Rijksdienst voor Ondernemend Nederland

Wegwijzer Horizon 2020

Calls 2016-2017

Versie november 2015

Voorwoord

In deze wegwijzer...

Deze wegwijzer leidt u door Horizon 2020, hét programma van de Europese Commissie om onderzoek en innovatie (financieel) te ondersteunen. Het geeft een overzicht van de vele mogelijkheden binnen de verschillende Horizon-onderdelen:

Horizon 2020

In de periode 2014-2020 trekt de Europese Commissie circa 80 miljard euro uit voor het stimuleren van onderzoek en innovatie. Dit Europese instrument, Horizon 2020 voor onderzoek en ontwikkeling, heeft als doel economische groei in Europa te bevorderen en de Europese concurrentiepositie te verbeteren. In de eerste plaats wil de Europese Commissie de basis van het innoverend vermogen versterken door het ondersteunen van excellent wetenschappelijk onderzoek op wereldniveau. Ten tweede wil de Europese Commissie de productiviteit en het concurrerend vermogen van de Europese industrie versterken door het stimuleren van industriële innovatie. Ten derde daagt Horizon 2020 de wetenschap en de industrie uit om oplossingen te ontwikkelen voor belangrijke Europese maatschappelijke uitdagingen. Denk daarbij aan vraagstukken als vergrijzing, duurzame voedselvoorziening, milieu, energie en veiligheid.

Projectvormen

Horizon 2020 financiert vooral onderzoeks- en innovatieprojecten, zowel kleinschalige als grootschalige. Soms wordt specifiek gevraagd om deelname van het midden- en kleinbedrijf (MKB). Daarnaast is er financiering voor programma ondersteunende projecten zoals het organiseren van een evenement of het schrijven van een onderzoeksagenda. Tenslotte ondersteunt Horizon 2020 innovatiegericht inkopen en afstemming van nationale onderzoeksprogramma's. De verschillende projectvormen worden als volgt afgekort:

Afkorting	Betekenis	Soort project	Aantal partners	Subsidie
RIA	Research and innovation action	Onderzoeksproject met mogelijk innovatie-elementen	3+	100%
IA	Innovation action	Innovatieproject (demo, pilot, market replication)	3+	70% (non-profit 100%)
SME	SME Instrument	Innovatieproject door het midden- en kleinbedrijf (MKB)	1+	70% (soms 100%)
CSA	Coordination and support action	Ondersteunende activiteiten	1+	100%
PCP	Pre-Commercial Procurement	Aanbesteden van onderzoek en innovatie	3+	70% cofinanciering
PPI	Public Procurement of Innovation	Aanbesteden van innovatieve producten of diensten	3+	20% cofinanciering
ERA-NET	-	Afstemming nationale onderzoeksprogramma's	3+	33% cofinanciering
FTI	Fast Track to Innovation	Innovatieproject (demo, pilot, market replication)	3-5	70%
EJP	European Joint Programme Cofund	Co-financiering van gecoördineerde nationale onderzoeksprogramma's	5+	50%

Vind uw match met Horizon 2020

Deze wegwijzer leidt u door het omvangrijke Horizon programma en geeft een overzicht van de mogelijkheden binnen Horizon 2020 in 2016 en 2017, gebaseerd op de werkprogramma's van de Europese Commissie. De eerste calls (financieringsrondes) zijn half oktober 2015 geopend. De sluitingsdata variëren per onderdeel. Let op: hoewel de werkprogramma's voor 2016-2017 vastliggen kan de inhoud voor 2017 nog wijzigen.

Stap 1: Blader door verschillende Horizon-onderdelen en kijk welke kansen er voor u liggen.
Stap 2: Ziet u een interessant onderwerp (topic)? De complete beschrijving hiervan leest u in het werkprogramma van het betreffende Horizon-onderdeel.

Kijk voor algemene informatie op de Horizon 2020 website van de Europese Commissie, zie ec.europa.eu/research/horizon2020. Documenten zoals werkprogramma's kunt u downloaden van ec.europa.eu/research/participants/portal (tabblad "how to participate - reference documents"). Ga bij het indienen van uw projectaanvraag altijd uit van de definitieve, officiële documenten op de participant portal.

Andere Europese programma's
Naast Horizon 2020 zijn er meer Europese programma's die onderzoeks- en innovatieprojecten financieren. Eurostars is er speciaal voor het high-tech midden- en kleinbedrijf. COST financiert coördinatie van een onderzoeksgebied. Tenslotte zijn er diverse programma's die projecten financieren op een specifiek gebied, zoals elektronica, luchtvaart, biobased economy en medicijnontwikkeling. Kijkt u voor meer details op www.rvo.nl.

Contact
Meer weten? Behoefte aan persoonlijk advies? De Rijksdienst voor Ondernemend Nederland, het nationaal contactpunt voor Horizon 2020, helpt u graag op weg. Neem contact op met onze adviseurs via 088 042 4242. Of kijk op www.rvo.nl/horizon2020.

European Research Council (ERC)

ERC stimuleert excellente onderzoekers om de wetenschappelijke grenzen binnen hun vakgebied te verleggen (frontier research). Het is niet noodzakelijk dat dit onderzoek in internationaal verband wordt uitgevoerd.

Het call-budget bedraagt circa 1650 miljoen euro voor 2016.

Calls 2016	Budget (miljoen euro)	Sluiting (indicatief)
ERC Starting Grant	485 (335 verwachte grants)	17-11-2015
ERC Consolidator Grant	605 (335 verwachte grants)	02-02-2016
ERC Advanced Grant	540 (235 verwachte grants)	01-09-2016
ERC Proof of Concept	20 (130 verwachte grants)	16-02-2016 26-05-2016 04-10-2016

Future and Emerging Technologies (FET)

FET financiert samenwerkingsprojecten die wetenschappelijke grenzen verleggen en zo de basis leggen voor toekomstige technologieën. Het call-budget bedraagt circa 228,2 miljoen euro voor 2016 en 162,8 miljoen euro voor 2017.

Topic	Omschrijving	Type project	Budget (miljoen euro)	Sluiting
	FET-Open – novel ideas for radically new technologies		**88,2** (2016) **113,8** (2017)	
FETOPEN-01	FET-Open Research and innovation actions	RIA	84 (<4 per project)	11-05-2016
		RIA	110,5 (<4 per project)	17-01-2017 27-09-2017
FETOPEN-02	FET-Open Coordination and Support Activities a) FET Communication	CSA	3 0,3-0,5 per project	11-05-2016
	b) FET Exchange	CSA	0,3-0,5 per project	11-05-2016
	c) FET Conference	CSA	<1 per project	11-05-2016
	d) FET Innovation Greenhouse	CSA	0,3-0,5 per project	11-05-2016
FETOPEN-03	FET-Open Coordination and Support Actions a) FET Futures	CSA	1,5 0,3-0,5 per project	17-01-2017
	b) FET Exchange	CSA	0,3-0,5 per project	17-01-2017
FETOPEN-04	FET Innovation Launchpad	CSA	1,2 (<0,1 per project)	29-10-2016
		CSA	1,8 (<0,1 per project)	27-09-2017
	FET Proactive – boosting emerging technologies		**90** (2016) **5** (2017)	
FETPROACT-01	FET-Proactive: emerging themes and communities Area 1: Future technologies for societal change Area 2: Biotech for better life Area 3: Disruptive information technologies Area 4: New technologies for energy and functional materials	RIA	80 (4-10 per project)	12-04-2016
FETPROACT-02	FET ERANET Cofund	ERA-NET	5 (5 per project)	12-04-2016
FETPROACT-03	FET ERANET Cofund in Quantum Technologies	ERA-NET	10 (10 per project)	24-01-2017

	FET-Proactive: High Performance Computing		**41** (2016) **44** (2017)	
FETHPC-01	Co-design of HPC systems and applications	RIA	41 (10-20 per project)	27-09-2016
FETHPC-02	Transition to exascale computing	RIA	40 (2-4 per project)	26-09-2017
FETHPC-03	Exascale HPC ecosystem development		4	
	a) Coordination of the exascale HPC strategy and international collaboration	CSA	1-2 per project	26-09-2017
	b) Excellence in exascale computing systems	CSA	1-2 per project	26-09-2017
	FET-Flagships - tackling grand interdisciplinary science and technology challenges		**9** (2016)	
FETFLAG-01	Partnering environment for FET Flagships			
	a) ERANET Cofund action	ERA-NET	8	01-03-2016
	b) Coordination and Support action	CSA	1	01-03-2016

Marie Skłodowska-Curie

Marie Skłodowska-Curie ondersteunt onderzoekers bij het uitbouwen van hun internationale onderzoekscarrière. Zo zijn er bijvoorbeeld mogelijkheden om (met financiële ondersteuning) gedurende een bepaalde periode onderzoek te doen in het buitenland en om buitenlandse onderzoekers tijdelijk in dienst te nemen.

Het call-budget bedraagt circa 756,5 miljoen euro voor 2016 en 838 miljoen euro voor 2017.

Calls 2016	Budget (miljoen euro)	Sluiting
Innovative Training Networks (ITN)	**370**	
European Traning Networks (ETN)	317	12-01-2016
European Industrial Doctorates (EID)	25	12-01-2016
European Joint Doctorates (EJD)	28	12-01-2016
Individual Fellowships (IF)	**218,5**	
European Fellowship – Standard (EF St), Career Restart (EF CAR) en Reintegration (EF RI)	179,5	14-09-2016
European Fellowship Industrial Panel (EF IP)	10	14-09-2016
Global Fellowship (GF)	29	14-09-2016
Research and Innovation Staff Exchange (RISE)	**80**	
Research and Innnovation Staff Exchange (RISE)	80	28-04-2016
Co-funding of regional, national and international programmes (COFUND)	**80**	
Doctoral Programme	30	29-09-2016
Fellowship Programme	50	29-09-2016
European Researchers' Night (NIGHT)	**8**	
European Researchers' Night	8	13-01-2016

Calls 2017	Budget (miljoen euro)	Sluiting
Innovative Training Networks (ITN)	**430**	
European Traning Networks (ETN)	370	10-01-2017
European Industrial Doctorates (EID)	28	10-01-2017
European Joint Doctorates (EJD)	32	10-01-2017
Individual Fellowships (IF)	**248**	
European Fellowship – Standard (EF St), Career Restart (EF CAR) en Reintegration (EF RI)	205	14-09-2017
European Fellowship Industrial Panel (EF IP)	10	14-09-2017
Global Fellowship (GF)	33	14-09-2017
Research and Innovation Staff Exchange (RISE)	**80**	
Research and Innnovation Staff Exchange (RISE)	80	05-04-2017
Co-funding of regional, national and international programmes (COFUND)	**80**	
Doctoral Programme	30	28-09-2017
Fellowship Programme	50	28-09-2017

Research infrastructures

Het totaal budget bedraagt circa 229,5 miljoen euro voor 2016 en circa 284,5 miljoen euro voor 2017.

Topic	Omschrijving	Type project	Budget (miljoen euro)	Sluiting
	Development and long-term sustainability of new pan-European research infrastructures		**80** (2016) **60** (2017)	
INFRADEV-01	Design Studies	RIA	20 (1-3 per project)	29-03-2017
INFRADEV-02	Preparatory Phase of ESFRI projects	CSA	40 (<4 per project)	22-06-2016
INFRADEV-03	Individual support to ESFRI projects and other world-class research infrastructures	CSA	70 (2-5 per project)	30-03-2016
INFRADEV-04	European open science cloud for research	RIA	10 (5-10 per project)	22-06-2016
	Integrating and opening research infrastructures of European interest		**88** (2016) **112** (2017)	
INFRAIA-01	Integrating activities for advanced communities	RIA	160 (<10 per project)	30-03-2016

Biological and Medical Sciences

Facilities for high throughput DNA sequencing

Vaccine infrastructures

Experimental facilities for animal disease and infectiology (including zoonoses)
Centres for replacement, reduction and refinement (3 Rs) of non-human primate testing
Facilities and resources for plant phenotyping

Marine biological stations

Research Infrastructures for the control of vector-borne diseases

Energy

Research Infrastructures for research on biomass conversion and biorefinery
Research Infrastructures for offshore renewable energy

Environmental and Earth Sciences

Research infrastructures for terrestrial research in the Arctic

Research Infrastructures for earthquake hazard

Mesocosms facilities for research on marine and freshwater ecosystems
Atmospheric simulation chambers

Research infrastructures for forest ecosystem and resources research
Sites, experimental platforms and data collections of anthropogenic impacts for ecosystem functioning and biodiversity research
Multidisciplinary Marine Data Centres for ocean and marine data management
Mathematics and ICT

Integrating activity for facilitating access to HPC (High Performance Computing) centers

Material Sciences and Analytical facilities

Research Infrastructures for advanced spectroscopy, scattering/
diffraction and imaging of materials
Synchrotron radiation sources and Free Electron Lasers

Facilities for research on materials under extreme magnetic
conditions
Infrastructures for Neutron Scattering and Muon Spectroscopy

Physical Sciences

Research Infrastructures for advanced radio astronomy

Research Infrastructures for optical/IR astronomy

Research Infrastructures for hadron physics

Particle Accelerators

Social Sciences and Humanities

Access to European Social Science Data Archives and Official
Statistics
Research infrastructures for the study of poverty, working life and
living conditions

INFRAIA-02	Integrating activities for starting communities	RIA	40 (<5 per project)	30-03-2016 (1st stage)

	e-Infrastructures		**36** (2016) **86** (2017)	
	Theme 1 - Integration and consolidation of e-infrastructure platforms supporting European policies and research and education communities			
EINFRA-11	Support to the next implementation phase of Pan-European High Performance Computing infrastructure and services (PRACE)	RIA	15	30-03-2016
EINFRA-12	Data and Distributed Computing e-infrastructures for Open Science		40	
	a) Secure and agile data and distributed computing e-infrastructures	RIA	10-15 per project	29-03-2017
	b) Access and preservation platforms for scientific information	RIA	8-10 per project	29-03-2017
	Theme 2 - Prototyping innovative e-infrastructure platforms and services for research and education communities, industry and the citizens at large			
EINFRA-21	Platform-driven e-infrastructure innovation			
	a) Support to Public Procurement of innovative HPC systems, PPI	PPI	26	20-09-2016
	b) Research and innovation actions for e-infrastructure protoypes	RIA	20	29-03-2017
EINFRA-22	User-driven e-infrastructure innovation		21	
	a) Exploitation of e-infrastructures for user-driven innovation and pilots responding to community specific challenges	RIA		30-03-2016
	b) Innovation for Open Science e-infrastructures and services	RIA	1-2 per project	30-03-2016

	Fostering the innovation potential of research infrastructure		**10** (2016) **20** (2017)	
INFRA-INNOV-01	Fostering co-innovation for future detection and imaging technologies	RIA	20 (<20 per project)	29-03-2017
INFRA-INNOV-02	Support to Technological Infrastructures	CSA	10 (<2 per project)	30-03-2016

	Support to policy and international cooperation		**15,5** (2016) **6,5** (2017)	
INFRASUPP-01	Policy and international cooperation measures for research infrastructures	CSA	8 (1,5-2 per project)	30-03-2016
INFRASUPP-02	Policy and international cooperation measures for research	CSA	6,5	29-03-2017

infrastructures

INFRASUPP-03	Support to policies and international cooperation for e-infrastructures			
	a) Research and innovation actions for international co-operation on high-end e-infrastructure requirements	RIA	3 (1,5-3 per project)	29-03-2017
	b) Coordination and support actions for international co-operation and policy development:		4,5	
	1) International Co-operation on e-infrastructure supporting major societal challenges	CSA	0,5-1 per project	30-03-2016
	2) Policy support to e-infrastructure programme	CSA	0,5-1 per project	30-03-2016
	3) Support to dissemination for the e-infrastructure programme	CSA	1-1,5 per project	30-03-2016
	4) Support to small-size foresight roadmaps for the e-infrastructure programme	CSA	0,3-0,4 per project	30-03-2016

Information and Communication Technologies (ICT)

Het call-budget bedraagt 476,5 miljoen euro voor 2016 en 611,5 miljoen euro voor 2017.

Topic	Omschrijving	Type project	Budget (miljoen euro)	Sluiting
	Information and Communication Technologies Call		**463,5** (2016) **604,5** (2017)	
	A new generation of components and systems			
ICT-01	Smart Cyber-Physical Systems a) Research and Innovation Actions - Science of system integration	RIA	19 (<5 per project)	12-04-2016
	b) Coordination and Support Actions	CSA	1 (<1 per project)	12-04-2016
ICT-02	Thin, Organic and Large Area Electronics (TOLAE) a) Advancing the readiness of TOLAE technologies and/or hybrid integration for use in applications	RIA	12 (2-4 per project)	12-04-2016
	b) Set-up and validation of pilot line for Hybrid Systems and/or Demonstration of TOLAE-enabled product prototypes	IA	8 (2-8 per project)	12-04-2016
ICT-03	SSI – Smart System Integration a) Research and Innovation actions	RIA	17 (2-4 per project)	12-04-2016
	b) Coordination and Support Actions	CSA	1,5 (0,5-1 per project)	12-04-2016
ICT-04	Smart Anything Everywhere Initiative a) Innovation Actions		24,5	
	- Area 1: Cyber-physical and embedded systems	IA	7 per project	08-11-2016
	- Area 2: Customised low energy computing powering CPS and the IoT	IA	7 per project	08-11-2016
	- Area 3: Advanced micro-electronics components and Smart System Integration	IA	7 per project	08-11-2016
	- Area 4: Organic and large area electronics	IA	3,5 per project	08-11-2016
	b) Coordination and Support Actions	CSA	1	08-11-2016
	Advanced Computing and Cloud Computing			
ICT-05	Customised and low energy computing a) Programming environments and toolboxes for low energy and highly parallel computing	RIA	24 (4-6 per project)	25-04-2017
	b) Coordination and Support Actions	CSA	2	25-04-2017
ICT-06	Cloud Computing a) New paradigms	RIA	35 (3-5 per project)	12-04-2016
	b) Experimentation of cloud-based services and their deployment configurations or Cloud computing for SMEs and public sector innovation	IA	10 (2-4 per project)	12-04-2016
	Future Internet			
ICT-07	5G PPP Research and validation of critical technologies and systems a) wireless access and radio network architecture/technologies and/or High capacity elastic - optical networks and/or "Software Network"	RIA	100 (5-8 per project)	08-11-2016
	b) Coordination and Support Actions	CSA	3 (<3 per project)	08-11-2016
ICT-08	5G PPP convergent technologies a) Ubiquitous 5G access leveraging optical technologies and/or Flexible network applications	IA	40 (5-8 per project)	08-11-2016
	b) Cooperation in access convergence	RIA	5 (2,5 per project)	08-11-2016

ICT-09	Networking research beyond 5G Scientific and technology advances and/or Advanced signal processing and/or Demand-attentive and cooperation networking Software technologies	RIA	18 (2-3 per project)	08-11-2016
ICT-10	Advanced software development approaches and methodologies and/or Seamless software architectures	RIA	31 (3-5 per project)	12-04-2016
ICT-11	Collective awareness platforms for sustainability and Social Innovation			
	a) Innovation Actions	IA	9 (1-2 per project)	25-04-2017
	b) Coordination and Support Actions	CSA	1 (0,2-0,8 per project)	25-04-2017
ICT-12	Net innovation initiative			
	a) Open service platform	IA	15 (2-6 per project)	12-04-2016
	b) Distributed architectures	RIA	5 (2-5 per project)	12-04-2016
	c) Coordination and Support Actions	CSA	0,2 (0,2 per project)	12-04-2016
ICT-13	Future internet experimentation – Building a European experimental infrastructure			
	a) Research and Innovation Actions	RIA	25 (<10 per project)	12-04-2016
	b) Coordination and Support Actions	CSA	1 (<1 per project)	12-04-2016
	Content			
ICT-14	Big Data PPP: cross-sectorial and cross-lingual data integration and experimentation		27 27	2016 2017
	a) Data integration activities	IA	1-3 per project	12-04-2016 25-04-2017
	b) Data experimentation incubators	IA	7 per project	12-04-2016 25-04-2017
ICT-15	Big Data PPP: Large scale pilot projects in sectors best benefitting from data-driven innovation	IA	25 (10-15 per project) 25 (10-15 per project)	12-04-2016 25-04-2017
ICT-16	Big data PPP: research addressing main technology challenges of the data economy	RIA	31 (2-5 per project)	25-04-2017
ICT-17	Big data PPP: Support, industrial skills, benchmarking and evaluation			
	a) Coordination and Support Action	CSA	5 (5 per project)	12-04-2016
	b) Research and Innovation Actions	RIA	2 (2 per project)	25-04-2017
ICT-18	Big data PPP: privacy-preserving big data technologies			
	a) Research and Innovation Actions	RIA	8 (2-4 per project)	12-04-2016
	b) Coordination and Support Action	CSA	1 (1 per project)	12-04-2016
ICT-19	Media and content convergence			
	a) Media and content convergence	IA	38 (2-4 per project)	08-11-2016
	b) Convergence and social media	CSA	1 (1 per project)	08-11-2016
ICT-20	Tools for smart digital content in the creative industries	RIA	17 (2-4 per project)	25-04-2017
ICT-21	Support technology transfer to the creative industries	IA	14 (0,5-1 per project)	12-04-2016
ICT-22	Technologies for learning and skills			
	a) Innovation Action	IA	20 (5 per project)	12-04-2016
	b) Research and Innovation Action	RIA	11 (2,5 per project)	12-04-2016
ICT-23	Interfaces for accessibility			
	a) Research and Innovation Actions	RIA	10 (2 per project)	25-04-2017
	b) Innovation Actions	IA	2 (2 per project)	25-04-2017
ICT-24	Gaming and gamification	IA	12 (1 per project)	12-04-2016

	Robotics and Autonomous Systems			
ICT-25	Advanced robot capabilities research and take-up			
	a) Research and Innovation Actions	RIA	15 (2-4 per project)	12-04-2016
		RIA	15 (2-4 per project)	25-04-2017
	b) Innovation Actions	IA	15 (2-4 per project)	12-04-2016
		IA	19 (2-4 per project)	25-04-2017
ICT-26	System abilities, development and pilot installations		42	
	a) Research and Innovation Actions on system abilities	RIA	2-4 per project	12-04-2016
	b) Research and Innovation Actions on multiple-actor systems	RIA	2-7 per project	12-04-2016
	c) Innovation Actions on systems development technology	IA	5-8 per project	12-04-2016
	d) Innovation Actions on pilot installations for robot testing	IA	7-10 per project	12-04-2016
ICT-27	System abilities, SME and benchmarking actions, safety certification		28	
	a) Research and Innovation Actions on system abilities	RIA	2-4 per project	25-04-2017
	b) Research and Innovation Actions for SME-based research and for benchmarks	RIA	5-8 per project	25-04-2017
	c) Innovation Actions on shared facilities for safety certification	IA	11 (6-11 per project)	25-04-2017
	d) Pre-Commercial Procurement Actions	PCP	7 (5-7 per project)	25-04-2017
ICT-28	Robotics competition, coordination and support	CSA	5 (<3 per project)	25-04-2017
	ICT Key Enabling Technologies			
ICT-29	Photonics KET 2016			
	a) Research and Innovation Actions		40	
	- Biophotonics: advancing imaging for in-depth disease diagnosis	RIA	2-4 per project	12-04-2016
	- Breakthrough in miniaturization of SSL light engines and systems	RIA	2-4 per project	12-04-2016
	- Pervasive high-specificity and high-sensitivity sensing for a safer environment	RIA	2-4 per project	12-04-2016
	b) Innovation Actions		23	
	- Application driven core photonic devices integrated in systems	IA	2-4 per project	12-04-2016
	- Pilot line for Assembly and Packaging	IA	6-14 per project	12-04-2016
	c) Coordination and Support Actions		3	
	- Coordination of regional photonics strategies	CSA	1,5 per project	12-04-2016
	- Photonics enhanced MakerLabs	CSA	1,5 per project	12-04-2016
ICT-30	Photonics KET 2017			
	a) Research and Innovation Actions		41	
	- Agile Petabit/s Optical Core and Metro Networks	RIA	6-8 per project	25-04-2017
	- Photonic integrated circuit (PIC) technology	RIA	3-4 per project	25-04-2017
	- Disruptive approaches to optical manufacturing by 2 and 3 D opto-structuring	RIA	3-4 per project	25-04-2017
	b) Innovation Actions		43	
	- Innovation Incubator for SMEs	IA	8-10 per project	25-04-2017
	- Application driven core photonic devices integrated in systems	IA	6-8 per project	25-04-2017
	c) Coordination and Support Actions			
	- Supporting the industrial strategy for photonics in Europe	CSA	3 (<3 per project)	25-04-2017
ICT-31	Micro- and nanoelectronics technologies			
	a) Research and Innovation Actions	RIA	19 (2-4 per project)	25-04-2017
	b) Innovation Actions	IA	3 (1-2 per project)	25-04-2017
	c) Coordination and Support Actions	CSA	1 (0,5 per project)	25-04-2017

	Innovation and Entrepreneurship support			
ICT-32	Startup Europe for Growth and Innovation Radar a) Innovation Actions	IA	10 (1,5 per project)	25-04-2017
	b) Coordination and Support Actions	CSA	2 (1 per project)	25-04-2017
ICT-33	Innovation procurement networks	CSA	4 (1-2 per project)	25-04-2017
ICT-34	Pre-Commercial Procurement open	PCP	4 (<4 per project)	12-04-2016
	Responsibility and Creativity			
ICT-35	Enabling responsible ICT-related research and innovation a) Research and Innovation Actions	RIA	7 1-2 per project	12-04-2016
	b) Smaller short-term Research and Innovation Actions (1 year)	RIA	0,3-0,5 per project	12-04-2016
ICT-36	Boost synergies between artists, creative people and technologists a) Innovation Action	IA	3 (3 per project)	12-04-2016
	b) Coordination and Support Actions - Integration of artists in research and innovation projects across all ICT objectives in WP2016/2017	CSA	5 4 per project	12-04-2016
	- Implementation of a 'STARTS prize'	CSA	1 per project	12-04-2016
	International Cooperation Activities			
ICT-37	CHINA: Collaboration on Future Internet	CSA	1 (1 per project)	19-01-2016
ICT-38	MEXICO: Collaboration on ICT a) Research and Innovation Actions	RIA	0,5 (0,5 per project)	19-01-2016
	b) Coordination and Support Actions	CSA	0,5 (0,25 per project)	19-01-2016
ICT-39	International partnership building in low and middle income countries a) Innovation Actions	IA	13 (1-2 per project)	25-04-2017
	b) Coordination and Support Actions for Africa	CSA	0,8 (0,8 per project)	19-01-2016

	EU-Japan Joint Call		**7** (2016)	
EUJ-01	5G – Next Generation Communication Networks	RIA	3 (<1,5 per project)	19-01-2016
EUJ-02	IoT/Cloud/Big Data platforms in social application contexts	RIA	2,7 (1,35 per project)	19-01-2016
EUJ-03	Experimental testbeds on Information-Centric Networking	RIA	1,3 (<1,3 per project)	19-01-2016

	EU-Brazil Joint Call		**7** (2017)	
EUB-01	Cloud Computing	RIA	2,5 (1-1,5 per project)	14-03-2017
EUB-02	IoT Pilots	RIA	4,5 (<1,5 per project)	14-03-2017

	EU-South Korea Joint Call		**6** (2016)	
EUK-01	5G – Next Generation Communication Networks	RIA	3 (3 per project)	19-01-2016
EUK-02	IoT joint research	RIA	1,5 (1,5 per project)	19-01-2016
EUK-03	Federated Cloud resource brokerage for mobile cloud services	RIA	1,5 (1,5 per project)	19-01-2016

Nanotechnologies, Advanced materials, Biotechnology, Advanced manufacturing and Processing

Het call-budget bedraagt 280 miljoen euro voor 2016 en 308 miljoen euro voor 2017.

Topic	Omschrijving	Type project	Budget (miljoen euro)	Sluiting
EEB	**Energy-efficient buildings**		**49.0** (2016) **54.0** (2017)	
EEB-01	Highly efficient insulation materials with improved properties	IA	3-6 per project	21-01-2016
EEB-02	Performance indicators and monitoring techniques for energy-efficiency and environmental quality at building and district level	CSA	0.5-0.75 per project	21-01-2016
EEB-03	Integration of advanced technologies for heating and cooling at building and district level	IA	5-7 per project	21-01-2016
EEB-04	New technologies and strategies for the development of pre-fabricated elements through the reuse and recycling of construction materials and structures	RIA	3-5 per project	21-01-2016
EEB-05	Development of near zero energy building renovation	IA	5-7 per project	19-01-2017
EEB-06	Highly efficient hybrid storage solutions for power and heat in residential buildings and district areas, balancing the supply and demand conditions	RIA	4-6 per project	19-01-2017
EEB-07	Integration of energy harvesting at building and district level	IA	4-6 per project	19-01-2017
EEB-08	New business models for energy-efficient buildings through adaptable refurbishment solutions	CSA	0,5-1 per project	19-01-2017
NMBP	**Nanotechnologies, advanced materials, biotechnology and production**		**230.78** (2016) **254.39** (2017)	
	Advanced materials and nanotechnologies for high added value products and process industries			
NMBP-01	Novel hybrid materials for heterogeneous catalysis	RIA	5-8 per project	08-12-2015 (1st stage)
NMBP-02	Advanced materials for power electronics based on wide bandgap semiconductor devices technology	RIA	5-8 per project	08-12-2015 (1st stage)
NMBP-03	Innovative and sustainable materials solutions for the substitution of critical raw materials in the electric power system	RIA	3-5 per project	08-12-2015 (1st stage)
NMBP-04	Architectured /advanced material concepts for intelligent bulk material structures	RIA	5-8 per project	27-10-2016 (1st stage)
NMBP-05	Advanced materials and innovative design for improved functionality and aesthetics in high added value consumer goods	IA	5-7 per project	27-10-2016 (1st stage)
NMBP-06	Improved material durability in buildings and infrastructures, including offshore	RIA	3-6 per project	27-10-2016 (1st stage)
NMBP-07	Systems of materials characterisation for model, product and process optimisation	RIA	3-4 per project	27-10-2016 (1st stage)
	Green vehicles			
NMBP-08	Affordable weight reduction of high-volume vehicles and components taking into account the entire life-cycle	RIA	16 (5-8 per project)	21-01-2016
	Advanced materials and nanotechnologies for healthcare			
NMBP-09	Biomaterials for diagnosis and treatment demyelination disorders of the central nervous system	RIA	5-8 per project	08-12-2015 (1st stage)
NMBP-10	Nanoformulation of biologicals	RIA	5-6 per project	08-12-2015 (1st stage)

NMBP-11	ERA-NET on nanomedicine	ERA-NET	8-10 per project	21-01-2016
NMBP-12	Development of a reliable methodology for better risk management of engineered biomaterials in advanced therapy medicinal products and/or medical devices	RIA	5-8 per project	27-10-2016 (1st stage)
NMBP-13	Cross-cutting KETs for diagnostics at the point-of-care	RIA	15 (3-5 per project)	19-01-2017
NMBP-14	Regulatory science framework for assessment of risk benefit ratio of Nanomedicines and Biomaterials	RIA	5-8 per project	27-10-2016 (1st stage)
NMBP-15	Nanotechnologies for imaging cellular transplants and regenerative processes in vivo	RIA	5-7 per project	27-10-2016 (1st stage)
NMBP-16	Mobilising the European nano-biomedical ecosystem	CSA	1-2 per project	19-01-2017
	Advanced materials and nanotechnologies for energy applications			
NMBP-17	Advanced materials solutions and architectures for high efficiency solar energy harvesting	IA	3-5 per project	08-12-2015 (1st stage)
NMBP-18	Advanced materials enabling the integration of storage technologies in the electricity grid	IA	6-8 per project	08-12-2015 (1st stage)
NMBP-19	Cost-effective materials for "power-to-chemical" technologies	RIA	3-5 per project	27-10-2016 (1st stage)
NMBP-20	High-performance materials for optimizing carbon dioxide capture	IA	6-8 per project	27-10-2016 (1st stage)
	Eco-design and new sustainable business models			
NMBP-21	ERA-NET on manufacturing technologies supporting industry and particularly SMEs in the global competition	ERA-NET	8-10 per project	21-01-2016
NMBP-22	Business models and industrial strategies supporting novel supply chains for innovative product-services	RIA	2-4 per project	27-10-2016 (1st stage)
BIOTEC	**Biotechnology**			
BIOTEC-01	ERA-NET Cofund on Biotechnologies	ERA-NET C	8-10 per project	21-01-2016
BIOTEC-02	Bioconversion of non-agricultural waste into biomolecules for industrial applications	RIA	5-7 per project	08-12-2015 (1st stage)
BIOTEC-03	Microbial chassis platforms with optimized metabolic pathways for industrial innovations through systems biology	RIA	5-7 per project	08-12-2015 (1st stage)
BIOTEC-04	KET Biotechnology foresight identifying gaps and high-value opportunities for the EU industry	CSA	0,35-0,5 per project	21-01-2016
BIOTEC-05	Microbial platforms for CO_2-reuse processes in the low-carbon economy	RIA	5-7 per project	27-10-2016 (1st stage)
BIOTEC-06	Optimisation of biocatalysis and downstream processing for the sustainable production of high value-added platform chemicals	IA	5-7 per project	27-10-2016 (1st stage)
BIOTEC-07	New plant breeding techniques (NPBT) in molecular farming: multipurpose crops for industrial bioproducts	RIA	5-7 per project	27-10-2016 (1st stage)
BIOTEC-08	Support for enhancing and demonstrating the impact of KET biotechnology projects	CSA	0,7-1 per project	19-01-2017
	Modelling for the development of nanotechnologies and advanced materials			
NMBP-23	Advancing the integration of materials Modelling in Business Processes to enhance effective industrial decision making and increase competitiveness	RIA	3-4 per project	08-12-2015 (1st stage)
NMBP-24	Network to capitalise on strong European position in materials modelling and to allow industry to reap the benefits	CSA	3-4 per project	21-01-2016
NMBP 25	Next generation system integrating tangible and intangible materials model components to support innovation in industry	IA	5-8 per project	27-10-2016 (1st stage)
	Science-based risk assessment and management of nanotechnologies, advanced materials and biotechnologies			
NMBP-26	Analytical techniques and tools in support of nanomaterial risk assessment	RIA	5-7 per project	08-12-2015 (1st stage)
NMBP-27	Promoting safe innovation through global consolidation and networking of nanosafety centres and strengthening the European industry through cooperation in nanosafety	CSA	1-2 per project	21-01-2016
NMBP-28	Framework and strategies for nanomaterial characterisation, classification, grouping and read-across for risk analysis	RIA	5-7 per project	27-10-2016 (1st stage)
NMBP-29	Advanced and realistic models and assays for nanomaterial hazard assessment	RIA	10-13 per project	27-10-2016 (1st stage)
	Innovative and responsible governance of new and converging enabling technologies			
NMBP-30	Facilitating knowledge management, networking and coordination	CSA	0,3-0,5	21-01-2016

	in the field of formulated products		per project	
NMBP-31	Presidency events	CSA	0,3-0,6 per project	21-01-2016 19-01-2017
NMBP-32	Support for National Contact Points	CSA	0,25-0,5 per project	21-01-2016
NMBP-33	Networking and sharing best experiences in using regional clusters strategies with a focus on supporting innovation in the NMBP thematic area	CSA	0,25-0,5 per project	21-01-2016
NMBP-34	Governing innovation of nanotechnology through enhanced societal engagement	CSA	1,5-2 per project	19-01-2017
NMBP-35	Innovative solutions for the conservation of 20th century cultural heritage	RIA	6-8 per project	27-10-2016 (1st stage)
NMBP-36	Policy support for Industry 2020 in the circular economy	CSA	1-1,5 per project	21-01-2016

Space

Het call-budget bedraagt 87,7 miljoen euro voor 2016 en 94 miljoen euro voor 2017.

Topic	Omschrijving	Type project	Budget (miljoen euro)	Sluiting
	Earth Observation - 2016		**21,85** (2016)	
EO-1	Downstream applications	IA	9,85 (1-2 per project)	03-03-2016
EO-2	Downstream services for public authorities	PCP	3	03-03-2016
EO-3	Evolution of Copernicus services	RIA	9 (1-2 per project)	03-03-2016
	Competitiveness of the European Space Sector: technology and science - 2016		**65,85** (2016)	
COMPET-1	Technologies for European non-dependence and competitiveness	RIA	14,85 (2-5 per project)	03-03-2016
COMPET-2	Maturing satellite communication technologies	RIA	7 (2-4 per project)	03-03-2016
COMPET-3	SRC – In-Space electrical propulsion and station keeping a) Incremental Technologies	IA	18 (4,5-11 per project)	03-03-2016
	b) Disruptive Technologies	RIA	5 (1-1,5 per project)	03-03-2016
COMPET-4	SRC – Space Robotics Technologies a) Space robot control operating system	RIA	18 3-3,5 per project	03-03-2016
	b) Autonomy framework time/space/resources planning and scheduling	RIA	3-3,5 per project	03-03-2016
	c) Common data fusion framework	RIA	3-3,5 per project	03-03-2016
	d) Inspection sensor suite	RIA	3-3,5 per project	03-03-2016
	E) Modular interfaces for robotic handling of payloads	RIA	3-3,5 per project	03-03-2016
	f) Validation platform and field tests	RIA	1 per project	03-03-2016
COMPET-5	Scientific instrumentation	RIA	3 (1,5-3 per project)	03-03-2016
	Applications in Satellite Navigation – Galileo - 2017		**33,0** (2017)	
GALILEO-1	EGNSS Transport applications	IA	14,5 (1-3 per project)	01-03-2017
GALILEO-2	EGNSS mass market applications	IA	9 (1-3 per project)	01-03-2017
GALILEO-3	EGNSS professional applications	IA	8 (1-3 per project)	01-03-2017
GALILEO-4	EGNSS awareness raising and capacity building	CSA	1,5 (0,5-1 per project)	01-03-2017

	Earth Observation - 2017		**19,5** (2017)	
EO-1	Downstream applications	IA	12 (1-2 per project)	01-03-2017
EO-2	EO Big Data Shift	RIA	7,5 (1-2 per project)	01-03-2017
	Competitiveness of the European Space Sector: technology and science - 2017		**41,5** (2017)	
COMPET-1	Technologies for European non-dependence and competitiveness	RIA	15 (2-5 per project)	01-03-2017
COMPET-2	Competitiveness in Earth observation mission technologies	RIA	7 (2-3 per project)	01-03-2017
COMPET-3	High speed data chain	RIA	10 (2-7 per project)	01-03-2017
COMPET-4	Scientific data exploitation	RIA	5 (1,5 per project)	01-03-2017
COMPET-5	Space weather	RIA	3 (1-1,5 per project)	01-03-2017
COMPET 6	Space portal	CSA	0,5 (0,5 per project)	01-03-2017
COMPET 7	Technology transfer and business generators	CSA	1 (1 per project)	01-03-2017

Innovation in SMEs

Onder dit thema vallen ondersteunende activiteiten om groei en innovatie bij het MKB te stimuleren. Het call-budget bedraagt 381,6 miljoen euro voor 2016 en 411,8 miljoen euro voor 2017.

Het SME instrument is bedoeld voor internationaal georiënteerde innovatieve bedrijven die een nieuw product, dienst of proces naar de markt willen brengen (high-risk en high-potential).

	Overzicht SME Instrument			
	Horizon 2020 dedicated SME Instrument		**353,4** (2016)	**385,91** (2017)
SMEInst-01	Open Disruptive Innovation Scheme	SME	60	66
SMEInst-02	Accelerating the uptake of nanotechnologies advanced materials or advanced manufacturing and processing technologies by SMEs	SME	31,8	35,32
SMEInst-03	Dedicated support to biotechnology SMEs closing the gap from lab to market	SME	7,5	7,5
SMEInst-04	Engaging SMEs in space research and development	SME	11,37	12,6
SMEInst-05	Supporting innovative SMEs in the healthcare biotechnology sector	SME	35	45
SMEInst-06	Accelerating market introduction of ICT solutions for Health, Well-Being and Ageing Wel	SME	18	12,5
SMEInst-07	Stimulating the innovation potential of SMEs for sustainable and competitive agriculture, forestry, agri-food and bio-based sectors	SME	25,46	32,19
SMEInst-08	Supporting SMEs efforts for the development - deployment and market replication of innovative solutions for blue growth	SME	9,5	10
SMEInst-09	Stimulating the innovation potential of SMEs for a low carbon and efficient energy system	SME	46	50
SMEInst-10	Small business innovation research for Transport and Smart Cities Mobility	SME	57,57	61,23
SMEInst-11	Boosting the potential of small businesses in the areas of climate action, environment, resource efficiency and raw materials	SME	25	27,5
SMEInst-12	New business models for inclusive, innovative and reflective societies	SME	10,8	11,4
SMEInst-13	Engaging SMEs in security research and development	SME	15,37	14,67

Projectaanvragen kunnen continu worden ingediend maar wel zijn er tussentijds sluitingsdata. Na elke sluitingsdatum worden binnengekomen aanvragen beoordeeld. U kunt twee typen projecten aanvragen: een 'fase 1' haalbaarheidsstudie (50k euro lump sum) en een 'fase 2' R&D project (0,5-2,5 miljoen euro,meestal 70%, soms 100% subsidie).

Sluitingsdata SME instrument		
	2016	**2017**
Fase I	24-02-2016 03-05-2016 07-09-2016 09-11-2016	15-02-2017 03-05-2017 06-09-2017 08-11-2017
Fase II	03-02-2016 14-04-2016 15-06-2016 13-10-2016	18-01-2017 6-04-2017 01-06-2017 18-10-2017

Topic	Omschrijving	Type project	Budget (miljoen euro)	Sluiting
	Call – For a better innovation support to SMEs		**28,2** (2016 **25,9** (2017)	
INNOSUP-01	Cluster facilitated projects for new industrial value chains	IA	15 (2,5-5 per project)	06-04-2016 (1st stage)
		IA	18,5 (2,5-5 per project)	04-04-2017 (1st stage)
INNOSUP-02	European SME innovation Associate - pilot	CSA	7,2	30-06-2016
INNOSUP-03	Technology services to accelerate the uptake of advanced manufacturing technologies for clean production by manufacturing SMEs	CSA	4,9 (<4,9 per project)	28-03-2017
INNOSUP-04	SMEs for social innovation – Challenge platform	CSA	3,5 (3,5 per project)	28-04-2016
INNOSUP-05	Peer learning of innovation agencies	CSA	0,5	17-03-2016 18-10-2016 08-03-2017 18-10-2017
INNOSUP-06	Capacity-building for National Contact Points (NCPs) for SMEs and Access to Risk Finance under Horizon 2020	CSA	2 (2 per project)	19-01-2016
INNOSUP-07	Innovating SMEs - segmentation along lifecycle and sectors (analytical research activity)	RIA	1 (0,3-1 per project)	28-03-2017
INNOSUP-08	A better access to industrial technologies developed overseas	SGA-CSA	1	28-03-2017

Health, demographic change and wellbeing

Het call-budget bedraagt 343 miljoen euro voor 2016 en 315.26 miljoen euro voor 2017.

Topic	Omschrijving	Type project	Budget (miljoen euro)	Sluiting
	Personalised medicine		**343** (2016) **315,26** (2017)	
	1.1 Understanding health, well-being and disease			
PM-01	Multi omics for personalised therapies addressing diseases of the immune system	RIA	30 (12-15 per project)	13-04-2016
PM-02	New concepts in patient stratification	RIA	40 (4-6 per project)	04-10-2016 (1st stage)
PM-03	Diagnostic characterisation of rare diseases	RIA	15 (15 per project)	11-04-2017
PM-04	Networking and optimising the use of population and patient cohorts at EU level	RIA	30 (8-10 per project)	13-04-2016
	1.2 Preventing disease			
PM-05	The European Human Biomonitoring Initiative	EJP	50 (50 per project)	13-04-2016
PM-06	Vaccine development for malaria and/or neglected infectious diseases	RIA	40 (3-20 per project)	13-04-2016
PM-07	Promoting mental health and well-being in the young	RIA	20 (2-4 per project)	04-10-2016 (1st stage)
	1.3 Treating and managing diseases			
PM-08	New therapies for rare diseases	RIA	60 (4-6 per project)	04-10-2016 (1st stage)
PM-09	New therapies for chronic diseases	RIA	60 (4-6 per project)	13-04-2016
PM-10	Comparing the effectiveness of existing healthcare interventions in the adult population	RIA	40 (4-6 per project)	04-10-2016 (1st stage)
PM-11	Clinical research on regenerative medicine	RIA	60 (4-6 per project)	13-04-2016
	1.4 Active ageing and self-management of health			
PM-12	PCP - eHealth innovation in empowering the patient	PCP	18 (4 per project)	16-02-2016
PM-13	PPI for deployment and scaling up of ICT solutions for active and healthy ageing	PPI	10,5 (2-5 per project)	16-02-2016
PM-14	EU-Japan cooperation on Novel ICT Robotics based solutions for active and healthy ageing at home or in care facilities	RIA	5 (1-2 per project)	12-04-2016
PM-15	Personalised coaching for well-being and care of people as they age	RIA	25 (3-4 per project)	31-01-2017
	1.5 Methods and data			
PM-16	In-silico trials for developing and assessing biomedical products	RIA	19 (4-6 per project)	14-03-2017
PM-17	Personalised computer models and in-silico systems for well-being	RIA	19 (4-6 per project)	14-03-2017

PM-18	Big Data supporting Public Health policies	RIA	10 (3-5 per project)	16-02-2016
PM-19	PPI for uptake of standards for the exchange of digitalised healthcare records	PPI	8,26 (3-4 per project)	14-03-2017
PM-20	Development of new methods and measures for improved economic evaluation and efficiency measures in the health sector	RIA	9	11-04-2017
1.6 Health care provision and integrated care				
PM-21	Implementation research for scaling-up of evidence based innovations and good practice in Europe and low- and middle-income countries	RIA	40 (4-6 per project)	13-04-2016
Coordination activities				
HCO-01	Valorisation of FP7 Health and H2020 SC1 research results	CSA	2 (1-2 per project)	13-04-2016
HCO-02	Standardisation of pre-analytical and analytical procedures for in vitro diagnostics in personalised medicine	CSA	2 (2 per project)	13-04-2016
HCO-03	Implementing the Strategic Research Agenda on Personalised Medicine	ERA-NET	5 (5 per project)	11-04-2017
HCO-04	Towards globalisation of the Joint Programming Initiative on Antimicrobial resistance	CSA	2 (1-2 per project)	13-04-2016
HCO-05	Coordinating personalised medicine research	CSA	2 (2 per project)	13-04-2016
HCO-06	Towards an ERA-NET for building sustainable and resilient health system models	CSA	2 (1-2 per project)	13-04-2016
HCO-07	Global Alliance for Chronic Diseases (GACD)	RIA	24	11-04-2017
HCO-08	Actions to bridge the divide in European health research and innovation	CSA	1 (<1 per project)	11-04-2017
HCO-10	Support for Europe's leading Health ICT SMEs	CSA	3 (<3 per project)	16-02-2016
HCO-11	Coordinated action to support the recognition of Silver Economy opportunities arising from demographic change	CSA	1 (<1 per project)	16-02-2016
HCO-12	Digital health literacy	CSA	2 (<2 per project)	16-02-2016
HCO-13	Healthcare Workforce IT skills	CSA	0,5 (<0,5 per project)	16-02-2016
HCO-14	EU-US interoperability roadmap	CSA	1 (<1 per project)	16-02-2016
HCO-15	EU eHealth Interoperability conformity assessment	CSA	1 (<1 per project)	16-02-2016
HCO-16	Standardisation needs in the field of ICT for Active and Healthy Ageing	CSA	1 (<1 per project)	16-02-2016

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

Het call-budget bedraagt circa 340,5 miljoen euro voor 2016 en circa 375 miljoen euro voor 2017.

Topic	Omschrijving	Type project	Budget (miljoen euro)	Sluiting
	Sustainable Food Security – Resilient and resource-efficient value chains		**180,5** (2016) **251,0** (2017)	
	More resilient and resource efficient value chains			
SFS-01	Solutions to multiple and combined stresses in crop production	RIA	12 (<6 per project)	17-02-2016 (1st stage)
SFS-02	Teaming up for good: Exploiting the benefits of species diversity in cropping systems	RIA	10 (<5 per project)	17-02-2016 (1st stage)
SFS-03	Testing and breeding for sustainability and resilience in crops	RIA	5 (<5 per project)	17-02-2016 (1st stage)
SFS-04	New partnerships and tools to enhance European capacities for in-situ conservation	CSA	2 (<2 per project)	14-02-2017
SFS-05	Robotics advances for precision farming	RIA	7 (2-4 per project)	14-02-2017
SFS-06	Weeding - Strategies, tools and technologies for sustainable weed management	RIA	7 (<7 per project)	17-02-2016 (1st stage)
SFS-07	Organic Breeding – Increasing the competitiveness of the organic breeding and farming sectors	RIA	8 (<8 per project)	17-02-2016 (1st stage)
		RIA	12 (<6 per project)	14-02-2017 (1st stage)
SFS-08	Organic Inputs – Contentious inputs in organic farming	RIA	8 (<4 per project)	14-02-2017 (1st stage)
SFS-09	Spotlight on critical outbreak of pests: The case of Xylella fastidiosa	RIA	7 (<7 per project)	17-02-2016
SFS-10	Research and approaches for emerging diseases in plants and terrestrial livestock	RIA	15 (<5 per project)	14-02-2017 (1st stage)
SFS-11	Challenges for disease management: Perennial crops in the tropics and sub-tropics	RIA	12 (<4 per project)	17-02-2016 (1st stage)
SFS-12	Support for international research on animal health	CSA	3 (<3 per project)	17-02-2016
SFS-13	Validation of diagnostic tools for animal and plant health	IA	6 (<3 per project)	14-02-2017
SFS-14	Understanding host-pathogen-environment Interactions	RIA	11 (<5,5 per project)	17-02-2016 (1st stage)
SFS-15	Breeding livestock for resilience and efficiency	RIA	7 (<7 per project)	17-02-2016 (1st stage)
		RIA	7 (<7 per project)	14-02-2017 (1st stage)
SFS-16	Bee health and sustainable pollination	RIA	9 (<4,5 per project)	14-02-2017 (1st stage)
SFS-17	Innovations in plant protection	RIA	10 (<3 per project)	14-02-2017 (1st stage)
SFS-18	Framework Partnership Agreement supporting Joint Actions towards Public-Public Partnerships in the Bioeconomy	FPA	-	13-09-2016
SFS-19	ERANET COFUND: Public-Public Partnerships in the bioeconomy a) Organic farming and food production	ERA-NET	15 5 per project	17-02-2016
	b) Sustainable food production and consumption	ERA-NET	5 per project	17-02-2016
	c) A knowledge platform for the intestinal microbiome	ERA-NET	5 per project	17-02-2016
SFS-20	Towards a science-based regionalisation of the Common Fisheries Policy	RIA	6 (<6 per project)	14-02-2017 (1st stage)

SFS-21	Advancing basic biological knowledge and improving management tools for commercially important fish and other seafood species	RIA	<5 per project	17-02-2016 (1st stage)
		RIA	5 (<5 per project)	14-02-2017 (1st stage)
SFS-22	Smart fisheries technologies for an efficient, compliant and environmentally friendly fishing sector	IA	6 (<6 per project)	14-02-2017
SFS-23	Improving technical performance of the Mediterranean aquaculture	RIA	<7 per project	17-02-2016 (1st stage)
SFS-24	Reinforcing international cooperation on sustainable aquaculture production with countries from South-East Asia	CSA	2 (<2 per project)	17-02-2016
SFS-25	Support Action to a common agricultural and wider bioeconomy research agenda	CSA	2 (1-2 per project)	17-02-2016
Environment-smart and climate-smart primary production				
SFS-26	Legumes - Transition paths to sustainable legume-based farming systems and agri-feed and food chains	RIA	10 (<5 per project)	17-02-2016 (1st stage)
SFS-27	Permanent grassland – farming systems and policies	RIA	10 (<10 per project)	14-02-2017 (1st stage)
SFS-28	Functional Biodiversity – Productivity gains through functional biodiversity – effective interplay of crop pollinators and pest predators	RIA	10 (<10 per project)	14-02-2017 (1st stage)
SFS-29	Socio-eco-economics – Socio economics in ecological approaches	RIA	5 (<5 per project)	14-02-2017 (1st stage)
SFS-30	Closing loops at farm and regional levels to mitigate GHG emissions and environmental contamination- focus on carbon, nitrogen and phosphorus cycling in agro-ecosystems	RIA	12 (<6 per project)	14-02-2017 (1st stage)
SFS-31	Farming for tomorrow: developing an enabling environment for resilient and sustainable agricultural systems	RIA	5 (<5 per project)	17-02-2016 (1st stage)
SFS-32	Promoting and supporting eco-intensification of aquaculture production systems: inland (including fresh water), coastal zone and offshore	RIA	12 (<6 per project)	14-02-2017 (1st stage)
A competitive food industry				
SFS-33	Understanding food value chain and network dynamics	RIA	6 (<6 per project)	17-02-2016 (1st stage)
SFS-34	Innovative agri-food chains: unlocking the potential for competitiveness and sustainability	RIA	6 (<6 per project)	14-02-2017 (1st stage)
SFS-35	Innovative solutions for sustainable food packaging	IA	12 (<6 per project)	14-02-2017
Healthy and safe foods and diets for all				
SFS-36	Co-fund on "One Health" (zoonoses – emerging threats)	EJP	35 (< 35 per project)	14-02-2017
SFS-37	The impact on consumer practices in food safety: risks and mitigation strategies	RIA	9,5 (<9,5 per project)	17-02-2016 (1st stage)
SFS-38	Impulsivity and compulsivity and the link to nutrition, lifestyle and the socio-economic environment	RIA	12 (<12 per project)	17-02-2016 (1st stage)
SFS-39	How to tackle the childhood obesity epidemic?	RIA	20 (<10 per project)	14-02-2017 (1st stage)
SFS-40	Sweeteners and sweetness enhancers	RIA	9 (<9 per project)	14-02-2017 (1st stage)
Support to the implementation of the EU-Africa partnership on food and nutrition security and sustainable agriculture				
SFS-41	EU-Africa Research and Innovation partnership on food and nutrition security and sustainable agriculture	ERA-NET	10 (<10 per project)	17-02-2016
SFS-42	Promoting food and nutrition security and sustainable agriculture in Africa: the role of innovation	RIA	5 (<5 per project)	17-02-2016 (1st stage)
SFS-43	Earth observation services for the monitoring of agricultural production in Africa	RIA	10 (<10 per project)	14-02-2017
Implementation of the EU-China FAB Flagship initiative				
SFS-44	A joint plant breeding programme to decrease the EU's and China's dependency on protein imports	RIA	5 (<5 per project)	17-02-2016 (1st stage)
SFS-45	Increase overall transparency of processed agri-food products	RIA	5 (<5 per project)	17-02-2016 (1st stage)
SFS-46	Alternative production system to address anti-microbial drug usage, animal welfare and the impact on health	RIA	5 (<5 per project)	14-02-2017 (1st stage)
SFS-47	Management of soil water resources in the EU and China and its impact on agro-ecosystem functions	RIA	5 (<5 per project)	14-02-2017 (1st stage)
SFS-48	Resource-efficient urban agriculture for multiple benefits – contribution to the EU-China Urbanisation Partnership	IA	7 (<7 per project)	14-02-2017

	Blue Growth: Demonstrating an ocean of opportunities		**82** (2016) **47** (2017)	
	Boosting nnovation for emerging Blue Growth activities			
BG-01	Large-scale algae biomass integrated biorefineries	IA	22 (<11 per project)	17-02-2016
BG-02	High value-added specialised vessel concepts enabling more efficient servicing of emerging coastal and offshore activities			
	1) Specialised vessel for coastal activities	IA	7 (<7 per project)	17-02-2016
	2) Specialised vessels for offshore activities	IA	8 (<8 per project)	14-02-2017
BG-03	Multi-use of the oceans' marine space, offshore and near-shore: compatibility, regulations, environmental and legal issues	CSA	2 (<2 per project)	17-02-2016
BG-04	Multi-use of the oceans marine space, offshore and near-shore: Enabling technologies	IA	8 (<8 per project)	14-02-2017
BG-05	ERANET COFUND on marine technologies	ERA-NET	10 (<10 per project)	17-02-2016
	Linking healthy oceans and seas with healthy people			
BG-06	Interaction between people, oceans and seas: a strategic approach towards healthcare and well-being	CSA	2 (<2 per project)	14-02-2017
BG-07	Blue green innovation for clean coasts and seas	IA	12 (<6 per project)	14-02-2017
BG-08	Innovative sustainable solutions for improving the safety and dietary properties of seafood	IA	7 (<7 per project)	14-02-2017
	The Arctic Dimension			
BG-09	An integrated Arctic Observation system	RIA	<15 per project	17-02-2016
BG-10	Impact of Arctic changes on the weather and climate of the Northern Hemisphere	RIA	7-8 per project	17-02-2016
BG-11	The effect of climate changes on Arctic permafrost and its socio-economic impact, with a focus on coastal areas	RIA	10 (<10 per project)	14-02-2017
	Valorising the Mediterranean sea basin			
BG-12	Towards an integrated Mediterranean Sea Observing System	RIA	8 (<8 per project)	17-02-2016 (1st stage)
BG-13	Support to the BLUEMED Initiative: Coordination of marine and maritime research and innovation activities in the Mediterranean	CSA	3 (<3 per project)	17-02-2016
	Rural Renaissance - Fostering innovation and business opportunities		**66** (2016) **62** (2017)	
	New approaches towards policies and governance			
RUR-01	Consolidated policy framework and governance models for synergies in rural-urban linkages	RIA	6 (<6 per project)	17-02-2016 (1st stage)
RUR-02	Coastal-rural interactions: enhancing synergies between land and sea-based activities	RIA	5 (<5 per project)	14-02-2017 (1st stage)
RUR-03	Towards 2030: policies and decision tools for an integrated management of natural resources	RIA	8 (<8 per project)	14-02-2017 (1st stage)
RUR-04	Water farms – improving farming and its impact on the supply of drinking water	RIA	5 (<5 per project)	17-02-2016 (1st stage)
RUR-05	Novel public policies, business models and mechanisms for the sustainable supply and payment of forest ecosystem services	IA	8 (<4 per project)	14-02-2017
	New value chains and business models			
RUR-06	Crop diversification systems for the delivery of food, feed, industrial products and ecosystems services: from farm benefits to value-chain organisation	RIA	20 (<10 per project)	17-02-2016 (1st stage)
RUR-07	Resource-efficient and profitable industrial crops on marginal lands	RIA	6 (<6 per project)	17-02-2016 (1st stage)
RUR-08	Demonstration of integrated logistics centres for food and non-food applications	IA	12 (<6 per project)	17-02-2016
RUR-09	Business models for modern rural economies	RIA	9 (<4.5 per project)	14-02-2017 (1st stage)
	Innovation and skill development			
RUR-10	Thematic Networks compiling knowledge ready for practice	CSA	10 (<2 per project)	17-02-2016
			10 (<2 per	14-02-2017

				project)
RUR-11	On-farm demonstrations: deepening farmer-to-farmer learning mechanisms	CSA	2 (<2 per project)	17-02-2016
RUR-12	Networking European farms to boost thematic knowledge exchanges and close the innovation gap	CSA	7 (<7 per project)	14-02-2017
RUR-13	Building a future science and education system fit to deliver to practice	RIA	7 (<7 per project)	14-02-2017 (1st stage)
RUR-14	Advisor's role in functioning of AKIS and advisory policies boosting innovation in sustainable agriculture	RIA	5 (<5 per project)	17-02-2016 (1st stage)
RUR-15	The benefits of working with others – fostering social capital in the farming sector	CSA	3 (<3 per project)	14-02-2017
RUR-16	Optimising interactive innovation project approaches and the delivery of EU policies to speed up innovation in rural areas	RIA	5 (<5 per project)	14-02-2017 (1st stage)
Bio-based innovation for sustainable goods and services - Supporting the development of a European Bioeconomy			**12** (2016) **15** (2017)	
Securing sustainable biomass supply for bio-based goods and services				
BB-01	Sustainability schemes for the bio-based economy	RIA	5 (<5 per project)	17-02-2016 (1st stage)
BB-02	Towards a methodology for the collection of statistical data on bio-based industries and bio-based products	RIA	6 (<6 per project)	14-02-2017 (1st stage)
BB-03	Adaptive tree breeding strategies and tools for forest production systems resilient to climate change and natural disturbances	RIA	6 (<6 per project)	14-02-2017 (1st stage)
BB-04	Intelligent solutions and tools in forest production systems, fostering a sustainable supply of quality wood for the growing bioeconomy	IA	6 (<2 per poject)	17-02-2016
Building the "bio-based markets of the future"- mobilising stakeholders engagement				
BB-05	Bio-based products: Mobilisation and mutual learning action plan	CSA	3 (<3 per project)	14-02-2017
BB-06	The regional dimension of bio-based industries	CSA	1 (<1 per project)	17-02-2016

Secure, Clean and Efficient Energy

Het call-budget bedraagt circa 488,66 miljoen euro voor 2016 en circa 468,62 miljoen euro voor 2017.

Topic	Omschrijving	Type project	Budget (miljoen euro)	Sluiting
	Energy Efficiency		**93** (2016) **101** (2017)	
	Heating and cooling			
EE-01	Waste heat recovery from urban facilities and re-use to increase energy efficiency of district or individual heating and cooling systems	IA	3-4 per project	19-01-2017
EE-02	Improving the performance of inefficient district heating networks	CSA	1-2 per project	07-06-2017
EE-03	Standardised installation packages integrating renewable and energy efficiency solutions for heating, cooling and/or hot water preparation	IA	3-4 per project	21-01-2016
EE-04	New heating and cooling solutions using low grade sources of thermal energy	RIA	3-4 per project	21-01-2016
		RIA	3-4 per project	19-01-2017
EE-05	Models and tools for heating and cooling mapping and planning	RIA	2,5-3 per project	21-01-2016
	Engaging consumers towards sustainable energy			
EE-06	Engaging private consumers towards sustainable energy	CSA	1-2 per project	15-09-2016
		CSA	1-2 per project	07-06-2017
EE-07	Behavioural change toward energy efficiency through ICT	IA	1-2 per project	21-01-2016
		IA	1-2 per project	19-01-2017
EE-08	Socio-economic research on consumer's behaviour related to energy efficiency	RIA	1-1,5 per project	21-01-2016
EE-09	Engaging and activating public authorities	CSA	1-2 per project	15-09-2016
		CSA	1-2 per project	07-06-2017
	Buildings			
EE-10	Supporting accelerated and cost-effective deep renovation of buildings through Public Private Partnership (EeB PPP)	IA	3-4 per project	21-01-2016
EE-11	Overcoming market barriers and promoting deep renovation of buildings	CSA	1-2 per project	15-09-2016
		CSA	1-2 per project	07-06-2017
EE-12	Integration of demand response in energy management systems while ensuring interoperability through Public Private Partnership (EeB PPP)	IA	3-4 per project	19-01-2017
EE-13	Cost reduction of new nearly zero-energy buildings	CSA	1-2 per project	15-09-2016
EE-14	Construction skills	CSA	0,5-1 per project	15-09-2016
		CSA	0,5-1 per project	07-06-2017
	Industry, services and products			
EE-15	Increasing capacities for actual implementation of energy efficiency measures in industry and services	CSA	1-2 per project	07-06-2017
EE-16	Effective implementation of EU product efficiency legislation	CSA	1-2 per project	15-09-2016

ID	Title	Type	Projects/Budget	Deadline
		CSA	1-2 per project	07-06-2017
EE-17	Valorisation of waste heat in industrial systems (SPIRE PPP)	IA	4-5 per project	21-01-2016
		IA	4-5 per project	19-01-2017
EE-18	Energy efficiency of industrial parks through energy cooperation and mutualised energy services	CSA	1-2 per project	07-06-2017
EE-19	Public procurement of innovative solutions for energy efficiency	PPI	1-2 per project	07-06-2017
EE-20	Bringing to market more energy efficient and integrated data centres	IA	2-3 per project	19-01-2017
EE-21	ERA-NET Cofund actions supporting Joint Actions towards increasing energy efficiency in industry and services	ERA-NET	5 (5 per project)	15-09-2016
	Innovative financing for energy efficiency investments			
EE-22	Project development assistance	CSA	8 (0,5-1,5 per project)	15-09-2016
		CSA	8 (0,5-1,5 per project)	07-06-2017
EE-23	Innovative financing schemes	CSA	1-2 per project	07-06-2017
EE-24	Making the energy efficiency market investible	CSA	1-1,5 per project	15-09-2016
		CSA	1-1,5 per project	07-06-2017
EE-25	Development and roll-out of innovative energy efficiency services	CSA	1-2 per project	15-09-2016

ID	Title	Type	Projects/Budget	Deadline
	Competitive low-carbon energy		**352,66** (2016) **367,62** (2017)	
	Towards an integrated EU energy system			
LCE-01	Next generation innovative technologies enabling smart grids, storage and energy system integration with increasing share of renewables: distribution network	RIA	20 (2-4 per project)	05-04-2016
		RIA	18 (2-4 per project)	14-02-2017
LCE-02	Demonstration of smart grid, storage and system integration technologies with increasing share of renewables: distribution system	IA	73,46 (12-15 per project)	05-04-2016
LCE-03	Support to R&I strategy for smart grid and storage	CSA	4 (4 per project)	05-04-2016
LCE-04	Demonstration of smart transmission grid, storage and system integration technologies with increasing share of renewables	IA	65,12 (15-20 per project)	14-02-2017
LCE-05	Tools and technologies for coordination and integration of the European energy system	RIA	28 (2-4 per project)	14-02-2017
	Renewable energy technologies			
LCE-06	New knowledge and technologies - New renewable energy technologies - Wind energy - Sustainable fuels	RIA	20 (2-4 per project)	05-01-2017
LCE-07	Developing the next generation technologies of renewable electricity and heating/cooling a) Photovoltaics b) Concentrated solar power (CSP) c) Solar heating and cooling (SHC) d) Wind energy e) Ocean energy f) Hydropower	RIA	61,3 (2-5 per project)	16-02-2016

	g) Geothermal energy			
	h) Combined heat and power			
	i) RES integration in the energy system			
	a) Photovoltaics	RIA	66,5 (2-5 per project)	05-01-2017
	b) Concentrated solar power (CSP)			
	c) Solar heating and cooling (SHC)			
	d) Wind energy			
	e) Ocean Energy			
	f) Hydropower			
	g) Geothermal energy			
	h) Combined heat and power			
	i) RES integration in the energy system			
LCE-08	Development of next generation biofuel technologies	RIA	10 (3-6 per project)	16-02-2016
		RIA	10 (3-6 per project)	05-01-2017
LCE-09	Increasing the competitiveness of the EU PV manufacturing industry	IA	25 (10-15 per project)	08-09-2016
LCE-10	Reducing the cost of PV electricity	IA	10 (7-10 per project)	07-09-2017
LCE-11	Near-to-market solutions for reducing the water consumption of CSP plants	IA	12 (10-12 per project)	07-09-2017
LCE-12	Near-to-market solutions for the use of solar heat in industrial processes	IA	8 (5-8 per project)	07-09-2017
LCE 13	Solutions for reduced maintenance, increased reliability and extended life-time of wind turbines/farms	IA	10 (7-10 per project)	08-09-2016
LCE-14	Demonstration of large >10MW wind turbine	IA	25 (20-25 per project)	07-09-2017
LCE-15	Scaling up in the ocean energy sector to arrays	IA	15 (10-15 per project)	08-09-2016
LCE-16	2nd Generation of design tools for ocean energy devices and arrays development and deployment	IA	7 (5-7 per project)	07-09-2017
LCE-17	Easier to install and more efficient geothermal systems for retrofitting buildings	IA	8 (5-8 per project)	07-09-2017
LCE-18	EGS in different geological conditions	IA	10 (6-10 per project)	07-09-2017
LCE-19	Demonstration of the most promising advanced biofuel pathways	IA	15 (10-15 per project)	08-09-2016
		IA	15 (10-15 per project)	07-09-2017
LCE-20	Enabling pre-commercial production of advanced aviation biofuel	IA	15 (5-15 per project)	08-09-2016
		IA	10 (5-10 per project)	07-09-2017
LCE-21	Market uptake of renewable energy technologies 1) Photovoltaics 2) Heat pumps 3) CSP 4) Wind energy 5) Geothermal energy 6) Sustainable fuels	CSA	15 (1-3 per project)	05-01-2017
LCE-22	International Cooperation with Brazil on advanced lignocellulosic	RIA	5 (3-5 per	08-09-2016

	biofuels		project)	
LCE-23	International Cooperation with Mexico on geothermal energy	RIA	10 (10 per project)	16-02-2016
	Enabling the decarbonisation of the use of fossil fuels during the transition to a low-carbon economy			
LCE-24	International Cooperation with South Korea on new generation high-efficiency capture processes	RIA	17 (2-5 per project)	16-02-2016
LCE-25	Utilisation of captured CO_2 as feedstock for the process industry	RIA	10 (6-10 per project)	16-02-2016
LCE-26	Cross-thematic ERA-NET on Applied Geosciences	ERA-NET	10	05-04-2016
LCE-27	Measuring, monitoring and controlling the risks of CCS, EGS and unconventional hydrocarbons in the subsurface	RIA	15	05-01-2017
LCE-28	Highly flexible and efficient fossil fuel power plants	RIA	3-6 per project	05-01-2017
LCE-29	CCS in industry, including Bio-CCS	RIA	4-9 per project	05-01-2017
LCE-30	Geological storage pilots	RIA	9-16 per project	05-01-2017
	Social, economic and human aspects of the energy system			
LCE-31	Social sciences and humanities support for the energy union	RIA	10 (2-4 per project)	16-02-2016
		RIA	10 (2-4 per project)	05-01-2017
LCE-32	European platform for energy-related social sciences and humanities research	CSA	1,7 (1-2 per project)	05-04-2016
	Supporting the development of a European research area in the field of energy			
LCE-33	European common research and innovation agendas (ECRIAs) in support of the implementation of the SET action plan	RIA	10 (<2,5 per project)	05-04-2016
LCE-34	Joint Actions towards the demonstration and validation of innovative energy solutions	ERA-NET	30,8	05-04-2016
LCE-35	Framework Partnership Agreement supporting joint actions towards the demonstration and validation of innovative energy solutions	FPA	n.a.	08-09-2016
	Cross-cutting issues			
LCE-36	Support to the energy stakeholders to contribute to the SET-Plan	CSA	2,4 (0,6 per project)	05-04-2016

Smart, Green and Integrated Transport

Het call-budget bedraagt circa 352,6 miljoen euro voor 2016 en circa 403,5 miljoen euro voor 2017.

Topic	Omschrijving	Type project	Budget (miljoen euro)	Sluiting
	Mobility for growth		**210,1 (2016) 225,5 (2017)**	
1	**Aviation**			
MG-1.1	Reducing energy consumption and environmental impact of aviation	RIA	40 (5-9 per project)	20-01-2016 (1st stage)
MG-1.2	Reducing aviation noise	RIA	20 (5-9 per project)	26-01-2017 (1st stage)
MG-1.3	Maintaining industrial leadership in aeronautics	RIA	45 (5-9 per project)	26-01-2017 (1st stage)
MG-1.4	Breakthrough innovation	RIA	15 (2-4 per project)	20-01-2016 (1st stage)
		RIA	15 (2-4 per project)	26-01-2017 (1st stage)
MG-1.5	Identification of gaps, barriers and needs in the aviation research	CSA	4 (1-2 per project)	26-01-2016
		CSA	7 (1-2 per project)	01-02-2017
2	**Waterborne**			
MG-2.1	Innovations for energy efficiency and emission control in waterborne transport	IA	5-9 per project	26-01-2017 (1st stage)
MG-2.2	Development, production and use of high performance and lightweight materials for vessels and equipment	IA	7-9 per project	20-01-2016 (1st stage)
MG-2.3	New and improved transport concepts in waterborne transport	RIA	6-12 per project	20-01-2016 (1st stage)
MG-2.4	Complex and value-added specialised vessels	IA	(8-12 per project)	26-01-2017 (1st stage)
3	**Safety**			
MG-3.1	Addressing aviation safety challenges	RIA	15 (5-9 per project)	26-01-2016
MG-3.2	Protection of all road users in crashes	RIA	14 (4-9 per project)	26-01-2017 (1st stage)
MG-3.3	Safer waterborne transport and maritime operations	RIA	5-7 per project	20-01-2016 (1st stage)
MG-3.4	Transport infrastructure innovation to increase the transport system safety at modal and intermodal level (including nodes and interchanges)	RIA	12 (2-5 per project)	20-01-2016 (1st stage)
MG-3.5	Behavioural aspects for safer transport	RIA	4-9 per project	20-01-2016 (1st stage)
MG-3.6	Euro-African initiative on road safety and traffic management	CSA	3 (2,5-3 per project)	26-01-2016
4	**Urban mobility**			
MG-4.1	Increasing the take up and scale-up of innovative solutions to achieve sustainable mobility in urban areas	IA	2-5 per project	26-01-2017 (1st stage)
MG-4.2	Supporting 'smart electric mobility' in cities	IA	4-5 per project	26-01-2017 (1st stage)
MG-4.3	Innovative approaches for integrating urban nodes in the TEN-T core network corridors	CSA	2 (1-2 per project)	01-02-2017

MG-4.4	Facilitating public procurement of innovative sustainable transport and mobility solutions in urban areas	CSA	2 (0,6-1 per project)	26-01-2016
MG-4.5	New ways of supporting development and implementation of neighbourhood-level and urban-district–level transport innovations	RIA	10 (2-4 per project)	20-01-2016 (1st stage)
5	**Logistics**			
MG-5.1	Networked and efficient logistics clusters	RIA	12 (4-6 per project)	20-01-2016 (1st stage)
MG-5.2	Innovative ICT solutions for future logistics operations	RIA	3-5 per project	26-01-2017 (1st stage)
MG-5.3	Promoting the deployment of green transport, towards Eco-labels for logistics	CSA	2 (1-2 per project)	26-01-2016
MG-5.4	Potential of the Physical Internet	RIA	2-3 per project	26-01-2017 (1st stage)
		CSA	1 (0,5-1 per project)	01-02-2017
6	**Intelligent transport systems**			
MG-6.1	Innovative concepts, systems and services towards 'mobility as a service'	RIA	3-3,5 per project	20-01-2016 (1st stage)
MG-6.2	Large-scale demonstration(s) of cooperative ITS	IA	11-13 per project	20-01-2016 (1st stage)
MG-6.3	Roadmap, new business models, awareness raising, support and incentives for the roll-out of ITS	CSA	5 (1-2 per project)	26-01-2016
7	**Infrastructure**			
MG-7.1	Resilience to extreme (natural and man-made) events	RIA	3-5 per project	26-01-2017 (1st stage)
MG-7.2	Optimisation of transport infrastructure multi-modal corridors and terminals	RIA	2-6 per project	26-01-2017 (1st stage)
MG-7.3	The Port of the future	RIA	3-5 per project	26-01-2017 (1st stage)
		CSA	1 (<1 per project)	01-02-2017
8	**Socio-economic and behavioural research and forward looking activities for policy making**			
MG-8.1	Research, technology development and market trends for the European transport manufacturing industries	CSA	1,5 (0,5-1,5 per project)	26-01-2016
MG-8.2	Big data in transport: Research opportunities, challenges and limitations	CSA	2 (0,5-1,5 per project)	01-02-2017
MG-8.3	Assessing future requirements for skills and jobs across transport modes and systems	RIA	3 (2-3 per project)	26-01-2016
MG-8.4	Improving accessibility, inclusive mobility and equity: new tools and business models for public transport in prioritised areas	RIA	1-3 per project	01-02-2017
MG-8.5	Shifting paradigms: Exploring the dynamics of individual preferences, behaviours and lifestyles influencing travel and mobility choices	RIA	1-2 per project	01-02-2017
MG-8.6	Innovation awards for students and researchers in the context of the Transport Research Arena conference - TRA 2018	CSA	0,6 (0,4-0,6 per project)	26-01-2016

	Automated road transport		**64** (2016) **50** (2017)	
ART-01	ICT infrastructure to enable the transition towards road transport automation	IA	5-15 per project	26-01-2017 (1st stage)
ART-02	Automation pilots for passenger cars	IA	18-36 per project	20-01-2016 (1st stage)
ART-03	Multi-Brand platooning in real traffic conditions	IA	15-20 per project	26-01-2017 (1st stage)
ART-04	Safety and end-user acceptance aspects of road automation in the transition period	RIA	3-6 per project	20-01-2016 (1st stage)
ART-05	Road infrastructure to support the transition to automation and the coexistence of conventional and automated vehicles on the	RIA	13 (2-5 per	20-01-2016 (1st stage)

	same network			project)
ART-06	Coordination of activities in support of road automation	CSA	3 (0,5-3 per project)	26-01-2016
ART-07	Full-scale demonstration of urban road transport automation	IA	10-15 per project	26-01-2017 (1st stage)

	Green vehicles			**78.5** (2016) **128.0** (2017)
GV-01	Optimisation of heavy duty vehicles for alternative fuels use	IA	5-10 per project	01-02-2017
GV-02	Technologies for low emission light duty powertrains	RIA	5-10 per project	26-01-2016
GV-03	System and cost optimised hybridisation of road vehicles	IA	7-10 per project	26-01-2016
GV-04	Next generation electric drivetrains for fully electric vehicles, focusing on high efficiency and low cost	RIA	5-10 per project	01-02-2017
GV-05	Electric vehicle user-centric design for optimised energy efficiency	RIA	7-10 per project	01-02-2017
GV-06	Physical integration of hybrid and electric vehicle batteries at pack level aiming at increased energy density and efficiency	IA	5-7 per project	01-02-2017
GV-07	Multi-level modelling and testing of electric vehicles and their components	RIA	4-10 per project	01-02-2017
GV-08	Electrified urban commercial vehicles integration with fast charging infrastructure	IA	5-15 per project	01-02-2017
GV-09	Aerodynamic and flexible trucks	IA	7-10 per project	01-02-2017
GV-10	Demonstration (pilots) for integration of electrified L-category vehicles in the urban transport system	IA	7-10 per project	01-02-2017
GV-11	Stimulating European research and development for the implementation of future road transport technologies	CSA	3,5 (2-3,5 per project)	26-01-2016
GV-12	ERA-NET Co-fund on electromobility	ERA-NET	10 (10 per project)	26-01-2016

Climate Action, Environment, Resource Efficiency and Raw materials

Het totaalbudget bedraagt circa 358 miljoen euro voor 2016 en circa 375 miljoen euro voor 2017.

Topic	Omschrijving	Type project	Budget (miljoen euro)	Sluiting
	Greening the Economy		**142,55** (2016) **183,10** (2017)	
	Climate services			
SC5-01	Exploiting the added value of climate services a) Demonstration of climate services	IA	20 (<5 per project)	08-03-2016 (1st stage)
	b) From climate service concepts to piloting and proof-of-concept	RIA	5 per project	07-03-2017
SC5-02	Integrated European regional modelling and climate prediction system	RIA	13 per project	07-03-2017
SC5-03	Climate services market research a) Defining the European and international climate service market characteristics and foresight into market growth	RIA	1,5 per project	08-03-2016
	b) Climate services market barriers and enabling conditions	RIA	1,5 per project	08-03-2016
SC5-04	Towards a robust and comprehensive greenhouse gas verification system	RIA	10 per project	07-03-2017
SC5-05	A 1.5 million year look into the past for improving climate predictions	CSA	2 per project	08-03-2016
	Towards a low-carbon Europe			
SC5-06	Pathways towards the decarbonisation and resilience of the European economy in the timeframe 2030-2050 and beyond a) Managing technology transition	RIA	4-6 per project	08-03-2016
	b) Assessment of the global mitigation efforts in the perspective of the long-term climate goal	RIA	2-3 per project	08-03-2016
	c) The risks and costs of climate change for Europe	RIA	4-5 per project	07-03-2017
SC5-07	Coordinating and supporting research and innovation actions on the decarbonisation of the EU economy	CSA	2,5-3 per project	07-03-2017
	Nature-based solutions for territorial resilience			
SC5-08	Large-scale demonstrators on nature-based solutions for hydro-meteorological risk reduction	IA	25 (>12 per project)	07-03-2017 (1st stage)
SC5-09	Operationalising insurance value of ecosystems	RIA	5 (5 per project)	08-03-2016
SC5-10	Multi-stakeholder dialogue platform to promote innovation with nature to address societal challenges	CSA	<3 per project	08-03-2016
	Water			
SC5-11	Supporting international cooperation activities on water	CSA	2 per project	08-03-2016
SC5-12	Food systems and water resources for the development of inclusive, sustainable and healthy Euro-Mediterranean societies	CSA	2 (<2 per project)	26-01-2016
	Raw materials			
SC5-13	New solutions for sustainable production of raw materials a) Sustainable selective low impact mining	RIA	3-7 per project	08-03-2016
	b) New technologies for the enhanced recovery of by-products	RIA	3-7 per project	08-03-2016
	c) New sensitive exploration technologies	RIA	10 (3-7 per project)	07-03-2017

SC5-14	Raw materials Innovation actions a) Intelligent mining on land	IA	28 (8-13 per project)	08-03-2016 (1st stage)
	b) Processing of lower grade and/or complex primary and/or secondary raw materials in the most sustainable ways	IA	8-13 per project	07-03-2017 (1st stage)
	c) Sustainable metallurgical processes	IA	8-13 per project	07-03-2017 (1st stage)
SC5-15	Raw materials policy support actions a) Expert network on critical raw materials	CSA	<3 per project	08-03-2016
	b) Good practice in waste collection systems	CSA	<1,5 per project	07-03-2017
	c) Optimising collection of raw materials data in Member States	CSA	<1,5 per project	07-03-2017
	d) Linking land use planning policies to national mineral policies	CSA	<1,5 per project	07-03-2017
	e) EU network of mining and metallurgy regions	CSA	<3 per project	07-03-2017
	f) EU network of regions on sustainable wood mobilisation (wood supply)	CSA	<1,5 per project	07-03-2017
SC5-16	Raw materials international co-operation a) Demand-supply forecast and raw materials flows at global level	CSA	<1 per project	08-03-2016
	b) Advancing the idea of a World Forum on raw materials	CSA	<1per project	08-03-2016
	c) International network of raw materials training centres	CSA	<1 per project	07-03-2017
SC5-17	ERA-NET Cofund on Raw materials	ERA-NET	5 (5 per project)	08-03-2016
	Earth Observation			
SC5-18	Novel in-situ observation systems	RIA	15 (4-5 per project)	07-03-2017
SC5-19	Coordination of citizens' observatories initiatives	CSA	1 per project	07-03-2017
SC5-20	European data hub of the GEOSS information system	RIA	10 (9-10 per project)	08-03-2016
	Cultural heritage for sustainable growth			
SC5-21	Cultural heritage as a driver for sustainable growth a) Heritage-led urban regeneration	IA	10 (<10 per project)	08-03-2016 (1st stage)
	b) Heritage-led rural regeneration	IA	10 (<10 per project)	07-03-2017 (1st stage)
SC5-22	Innovative financing, business and governance models for adaptive re-use of cultural heritage	RIA	5 (<5 per project)	07-03-2017
	Support to policy and preparing for innovation procurement			
SC5-23	Support to confirmed Presidency events (conferences) – Malta, United Kingdom, Estonia	CSA	0,1-0,3 per project	08-03-2016
		CSA	0,1-0,3 per project	07-03-2017
SC5-24	Support to confirmed Presidency event (conference) in Slovakia	CSA	0,3 (0,1-0,3 per project)	26-01-2016
SC5-25	Macro-economic and societal benefits from creating new markets in a circular economy	CSA	0,5 per project)	08-03-2016
SC5-26	Pre-commercial procurement on soil decontamination	PCP	5 (5 per project)	07-03-2017
SC5-27	Preparing for pre-commercial procurement (PCP) and/or public procurement of innovative solutions (PPI) in support of climate action, environment, resource efficiency and raw materials	CSA	0,05 per project	08-03-2016
SC5-28	Transformations to sustainability	ERA-NET	3 (3 per project)	08-03-2016
SC5-29	Framework Partnership Agreement supporting Joint Actions towards a sustainable green economy in Europe and beyond	FPA		08-09-2016

Europe in a changing world – Inclusive, Innovative and Reflective societies

Het call-budget bedraagt circa 98 miljoen euro voor 2016 en circa 114,15 miljoen euro voor 2017.

Topic	Omschrijving	Type project	Budget (miljoen euro)	Sluiting
	Co-creation for growth and inclusion		**23,5** (2016) **33,15** (2017)	
CO-CREATION-1	Education and skills: empowering Europe's young innovators	IA	5 (2,5 per project)	02-02-2017
CO-CREATION-2	User-driven innovation: value creation through design-enabled innovation	CSA	4 (4 per project)	04-02-2016
CO-CREATION-3	Piloting demand-driven collaborative innovation models in Europe	IA	5 (2,5 per project)	04-02-2016
CO-CREATION-4	Applied co-creation to deliver public services	IA	10 (4-5 per project)	02-02-2017
CO-CREATION-5	Co-creation between public administrations: once-only principle a) Innovation actions	IA	8 (8 per project)	24-05-2016
	b) Coordination and Support Action	CSA	1 (<1 per project)	24-05-2016
CO-CREATION-6	Policy-development in the age of big data: data-driven policy-making, policy-modelling and policy-implementation a) Research and Innovation Actions	RIA	11 (4-5 per project)	02-02-2017
	b) Coordination and Support Action	CSA	0,5 (0,5 per project)	02-02-2017
CO-CREATION-7	Towards a new growth strategy in Europe - Improved economic and social measurement, data and official statistics a) Research and Innovation Actions	RIA	2 (2 per project)	02-02-2017
	b) Coordination and Support Action	CSA	1 (1 per project)	02-02-2017
CO-CREATION-8	Better integration of evidence on the impact of research and innovation in policy making	RIA	3,5 (1-1,5 per project)	04-02-2016
		RIA	3,65 (1-1,5 per project)	02-02-2017
CO-CREATION-9	A European map of knowledge production and co-creation in support of research and innovation for societal challenges	CSA	2 (2 per project)	04-02-2016
	Reversing inequalities and promoting fairness		**43,5** (2016) **3** (2017)	
REV-INEQUAL-1	An empirically informed European theory of justice and fairness	RIA	2,5-5 per project	04-02-2016
REV-INEQUAL-2	Contemporary radicalisation trends and their implications for Europe	RIA	5 per project	04-02-2016
REV-INEQUAL-3	Dynamics of inequalities across the life-course	ERA-NET	5 (5 per project)	04-02-2016
REV-INEQUAL-4	Intra-EU mobility and its impacts for social and economic systems	RIA	2,5-5 per project	04-02-2016
REV-INEQUAL-5	Inequalities in the EU and their consequences for democracy, social cohesion and inclusion	RIA	2,5-7,5 per project	04-02-2016
REV-INEQUAL-6	Tackling inequalities at their roots: new policies for fairness in education from early age	RIA	5 per project	04-02-2016

REV-INEQUAL-7	Spatial justice, social cohesion and territorial inequalities	RIA	5 per project	04-02-2016
REV-INEQUAL-8	Fighting inequalities through policies against tax fraud and tax evasion	RIA	2,5-5 per project	04-02-2016
REV-INEQUAL-9	Boosting inclusiveness of ICT-enabled research and innovation	CSA	3 (3 per project)	02-02-2017
REV-INEQUAL-10	Multi-stakeholder platform for enhancing youth digital opportunities	CSA	1 (1 per project)	04-02-2016
	Engaging together globally		**11,5** (2016) **30,5** (2017)	
ENG-GLOBALLY1	Strengthening Europe's position in the global context: science diplomacy and intercultural relations	RIA	2,5-7,5 per project	02-02-2017
ENG-GLOBALLY2	Shifting global geopolitics and Europe's preparedness for managing risks, mitigation actions and fostering peace	RIA	5 per project	02-02-2017
ENG-GLOBALLY3	The European Union and the global challenge of migration	RIA	5 per project	02-02-2017
ENG-GLOBALLY4	Science diplomacy for EU neighbourhood policies	CSA	1,5 (1,5 per project)	02-02-2017
ENG-GLOBALLY5	The strategic potential of EU external trade policy	RIA	2,5 per project	02-02-2017
ENG-GLOBALLY6	The Asia-Pacific as a strategic region for Europe	RIA	2,5-5 per project	02-02-2017
ENG-GLOBALLY7	The European Union and Central Asia	CSA	1,5 (1,5 per project)	02-02-2017
ENG-GLOBALLY8	EU-China cooperation on sustainable urbanisation a) Cultural and socio-economic aspects of urban issues in China	RIA	2,5 (2,5 per project)	02-02-2017
	b) EU-China innovation platform on sustainable urbanisation	CSA	1,5 (1,5 per project)	14-04-2016
ENG-GLOBALLY9	Centres/Networks of European research and innovation	CSA	10 (3 per project)	14-04-2016
	Understanding Europe- promoting the European public and cultural space		**19,50** (2016) **47,50** (2017)	
CULT-COOP-1	Democratic discourses and the rule of law	RIA	5 per project	02-02-2017
CULT-COOP-2	Improving mutual understanding among Europeans by working through troubled pasts	RIA	2,5-5 per project	02-02-2017
CULT-COOP-3	Cultural literacy of young generations in Europe	RIA	5 per project	02-02-2017
CULT-COOP-4	Contemporary histories of Europe in artistic and creative practices	RIA	2,5 per project	02-02-2017
CULT-COOP-5	Religious diversity in Europe - past, present and future	RIA	2,5 per project	02-02-2017
CULT-COOP-6	Participatory approaches and social innovation in culture a) Research and Innovation Actions	RIA	2,5 per project	02-02-2017
	b) Coordination and Support Action	CSA	1,5 (1,5 per project)	02-02-2017
CULT-COOP-7	Cultural heritage of European coastal and maritime regions	RIA	2,5 per project	02-02-2017
CULT-COOP-8	Virtual museums and social platform on European digital heritage, memory, identity and cultural interaction a) Research and Innovation Actions	RIA	10 (2,5 per project)	04-02-2016
	b) Coordination and Support Action	CSA	1 (1 per project)	04-02-2016
CULT-COOP-9	European cultural heritage, access and analysis for a richer interpretation of the past	RIA	9 (2-3 per project)	02-02-2017
CULT-COOP-10	Culture, integration and European public space	ERA-NET	5 (5 per project)	02-02-2017

CULT-COOP-11	Understanding the transformation of European public administrations			
	a) Research and Innovation Actions	RIA	8 (4-5 per project)	04-02-2016
		RIA	7 (4-5 per project)	02-02-2017
	b) Coordination and Support Action	CSA	0,5 (0,5 per project)	04-02-2016

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

Het call-budget bedraagt 197 miljoen euro voor 2016 en 196 miljoen euro voor 2017.

Topic	Omschrijving	Type project	Budget (miljoen euro)	Sluiting
	Critical infrastructure protection		**20** (2016) **20** (2017)	
CIP-01	Prevention, detection, response and mitigation of the combination of physical and cyber threats to the critical infrastructure of Europe	IA	20 (8 per project)	25-08-2016
			20 (8 per project)	24-08-2017
	Security		**113,25** (2016) **121,75** (2017)	
	Disaster-resilience: safeguarding and securing society			
SEC-01-DRS	Integrated tools for response planning and scenario building	IA	8 (8 per project)	25-08-2016
SEC-02-DRS	Situational awareness systems to support civil protection preparation and operational decision making	CSA	1,5 (1,5 per project)	25-08-2016
SEC-03-DRS	Validation of biological toxins measurements after an incident: Development of tools and procedures for quality control	IA	8 (8 per project)	25-08-2016
SEC-04-DRS	Broadband communication systems	PCP	10 (10 per project)	24-08-2017
SEC-05-DRS	Chemical, biological, radiological and nuclear (CBRN) cluster	CSA	2 (2 per project)	25-08-2016
		RIA	13,75 (3,5 per project)	24-08-2017
	Fight against crime and terrorism			
SEC-06-FCT	Developing a comprehensive approach to violent radicalization in the EU from early understanding to improving protection	RIA	3 per project	25-08-2016
SEC-07-FCT	Human Factor for the Prevention, Investigation, and Mitigation of criminal and terrorist acts	RIA	3 per project	25-08-2016
		RIA	3 per project	24-08-2017
SEC-08-FCT	Forensics techniques on: a) trace qualification, and b) broadened use of DNA	RIA	5 per project	25-08-2016
SEC-09-FCT	Toolkits integrating tools and techniques for forensic laboratories	PCP	10 (10 per project)	24-08-2017
SEC-10-FCT	Integration of detection capabilities and data fusion with utility providers' networks	IA	16 (8 per project)	24-08-2017
SEC-11-FCT	Detection techniques on explosives: Countering an explosive threat, across the timeline of a plot	RIA	5 per project	25-08-2016
SEC-12-FCT	Technologies for prevention, investigation, and mitigation in the context of fight against crime and terrorism	RIA	10 (5 per project)	25-08-2016 24-08-2017
	Border security and external security			
SEC-13–BES	Next generation of information systems to support EU external policies	PCP	10 (10 per project)	24-08-2017
SEC-14–BES	Towards reducing the cost of technologies in land border security applications	RIA	10 (5 per project)	25-08-2016
SEC-15–BES	Risk-based screening at border crossing	IA	8 (8 per project)	24-08-2017
SEC-16–BES	Through-foliage detection, including in the outermost regions of the EU	RIA	8 (8 per project)	24-08-2017
SEC-17–BES	Architectures and organizations, big data and data analytics for	RIA	10 (5 per	24-08-2017

	customs risk management of the international goods supply chain trade movements			project)
SEC-18–BES	Acceptance of "no gate crossing point solutions"	RIA	3 per project	24-08-2017
SEC-19–BES	Data fusion for maritime security applications	IA	8 per project	25-08-2016
SEC-20–BES	Border Security: autonomous systems and control systems	IA	8 per project	25-08-2016
	General matters			
SEC-21–GM	Pan European Networks of practitioners and other actors in the field of security	CSA	15,5 (2-3,5 per project)	25-08-2016
		CSA	14 (2-3,5 per project)	24-08-2017
	Digital Security Focus Area		**63,5** (2016) **54,5** (2017)	
DS-01	Assurance and Certification for Trustworthy and Secure ICT systems, services and components a) Research and Innovation Actions – Assurance	RIA	13,5 (3-4 per project)	12-04-2016
	b) Innovation Actions- Security certification	IA	9 (3-4 per project)	12-04-2016
	c) Coordination and Support Actions	CSA	1 (<1 per project)	12-04-2016
DS-02	Cyber Security for SMEs, local public administration and individuals	IA	22 (3-4 per project)	25-08-2016
DS-03	Increasing digital security of health related data on a systemic level	RIA	11 (3-5 per project)	16-02-2016
DS-04	Economics of Cybersecurity	RIA	4 (1-2 per project)	25-08-2016
DS-05	EU Cooperation and International Dialogues in Cybersecurity and Privacy Research and Innovation	CSA	3 (0,5-2 per project)	25-08-2016
DS-06	Cryptography	RIA	18,5 (3-5 per project)	25-04-2017
DS-07	Addressing Advanced Cyber Security Threats and Threat Actors a) Research and Innovation Actions- Situational awareness	RIA	10 (2-3 per project)	24-08-2017
	b) Innovation Actions- Simulation environments, Training	IA	8 (4-5 per project)	24-08-2017
DS-08	Privacy, Data Protection, Digital Identities	IA	18 (2-3 per project)	24-08-2017

Cross-cutting activities (Focus Areas)

Het call-budget bedraagt 577,5 miljoen euro voor 2016 en 462,5 miljoen euro voor 2017.

Topic	Omschrijving	Type project	Budget (miljoen euro)	Sluiting
	Industry 2020 in the Circular Economy		**32** (2016) **48** (2017)	
PILOTS-01	Pilot lines for manufacturing of materials with customized thermal/electrical conductivity properties	IA	5-8 per project	08-12-2015 (1st stage)
PILOTS-02	Pilot Line Manufacturing of Nanostructured Antimicrobial Surfaces using Advanced Nanosurface Functionalization Technologies	IA	5-8 per project	08-12-2015 (1st stage)
PILOTS-03	Pilot Lines for Manufacturing of Nanotextured surfaces with mechanically enhanced properties	IA	5-8 per project	27-10-2016 (1st stage)
PILOTS-04	Pilot Lines for 3D printed and/or injection moulded polymeric or ceramic microfluidic MEMS	IA	5-8 per project	27-10-2016 (1st stage)
PILOTS-05	Paper-based electronics	RIA	5-8 per project	27-10-2016 (1st stage)
	Factories of the Future		**77** (2016) **85** (2017)	
FoF-01	Novel hybrid approaches for additive and subtractive manufacturing machines	RIA	3-5 per project	21-01-2016
FoF-02	Machinery and robot systems in dynamic shop floor environments using novel embedded cognitive functions	IA	4-6 per project	21-01-2016
FoF-03	Zero-defect strategies at system level for multi-stage manufacturing in production lines	IA	4-6 per project	21-01-2016
FoF-04	Continuous adaptation of work environments with changing levels of automation in evolving production systems	RIA	3-5 per project	21-01-2016
FoF-05	Support for the further development of Additive Manufacturing technologies in Europe	CSA	0,75-1 per project	21-01-2016
FoF-06	New product functionalities through advanced surface manufacturing processes for mass production	RIA	3-5 per project	19-01-2017
FoF-07	Integration of unconventional technologies for multi-material processing into manufacturing systems	RIA	3-5 per project	19-01-2017
FoF-08	In-line measurement and control for micro-/nano-enabled high-volume manufacturing for enhanced reliability	IA	4-6 per project	19-01-2017
FoF-09	Novel design and predictive maintenance technologies for increased operating life of production systems	IA	4-6 per project	19-01-2017
FoF-10	New technologies and life cycle management for reconfigurable and reusable customised products	IA	4-6 per project	19-01-2017
	ICT for the Factories of the Future		**83** (2016) **33** (2017)	
FoF-11	Digital automation a1) Collaborative manufacturing and logistics	RIA	<8 per project	21-01-2016
	a2) Novel architectures for factory automation	RIA	<4 per project	21-01-2016
	b) Coordination and Support Actions	CSA	2	21-01-2016
FoF-12	ICT Innovation for Manufacturing SMEs (I4MS): a) Innovation actions (CPS and IoT; Robotics; Modelling, simulation and analytics; Digital design for additive Manufacturing)	IA	32 (< 8 per project)	19-01-2017
	b) Coordination and Support Actions	CSA	1	19-01-2017
FoF-13	Photonics Laser-based production a) Research and Innovation Actions - From "design to piece" – Excellence in laser-based additive industrial manufacturing	RIA	15 (2-4 per project)	21-01-2016
	b) Innovation Actions - Rapid individualised laser-based production	IA	15 (2-4 per project)	21-01-2016
	Sustainable Process Industries - SPIRE		**74** (2016) **80** (2017)	
SPIRE-01	Systematic approaches for resource-efficient water management systems in process industries	IA	5-7 per project	21-01-2016

SPIRE-02	Plant-wide monitoring and control of data-intensive processes	RIA	4-6 per project	21-01-2016
SPIRE-03	Industrial technologies for the valorisation of European bio-resources into high added value process streams	IA	5-7 per project	21-01-2016
SPIRE-04	Industrial furnace design addressing energy efficiency in new and existing furnaces	RIA	5-7 per project	21-01-2016
SPIRE-05	Potential use of carbon dioxide / carbon monoxide and non-conventional fossil natural resources in Europe as feedstock for the process industry	CSA	0,25-0,5 per project	21-01-2016
SPIRE-06	Business models for flexible and delocalised approaches for intensified processing	CSA	0,25-0,5 per project	21-01-2016
SPIRE-07	Integrated approach to process optimisation for raw material resources efficiency, excluding recovery technologies of waste streams	IA	6-8 per project	19-01-2017
SPIRE-08	Carbon dioxide utilisation to produce added value chemicals	RIA	6-8 per project	19-01-2017
SPIRE-09	Pilot lines based on more flexible and down-scaled high performance processing	IA	6-8 per project	19-01-2017
SPIRE-10	New electrochemical solutions for industrial processing, which contribute to a reduction of carbon dioxide emissions	RIA	4-6 per project	19-01-2017
SPIRE-11	Support for the enhancement of the impact of SPIRE PPP projects	CSA	0,25-0,5 per project	19-01-2017
SPIRE-12	Assessment of standardisation needs and ways to overcome regulatory bottlenecks in the process industry	CSA	0,5-1 per project	19-01-2017
	Circular Economy		**101** (2016) **70** (2017)	
CIRC-01	Systemic, eco-innovative approaches for the circular economy: large-scale demonstration projects a) Design for circular value and supply chains	IA	60 (7-10 per project)	08-03-2016 (1st stage)
	b) Systemic services for the circular economy	IA	40 (4-7 per project))	07-03-2017 (1st stage)
CIRC-02	Water in the context of the circular economy a) Demonstrating the potential of efficient nutrient recovery from water	IA	20 (6-8 per project)	08-03-2016 (1st stage)
	b) Towards the next generation of water systems and services– large scale demonstration projects	IA	30 (10 per project)	07-03-2017 (1st stage)
CIRC-03	Smart Specialisation for systemic eco-innovation/circular economy	CSA	1.5 (1.0-1.5 per project)	08-03-2016
CIRC-04	New models and economic incentives for circular economy business	RIA	3 (3 per project)	08-03-2016
CIRC-05	Unlocking the potential of urban organic waste	RIA	3 (3 per project)	08-03-2016
	Internet of Things		**104** (2016) **35** (2017)	
IoT-01	Large Scale Pilots: Pilot 1: Smart living environments for ageing well	IA	100: <20 per project	12-04-2016
	Pilot 2: Smart Farming and Food Security	IA	<30 per project	12-04-2016
	Pilot 3: Wearables for smart ecosystems	IA	<15 per project	12-04-2016
	Pilot 4: Reference zones in EU cities	IA	<15 per project	12-04-2016
	Pilot 5: Autonomous vehicles in a connected environment	IA	<20 per project	12-04-2016
IoT-02	IoT Horizontal activities a) Co-ordination of and support to the IoT Focus Area	CSA	4 1 per project	12-04-2016
	b) RRI-SSH support to IoT	CSA	1 per project	12-04-2016
IoT-03	R&I on IoT integration and platforms	RIA	35 (3-5 per project)	25-04-2017

	Smart and Sustainable Cities		**120** (2016) **111,5** (2017)	
	Smart Cities and Communities			
SCC-01	Smart Cities and Communities lighthouse projects	IA	60 (12-18 per project)	05-04-2016
		IA	71,5 (12-18 per project)	14-02-2017
	Sustainable Cities Through Nature Based Solutions			
SCC-02	Demonstrating innovative nature-based solutions in cities a) Demonstrating innovative nature-based solutions for climate and water resilience in cities	IA	40 (>10 per project)	08-03-2016 (1st stage)
	b) Nature-based solutions for inclusive urban regeneration	IA	40 (>10 per project)	07-03-2017 (1st stage)
SCC-03	New governance, business, financing models and economic impact assessment tools for sustainable cities with nature-based solutions (urban re-naturing)	RIA	15 (7,5 per project)	08-03-2016
SCC-04	Sustainable urbanisation	ERA-NET	5 (5 per project)	08-03-2016

Spreading excellence and widening participation

Het call-budget bedraagt circa 90 miljoen euro voor 2016 en circa 111 miljoen euro voor 2017.

Topic	Omschrijving	Type project	Budget (miljoen euro)	Sluiting
	Widespread		**90,78** (2016) **111,38** (2017)	
WIDESPREAD1	Teaming Phase 2	CSA	89,53 (15 per project)	30-08-2016
		CSA	45,47 (15 per project)	30-08-2016
WIDESPREAD2	Support to JPI Urban Europe	CSA	1,25 (1,25 per project)	04-02-2016
WIDESPREAD3	ERA Chairs	CSA	33,91 (2,5 per project)	05-10-2017
WIDESPREAD4	Teaming Phase 1	CSA	12 (0,4 per project)	15-11-2016
WIDESPREAD5	Twinning	CSA	20 (1 per project)	15-11-2017

Science with and for Society

Het call-budget bedraagt circa miljoen 44 euro voor 2016 en circa 54 miljoen euro voor 2017.

Topic	Omschrijving	Type project	Budget (miljoen euro)	Sluiting
	Science with and for Society		**44,02** (2016) **54,55** (2017)	
	Institutional Change to Support Responsible Research and Innovation in Research Performing and Funding Organisations			
SwafS-01	Participatory research and innovation via science shops	RIA	3 (3 per project)	30-08-2016
SwafS-02	ERA-NET Cofund – Promoting Gender equality in H2020 and the ERA	ERANET	5 (5 per project)	30-08-2016
SwafS-03	Support to research organisations to implement gender equality plans	CSA	3,9 (1,5-2,03 per project)	30-08-2016
		CSA	6,1 (1,5-2,03 per project)	30-08-2017
SwafS-04	Opening Research Organisations in the European Research Area	CSA	6,7 (3-3,35 per project)	30-08-2016
SwafS-05	New constellations of Changing Institutions and Actors	CSA	7,1 (3-3,55 per project)	30-08-2017
SwafS-06	Engaging industry – Champions for RRI in Industrial Sectors	CSA	7,1 (3-3,55 per project)	30-08-2017
SwafS-07	Training on Open Science in the European Research Area	CSA	0,9 (0,9 per project)	30-08-2016
SwafS-08	European Community of Practice to support institutional change	RIA	3 (3 per project)	30-08-2017
	Embedding responsible research and innovation in Horizon 2020 Research & Innovation			
SwafS-09	Moving from constraints to openings, from red lines to new frames in Horizon 2020	CSA	6,8 (6,8 per project)	30-08-2016
SwafS-10	Putting Open Science into action	RIA	3 (3 per project)	30-08-2017
	Strengthening the Science and for Society knowledge-base			
SwafS-11	Science education outside the classroom	RIA	3 (3 per project)	30-08-2017
SwafS-12	Webs of Innovation Value Chains and Openings for RRI	RIA	3 (3 per project)	30-08-2017
SwafS-13	Integrating Society in Science and Innovation – An approach to co-creation	RIA	4 (4 per project)	30-08-2017
SwafS-14	A Linked-up Global World of RRI	RIA	3 (3 per project)	30-08-2017
	Developing inclusive, anticipatory governance for research & innovation			
SwafS-15	Open Schooling and collaboration on science education	CSA	3 (3 per project)	30-08-2016
SwafS-16	Mapping the Ethics and Research Integrity Normative Framework	CSA	3,8 (3,8 per project)	30-08-2016
SwafS-17	The Ethics of informed consent in novel treatment including a gender perspective	CSA	3,8 (3,8 per project)	30-08-2016
SwafS-18	The Ethics of technologies with high socio-economic impact and Human Rights relevance	CSA	3,8 (3,8 per	30-08-2016

			project)	
SwafS-19	Networking of National representatives and resources centres on Gender in R&I	CSA	1,95 (1,95 per project)	30-08-2016
SwafS-20	ERA Mobility and Career Day	CSA	0,87 (0,08 per project)	30-08-2016
SwafS-21	Promoting integrity in the use of research results in evidence based policy: a focus on non-medical research	CSA	4,2 (4,2 per project)	30-08-2017
SwafS-22	The ethical dimensions of IT technologies: a European perspective focusing on security and human rights aspects	CSA	4,2 (4,2 per project)	30-08-2017
SwafS-23	Responsible Research and Innovation (RRI) in support of sustainability and governance, taking account of the international context	CSA	3 (3 per project)	30-08-2017
SwafS-24	Trans-national operation of the EURAXESS Service network	CSA	3,85 (3,85 per project)	30-08-2017
SwafS-25	Celebrating European Science	CSA	0,5 (0,5 per project)	26-01-2016

Fast Track to Innovation Pilot

Fast Track to Innovation (FTI) is een nieuwe aanpak waarmee de Europese Commissie bedrijven met een innovatief product, proces of dienst het laatste zetje naar de Europese markt wil geven.

Een FTI-project moet bijdragen aan de algemene doelstellingen van Horizon 2020 (het versterken van het industriële leiderschap van het Europese bedrijfsleven en/of het bijdragen aan oplossingen voor maatschappelijke opgaven), maar kent verder geen vooraf bepaalde thema's waaraan een project moet voldoen. FTI werkt met een continu open oproep en het indienen van een projectvoorstel kan op ieder moment. Wel zijn er 3 momenten (cut off dates) waarop alle dan ingediende voorstellen beoordeeld worden.

Het call-budget bedraagt circa 100 miljoen euro voor 2016.

	Fast Track to Innovation Pilot		**100** (2016)	
FTIPilot-01	Fast Track to Innovation Pilot	IA	<3 per project	15-03-2016 01-06-2016 25-10-2016