

European Commission

## HORIZON 2020

The EU Framework Programme for Research and Innovation

#### 2014-2020

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#### **Georgian Association to H2020**





European Commission



#### What is Horizon 2020?

- The European Union programme for research and innovation for 2014-2020 with a budget of €77 billion
- A core part of Europe 2020, Innovation Union & European Research Area:
- Responding to the economic crisis to invest in jobs and growth
- Addressing people's concerns about their livelihoods, safety and environment
- Strengthening the EU's global position in research, innovation and technology



## **Three priorities**

Excellent science

## IndustrialSocietalleadershipchallenges



#### **Priority 1. Excellent science**

Why:

- World class science is the foundation of tomorrow's technologies, jobs and wellbeing
- Europe needs to develop, attract and retain research talent
- Researchers need access to the best infrastructures



#### **Funding for Excellent science** (€ million)

European Research Council (ERC)	
Frontier research by the best individual teams	13 095
Future and Emerging Technologies	
Collaborative research to open new fields of innovation	2 585
Marie Skłodowska-Curie actions (MSCA)	
Opportunities for training and career development	6 162
<b>Research infrastructures</b> (including e-infrastructure)	
Ensuring access to world-class facilities	2 390



#### **Priority 2. Industrial leadership**

Why:

- Strategic investments in key technologies

   (e.g. advanced manufacturing, micro-electronics)
   underpin innovation across existing and emerging
   sectors
- Attracting more private investment in research and innovation
- More innovative small and medium-sized enterprises (SMEs) needed to create growth and jobs



### **Funding for Industrial leadership** (€ million)

Leadership in enabling and industrial technologies (LEITs) (ICT, nanotechnologies, materials, biotechnology, manufacturing, space)	13 035
Access to risk finance Leveraging private finance and venture capital for research and innovation	2 842
<b>Innovation in SMEs</b> Fostering all forms of innovation in all types of SMEs	589 + complemented by a minimum of 20% of the total budget for societal challenges + LEITs and 'Access to risk finance'
	with strong SME focus



#### **Priority 3. Societal challenges**

Why:

- Concerns of citizens and society/EU policy objectives (climate, environment, energy, transport, etc) cannot be achieved without innovation
- Breakthrough solutions come from multi-disciplinary collaborations, including social sciences & humanities
- Promising solutions need to be tested, demonstrated and scaled up



#### **Funding for Societal challenges** (€ million)

Health, demographic change and wellbeing	7 257
Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the Bioeconomy	3 708
Secure, clean and efficient energy *	5 688
Smart, green and integrated transport	6 149
Climate action, environment, resource efficiency and raw materials	2 956
Inclusive, innovative and reflective societies	1 259
Secure societies	1 613
Science with and for society	445
Spreading excellence and widening participation	816

\* Additional funding for nuclear safety and security from the Euratom Treaty activities (2014-2018)





Budget: €1 044 million to support indirect research actions in nuclear fission, radiation protection and fusion activities
Duration of the Programme: 5 years (2014-2018), in line with the Euratom Treaty

#### What is new?

•Euratom Programme complements Horizon 2020 and addresses the same key challenges;

•The same rules for participation apply to Horizon 2020 and Euratom Programme;

•A streamlined fusion research programme focusing on the implementation of the fusion roadmap;

•Only one legal act, instead of four.



#### European Institute of Innovation and Technology (EIT)

- Body of the European Union based in Budapest
- Integrates all three sides of the knowledge triangle (higher education, research and business) by so-called Knowledge and Innovation Communities (KIC)
- Budget of € 2 383 billion from Horizon 2020

#### **Current KICs**

- ✓ Climate
- ✓ ICT labs
- ✓ InnoEnergy
- ✓ Raw Materials
- ✓ Health

#### In pipeline

- ✓ Food4future; Added-Value Manufacturing (2016)
- ✓ Urban Mobility (2018)



#### **Joint Research Center (JRC)**

- Provides customer-driven scientific and technical support to Union policies while flexibly responding to new policy demands
- Carries out direct actions under both the TFEU and Euratom parts of Horizon 2020
- Budget of € 2 416 billion from Horizon 2020
- Board Members from Member States and Associated Countries



#### **Strong participation by SMEs**

- Integrated approach a minimum of 20% of the total budget for societal challenges and LEITs to go to SMEs
- A new SME instrument a minimum of 7 % of the total budget for societal challenges and LEITs
- A dedicated activity for research-intensive SMEs in 'Innovation in SMEs'
- 'Access to risk finance' will have a strong SME focus (debt and equity facility)
- **Simplification** with particular benefits for SMEs (e.g. single entry point)



### Widening participation

• Principle of excellence: continue to allocate funding on the

basis of competitive calls, selecting only the best projects

- Clear division of labour between cohesion policy and Horizon 2020
  - Cohesion policy: support for regions in building up their research and innovation capacity
  - Horizon 2020: widen participation, better coordination between the two Union funding programmes, support policy learning reforms
- Accompanying measures in Horizon 2020 to ensure that excellence prevails wherever it exists, including: twinning, ERA chairs, support for access to international networks, development of smart specialisation strategies



#### Horizon 2020: the first 100 calls

- Successful implementation of biennial work programme with broader and fewer topics and embedding key features and novelties like SSH
- Over € 15 billion funding over first two years (2014-2015)
- In total, more than 36 000 proposals evaluated and over 3200 projects started
- Robust and user-friendly IT systems and Participant Portal (just over 3 million visits per month)
- **Simplified business processes** helping to achieve implementation targets like shortened time-to-grant



#### **National Contact Points**

National Contact Points provide the following services:

- •Guidance on choosing relevant topics and types of action
- •Advice on administrative procedures and contractual issues
- •Training and assistance on proposal writing
- •Documentation (forms, guidelines, manuals etc.)
- Assistance in partner search

http://ec.europa.eu/research/participants/portal/desktop/en/suppo



### **For further information**

#### Participant Portal

http://ec.europa.eu/research/participants/portal/desktop/en/home.h tml

#### Helpdesk

http://ec.europa.eu/research/enquiries

#### • Expert evaluators needed!

http://ec.europa.eu/research/participants/portal/desktop/en/experts /index.html

#### Learn more about Horizon 2020

http://ec.europa.eu/horizon2020





# HORIZON 2020

### Thank you for your attention!

**Find out more:** www.ec.europa/research/horizon2020



# HORIZON 2020

### **Participation**

### **Key Concepts**

The right CALL

## The rightThe rightCONSORTIUMPROPOSAL



#### **Evaluation Criteria – all actions**

Excellence	Impact	Quality and Efficiency of the Implementation
Clarity and pertinence of the objectives	The expected impacts listed in the work programme under the relevant topic	Coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources; Complementarity of the participants within the consortium (when relevant); Appropriateness of the management structures and procedures, including risk and innovation management.



#### **Evaluation Criteria – Research and innovation; Innovation; SME instrument**

Excellence	Impact	Quality & Efficiency
Soundness of the concept, including trans-disciplinary considerations, where relevant; Extent that proposed work is ambitious, has innovation potential, and is beyond the state of the art (e.g. groundbreaking objectives, novel concepts and approaches)	Enhancing innovation capacity and integration of new knowledge; Strengthening competitiveness & growth of companies by developing innovations meeting the needs of European and global markets; and, where relevant, by delivering such innovations to the markets; Any other environmental and socially important impacts (not already covered above); Effectiveness of the proposed measures to exploit and disseminate the project results (including management of IPR), to communicate the project, and to manage research data where relevant.	As before



#### **Evaluation Criteria – Coordination and Support Actions**

Excellence	Impact	Quality & Efficiency
Soundness of the concept, Quality of the proposed coordination and/or support measures.	Effectiveness of the proposed measures to exploit and disseminate the project results (including management of IPR), to communicate the project, and to manage research data where relevant.	As before



#### **Evaluation Criteria – ERANet Cofund**

Excellence	Impact	Quality & Efficiency
Level of ambition in the collaboration and commitment of the participants in the proposed ERA-NET action to pool national resources and coordinate their national/regional research programmes.	Achievement of critical mass for the funding of trans-national projects by pooling of national/regional resources and contribution to establishing and strengthening a durable cooperation between the partners and their national/regional research programmes; Effectiveness of the proposed measures to exploit and disseminate the project results and to communicate the project.	As before



#### **Evaluation Criteria – Pre-commercial** procurement Cofund/ Public procurement of innovative solutions Cofund

Excellence	Impact	Quality & Efficiency
Progress beyond the state of the art in terms of the degree of innovation needed to satisfy the procurement need.	Strengthening the competitiveness and growth of companies by developing innovations meeting the needs of European and global procurement markets Effectiveness of the proposed measures to exploit and disseminate the project results (including management of IPR), to communicate the project. More forward-looking concerted procurement approaches that reduce fragmentation of demand for innovative solutions	As before



#### **Research Participant Portal**



