



Public-Private Partnerships in FP7 and in Horizon 2020

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EUROPE 2020 and the PPPs

- **Strategy for smart, sustainable and inclusive growth:**
 - Innovation, Competitiveness, Green & Social aspects
 - Focus on facing the Grand Challenges: Ageing, Energy ...
 - 3% for R&D and 20/20/20 climate targets should be met
- **Support to PPPs** as a tool to combine public & private funding
- PPPs may play a role regarding the **7 flagship initiatives**
- The **Horizon 2020** proposal promotes the use of PPPs

Horizon 2020: Key elements

- Three pillars: **societal challenges, industrial competitiveness and excellence in science**
- More emphasis on **innovation**
- More involvement of industry via the **industrial deployment of key enabling technologies**, and through **PPPs** - institutional and contractual



Horizon 2020

Total indicative budget: 80 000 M€*

Excellent science

- *European Research Council*
- *Future and Emerging Technologies*
- *Marie Curie actions*
- *Research infrastructures*

**Indicative Budget:
24 598 M€***

Industrial leadership

- *Leadership in enabling and industrial technologies*
- *Access to risk finance*
- *Innovation in SMEs*

**Indicative Budget:
17 938 M€***

Societal challenges

- *Health, demographic change and wellbeing*
- *Food security, sust. agriculture, marine and maritime research & the bioeconomy*
- *Secure, clean and efficient energy*
- *Smart, green and integrated transport*
- *Climate action, resource efficiency and raw materials*
- *Inclusive, innovative and secure societies*

**Indicative Budget:
31 748 M€***

* 2014-20, in constant 2011 prices

Industrial deployment of key enabling technologies

What are KETs?

- Six strategic technologies
- Driving competitiveness and growth opportunities, contribution to knowledge and societal challenges
- Cut across many sectors

- **Nanotechnologies**
- **Advanced Materials**
- **Micro- and nano-electronics**
- **Photonics**
- **Biotechnology**
- **Advanced Manufacturing**

**KET High level group
& EC Communications**



Horizon 2020: Leadership in Enabling and Industrial Technologies

- A common approach to enabling and industrial technologies:
 - ICT (incl. 2 KETs: micro- and nano-electronics, photonics)
 - Nanotechnologies, Advanced Materials, Advanced Manufacturing
 - Biotechnology
 - Space
- Innovation: Emphasis on technology development, industrial-scale pilots and demonstrators, prototyping and validation
- Specific support for "multi-KETs" / "cross-KETs"
- Strong focus on leveraging private sector investment
- Important role of PPPs to implement KET-related activities

Why Public-Private Partnerships?

- To solve problems together with industry
- To strengthen European industrial leadership
- To facilitate prioritisation of R&I in line with Europe 2020 objectives and industry needs
- To leverage research and innovation elements
- To strongly commit industry to joint objectives

Experience until now: PPPs in FP7

Joint Technology Initiatives

- **Innovative Medicines Initiative (IMI)**
- **Clean Sky**
- **Single European Sky ATM Research (SESAR)**
- **Fuel Cells and Hydrogen (FCH)**
- **Embedded Computing Systems (ARTEMIS)**
- **Nanoelectronics (ENIAC)**

"Contractual" PPPs

- **Factory of the Future (FoF)**
- **Energy-efficient Buildings (EeB)**
- **Green Cars (GC)**
- **Future internet (FI-PPP)**

Case of Joint Technology Initiatives

- Implemented through Joint Undertakings with public and private membership (EU bodies)
- Firmly anchored in Themes of the Cooperation SP
- In fields of major European public and industrial interest, with large scale and long term goals
- Lengthy process (of years) to set them up
- Specific solutions outside FP rules
- Industry and EC are keen to continue

Joint Technology Initiatives in FP7

- Innovative Medicines Initiative (IMI)
- Embedded Computing Systems (ARTEMIS)
- Aeronautics and Air Transport (Clean Sky)
- Nanoelectronics Technologies 2020 (ENIAC)
- Fuel Cells and Hydrogen (FCH)
- Single European Sky ATM Research (SESAM)

Case of the PPPs using FP7 rules

- **The Recovery Plan** launched **FoF, EeB and GC** in End 2008
- **A new model** had to be developed, **different from JTIs**
- **PPPs with FP7 rules** demonstrated **clear benefits to industry**
- **Europe 2020** and the **May 2010 Council** supported the PPPs
- **Key industry role to shape strategy**, but implementation in FP7
- **Stakeholders backed these PPPs** in response to CSF Green Paper
- **Horizon 2020** and Partnering Communication promote further use

Existing "contractual" PPPs in FP7

"Factories of the future" PPP initiative

- In the manufacturing sector - **€ 1.2 billion in 4 years**

"Energy-efficient buildings" PPP initiative

- In the construction sector - **€ 1 billion in 4 years**

"Green cars" PPP initiative

- In the automotive sector - **€ 1 billion (R&D) in 4 years**

"Future Internet" PPP initiative - launched in 2011

- In the ICT sector – **outside the Recovery Plan**

Implementation of "contractual" PPPs

- **Industry has a leading role** in defining research priorities
- **Ad-hoc Industrial Advisory Group** advises on implementation
- **Multi-annual Roadmap** allows long-term investment plans
- **Pre-defined budget** ensures continuity
- More emphasis on **relevance of industry** and **impact**
- Focused on **enabling industrial technologies**
- Increased use of **SME-friendly** instruments and **demonstration**

Features in "contractual" PPP calls

- **Involvement of industry** in the preparation
- Industrial partners **provide added value**
- **High share of industrial experts** in the evaluation
- Single stage evaluation **to reduce time to contract**
- **Coordinated & Joint Calls for Proposals**
- **Specific PPP Annex to the WP** for higher visibility

but...

Open to all according to normal FP7 rules

Outcome of "contractual" PPPs in FP7

- **Quick response in defining the strategy**
- **Efficient launch of calls within the Recovery Plan**
- **Increased industry participation: >50%, SMEs ~ 23%**
- **More innovation related activities, including demonstration**
- **The full EC contribution of € 1.6 billion has been provided**
- **Industry and EC are keen to continue under Horizon 2020**

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

Criteria for Public-Private Partnerships

(in Article 19 of the Horizon 2020 proposal)

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.



Contractual Arrangement

Article 19 of the Horizon 2020 proposal states that the involvement of the Union in a PPP may be via ...

"entering a contractual agreement between the partners ...

*...which specifies the **objectives** of the partnership, respective **commitments** of the partners, **key performance indicators**, and **outputs to be delivered** including the **identification of research and innovation activities** that require support from Horizon 2020"*

Commitments from industry

- PPP goals should form part of the industrial strategy of the sector
- Public funds for the PPP should be matched by major R+I industrial investments in the sector in full synergy
- The public funds should contribute to increased leverage
- Adequate key performance indicators should be identified and agreed to measure progress towards the goals
- The industrial efforts should also consider Training

PPPs named in the SP for Horizon 2020

- Continuation of existing JTIs/JUs
- Continuation of existing "contractual" PPPs
 - Factories of the Future, Energy-efficient Buildings, Green Vehicles, Future Internet***
- New initiatives to consider:
 - JTI under preparation: ***Bio-based industry***
 - New contractual PPPs under preparation: ***Sustainable process industry (SPIRE), Photonics, Robotics, High Performance Computing***

Article 187 PPPs

- Budget is fully earmarked
- Greater thematic visibility
- Higher ownership of industry partners
- Industry shares management costs
- There is no commitology
- Rules for community bodies apply
- Derogations of FP rules are needed

Contractual PPPs

- Earmarked budget is only indicative
- Industry proposes strategy and advises on WPs
- Commitology as usual under Horizon 2020
- Commission manages the programme
- Framework Programme rules for participation
- Industry commitment via Partnership Agreement

Contractual PPPs: timetable envisaged

- Draft Multi-annual Roadmaps (including Vision to 2030, R+I strategic content and Expected impact) available in July 2012
- Wide stakeholders consultation launched until October
- Updated versions ready in early 2013 after validation
- Communication on PPPs in Horizon 2020 on June 2013
- Formal PPP approval process launched by EC during 2013
- Aiming at being ready for the start of Horizon 2020

Contractual PPPs: multiannual roadmap

- Part1: Vision
 - Scene setter, background, overall vision, actors, added-value at EU level, strategic objectives, ...
- Part 2: Research and Innovation Strategy
 - Scope of R&D&I challenges, R&D&I subdomains and priorities, indicative timeline and estimated budget.
- Part 3: Expected Impacts
 - Industry commitments, expected impacts, ability to leverage additional investments, measuring progress, monitoring, KPIs.
- To be added later: Legal information and suggested partner roles
 - Governance model and decision making processes, modus operandi and Statute of the association, IPR issues, ...

Roadmap Public Consultations

- Started in July 2012 and lasting until end September 2012
- Three parts covered: Vision, R&I strategy and Expected Impacts
- High visibility all over Europe: thousands of downloads and hundreds of contributions (e.g. over 600 textual comments and 1800 prioritisation inputs for FoF or 450 full questionnaires for SPIRE).
- Many types of organisation involved: research, universities, SMEs, companies, and private non-profit organisations
- Many sectors involved: agriculture, ceramics, chemicals, energy, engineering, food, minerals, pulp & paper, water, engineering, electro-mechanical, robotics, photonics, etc.
- Many Associations/European Technology Platforms involved

Proposed process for setting contractual PPPs

- Agreement EC/private sector signed after a Commission Decision
- Impact assessment not necessary for such a Decision
- Contractual arrangement would include agreed objectives, commitments, key performance indicators, deliverables, governance and termination
- Private sector partners will advise the Commission on research priorities
- Implementation via 'normal' programme for research and innovation with the Horizon 2020 RfP and with standard commitology.

Further information ...

FP7 Research Themes and Call information:
ec.europa.eu/research/participants/portal

Information on the Research PPPs:
ec.europa.eu/research/industrial_technologies/

