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Initiatives on Innovation Procurement

2018
The EGG
BRUSSELS
Innovation Procurement potential underutilised in Europe
Data from EU studies

- Public procurement is 'the tool' that enables potential buyers to steer industry R&I to its needs. However, it is under-used in EU.

<table>
<thead>
<tr>
<th>PCP:</th>
<th>EUR</th>
<th>'PPI:</th>
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<tbody>
<tr>
<td>US</td>
<td>50 $Bn</td>
<td>15%</td>
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<tr>
<td>EU</td>
<td>2.5 €Bn</td>
<td>5%</td>
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- Also large differences within Europe

Frontrunner Member States invest 5 times higher % of total public procurement budget than followers on ICT and R&D proc:

- ICT procurement: 13.5% in UK <-> 2.5% in GR
- R&D procurement: 0.5% in UK <-> 0.1% in GR

Fragmentation of demand: Majority of contracts below 60K€

Pre-Commercial Procurement (PCP) to steer the development of solutions towards concrete public sector needs, whilst comparing/validating alternative solution approaches from various vendors.

Public Procurement of Innovative Solutions (PPI) to act as launching customer / early adopter / first buyer of innovative commercial end-solutions newly arriving on the market.

Innovation Procurement = PCP + PPI / Complementarity
Why Innovation Procurement?
WIN-WIN FOR THE PUBLIC SECTOR IN EUROPE

- Modernization of public services – improving the quality and efficiency of public services and tackling societal challenges with innovative / breakthrough solutions for the benefit of the citizens
- Smart use of the procurement budget to remove supplier lock-in and obtain more open, standardized and better value for money solutions in a cost effective manner
- In times of economic distress innovation procurement can boost innovation in a country/region without extra funds – only by shifting existing procurement budget towards R&D and Innovation
- Benefits to the local economy– support to the economic activity in sectors related to the innovative solutions purchased or developed
- It can create growth and jobs 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 innovative businesses 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 3% to Pre-Commercial Procurements and 20% to Public Procurements of Innovative Solutions
6 purchasing groups from FR, UK, IT, BE and LU launched on 30 September 2014 the first 'joint' transnational PPI procurement in the healthcare domain in Europe: Resah-Idf (FR), SCR Piemonte (IT), NHS commercial solutions (UK), Centrale de Marchés Mercure (BE), Entente des hôpitaux (LU).

The French lead procurer setup a framework agreement with several vendors under French law on behalf of the whole group of procurers to buy 5 different lots of equipment. All 6 purchasing groups have then setup specific contracts under their own national legislation to buy products from any vendor selected under the framework agreement.

HAPPI

URL: www.happi-project.eu

Erasmus University Medical Center PPI

Robotics based bed washing system
One of the PPI procurements of www.ecoquip.eu
Won European PPI award 2014 (supplier = SME)

More efficient and sustainable healthcare solution
Cost reduction: 35%
CO2 footprint reduction: 65%
5 buyers: Univ, hospitals of Aachen (DE), Maastricht (NL), Parc Tauli Sabadell (ES), East Limburg (BE), Oulu (FI).

PCP (June 2015 - Oct 2016) developed, tested and deployed in small scale a highly interoperable platform for tele-detection and tele-care of ICU patients at increased risk. PCP started with 5 vendors: 3 delivered a system that meets the needs (PCP opened market for SMEs). Self-learning and prediction algorithms enable earlier diagnosis and higher efficiency in ICU

-> Cost savings (buyers group), 25% reduction in sepsis mortality and 20-50% in length of hospital stay

Enlarged buyers group now starts THALEA II PPI to deploy certified solutions at wider scale across EU

Entities involved: Lombardy region, Niguarda hospital, ARCA regional purchasing body

PCP (2014-2016) developed and tested: easy-to-use automated universal system for moving hospital beds, with anti-collision and safety systems, not needing guide lines or tracks even on non rectilinear routes. PCP opened market to 6 SMEs.

Benchmarking: 40% expected cost savings (cheaper solution + less accidents and functional limitations)

PPI for deployment under preparation

New PCPs on other health topics starting
- **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)
Overview EU funded projects in the health ageing sector doing PCPs (FP7/H2020)

- **THALEA (PCP)**
  Tele-detection/care of ICU patients

- **SILVER (PCP)**
  Robotics ageing well

- **DECIPHER (PCP)**
  Services mobile health data

- **NYMPHA-MD (PCP)**
  Mental care for bipolar disorders

- **MAGIC (PCP)**
  Post stroke recovery

- **PCP in Human Brain Project**

- **PCP on supercomputing / brain modelling**

- **EMPATTICS (PCP)**
  Chronic disease self-management

- **STARS (PCP)**
  Stress reduction

- **RELIEF (PCP)**
  Pain self-management

- **LIVE INCITE (PCP)**
  Life style interventions in perioperative care

- **ANTISUPERBUGS (PCP)**
  Detection of superbugs

- **NIGHTINGALE (PCP)**
  Wearable sensors

- **PROEMPOWER (PCP)**
  Diabetes disease self-management
Overview EU funded projects in the health/ageing sector doing PPIs (CIP/H2020)


Finished PPIs

**HAPPI (PPI)**
Healthy Ageing

**STOP AND GO (PPI)**
Telecare for elderly with multiple conditions

**RITMOCORE (PPI)**
Remote care for Arrhythmia / Pacemaker patients

**THALEA II (PPI)**
Telemedicine for ICU patients

**ECOQUIP & LCB-HEALTHCARE (PPI)**
Low carbon healthcare

Contract Implementing PPIs

Open market consultation is about to start
16 PCPs are busy - or have completed - procuring by now

- **SILVER** (Robotics for elderly care)
- **THALEA** (Telemedicine for intensive care unit patients at increased risk)
- **SMART@FIRE** (Smart protective equipment for fire fighters)
- **Human Brain Project** (High Performance Computing for brain simulation)
- **Cloud for Europe** (Cloud computing for governments)
- **DECIPHER** (Mobile health services)
- **V-CON** (Virtual construction of road infrastructure)
- **CHARM** (Traffic management)
- **PRACE 3IP** (Energy efficient supercomputing)
- **PREFORMA** (Long term digital preservation)
- **IMAILE** (Personalised e-learning solutions)
- **NYMPHA-MD** (Mental care for bipolar disorders)
- **HNSciCloud** (Science cloud platform for research community)
- **QUACO** (Quadrupole magnets for large hadron collider)
- **MAGIC** (Post stroke recovery)
- **SELECT4Cities** (Internet of Everything platform for Cities)

HBP PCP doesn't result from a PCP call. HBP decided itself to implement a PCP in the HBP research project.
Achieved market engagement

- **Open Market Consultations**
  - Involving between 70 to 300 companies and researchers per PCP
  - Broaching the views of companies and researchers from all over Europe and beyond in preparation of the upcoming PCP procurement

- **Call for Tenders**
  - Tender docs downloaded typically between 50 to 300 times
  - Nr of offers received typically between 10-48 (4-7 for specialised/low budget PCPs)
  - Offers received from all over Europe and beyond

- **Contract award**
  - 73 procurers cooperating in the 16 buyers groups
  - 104 contracts awarded in total
  - Winning bidders involving 147 companies and 20 universities/research centres
  - Total value of the PCP procurements: between € 450.000 and € 9.000.000
    - Contract values for phase 1: between € 15.000 and € 180.000 (per contractor)
    - Contract values for phase 2: between € 20.000 and € 900.000 (per contractor)
    - Contract values for phase 3: between € 65.000 and € 2.700.000 (per contractor)
Info about impacts of the procurements

• 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 years 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

• Creating growth and jobs in Europe
  98.7% of bidders do 100% of R&D in Europe (2 have committed to do minimum 68% resp. 85% Of R&D in Europe)
2018 calls in support of PCP and PPI

2018 (41,2 M€)

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

- **CSA actions**
  - Integrated healthcare / diagnosis: 2 M€ (**HCO-12**) 
  - Digital health & care: 3 M€ (**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€ (**LC-SC3-JA-3-2019**) 
  - Security: 7 M€ (**SU-GM03**) 

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

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

2020 (100+ M€)

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

- **PPI actions**
  - Infection & integrated care: (**BHC-20**) 
  - Innovative HPC systems (**INFRAEDI-04**) 

**PCP actions:** co-finance (max 90%) actual procurement cost for joint PCPs + coordination costs

**Note:** Lower max funding rates are used for the security PCPs (70%) and wave energy PCPs (50%) !!!

**PPI actions:** co-finance (max 35%) actual procurement cost for joint or coordinated PPIs + coordination costs

**CSA actions:** co-finance (max 100%) only coord/netw costs e.g. procurer networks preparing future PCP/PPIs

**Note:** WP2020 info is still indicative. WP2020 will only be finalised next year.
For more detailed info on Innovation Procurement please the following link:

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

And links to the web-pages of all projects funded-projects https://ec.europa.eu/digital-single-market/en/eu-

European Assistance for Innovation Procurement (Eafip):
http://eafip.eu/
Thank you very much for your attention

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