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# **I nuovi strumenti della Commissione Europea per promuovere lo sviluppo di innovazioni: Public Procurement for Innovative Solutions (PPI) e Pre Commercial Procurement (PCP)**

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# About empirica



- ❑ Consultancy established 1988 in Bonn, Germany
- ❑ Operating internationally, focus on EU and national projects and studies
- ❑ Partnering with private and public bodies - utilities, technology companies, universities, and government bodies
- ❑ Coordinator of the European Network for Information Society Research (ENIR): Partners in all EU and EEA countries as well as Canada, Japan, Switzerland, USA, China, Australia (<http://www.enir.org>)
- ❑ Areas of expertise
  - Health & Care
  - eAccessibility and eInclusion
  - Research & Innovation
  - eSkills & Work
  - Energy
- ❑ Partnerships with organisations from the Campania region
  - AOU Federico II University Hospital in Naples
  - University Hospital of Salerno
  - Campania Integrated Regional ICT Health Network as Reference Site of the EIP on AHA

# Background on PCP and PPI



- ❑ Demand-driven innovation creates challenges/opportunities for the companies to solve
- ❑ Why Demand side focus?
  - Studies show that demand-driven public procurement has a greater impact on innovations than traditional public aid in R&D activities
  - Public procurement potential is underutilised in EU due to fragmentation of demand, lack of incentives
- ❑ EU and National funding bodies have started financing Demand side activities such as Innovative and Pre-Commercial Public Procurement
- ❑ To balance better supply and demand side innovation policies, the European Commission is taking several actions:
  - Better policy framework: EU policy initiatives in the context of the Europe 2020 strategy and the Digital Agenda for Europe targets to increase the use of PCP and PPI by 2020.
  - EU co-financing: Horizon 2020 reinforces the co-financing for public procurers around Europe that address common challenges by undertaking PCPs or PPIs jointly.
  - Networking - Experience sharing – Training

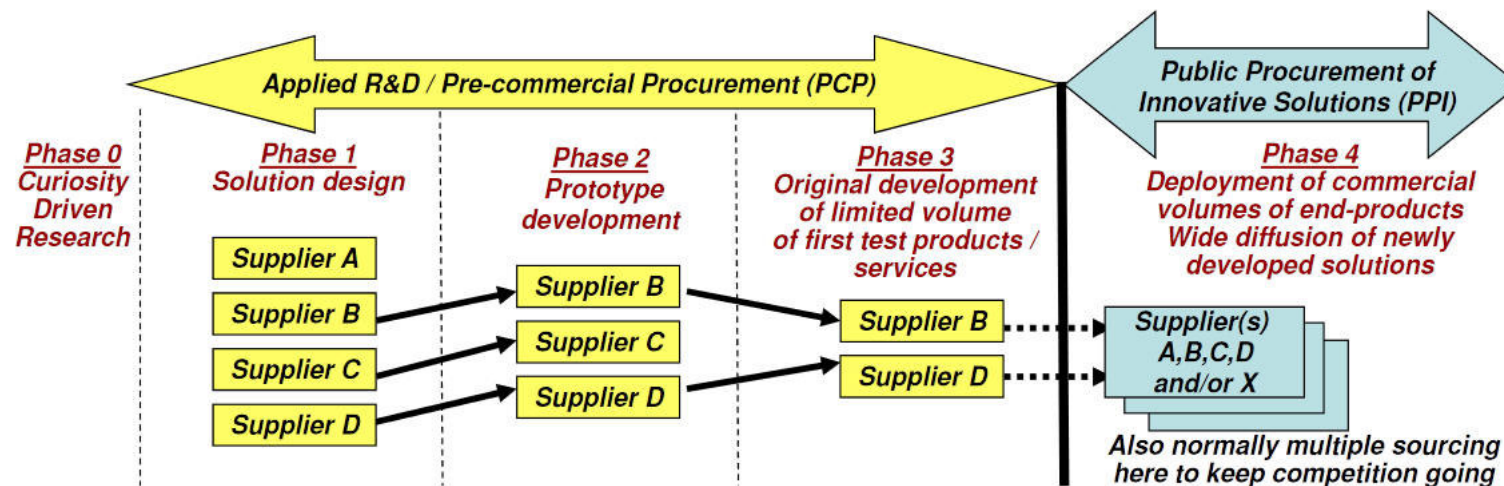
## ❑ Pre-Commercial Procurement (PCP)

- used when there are no near-to-the-market solutions yet and new R&D is needed.
- Public procurers (typically from different EU countries), co-financed by the EC, provide funds to suppliers to procure R&D services, a process divided in stages (solution design, prototyping, development and first product testing)
- Public procurers can then compare the pros and cons of alternative competing solutions approaches. This will in turn enable to de-risk the most promising innovations step-by-step

- ❑ Public Procurement of Innovative solutions (PPI)
  - used when challenges can be addressed by innovative solutions that are nearly or already in small quantity in the market and don't need new Research & Development (R&D). The public sector uses its purchasing power to act as early adopter of innovative solutions which are not yet available on large scale commercial basis.

# PCP and PPI

- ❑ PCP and PPI are complementary
  - PCP to steer the development of solutions towards concrete public sector needs, whilst comparing/validating alternative solution approaches from various vendors
  - PPI to act as launching customer / early adopter / first buyer of innovative commercial end-solutions newly arriving on the market



# Comparison of PCP and PPI



	PCP	PPI
<b>When?</b>	Requires R&D to get new solutions developed. Problem clear, but pros/cons of <b>competing solutions</b> not compared/validated yet. <b>No commitment to deploy yet.</b>	Requires solution which is <b>almost on the market/already on the market</b> in small quantity, but not meeting public sector requirements for large scale deployment yet. No R&D involved.
<b>What?</b>	Public sector buys R&D to <b>steer development of solutions to its needs</b> , gather knowledge about <b>pros/cons of alternative solutions</b> , to avoid supplier lock-in later.	Public sector acts as <b>launching customer/early adopter/first buyer</b> for innovative products and services that are newly arriving on the market.
<b>How?</b>	Public sector buys R&D from <b>several suppliers</b> in parallel (comparing alternative solution approaches), in form of <b>competition evaluating progress after critical milestones</b> , risks and benefits of R&D) shared with suppliers to maximise incentives for the wide commercialisation.	Public sector acts as facilitator establishing a <b>buyers group with critical mass</b> that triggers <b>industry to scale up its production chain</b> to bring products on the market with desired quality/price ratio within a specific time. After a test and/or certification, the buyers group <b>purchases a significant volume of products.</b>

# Benefits of PCP and PPI



## ❑ For procurers

- By developing a forward-looking innovation procurement strategy that uses PCP and PPI in a complementary way, public procurers can drive innovation from the demand side.
- PCP generates a number of solutions, ensuring creativeness and innovativeness by selecting the best option

## ❑ For vendors/suppliers/subcontractors

- Creating opportunities for companies in Europe to gain leadership in new markets
- PPI provides a large enough demand to incentivise industry to invest in wide commercialisation to bring innovative solutions to the market with the quality and price needed for mass market deployment (IPR typically remains with the vendors)



# For interested vendors/suppliers/contractors



- ❑ A total budget of circa €130 million is available for EU funding for PCP (pre-commercial procurement) and PPI (public procurement of innovative solutions) projects across the different 2016-17 Horizon 2020 work programmes.
- ❑ New PCP and PPI calls for tender are published regularly on the 'Supplement to the Official Journal' of the EU
- ❑ Each PCP and PPI is required to perform an Open Market Consultation and disseminate it widely
  - Vendors can propose ideas and give feedback on the vision of the procurers and influence the final requirements to be used in the call for tender

# Examples

- ❑ Examples of on-going EC funded PCP projects doing joint cross-border PCP procurements:
  - SILVER (Robotics solutions for elderly care)
  - CHARM (Traffic management)
  - V-CON (Virtual Construction / Modelling of Roads)
  - SMART@FIRE (Smart Personal Protective Equipment for Fire Fighter)
  - DECIPHER (applications based on Distributed EC Individual Personal Health Records)
  - PRACE 3IP (energy efficient high performance computing)
  - C4E (Cloud computing)
  - ENIGMA (lighting solutions for cities)
  - IMAILE (e-learning)
  - THALEA (telemedecine for ICU patients at increased risk)
  - UNWIRED-HEALTH (mobile care for vaccination & heart failure)
  - PREFORMA (Digital Preservation)
  - NYMPHA-MD (mental care for bipolar disorders)
  
- ❑ More info about EU funded cross border PCP projects:  
[http://cordis.europa.eu/fp7/ict/pcp/projects\\_en.htm](http://cordis.europa.eu/fp7/ict/pcp/projects_en.htm)

# Results from finished PCP and PPI projects

- ❑ Shortening of time-to-market
- ❑ Removal of supplier lock-in
- ❑ Opening market to new players/SMEs and stimulating cross-border company growth
  - In EU funded PCPs 2,5 X more new players and 25 X more cross-border contracts compared to procurement average in EU
  - 71% of contracts won by SMEs (SME lead bidder, bidding alone or with partners) compared to only 29% in public procurements across Europe
- ❑ Creating lead markets: Companies in UK ministry of defense PCPs are selling now also to US department of defense
- ❑ Joint procurement stimulates cross-border company growth
  - 31% of contracts won by bidders that are not from a country of any of the procurers in the buyers group (e.g. DE company working for UK+NL procurers) compared to only 1,26% in public procurements across Europe (also in national PCPs)
- ❑ Relevance to universities & bringing scientific results to market
  - 32% of winning contracts have university/R&D center partner in consortium
  - Winning SMEs are also often university start-ups

## Useful links

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- ❑ [Guidelines for PCP and PPI](#)
- ❑ [European Assistance on Innovation Procurement](#)
- ❑ [Procurement of Innovation Platform](#)
- ❑ [Procurement Forum](#) – find complementary organisations to build a consortium (for suppliers)



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**Thank you for your attention!**