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# Initiatives on Innovation Procurement

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—  
The EGG  
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A MedTech Europe grant

## The MedTech Forum

bringing HealthTech stakeholders together

# Innovation Procurement potential underutilised in Europe

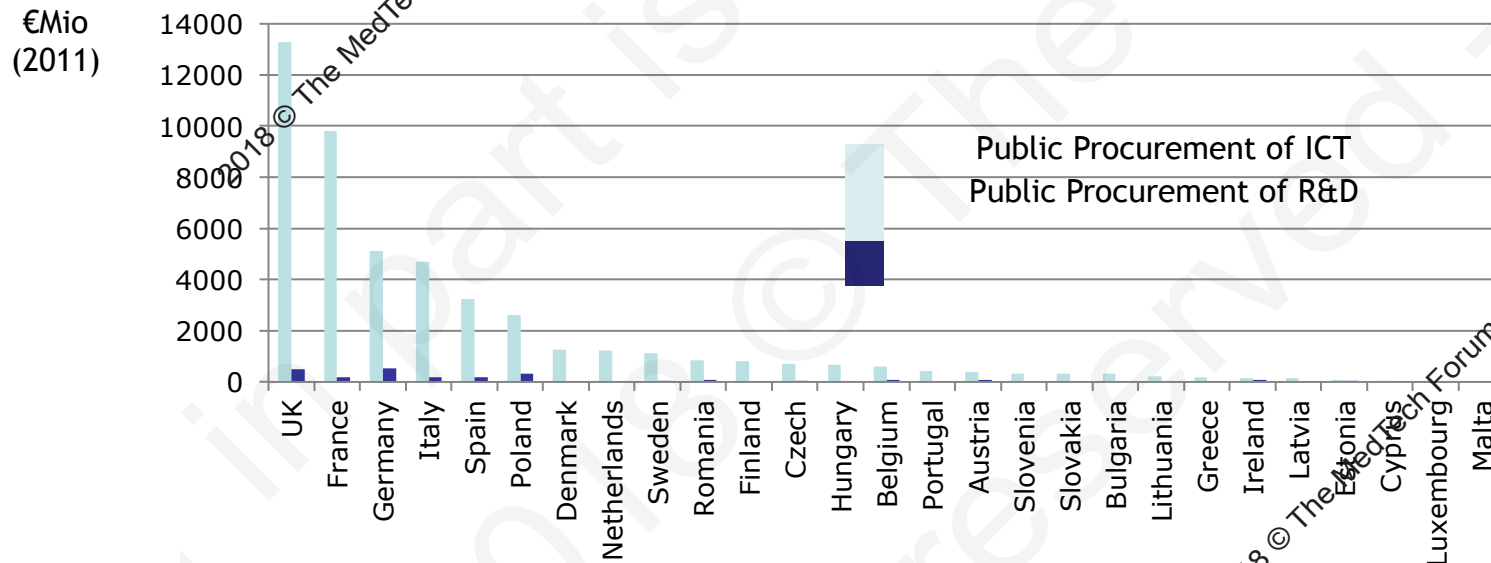
## Data from EU studies



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

	US	EU	
PCP:	50 \$Bn	2,5 €Bn	of R&D public procurement/year
'PPI:	15%	5%	of e-gov solutions procured are 'innovative'

- 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

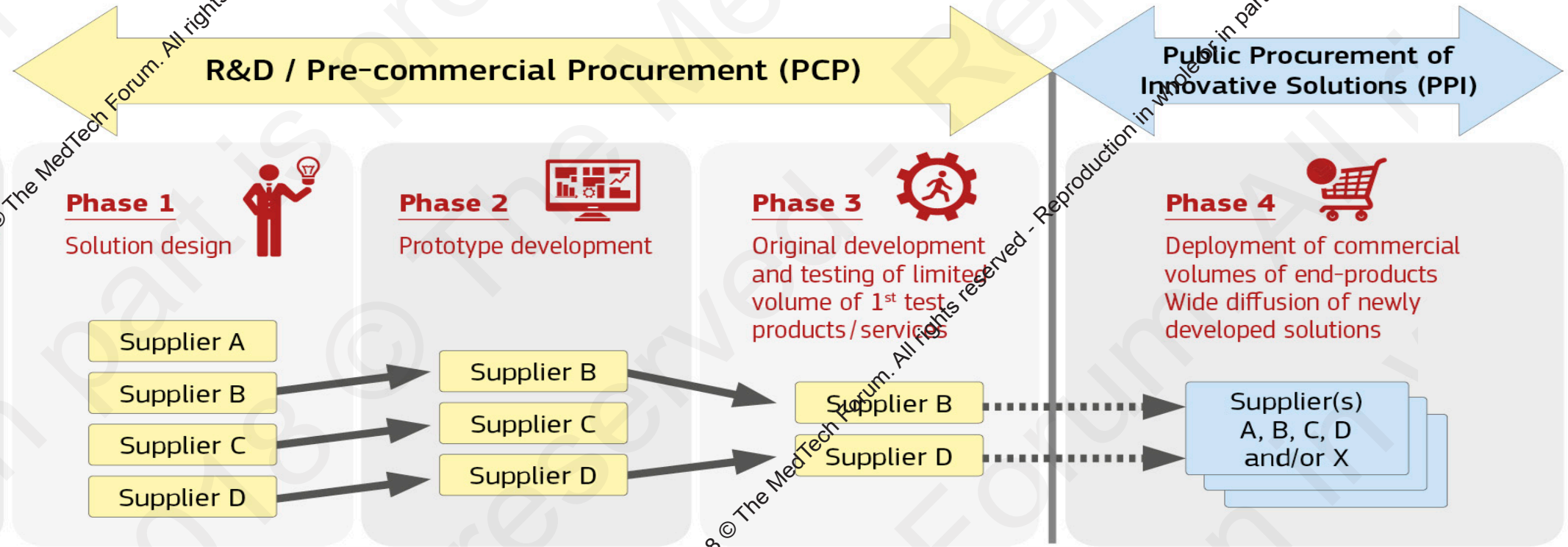
Fragmentation of demand:  
Majority of contracts below 60K€

# Innovation Procurement = PCP + PPI / Complementarity

European  
Commission

**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





## 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



### HAPPI



URL: [www.happi-project.eu](http://www.happi-project.eu)

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: Resm-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.

### Erasmus University Medical Center PPI

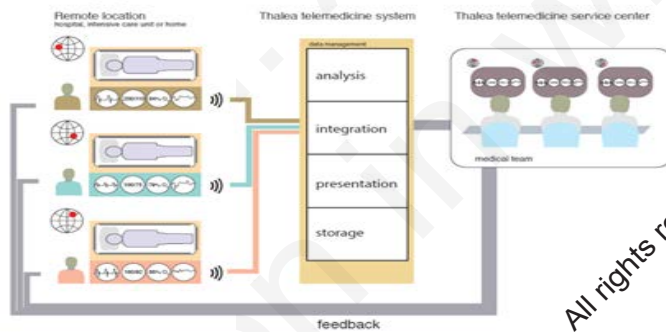


URL: <http://www.innovation-procurement.org/award/erasmus-mc/>

Robotics based benchwashing system  
One of the PPI procurements of [www.ecoquip.eu](http://www.ecoquip.eu)  
Won European PPI award 2014 (supplier = SME)

More efficient and sustainable healthcare solution  
Cost reduction: 35%  
CO<sub>2</sub> footprint reduction: 65%

## THALEA (I & II)



[http://eafip.eu/wp-content/uploads/2015/12/7\\_G.MARX\\_.pdf](http://eafip.eu/wp-content/uploads/2015/12/7_G.MARX_.pdf)

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

## Niguarda PCP



URL: [http://inspirecampus.eu/wp-content/uploads/2014/09/INSPIRE\\_case\\_study\\_LOMBARDY\\_hospital\\_pcp3.pdf](http://inspirecampus.eu/wp-content/uploads/2014/09/INSPIRE_case_study_LOMBARDY_hospital_pcp3.pdf)

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

# 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, 1st 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)

More info on: <http://ec.europa.eu/digital-agenda/en/eu-funded-projects>



**Finished PCPs**

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

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

**Contract Implementing PCPs**

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

**PCP in Human Brain Project**  
*PCP on supercomputing / brain modelling*

**Open market consultation ongoing**

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

**NIGHTINGALE (PCP)**  
*Wearable sensors*

**Call for tenders open**

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

**STARS (PCP)**  
*Stress reduction*

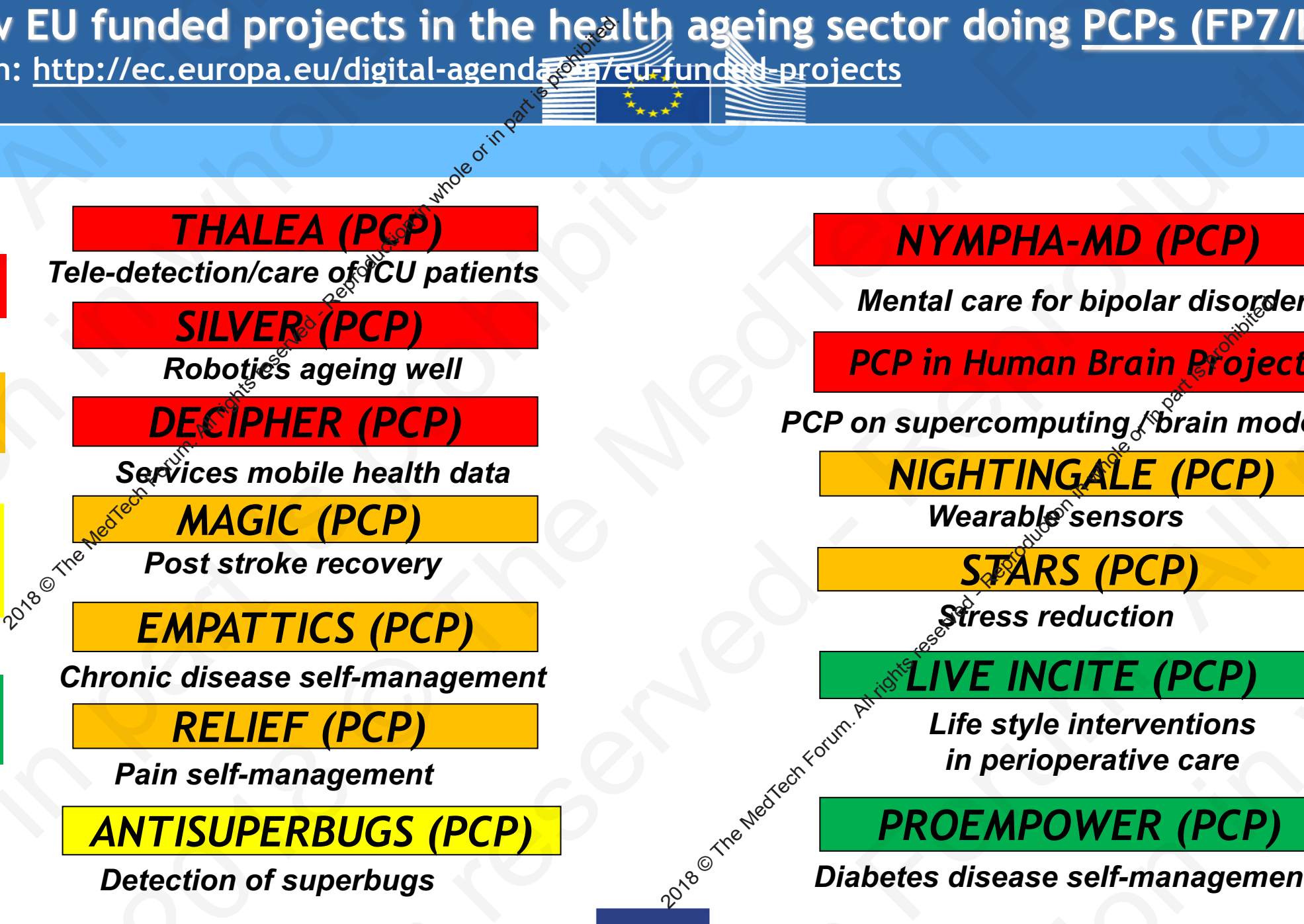
**EMPATTICS (PCP)**  
*Chronic disease self-management*

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

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

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

**PROEMPOWER (PCP)**  
*Diabetes disease self-management*



# Overview EU funded projects in the health/ageing sector doing PPIs (CIP/H2020)

More info on: <http://ec.europa.eu/digital-agenda/en/eu-funded-projects>



**Finished PPIs**

**HAPPI (PPI)**

*Healthy Ageing*

**STOP AND GO (PPI)**

*Telecare for elderly with multiple conditions*

**Contract Implementing PPIs**

**RITMOCORE (PPI)**

*Remote care for Arrhythmia / Pacemaker patients*

**THALEA II (PPI)**

*Telemedicine for ICU patients*

**Open market consultation is about to start**

**ECOQUIP & LCB-HEALTHCARE (PPI)**

*Low carbon healthcare*

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# Ongoing and completed PCP procurements



- 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)

completed  
PCP

ongoing  
PCP

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 centra
- 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)

# 2018-2020 calls in support of PCP and PPI



## 2018 (41,2 M€)

## 2019 (83 M€)

## 2020 (100+ 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: 2M€ ([HCO-12](#))
- Digital health & care: 3M€ ([HCC-04](#))

### 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](#))

### 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:

<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

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

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

European Assistance for Innovation Procurement (Eafip):

<http://eafip.eu/>

**Thank you very much  
for your attention**

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