



# Horizon 2020

*The EU Framework  
Programme for  
Research and Innovation*

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*2014-2020*

HORIZON 2020

A stylized graphic of the Earth as a globe, with the word "HORIZON 2020" written across it. The globe is positioned in the center, and the text is written in large, white, sans-serif capital letters. The background is a deep blue with a glowing horizon line and radiating light effects.

Research and  
Innovation



# What is Horizon 2020

- **Commission proposal for a 80 billion euro research and innovation funding programme (2014-2020)**
- **A core part of Europe 2020, Innovation Union & European Research Area:**
  - **Responding to the economic crisis** to invest in future jobs and growth
  - **Addressing people's concerns** about their livelihoods, safety and environment
  - **Strengthening the EU's global position** in research, innovation and technology



# Active involvement of stakeholders

- **EU Presidencies: Sweden** (societal challenges-based approach), **Spain** (integration of research and innovation), **Hungary** (FP7 interim evaluation), **Poland** (widening participation), **European Council conclusions** from 4.2.2011 (Common Framework to bring together all EU research and innovation funding)
- **European Parliament** reports: Merkies (Innovation Union), Audy (FP7 evaluation), Matias (Horizon 2020) and Carvalho (simplification)
- Overwhelming response to the **public consultation** on Horizon 2020 - more than 2000 contributions, **including 169 from Spain**
- **Survey on administrative costs for participants in FP7**
- **25 workshops on the content** of Horizon 2020

# What's new

- **A single programme** bringing together three separate programmes/initiatives\*
- **Coupling research to innovation** – from research to retail, all forms of innovation
- **Focus on societal challenges** facing EU society, e.g. health, clean energy and transport
- **Simplified access**, for all companies, universities, institutes in all EU countries and beyond.

\*The 7th Research Framework Programme (FP7), innovation aspects of Competitiveness and Innovation Framework Programme (CIP), EU contribution to the European Institute of Innovation and Technology (EIT)



# Three priorities:

1. Excellent science
2. Industrial leadership
3. Societal challenges



# 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



## Proposed funding (million euro, 2014-2020)

<b><i>European Research Council</i></b> Frontier research by the best individual teams	<i>13 268</i>
<b><i>Future and Emerging Technologies</i></b> Collaborative research to open new fields of innovation	<i>3 100</i>
<b><i>Marie Curie actions</i></b> Opportunities for training and career development	<i>5 572</i>
<b><i>Research infrastructures (including e-infrastructure)</i></b> Ensuring access to world-class facilities	<i>2 478</i>

## Priority 2. Industrial leadership

*Why:*

- Strategic investments in key technologies (e.g. advanced manufacturing, micro-electronics) underpin innovation across existing and emerging sectors
- Europe needs to attract more private investment in research and innovation
- Europe needs more innovative SMEs to create growth and jobs





## Proposed funding (million euro, 2014-20)

<b><i>Leadership in enabling and industrial technologies</i></b> (ICT, nanotechnologies, materials, biotechnology, manufacturing, space)	13 781
<b><i>Access to risk finance</i></b> Leveraging private finance and venture capital for research and innovation	3 538
<b><i>Innovation in SMEs</i></b> Fostering all forms of innovation in all types of SMEs	619 complemented by 6 829 (expected 15% of societal challenges + LEIT) 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



## Proposed funding (million euro, 2014-2020)

<i>Health, demographic change and wellbeing</i>	<i>8 033</i>
<i>Food security, sustainable agriculture, marine and maritime research &amp; the bioeconomy</i>	<i>4 152</i>
<i>Secure, clean and efficient energy*</i>	<i>5 782</i>
<i>Smart, green and integrated transport</i>	<i>6 802</i>
<i>Climate action, resource efficiency and raw materials</i>	<i>3 160</i>
<i>Inclusive, innovative and secure societies</i>	<i>3 819</i>

***\*Additional €1 788m for nuclear safety and security from the Euratom Treaty activities (2014-2018). Does not include ITER.***



# Horizon 2020 and partnering

## *Public private partnerships:*

- Through Joint Technology Initiatives or other formal structures (Art. 187)
- Through contractual agreements, which provide inputs for work programmes
- Only when criteria met, e.g. clear commitments from private partners

## *Public public partnerships:*

- Through « ERA-Nets » for topping up individual calls/actions (replacing current ERA-Net, ERA-Net Plus, Inco-Net, Inno-net)
- Through participation in joint programmes between Member States (Art. 185)
- Supporting agendas of Joint Programming Initiatives when in line with Horizon 2020
- Only when criteria met, e.g. financial commitments of participating countries

## *European Innovation Partnerships:*

- Not funding instruments, but for coordination with broader policies and programmes



# Role of the EIT and JRC in Horizon 2020

<b><i>European Institute Technology (EIT)</i></b> Combining research, innovation & training in knowledge and Innovation Communities	<b>1 360+</b> <b>1 440*</b>
<b><i>Joint Research Centre (JRC) **</i></b> Providing a robust, evidence base for EU policies	<b>1 962</b>

*\*Second tranche pro rata from LEIT and Societal challenges (subject to review)*

*\*\*Additional €656 m for the JRC to be funded from the Euratom Treaty activities*



# Euratom Programme 2014-2018

**Budget:** TOTAL: € 1665 million, including Fission €336m; Fusion € 673m; JRC € 656m.

**Programme for 5 years, in line with the Euratom Treaty (art.7)**

## **What is new?**

- Stronger focus on nuclear safety and nuclear training
- A single Euratom programme bringing together three separate decisions
- The same rules for participation as in the Horizon 2020 - simplified access
- Programme contributes to the implementation of priorities of the 'Horizon 2020'
- Fusion research programme will be restructured

**Funding for ITER outside MFF in a separate supplementary programme: € 2573 million for 2014-2018**

# Simplification: Rules for Participation

## **1. A single set of rules**

- Adapted for the whole research and innovation cycle
- Covering all research programmes and funding bodies
- Aligned to the Financial Regulation, coherent with other new EU Programmes

## **2. One project – one funding rate**

- Maximum of 100% of the total eligible costs (except for actions close to market, where a 70% maximum will apply)
- Indirect eligible costs: a flat rate of 20% of direct eligible costs

## **3. Simple evaluation criteria**

- Excellence – Impact – Implementation (Excellence only, for the ERC)

## **4. New forms of funding aimed at innovation: pre-commercial procurement, inducement prizes, dedicated loan and equity instruments**

## **5. International participation: facilitated but better protecting EU interests**

# Simplification: Rules for Participation

**6. *Simpler rules for grants:*** broader acceptance of participants accounting practices for direct costs, flat rate for indirect costs, no time-sheets for personnel working full time on a project, possibility of output-based grants

**7. *Fewer, better targeted controls and audits***

- Lowest possible level of requirements for submission of audit certificates without undermining sound financial management
- Audit strategy focused on risk and fraud prevention

**8. *Improved rules on intellectual property***

- Balance between legal security and flexibility
- Tailor-made IPR provisions for new forms of funding
- A new emphasis on open access to research publications

***Beyond the Rules: further simplified provisions in the Grant Agreement and implementing procedures to facilitate access to Horizon 2020 (e.g. common IT platform).***



## Simplification: summary

- **Single set of** simpler and more coherent participation **rules**
- New **balance between trust and control**
- Moving from several **funding rates** for different beneficiaries and activities to just two
- Replacing the four methods to calculate overhead or «indirect costs» with a **single flat rate**
- Major simplification under the **forthcoming financial regulation**
- **Successful applicants to get working more quickly:** reduction of average time to grant by 100 days (current average of around 350 days under FP7)



# Socio-economic sciences and humanities

- **Integrated approach:** SSH included as an integral part of the activities, working beyond 'silos' (*e.g. understanding the determinants of health and optimising the effectiveness of healthcare systems*).
- The '**Inclusive, Innovative and Secure Societies**' **challenge:** issues such as smart and sustainable growth, social transformations, social innovation and creativity, the position of Europe as a global actor as well as the social dimension of a secure society (*SSH have the tools to contribute to addressing security challenges, enhancing the societal dimension of security policy and research*).
- **Bottom-up funding:** ERC, MCA, Research Infrastructures.



# Thank you for your attention!

Find out more:

[www.ec.europa.eu/research/horizon2020](http://www.ec.europa.eu/research/horizon2020)