# HORIZON 2020

the EU framework programme for research and innovation



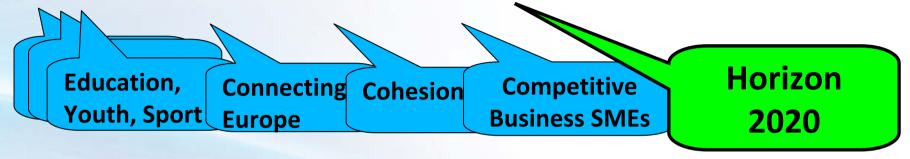




#### The Multiannual Financial Framework 2014-2020:

Commission's proposals of 29 June 2011

1. Smart & inclusive growth (€491bn)



- 2. Sustainable growth, natural resources (€383bn)
- 3. Security and citizenship (€18.5bn)
- 4. Global Europe (€70bn)
- 5. Administration (€62.6bn)

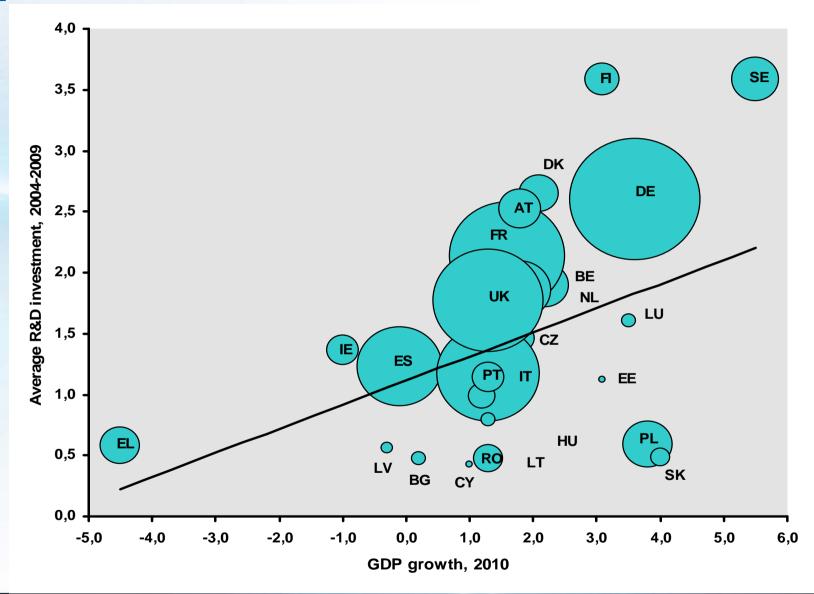








## Impact of R&D on economic recovery









## What is Horizon 2020

- Commission proposal for a 80 billion euro research and innovation funding programme (2014-20)
- Part of proposals for next EU budget, complementing Structural Funds, education, etc.
- A core part of Europe 2020, Innovation Union & European Research Area:
  - Responding to the economic crisis to invest in future jobs and growth
  - Addressing peoples' concerns about their livelihoods, safety and environment.
  - Strengthening the EU's global position in research, innovation and technology







#### What's new

- A single programme bringing together three separate programmes/initiatives\*
- More 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, 2014-20)

European Research Council	13 268
Frontier research by the best individual teams	
Future and Emerging Technologies	3 100
Collaborative research to open new fields of innovation	
Marie Curie actions*	5 752
Opportunities for training and career development	
Research infrastructures (including e-infrastructure)	2 478
Ensuring access to world-class facilities	







## **Priority 2 Industrial leadership**

#### Why:

- Europe needs more innovative SMEs to create growth and jobs
- 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





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

Leadership in enabling and industrial technologies (ICT, nanotechnologies, materials,	13 781
biotechnology, manufacturing, space)	
Access to risk finance	3 538
Leveraging private finance and venture capital for research and innovation	
Innovation in SMEs	619
Fostering all forms of innovation in all types of SMEs	







# **Priority 3 Societal challenges**

#### Why:

- 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, 2014-20)

Health, demographic change and wellbeing	8 029
Food security, sustainable agriculture, marine and maritime research & the bioeconomy	4 152
Secure, clean and efficient energy*	5 782
Smart, green and integrated transport	6 802
Climate action, resource efficiency and raw materials	3 160
Inclusive, innovative and secure societies	3 819

<sup>\*</sup>Additional €1 050m for nuclear safety and security from the Euratom Treaty activities (2014-18). Does not include ITER.







#### Role of the EIT and JRC in Horizon 2020

#### Three priorities to be supported by:

European Institute of Innovation and Technology (EIT) Combining research, innovation & training in Knowledge and Innovation Communities	1 364 + 1 461*
Joint Research Centre (JRC)**  Providing a robust, evidence base for EU policies	1 961

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







<sup>\*\*</sup>Additional €724 m for the JRC to be funded from the Euratom Treaty activities

#### Rules for Participation: what's new? (1)

#### 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 direct 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.







#### Rules for Participation: what's new? (2)

**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 (eg. common IT platform).







## **Broader access**

- For SMEs dedicated SME projects to address societal challenges and enabling technologies
- For all regions tailored support to policy learning, twinning, networking, complementing Structural Funds
- For international partners broad access to Horizon 2020 ("mainstreaming"), strategic initiatives where there is mutual benefit
- For all forms of innovation social innovation, services, pilots, stimulating demand through public procurement, standard setting







# Contributing to the European Research Area (ERA)

- ERA framework proposal in 2012 to create a single market for knowledge research and innovation.
- Complemented by Horizon 2020:
  - Boosting support to ERA priorities mobility,
     infrastructures, knowledge transfer, policy learning
  - Stronger partnerships with Member States and private sector to invest more efficiently
  - Taking account of gender, ethical issues, researcher careers and open access to results







## **Next steps**

From 30/11: Parliament and Council negotiations on the basis of

the Commission proposals

Ongoing: Parliament and Council negotiations on EU budget

2014-20 (including overall budget for Horizon 2020)

Mid 2012: Final calls under 7th Framework Programme for

Research to bridge gap towards Horizon 2020

By end 2013: Adoption of legislative acts by Parliament and

Council on Horizon 2020

1/1/2014: Horizon 2020 starts; launch of first calls





# Thank you for your attention!

Find out more:

www.ec.europa.eu/research/horizon2020





