

HORIZON 2020

**the EU framework programme for
research and innovation**

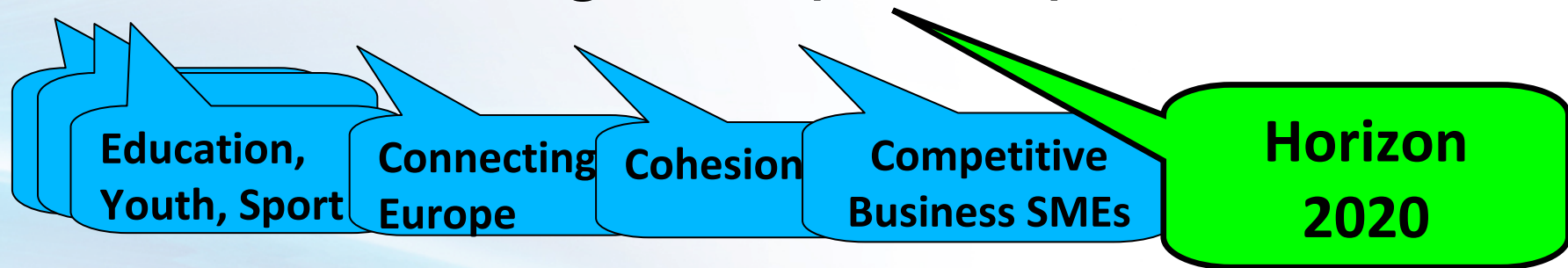
Laurent Bochereau

*DG RTD, Head of International Cooperation
Policy*

The Multiannual Financial Framework 2014-2020:

Commission's proposals of 29 June 2011

1. Smart & inclusive growth (€491bn)



2. Sustainable growth, natural resources (€383bn)

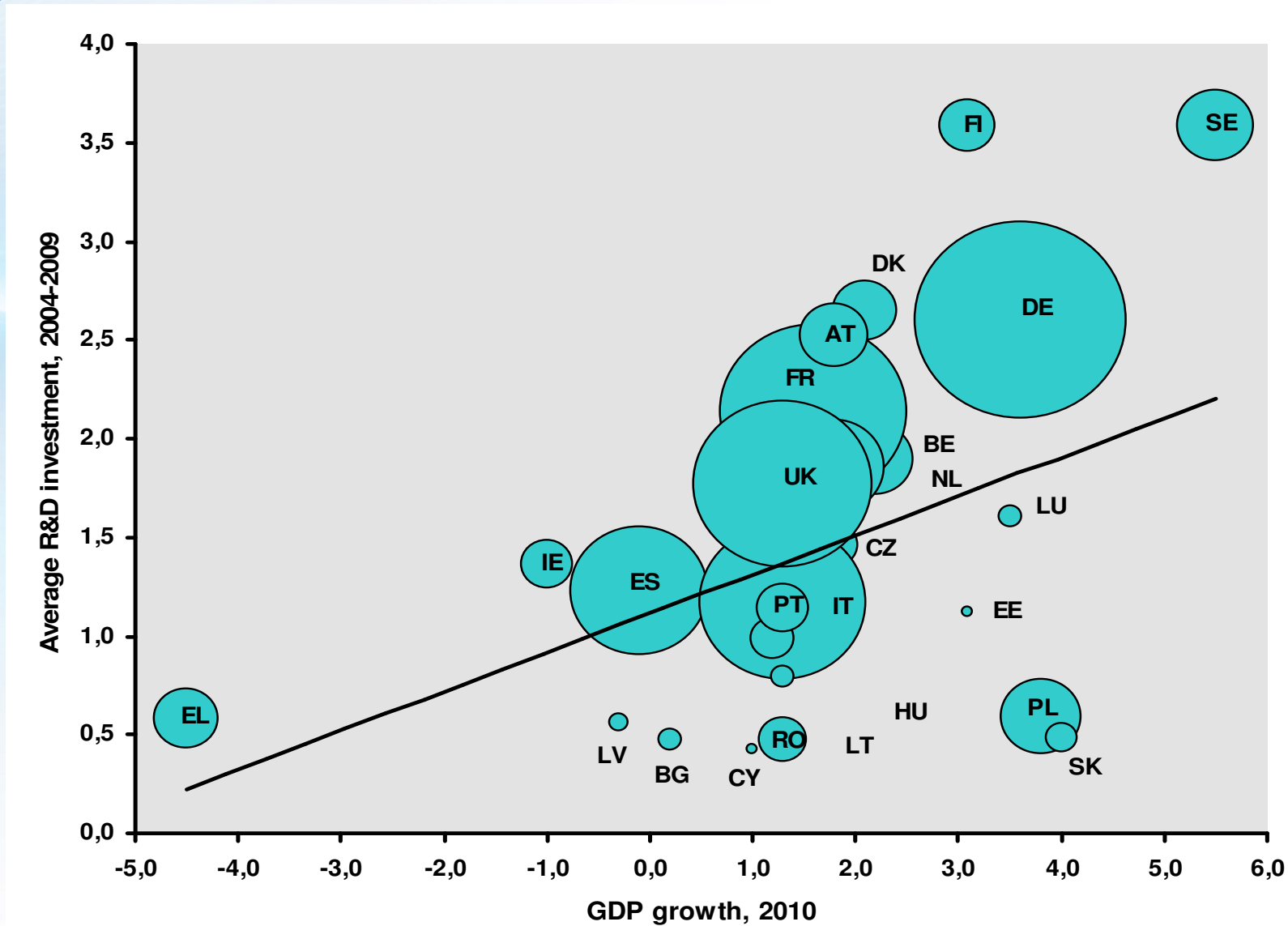
3. Security and citizenship (€18.5bn)

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

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

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	8 028
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

*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) <i>Combining research, innovation & training in Knowledge and Innovation Communities</i>	1 364 + 1 461*
Joint Research Centre (JRC)** <i>Providing a robust, evidence base for EU policies</i>	1 961

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

**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*

Horizon 2020: International Cooperation

- Horizon 2020 fully open for international cooperation
- Focus on cooperation with
 - Industrialised and emerging economies
 - Enlargement and neighbourhood countries
 - Developing countries
- Increased cooperation at regional or multilateral level
- Funding for third countries under Horizon 2020 - list of countries eligible for automatic funding will be set out in work programmes

Association to Horizon 2020

Association **open to**:

- Accessing and candidate countries and potential candidates
- Selected third countries with:
 - Good STI capacity
 - Good track record in EU R&I programmes
 - Close geographic and economic links to the EU
 - And which are EFTA members or ENP countries

Terms and conditions for association:

- Determined by specific international ‘association’ agreements
- Financial contribution based on GDP of associated country

Horizon 2020: Specific International Measures

- **Research Projects - Societal Challenges and Industrial Leadership**
 - Targeting of topics to specific countries or regions based on mutual interest
 - Joint calls or co-funding programmes with third countries or international organisations
 - Specific strategic international actions, e.g. EDCTP2, HFSP, International Consortium on Rare Diseases, International Knowledge-Based Bio-Economy Forum, etc.
- **Excellent Science**
 - Marie Curie **Fellowships** - including actions to stimulate innovation by cross-border fertilisation of knowledge
 - Development of **global research infrastructures** - Carnegie Group, UN, OECD
- **Cross-Cutting Horizontal Actions – Inclusive, Innovative and Secure Societies Challenge**
 - Support for bilateral, multilateral and bi-regional policy dialogue
 - Networking and twinning activities - to facilitate partnering
 - Coordination of EU and MS/AC international cooperation policies
 - Strengthening of European presence in third countries

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