



Horizon 2020: Public-Private Partnerships

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Research



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





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)

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





Priority 2. Industrial leadership

Why:

- Strategic investments in key technologies (e.g. advanced manufacturing, microelectronics) 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 (ICT, nanotechnologies, materials, biotechnology, manufacturing, space)	13 781
Access to risk finance Leveraging private finance and venture capital for research and innovation	3 538
Innovation in SMEs 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 multidisciplinary collaborations, including social sciences & humanities
- Promising solutions need to be tested, demonstrated and scaled up





Proposed funding (million euro, 2014-2020)

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 (2014-2018). Does not include ITER.





Simplification in 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
- 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)





PPPs in the Horizon 2020 proposal

- PPPs are specifically addressed in Article 19
- To implement R+I activities of strategic importance
- Based on Article 187 TFEU or on a Contractual agreement
- Identified in an open way based on five specific criteria
- Envisaged cross-thematic Contractual PPPs: The three in the Recovery Plan plus Sustainable process industry (SPIRE)





Contractual PPP Implementation under FP7

- Quick response in defining the strategy
- Efficient launch of calls within the Recovery Plan
- Increased industry participation: >50%, SMEs ~ 23% (~ 30% in FoF)
- More innovation related activities, including demonstration
- The full EC contribution of € 1.6 billion has been provided





Article 19 Public-private partnerships

Horizon 2020 may be implemented through public-private partnerships where all the partners concerned commit to support the development and implementation of research and innovation activities of strategic importance to the Union's competitiveness and industrial leadership or to address specific societal challenges.





Article 19 Public-private partnerships (cont)

Involvement of the Union in those partnerships may take one of the following forms:

- financial contributions from the Union to joint undertakings under the Seventh Framework Programme;
- to new public-private partnerships set up on the basis of Article 187 of the Treaty;
- entering a contractual agreement between the partners which specifies the objectives and conditions of the partnership.





Article 19 Public-private partnerships (cont)

Public-private partnerships shall be identified in an **open** and transparent way based on all of the following criteria:

- the added value of action at Union level;
- the scale of impact on **industrial competitiveness**, sustainable growth and socio-economic issues;
- the **long-term commitment** from all partners based on a shared vision and clearly defined objectives;
- the scale of the resources involved and the ability to leverage additional investments in research and innovation;
- a clear **definition of roles** for each of the partners and agreed key performance indicators over the period chosen.





Specific Programme text PARTNERING

Joint Undertakings established in FP7 under Article 187 of the Treaty, for which further support may be provided under the above conditions are:

the Innovative Medicines Initiative (IMI), Clean Sky, Single European Sky ATM Research (SESAR), Fuel Cells and Hydrogen (FCH), and Embedded computing systems (ARTEMIS) and Nanoelectronics (ENIAC).

The latter two may be combined into a single initiative.





Specific Programme text PARTNERING

Other public-private partnerships supported under FP7 for which further support may be provided under the above conditions are: Factories of the Future, Energy-efficient Buildings, European Green Cars Initiative, Future Internet.

Further public-private partnerships may be launched under Horizon 2020 where they meet the defined criteria. This may include partnerships on Information and Communication Technologies in the areas of **photonics and robotics**, on **sustainable process industries**, on **bio-based industries** and on security technologies for maritime border surveillance.





Status update for the FoF, EeB and SPIRE PPPs

- A Parallel Process for FoF, EeB, SPIRE (and also GC) PPPs
- Draft Multi-annual Roadmaps (including 3 Parts: Vision, R+I strategy and Expected impacts) publicly available in July 2012
- Wide stakeholders consultation launched until 1 October 2012
- PPP AIAGs meetings (end of October) reviewed the outcomes from the Consultation process and discussed on the Expected impacts including the industrial commitment, the leverage and the KPIs.





Timetable envisaged

- Updated versions of the Multi-annual Roadmaps expected to be put on shorter open validation exercise
- Next meetings of the AIAGs, beginning of December, in order to revise the final version of the Multi-annual Roadmaps
- High level meeting with EC services with the high industrial representatives of the Cross-thematic PPPs (FoF, EeB, SPIRE and GC) scheduled on 19 December.
- Final FoF, EeB and SPIRE PPP Multi-annual Roadmaps by the end of 2012.
- Further Workshops on the Impact of FoF and EeB PPP projects in March 2013
- Aiming at being ready for the start of Horizon 2020

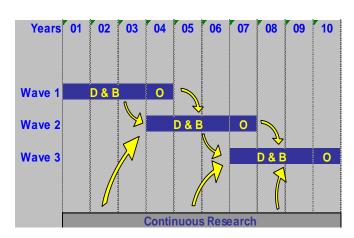






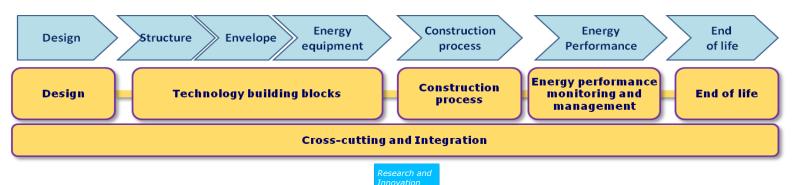


From a wave action



- **Step 1:** Reducing the energy use of buildings and its negative impacts on environment through integration of existing technologies (main focus of the current EeB PPP);
- **Step 2:** Buildings cover their own energy needs;
- Step 3: Transformation of buildings into energy providers, preferably at district level.

To a value-chain approach







Thank you for your attention



Information on PPPs
ec.europa.eu/research/industrial_technologies/
www.e2b-ei.eu
www.ec.europa.eu/research/horizon2020

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