



Opportunities for African Participation in H2020

Information and Communication Technologies 2016-2017



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Building Bi-regional Partnerships for Global Challenges



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Industrial Leadership: Information and Communication Technologies (ICT)

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15/05/17

Information and Communication Technologies

– General Information

Digital technologies underpin innovation and competitiveness across a broad range of market sectors

Areas:

1. Key enabling technologies
2. Networking technologies
3. Robotics
4. Content and Information management Technologies

To promote more innovation orientation to ensure the EU industry remains strong in the core technologies

- How?

1. To support core ICT industries through road map based PPP
2. Building of innovation capacity by strengthening of the ‘open and disruptive innovation’
3. International dimension of ICT reinforced

Novelty: Pilot on Open Research Data and Data Management Plans

Information and Communication Technologies Calls: Overview

Topics

A new generation of components and systems

ICT-04-2017: Smart Anything Everywhere Initiative

Advanced Computing and Cloud Computing

ICT-05-2017: Customized and low energy computing (including Low power processor technologies)

Future Internet

ICT-07-2017: 5G PPP Research and Validation of critical technologies and systems

ICT-08-2017: 5G PPP Convergent Technologies

ICT-09-2017: Networking research beyond 5G

ICT-11-2017: Collective Awareness Platforms for Sustainability and Social Innovation

Robotics and Autonomous Systems

ICT-25-2016-2017: Advanced robot capabilities research and take-up

ICT-27-2017: System abilities, SME & benchmarking actions, safety certification

ICT-28-2017: Robotics Competition, coordination and support

Information and Communication Technologies

Calls: Overview

Topics

Content

ICT-14-2016-2017: Big Data PPP: cross-sectorial and cross-lingual data integration and experimentation

ICT-15-2016-2017: Big Data PPP: Large Scale Pilot actions in sectors best benefitting from data-driven innovation

ICT-16-2017: Big data PPP: research addressing main technology challenges of the data economy

ICT-17-2016-2017: Big data PPP: Support, industrial skills, benchmarking and evaluation

ICT Key Enabling Technologies

ICT-30-2017: Photonics KET 2017

ICT-31-2017: Micro- and nanoelectronics technologies

Innovation and Entrepreneurship support

ICT-32-2017: Startup Europe for Growth and Innovation Radar

ICT-33-2017: Innovation procurement networks

IC Technologies Calls: Overview

Topics

Responsibility and Creativity???

International Cooperation Activities

ICT-39-2016-2017: International partnership building in low and middle income countries

Support Actions

ICT-40-2017: Reinforcing European presence in international ICT standardization

ICT-41-2017: Next Generation Internet

Budget for 2017 Calls (1)

	Topics (Type of Action)	Budget (EUR Million)
	Opening: 08 Dec 2016	
1	ICT-05-2017 (RIA)	30
2	ICT-05-2017 (CSA)	2
3	ICT-11-2017 (IA)	9
4	ICT-11-2017 (CSA)	1
5	ICT-14-2016-2017 (IA)	27
6	ICT-15-2016-2017 (IA)	25
7	ICT-16-2017 (RIA)	33
8	ICT-17-2016-2017 (RIA)	2

Budget for 2017 Calls (2)

9	ICT-20-2017 (RIA)	17
10	ICT-23-2017 (RIA)	10
11	ICT-23-2017 (IA)	4
12	ICT-25-2016-2017 (RIA)	15
13	ICT-25-2016-2017 (IA)	19
14	ICT-27-2017 (RIA)	30
15	ICT-27-2017 (IA)	11
16	ICT-27-2017 (PCP)	7
17	ICT-28-2017 (CSA)	5
18	ICT-30-2017 (RIA)	43
19	ICT-30-2017 (IA)	43

Budget for 2017 Calls (3)

20	ICT-30-2017 (CSA)	3
21	ICT-31-2017 (RIA)	19
22	ICT-31-2017 (IA)	3
23	ICT-31-2017 (CSA)	1
24	ICT-32-2017 (IA)	10
25	ICT-32-2017 (CSA)	2
26	ICT-33-2017 (CSA)	4
27	ICT-39-2016-2017 (IA)	13
28	ICT-40-2017 (CSA)	2
29	ICT-41-2017 (CSA)	2

ICT – Topics for African Researchers

ICT-39-2016-2017: International partnership building in low and middle income countries

Specific Challenge: To reinforce cooperation and strategic partnership with selected countries and regions in areas of mutual interest.

- *Targeted countries: Low and middle income countries in sub-Saharan Africa and ASEAN countries*

The topic 'ICT-39-2016-2017: International Partnership building in low and middle income countries' includes both innovation actions and coordination and support actions (for Africa) to reinforce cooperation and strategic partnership with low and middle income countries in sub-Saharan Africa and ASEAN countries.

a. Innovations Actions

Actions will address the requirements of end-user communities in developing countries. This may include technological improvements and adaptations as well as innovative service creation based on existing technologies.

Proposals could include specific technological targets such as co-design, adaptation, demonstration and validation (e.g. pilots) of ICT related research and innovation in relevant thematic areas addressed by Horizon 2020 including Content Technologies and Societal Challenges. Proposals are expected to address take up and scalability of the proposed solutions.

b. Coordination and Support Actions for Africa

The coordination and support action focuses on fostering research and coordination and supporting collaborative activities between Europe and Africa.

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-health_en.pdf

Societal Challenge 3: Secure, Clean and Efficient Energy

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Societal Challenge 3 – General Information

Secure, Clean and Efficient Energy

Framed in consonant with the European Union framework strategy to increase energy security, solidarity and trust that seek to provide secure, sustainable, competitive and affordable energy for households and businesses

Activities include two focus areas:

- Energy efficiency
- Competitive Low Carbon Energy

Cross Cutting

- SME Instrument
- Smart and sustainable cities
- Fast Track to Innovation Pilot
- Blue Growth: Demonstrating an ocean of opportunities

Others.....

Energy Efficiency Calls: Overview

Topics

Heating and cooling

EE-01-2017: Waste heat recovery from urban facilities and re-use to increase energy efficiency of district or individual heating and cooling systems

EE-02-2017: Improving the performance of inefficient district heating networks

EE-04-2016-2017: New heating and cooling solutions using low grade sources of thermal energy

Engaging consumers towards sustainable energy

EE-06-2016-2017: Engaging private consumers towards sustainable energy

EE-07-2016-2017: Behavioural change toward energy efficiency through ICT

EE-09-2016-2017: Engaging and activating public authorities

Buildings

EE-11-2016-2017: Overcoming market barriers and promoting deep renovation of buildings

EE-12-2017: Integration of Demand Response in Energy Management Systems while ensuring interoperability through Public Private Partnership (EeB PPP)

EE-14-2016-2017: Construction skills

Information and Communication Technologies

Calls: Overview

Topics

Industry, services and products

EE-15-2017: Increasing capacities for actual implementation of energy efficiency measures in industry and services

EE-16-2016-2017: Effective implementation of EU product efficiency legislation

EE-17-2016-2017: Valorization of waste heat in industrial systems (SPIRE PPP)

EE-18-2017: Energy efficiency of industrial parks through energy cooperation and mutualized energy services

EE-19-2017: Public Procurement of Innovative Solutions for energy efficiency

EE-20-2017: Bringing to market more energy efficient and integrated data centers

Innovative financing for energy efficiency investments

EE-22-2016-2017: Project Development Assistance

EE-23-2017: Innovative financing schemes

EE-24-2016-2017: Making the energy efficiency market investible

COMPETITIVE LOW-CARBON ENERGY: Overview

Topics

Towards an integrated EU energy system

LCE-01-2016-2017: Next generation innovative technologies enabling smart grids, storage and energy system integration with increasing share of renewables: distribution network

LCE-04-2017: Demonstration of system integration with smart transmission grid and storage technologies with increasing share of renewables

Support Actions

LCE-05-2017: Tools and technologies for coordination and integration of the European energy system

LCE-37-2017: ERA-NET Co-Fund Enhanced cooperation in Smart Local and Regional Energy Networks of the European Energy System

Competitive Low Carbon Energy

Renewable energy technologies

LCE-06-2017: New knowledge and technologies

LCE-07-2016-2017: Developing the next generation technologies of renewable electricity and heating/cooling

LCE-08-2016-2017: Development of next generation biofuel technologies

LCE-10-2017: Reducing the cost of PV electricity

LCE-11-2017: Near-to-market solutions for reducing the water consumption of CSP Plants

LCE-12-2017: Near-to-market solutions for the use of solar heat in industrial processes

LCE-14-2017: Demonstration of large >10MW wind turbine

Competitive Low Carbon Energy (2)

Topics

LCE-16-2017: 2nd Generation of design tools for ocean energy devices and arrays development and deployment

LCE-17-2017: Easier to install and more efficient geothermal systems for retrofitting buildings

LCE-18-2017: EGS in different geological conditions

LCE-19-2016-2017: Demonstration of the most promising advanced biofuel pathways

LCE-20-2016-2017: Enabling pre-commercial production of advanced aviation biofuel.

LCE-21-2017: Market uptake of renewable energy technologies

Enabling the decarbonization of the use of fossil fuels during the transition to a low-carbon economy

LCE-27-2017: Measuring, monitoring and controlling the potential risks of subsurface operations related to CCS and unconventional hydrocarbons

LCE-28-2017: Highly flexible and efficient fossil fuel power plants

LCE-29-2017: CCS in industry, including Bio-CCS

Other Calls

Topic

Social, economic and human aspects of the energy system

LCE-31-2016-2017: Social Sciences and Humanities Support for the Energy Union

Supporting the development of a European research area in the field of energy

LCE-35-2017: Joint Actions to foster innovative energy solutions in renewable energy technologies

Cross-cutting issues

LCE-36-2016-2017: Support to the energy stakeholders to contribute to the SET-Plan

Budget (2)

No	Topics 11 th May 2017	Budget (Eur Million)	Deadline
	Date of open: 11 th May 2017		7 th September 2017
1	LCE-10-2017 (IA)	10	
2	LCE-11-2017 (IA)	12	
3	LCE-12-2017 (IA)	8	
4	LCE-14-2017 (IA)	25	
5	LCE-16-2017 (IA)	7	
6	LCE-17-2017 (IA)	8	
7	LCE-18-2017 (IA)	10	
8	LCE-19-2016-2017 (IA)	15	
9	LCE-20-2016-2017 (IA)	10	
	Total	105	

Thank you



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