

HORIZON 2020

The EU Framework Programme For Research and Innovation (2014-2020)

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Robert-Jan Smits

Director-General, DG Research & Innovation

European Commission

Outline of the presentation

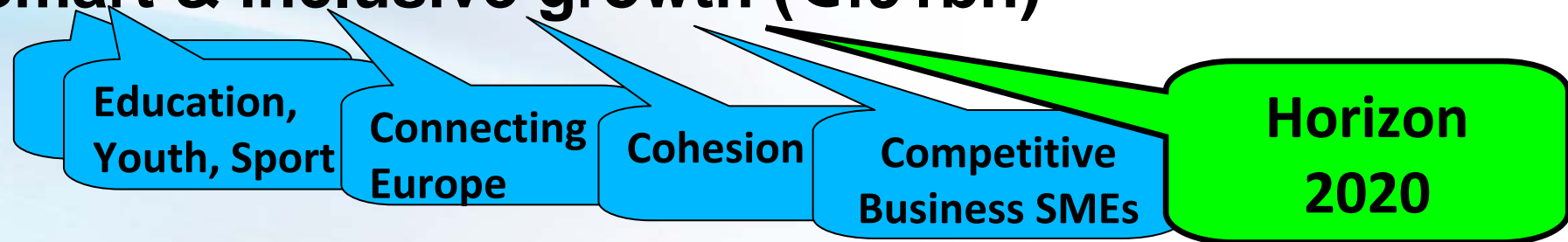
1. Context
2. Outline of the proposal
3. Cross-cutting issues
4. Timetable

The Multiannual Financial Framework 2014-2020:

Commission's proposals of 29 June 2011

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

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)

**Total:
€ 1,025bn**

What is Horizon 2020

- Commission proposal for a 80 billion euro research and innovation funding programme (2014-20)
- 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

Active involvement of stakeholders

- **European Parliament** reports: Carvalho (simplification), Merkies (Innovation Union), Audy (FP 7 evaluation) and Matias (Green Paper)
- **EU Presidencies: Sweden** (societal challenges-based approach), **Spain** (integration of research and innovation), **Belgium** (simplification) **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)
- **Overwhelming response** to the public consultation on Horizon 2020 (more than 2000 contributions)
- **Survey on administrative costs for participants in FP7**
- **25 workshops on the content of Horizon 2020**

EP views and Horizon 2020

EP position	Horizon 2020
Integration of European research and innovation funding	✓
Radical simplification	✓
Importance of science base (excellence in research)	✓
Focus on societal challenges	✓
Multi-disciplinarity	✓
Widening participation	✓
Address the whole innovation cycle (including social innovation)	✓
Greater involvement of SMEs	✓

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>	5 572
Research infrastructures (including e-infrastructure) <i>Ensuring access to world-class facilities</i>	2 478

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)

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 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, 2014-20)

Health, demographic change and wellbeing	8 033
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 788m for nuclear safety and security from the Euratom Treaty activities (2014-18). Does not include ITER.

Social 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.

Strong participation by SMEs

- **Integrated approach** - around 15% of the total budget for societal challenges and LEITs to go to SMEs.
- **Simplification** of particular benefit to SMEs (e.g. single entry point).
- A **new SME instrument**, building on the SBIR model, will be used across all societal challenges as well as for the 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)

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.

International cooperation

- **International cooperation is crucial** to address many Horizon 2020 objectives.
- **Principle of general openness:** the programme will remain to be the most open funding programme in the world.
- Horizon 2020 shall be open to the **association** of: acceding countries, candidate countries and potential candidates and selected third countries that fulfil the relevant criteria (capacity, track record, close economic and geographical links to the Union, etc.).
- Targeted actions to be implemented taking a **strategic approach to international cooperation** (dedicated measures in the 'Inclusive, innovative and secure societies' challenge).

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>	1 360 + 1 440*
Joint Research Centre (JRC)** <i>Providing a robust, evidence base for EU policies</i>	1 962

* 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

Simplification: Rules for Participation (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 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 (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 (e.g. common IT platform).

Simplification: Summary (Mrs Carvalho's checklist)

	Horizon 2020
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	√
Full alignment of the rules for participation with the revised Financial Regulation	√
Simplifications for research directly introduced in revised Financial Regulation (prizes, interest on pre-financing, VAT, extrapolation)	√
Broader acceptance of usual accounting practices of the beneficiaries	√
Simplified time recording; abolition of time-sheets for staff working fully on the EU project	√
Reducing Time to grant	√

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

Euratom Programme 2014-2018

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



Links to COSME

- Horizon 2020 and COSME are **complementary programmes** to generate growth and jobs
- **Different focus:**
 - Horizon 2020 = innovation driven growth
 - COSME = support to create favourable business environment and competitiveness
- **Closely coordinated**, for instance:
 - Integrated financial instruments (debt and equity), with facilities in both programmes serving complementary objectives
 - Enterprise Europe Network set up under COSME, but support to SMEs for EU funding

Next steps

- Ongoing:** 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
- Mid 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