



HORIZON 2020

**The New EU
Framework Programme for
Research and Innovation**

2014-2020

Brendan Hawdon
DG Research & Innovation
European Commission



What is Horizon 2020?

- **The new European Union programme for research and innovation for 2014-2020**
- **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

The Multiannual Financial Framework 2014-2020:

Key challenge: stabilise the financial and economic system while taking measures to create economic opportunities

1. Smart & inclusive growth (€451 billion)



2. Sustainable growth, natural resources (€373 billion)

3. Security and citizenship (€16 billion)

4. Global Europe (€58 billion)

5. Administration (€61.6 billion)



(figures are given in constant prices)

Three priorities



What is key?

1. **Impressive increase of budget**
2. **Coupling research to innovation**
3. **Challenge-based approach**
4. **New approach to Work Programme and Calls**
5. **Radical simplification**
6. **Focus on increased industry participation**
7. **Dedicated support for SMEs**
8. **Selection of projects on the basis of excellence**
9. **Full openness to the rest of the world**
10. **Embedding Socio-economic Sciences and Humanities**
11. **Dedicated Widening activities**

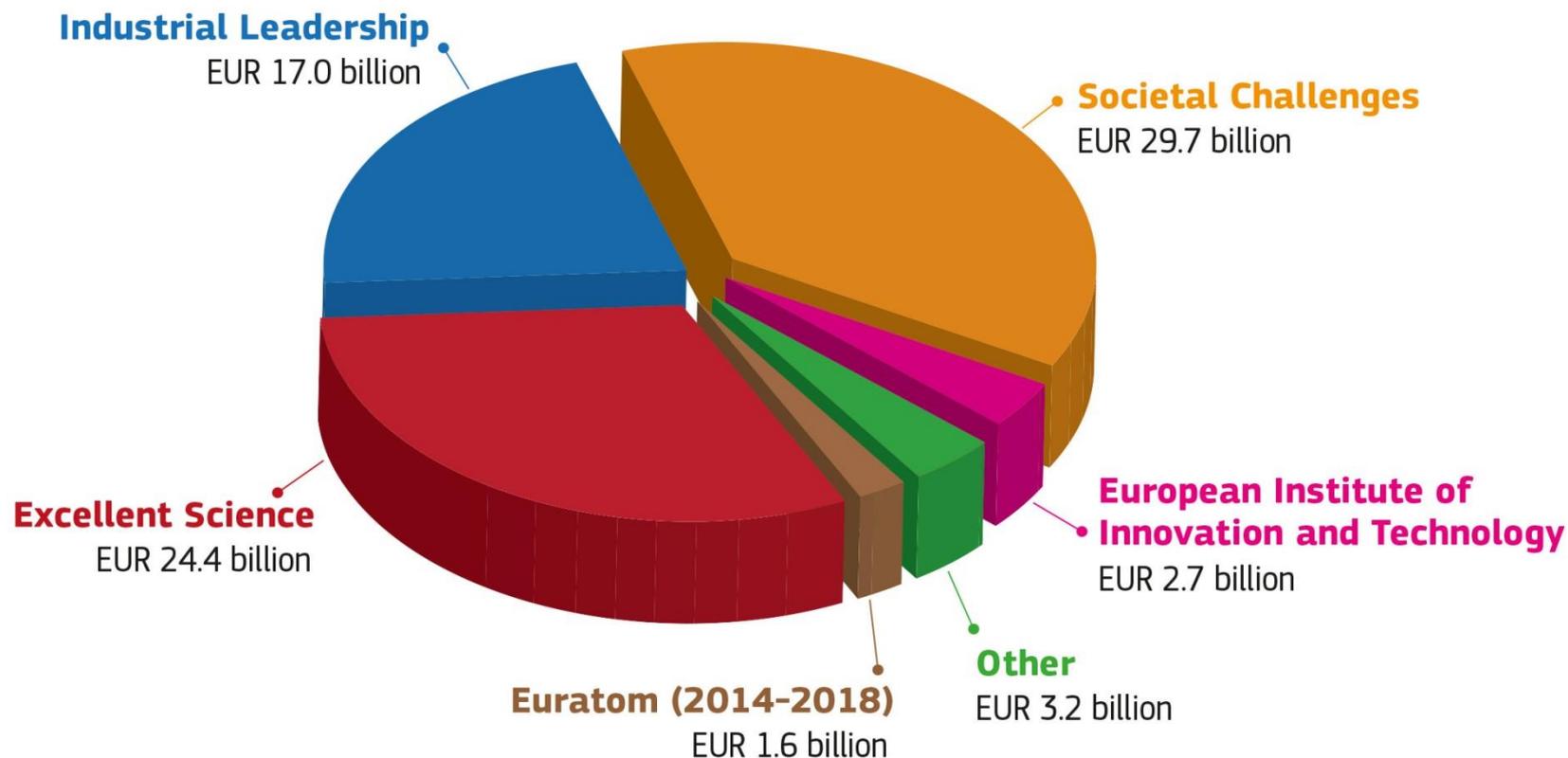
1. Impressive increase in budget

The only part of the new EU budget with a significant increase.

A budget of just over €79 billion; 30 per cent higher in real terms than the 2007-2013 period.

€ 79 billion from 2014 to 2020

HORIZON 2020 BUDGET (in current prices)



2. Coupling research to innovation

- Coupling Research to Innovation in order to bring research results to market.
- For those that would like to bring results to the market, support via
 - Demonstration activities
 - Testing
 - Prototyping
 - Proof of Concept
 - Pilot type activities etc.

3. Challenge-based approach

The majority of the budget is spent to solve major societal challenges; through a problem-solving approach:

- Health, demographic change and wellbeing
- Food security, sustainable agriculture, marine and maritime and inland water research and the bioeconomy
- Secure, clean and efficient energy
- Smart, green and integrated transport
- Climate action, environment, resource efficiency and raw materials
- Inclusive, innovative and reflective societies
- Secure societies

4. New approach to Work Programme and Calls

More strategic work programmes

- Focusing on areas where EU level action has greatest impact
- With a coherent set of actions from research to innovation
- Greater integrated across different parts of Horizon 2020

Less prescriptive calls

- More open to innovative proposals
- Stronger emphasis on impact
- Stimulating inter-disciplinary projects

Two year work programmes

- Better consultations possible
- More advanced notice for applicants

5. Radical simplification

- A single set of rules for all funding under Horizon 2020
- Principle of 'one action – one funding rate'
- Single flat rate for indirect costs
- Faster TTG: 8 months from call deadline
- No more paper: e-communication and e-signature of grants
- No more time sheets for personnel working full time for a project
- Financial viability check only for co-ordinators in projects above 500000 €
- Wider acceptance of average personnel costs

6. Focus on increased industry participation

- More attention to innovation
- Radical simplification
- More topics of interest to industry
- Public-private partnerships: Joint Technology Initiatives (Art 187):
 1. Innovative Medicines Initiative
 2. Clean Sky (Aeronautics)
 3. Fuel Cell and Hydrogen
 4. Biobased industries
 5. Electronic components and systems

7. Dedicated support for SMEs

- 20% of total budget for societal challenges and enabling & industrial technologies to go to SMEs
- A new SME instrument in all challenges and enabling & industrial technologies

8. Selection of projects on the basis of excellence

- Excellence is the only standard award criterion, no geographical selection criteria.
- Clear division of labour between Horizon 2020 and cohesion policy:
 - Cohesion policy: support for regions in building up their research and innovation capacity (on basis of smart specialisation)
 - Horizon 2020: extending the frontiers of knowledge by fostering cooperation between the best brains of Europe

Evaluation criteria



- ✓ **ERC** frontier Research actions >> only EXCELLENCE
- ✓ Innovation actions >> higher weighting for "IMPACT"

Proposal evaluated by the experts “as it is”
and not as “what could be” = no need for negotiation

9. Full openness to the rest of the world

- Horizon 2020 is open to all researchers worldwide
- It will remain to be the most open funding programme in the world
- Open to association of: enlargement countries/EFTA/ European Neighbourhood (and others associated to FP7)
- Targeted flagship actions - strategic approach to international cooperation

10. Embedding socio-economic sciences and humanities (SSH)

- **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 reflective societies**' challenge: issues such as smart and sustainable growth, social transformations, social innovation and creativity, and the position of Europe as a global actor
- **Bottom-up funding:** ERC, MSCA, Research Infrastructures

11. Dedicated Widening activities

- Specific challenge: To help address the disparities in research and innovation performance across Europe
- Key new features/topics: New activities in Horizon 2020 that enable expertise and knowledge transfer in Europe through Teaming and Twinning
- *Separate presentation to follow later*

Simpler access through the Participant Portal

- **Single entry point** from calls to electronic submission of proposals
- **New tools for smart searches for the benefit of users,** including newcomers to the programme.

The screenshot shows the main page of the Participant Portal. At the top, there is a navigation bar with the European Commission logo and the text 'RESEARCH & INNOVATION Participant Portal'. Below this, a large banner for 'Horizon 2020 Funding' is displayed, starting from 1/1/2014. The main content area is divided into sections for 'Non-registered users' and 'Registered users', each with a list of actions they can perform. At the bottom, there is a row of six icons representing different user paths: 'WHAT'S NEW?', 'FUNDING OPPORTUNITIES', 'HOW TO PARTICIPATE', 'WORK AS AN EXPERT', 'MY PERSONAL AREA', and 'INFORMATION AND SUPPORT'. The footer includes the text 'RESEARCH ON EUROPA CORDIS OLAF' and the European Commission logo.

The screenshot shows the 'Funding Opportunities' page. It features a search bar for 'Horizon 2020' and 'FP7 & CIP Programmes'. A prominent message states: 'Please note that the H2020 calls have not yet been published and thus this section is not available'. Below this, there is a 'Funding Opportunities' section with a 'H2020 ONLINE MANUAL' link. The page also includes sections for 'Horizon 2020' and 'FP7 and CIP - previous programmes', each with a brief description and a 'COSME' section. The footer includes the text 'RESEARCH ON EUROPA CORDIS OLAF' and the European Commission logo.

Bulgaria and Horizon 2020

Performance of Bulgaria in FP7

- Bulgarian R&I organisations participate in **490 FP7 projects** (signed grant agreements)
- Benefiting from a total of **more than 92 million euro EU contribution**
- **Greatest EU contribution to Bulgarian participants in:**
 - Research Potential, Information and Communication Technologies, Environment, Research Infrastructures and Marie Curie Actions
- **Top 5 organisations in terms of EU contributions in FP7**
 - University of Sofia 'Sveti Kliment Ohridski'
 - Institute of information and communication technologies, Bulgarian Academy of Sciences
 - Ontotext AD
 - Institute of solid state physics, Bulgarian Academy of Sciences
 - University of Plovdiv
- **Success rate for applications is 16.4%** (EU-average: 20.9%)

Conclusions:

- Research and innovation triggers long-term growth and jobs and will help us exit the crisis
- Need for continued investment in research and innovation at national and EU level
- Horizon 2020 is the largest funding programme for research and innovation in the world
- Opportunities for Bulgaria in all pillars of Horizon 2020

For further information

- **Participant Portal**

<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>

- **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>

Thank you for your attention!