



# Horizon 2020

# Innovation related aspects

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*"The views expressed in this presentation are those of the author and do not necessarily reflect the views of the European Commission"*

# The Knowledge Triangle at Work

To be a genuinely competitive in the knowledge economy, one must be better:

- in producing knowledge through research
- in diffusing it through education
- in applying it through **innovation**



# Interaction with Industry

- **Researchers as a Supplier**  
Technology transfer, know-how generation, access to world-class facilities, incubators, innovation and start-up centres
- **Researchers as a User**  
Procurement of innovative solutions and advanced prototypes, driving the innovation capacities of industry, spearheading technological development

# Innovation and Industrial Support Measures

- Researchers can provide advanced services to industry
- Researchers need access to leading-edge technologies
- Exploit the innovation potential associated with procurement from industry during the construction of a new Research facilities, Technology Parks, Centres of Excellence, etc.
- Stimulate innovation both from within the research community itself and in the supplier industry



# Innovation Support Measures in Horizon 2020

- Development of a portal of calls, tenders and future needs and technology transfer opportunities in research infrastructures of pan European interest
- Networking of procurement professionals to encourage exchange of good practices across research sectors
- Awareness campaign towards industry (including SMEs) on the potential of research facilities for their activities

# Innovation in Research

- Fostering the innovation potential and developing the human resources of research facilities
- Innovation and development of human resources are mainstreamed in all relevant parts of the work programme

## **Example: Innovative Procurement Pilot action in the field of scientific instrumentation**

- Exploit the strong innovation potential that researchers have towards their supplier industry
- Act as early adopter of advanced technologies
- Trigger innovation in companies supplying high-tech components (e.g. new stronger magnets or lasers)
- Stimulate R&D partnerships with industry
- Develop the EU capacities and industrial supply in high-tech areas such as scientific instrumentation

## e.g. Innovative Procurement Pilot Action

- **Feasibility studies:** focus on analysing and exploring the use of PCP or PPI procurement for common purchasing operations of a set of RIs; analysis of the state of the art and of the market offer and
  - **Pre-Commercial Procurement** in the field of scientific instrumentation (PCP): define requirements and terms of reference for common procurement of scientific instrumentation and organise joint PCP action
- or
- **Public Procurement of Innovative** scientific instrumentation (PPI): joint procurement of innovative instrumentation by research infrastructures to enhance their services



# Pre-Commercial Procurement PCP

- Requires R&D to get new solutions developed. Problem clear, but pros/cons of several potential competing solutions not compared/validated yet
- No commitment to deploy (this is PPI)
- Public sector buys R&D to steer development of solutions to its needs, gather info about pros/cons of alternative solutions to be better informed to make specs for a follow-up PPI possibly later, to avoid supplier lock-in (create competitive supply base)
- Public sector buys R&D from several suppliers in parallel (comparing alternative solution approaches), in form of competition evaluating progress after critical milestones (design, prototyping, test phase), risks & benefits of R&D (e.g. IPRs) shared with suppliers to maximise incentives for wide commercialisation

# Public Procurement of Innovative Solutions

## PPI

- Requires solution which is almost on the market or already on the market in small quantity but not meeting public sector requirements for large scale deployment yet
- No R&D involved (R&D already done, or no R&D needed to solve problem)
- Public sector acts as launching customer/early adopter/first buyer for innovative products and services that are newly arriving on the market (not widely commercially available yet)
- Public sector acts as facilitator establishing a buyers group with critical mass that triggers industry to scale up its production chain to bring products on the market with desired quality/price ratio within a specific time
- After potentially a test/certification/labelling, the buyers group buys a significant volume of solutions.

# Funding Innovative Procurement

- **PCP** co-fund Actions (90% funding rate):  
Provides EU co-funding for an actual PCP procurement (one joint PCP procurement per action) and for related coordination and networking activities (e.g. to prepare, manage and follow-up the PCP call for tender)
- **PPI** co-fund Actions (35% funding rate):  
Provides EU co-funding for an actual PPI procurement (one joint PPI procurement per action) and for related coordination and networking activities (e.g. to prepare, manage and follow-up the PPI call for tender)

# Innovation in Research Grants

## **Foster the potential for innovation – including social innovation:**

- by reinforcing partnerships with industry
- transfer of knowledge and other dissemination activities
- use of research facilities by industrial researchers
- involvement of industrial associations in consortia or in advisory bodies

# Innovation Procurement - daily work

**European Assistance for Innovation Procurement** ([www.eafip.eu](http://www.eafip.eu)) listed key public procurers for Innovation Procurement in EU Member States (e.g. listed below) in areas like: Health, Education, Environment, Public Administration, Transport, Water:

- SI: 129
- HR: 143
- HU: 132
- BG: 113
- RO: 141
- GR: 203

## Innovation in your Daily Work

The **European Assistance for Innovation Procurement (eafip)** initiative provides free assistance to European public procurers for implementing pre-commercial procurements and public procurements of innovative solutions.

Apply now to receive hands-on local assistance which includes also legal support:

<http://eafip.eu/assistance/>



**Thank you for your Attention!**



**HORIZON 2020**

Find out more:

[www.ec.europa.eu/research/horizon2020](http://www.ec.europa.eu/research/horizon2020)