.0	07.11.17	19/02/20 09/06/20 27/10/20