

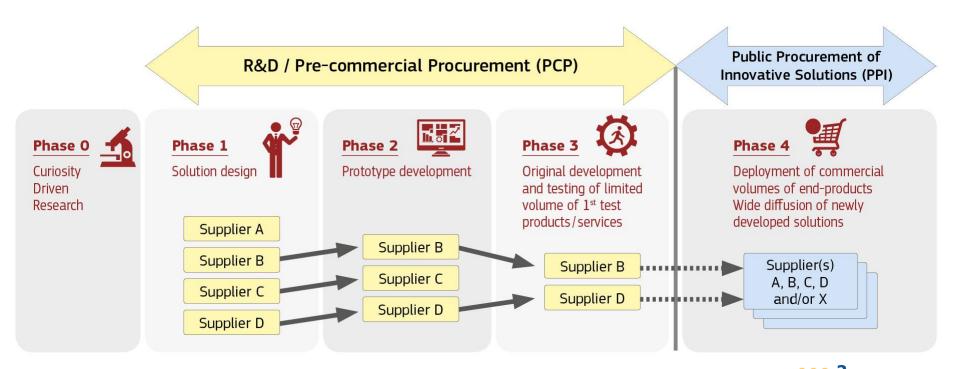
Introduction to Innovation Procurement and H2020 support

Vassilis Tsanidis
Start-ups and Innovation Unit (F3)
DG CNECT
European Commission



Innovation Procurement:

- Procurement of R&D services to tackle specific public needs when solutions are not yet on the market (PCP)
- Procurement of solutions new to the market where the public sector acts as first customer (PPI)



PCP - Pre-Commercial Progurement

When

Challenge needs radical innovation, no solution 'on' or 'close to' market yet. There are different competing 'potential' solution approaches / ideas, but still R&D needed to de-risk and compare / validate the pros and cons of different technological alternatives: No commitment to large scale deployment (PPI) yet. Procurer wants to induce step change in the market (e.g. moving from proprietary / vendor lock-in situation to better open systems and multiple vendor environment including new players)

What

 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)

How

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 (in particular related to IPRs) shared with suppliers to maximise incentives for wide commercialisation

PPI - Public Procurement of Innovative Solutions

When

- Challenge requires solution which is almost or already on the market in small quantity but not meeting requirements for large scale deployment yet. Desired solutions would be provided if clear requirements/sufficient demand would be expressed by the market. Incremental innovation (production adaptation, scaling up of production) or non-R&D innovation (e.g. organisational/process innovation) can deliver required quality/price, so no procurement of R&D involved.

What

 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)

How

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.



Why Innovation Procurement?

WIN-WIN FOR THE PUBLIC SECTOR IN EUROPE

- <u>Modernization of public services</u> improving the quality and efficiency of public services and tackling societal challenges with innovative / breakthrough solutions <u>for the benefit of the citizens</u>
- Smart use of the procurement budget to <u>remove supplier lock-in</u> and obtain <u>more open, standardized and better value for money solutions</u> in a cost effective manner
- In times of economic distress innovation procurement can <u>boost</u> <u>innovation in a country/region without extra funds</u> – only by shifting existing <u>procurement budget towards R&D and Innovation</u>
- <u>Benefits to the local economy-</u> support to the economic activity in sectors related to the innovative solutions purchased or developed
- It can create <u>growth and jobs</u> in Europe (in PCPs, suppliers can be required to do the majority of R&D in Europe)





WHY INNOVATION PROCUREMENT

WIN-WIN FOR THE PRIVATE SECTOR IN EUROPE

- The power of the public pursue can open up market/sales opportunities for innovative companies in Europe
- Public sector can act as launch customer to help start-ups in Europe scale up and finally go to market
- Demand driven Innovation (through Procurement) helps shortening time-to-market for innovative products/services

SCALE - UP EUROPE MANIFESTO

Calls on the Member States:

- to open public procurement by supporting more Innovation
- to allocate of their annual procurement budget <u>3% to Pre-Commercial</u> <u>Procurements</u> and <u>20% to Public Procurements of Innovative Solutions</u>

Growing impact at European level



More info on these EU policy initiatives on innovation procurement http://ec.europa.eu/information_society/newsroom/cf/dae/itemdetail.cfm?item_id=16605

Network national competence centers on innov proc

ERAC council recommendations eafip launched 1st joint cross-border PPI launched

2014 public proc dirs, EU state aid rules ESIF and H2020 reinforce PCP/PPI support European award for innovation proc

First joint cross-border PCPs launched (FP7)

Increasing amount of EU funding for PCP & PPI 4,5€M in 2009-10, 43 €M in 2011-12, 94 €M in 2013, 130 €M in 2014-15, 130 €M in 2016-17

European Council asking for more balanced use of supply and demand side instruments (in particular more pcp) European Council asking for more balanced use of suppliant more PCP)
and demand side instruments (in particular more PCP) Study measuring amount of R&D procured in all MS First national PCPs started by procurers in MS without EU funding

> Europe 2020: IU and DAE targets for PCP and PPI EC Survey on state of implementation of PCP across MS (national legal

FP7 & CIP: awareness raising/networking procurérs

Council & EP conclusions on PCP Communication

2010 2011 2012 **2013** 2014-15 2008 2009 2016-17

Growing impact at Member State level



DE, PL put innov. proc. in R&D&I strategy
IT (€ 150M), ES (€ 250M) to PCP/PPI struct funds
Baltics (LT, LV, EE) join Norden agreement
FR sets 2% target for innov proc.

NO, FI, SE, DK, IS min. agreement on cross border innov. proc. collaboration (including 2,5% target)

AT, NO, DK, IS, IT include innov. proc. in R&D&I strategy ES (3%), NL and UK (2,5%) set expenditure target for innov. proc.

FI, SE, ES, Flanders (BE) launch support program & competence center for procurers

FI, SE, ES, Flander (BE) include innov. Proc. in R&D&I strategy

UK NHS and MOD PCPs and PPIs, NL launching customer (PPI)

2008 2009 2010 2011 2012 2013 2014 2015 2016



H2020 support to Innovation Procurement

PCP/PPI Actions +
Coordination and Support Actions (CSAs)



Why European cooperation on PCP-PPI?

- **Speed up public sector modernisation** improve quality and efficiency of public services with breakthrough solutions
- Get better value for money through cooperation enable public sector around Europe to share cost + experience to buy new solutions that can respond to concrete public needs
- Address issues of common interest together e.g. where interoperability and coherence of solutions across borders, pooling of resources or market defragmentation is required
- Create growth and jobs in Europe help innovators bring European R&D to the market (the majority of R&D in H2020 funded PCPs should take place in Europe, ltd set of first test products can be bought in the PPI from companies in the PCP)

Forms of support



- Coordination and Support Actions (100% funding rate):
 - Support only coordination activities e.g. preparation of a PCP or PPI by a group of procurers (identifying common challenges, open market consultation with industry before initiating a concrete PCP or PPI etc)
 - CSAs do not provide EU co-financing for an actual PCP or PPI procurement
- PCP Actions (max 90% funding rate):
 - Provide EU co-financing for an actual PCP procurement (one joint PCP procurement per action) + for related coordination and networking activities (e.g. to prepare, manage and follow-up the PCP call for tender)
- PPI Actions (35% funding rate):
 - Provide EU co-financing for an actual PPI procurement (one joint PPI procurement per action) + for related coordination and networking activities (e.g. to prepare, manage and follow-up the PPI call for tender)

! New!



OVERVIEW OF THE INNOVATION PROCUREMENT RELATED CALLS IN THE H2020 WP.2018-2020

N.B. Draft work programme parts are made public before the adoption of the work programme 2018-2020 to provide potential participants with the currently expected main lines of this work programme. Only the adopted work programme will have legal value

2018-2020 calls in support of PCP and PPI

This is draft information only!

2018-19 WP adoption end October

2018 (41,2 M€)

PCP actions

- ICT based solutions for any area of public interest: 6 M€ (<u>ICT-34</u>)
- Digital health & care:22 M€ (DTH-10)
- Security: 8,2 M€ (SU-GM03)

CSA actions

- Integrated healthcare / diagnosis: 2M€ (HCO-12)
- Digital health & care:
 3M€ (HCC-04)

2019 (83 M€)

- PCP actions
 - ICT based solutions for any area of public interest: 6 M€ (ICT-34)
 - Next generation sequencing for routine diagnosis: 40 M€ (BHC-10)
 - Wave energy: 20 M€ (<u>LC-SC3-JA-3-2019</u>)
 - Security: 7 M€ (SU-GM03)

PPI actions

Digital health & care solutions for an ageing society: 10 M€ (DTH-05

2020 (100+ M€)

- PCP actions
 - Infection & integrated care: (BHC-20)
 - Climate Change resilience (<u>LC-CLA-13-2020</u>)
 - 100% renewable energy: (<u>LC-SC3-RES-10-2020</u>)
 - Security (SU-GM03)

PPI actions

- Infection & integrated care: (BHC-20)
- Innovative HPC systems (<u>INFRAEDI-04</u>)

PCP actions: co-finance (maximum 90%) actual procurement cost for joint PCPs + coordination costs PPI actions: co-finance (35%) actual procurement cost for joint and coordinated PPIs + coordination costs CSA actions: co-finance (100%) only coordination costs e.g. procurer networks preparing future PCPs/PPIs Note: WP2020 info is still indicative. WP2020 will only be finalised next year.



Results from the first EU funded PCPs for the procurers

- > Increased budget efficiency
- > More open interoperable solutions
- > Encouraging commercialisation of results by vendors
- > Improving quality and efficiency of public services

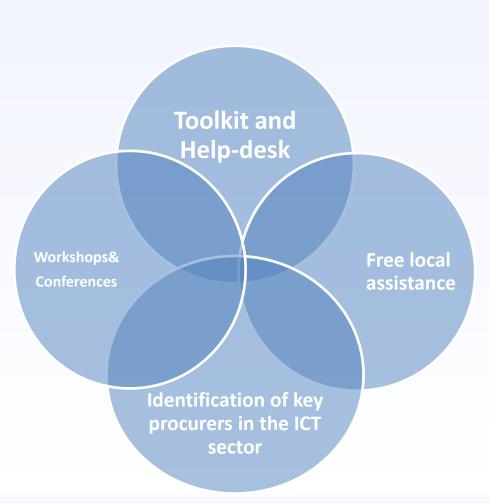
Results for the Companies

Creating growth and jobs in Europe

- 98,7% of bidders do 100% of R&D activities for the PCP in Europe (2 have committed to do minimum 68% resp. 85% of R&D in Europe)
- Opening a route-to-market for new players/SMEs
 - 71% of contracts won by SMEs (SME lead bidder, bidding alone or with partners)
 - Compared to 29% average in public procurements across Europe
 - Mostly small young SMEs: 23% below 10 people, 58% below 50 people, 51% less than 10 y. old
- Helping also larger market players bring products to the market
 - 18% of contracts won by large companies as single bidder
 - 11% of contracts won by consortia of larger companies and SMEs bringing innovative products together to the market
- Relevance to universities & bringing scientific results to market
 - 28% of winning contracts have also a university/R&D center partner in consortium
 - Winning SMEs are also often university start-ups
- Stimulating cross-border company growth
 - -34,6% 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 1,26% average in public procurements across Europe

eafip INITIATIVE









EAFIP TOOLKIT

The *eafip* Toolkit aims to provide support to policy makers in designing PCP and PPI strategies, and to procurers and their legal departments in implementing such procurements. It is consisted of three modules:

- Module 1: A strategic module addressed to policy makers, providing economic and case evidence about the impacts and benefits of PCP and PPI, together with concrete guidance on how to embed PCP and PPI into innovation strategies;
- **Module 2:** An operational module addressed to public procurers aimed at clarifying the pre-requisites and key steps to design and implement an innovation procurement process (PCP and PPI); and
- **Module 3:** A legal / operational module addressed to legal services aimed at clarifying legal issues and provide practical 'how-to' guidelines, supported by templates.



Study on the Strategic Use of Innovation Procurement in the Digital Economy / Purpose

- To develop an approach that enables **systematic measuring** and **monitoring** of the progress across different countries in Europe on implementing a policy mix of measures to mainstream **innovation procurement.**
- To gather for the first time based on the above approach qualitative and quantitative evidence per country about the implementation progress, good practice cases and remaining barriers.
- To identify **key disparities, commonalities and trends across Europe** arising from the data gathered from different countries and to report on the key findings of this analysis
- To propose **methodology and guidelines** to collect in the future the above type of data per country in a systematic way and to integrate the results into statistics, scoreboards and benchmarking exercises across Europe



For more detailed info on Innovation Procurement please the following link:

http://ec.europa.eu/digital-agenda/en/innovation-procurement

where you can also find the brochure on the PCP/PPI projects that are currently EU Co-funded

<u>http://ec.europa.eu/digital-agenda/en/news/innovation-procurement-power-public-purse</u>

European Assistance for Innovation Procurement (Eafip): http://eafip.eu/



Thank you very much for your attention

Vassilis Tsanidis Dr.Jur
Start-ups and Innovation Unit (F3)
DG CNECT
European Commission
Vasileios.Tsanidis@ec.europa.eu