

Opportunities in H2020 (video conference)

Lieve Bos, Policy Officer, DG CONNECT, European Commission



HORIZON 2020 SUPPORT TO INNOVATION PROCUREMENT



Pre-commercial procurement (PCP) versus public procurement of innovative solutions (PPI)



Public sector is faced with important challenges.

To tackle these challenges often public sector transformations are needed.

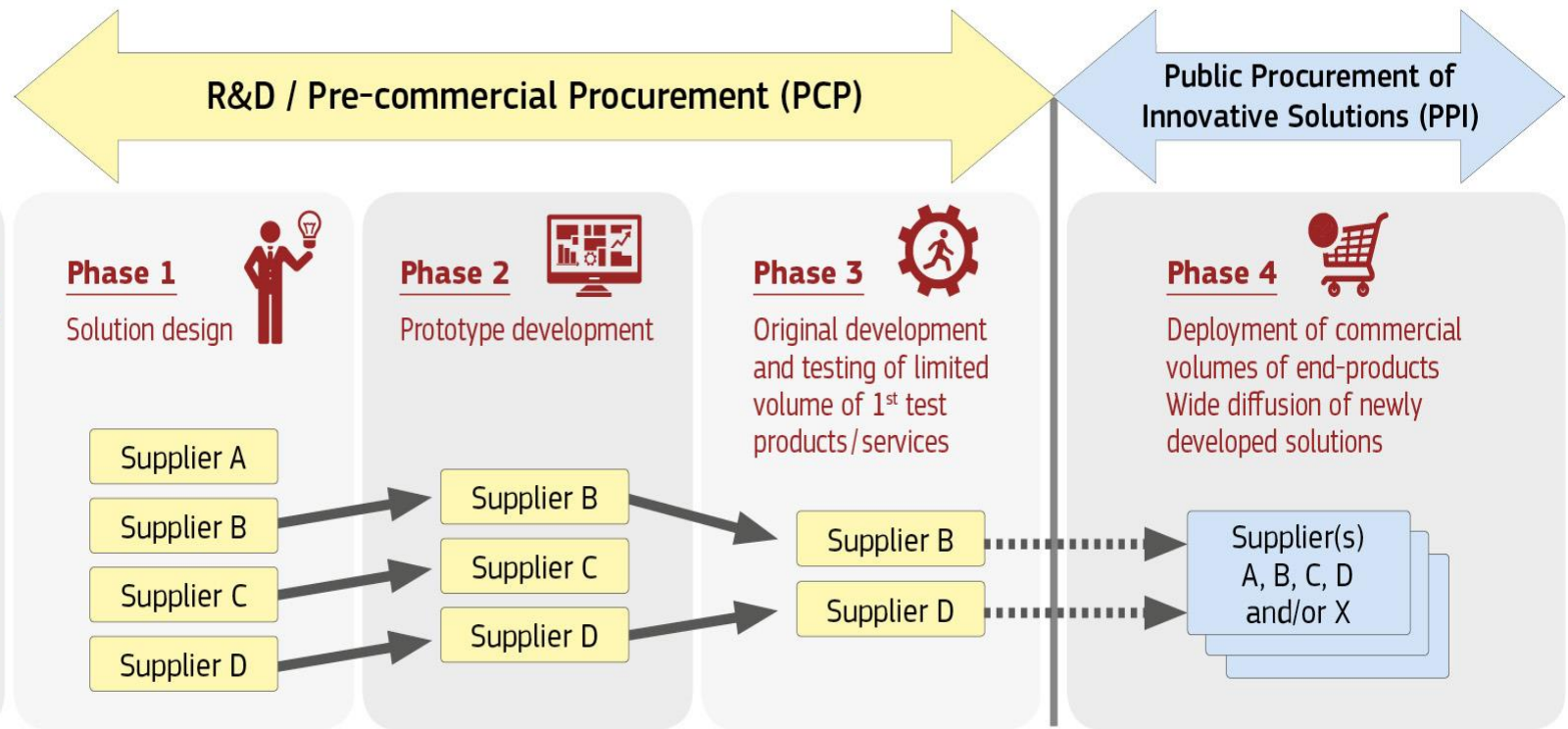
*- In many cases, solutions are close to the market and would be provided if clear requirements/sufficient demand expressed by market. Incremental innovation (product adaptation, scaling up of production...) or non-R&D innovation (e.g. service innovation) can deliver required quality/price, so no need for R&D procurement. Public sector provides seal of approval for innovative solution by acting as launching customer/early adopter **(PPI)***

*- In other cases, addressing the problem requires radical innovation, there is no available solution 'on' or 'close to' the market yet. There are different competing potential solution approaches but R&D still needed to de-risk and compare different technological alternatives before committing to large scale deployment. Procurer wants to induce step change in market (e.g. moving from proprietary/vendor lock-in to better open systems with multiple vendors incl. new players) **(PCP)***

Innovation Procurement = PCP + PPI / Complementarity



- **PCP** to steer the development of new solutions towards concrete public sector needs, whilst comparing/validating alternative solution approaches from various vendors and enabling new players to prove themselves against established ones
- **PPI** to act as launching customer / early adopter / first buyer of innovative commercial end-solutions newly arriving on the market



Growing impact at Member State level



*PCP and PPI in ESIF: PL, FR,...
EE, LV develop innov. proc. strategy*

*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)

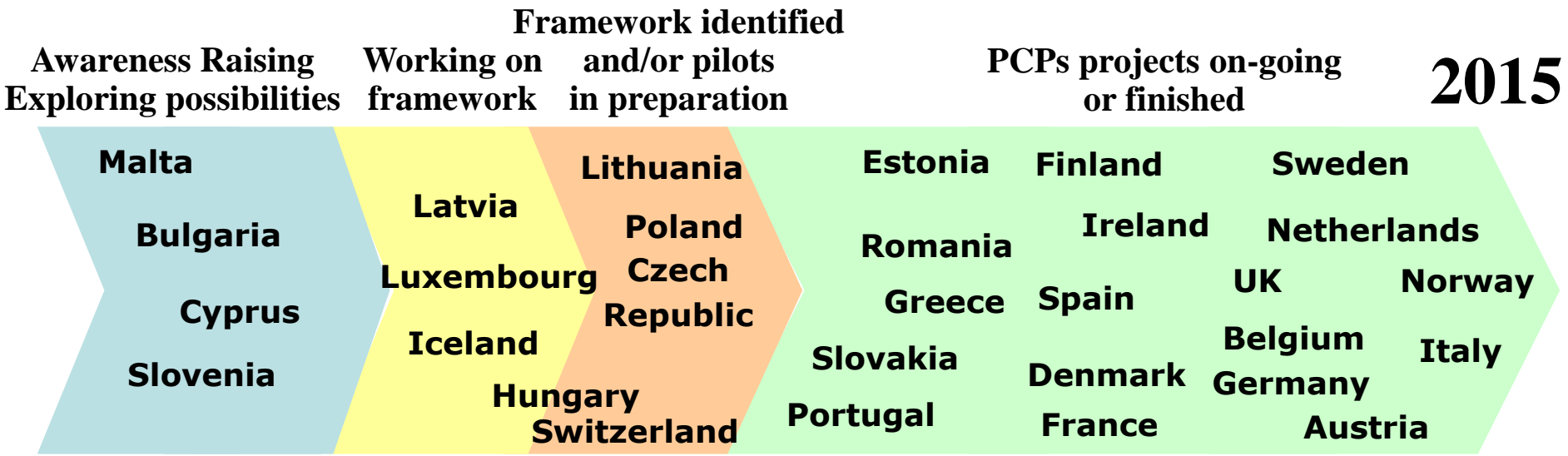
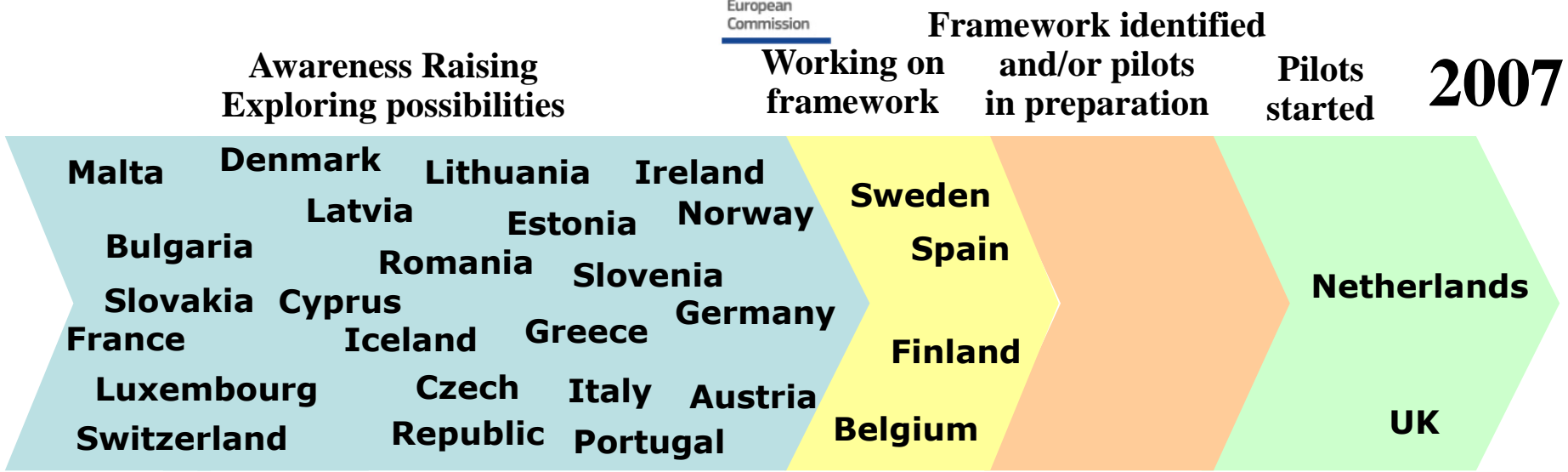
2008 2009 2010 2011 2012 2013 2014-15

Progress PCP implementation

Learn from first movers



European Commission



What can countries/regions do?



Political encouragement

- Modernising public sector 'a priority'
Quality-efficiency improvement targets
e.g. Lombardia/IT, UK, Flanders/BE
- Target % proc budgets to innovation
Monitoring framework
e.g. UK, NL, ES, Nordics, FR

Implementation

- Innov Proc Competence center
Training / assisting procurers
(e.g. SE, FI, ES, Flanders/BE, DE)
- Innov Proc financial support program
(e.g. SE, FI, ES, Flanders/BE, DE)

Encourage demand side to meet supply side

- Early notification innov proc needs
- Open market consultations
Meet the buyers events

Leverage EU funding

- Horizon 2020
 - ESIF
 - EIB loans
- } Increased support for innov proc

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)

Overview EU funded projects doing PCPs (FP7)

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



HEALTH AGEING

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

UNWIRED-HEALTH (PCP)

Mobile care for vaccination & heart failure

Human Brain project

PCP on supercomputing/brain modelling

TRANSPORT

CHARM (PCP)

Traffic Management

V-CON (PCP)

Virtual road infrastructure modelling

E-GOV

Cloud for Europe (PCP)

Cloud computing

PREFORMA (PCP)

Long term digital preservation

SUSTAINABILITY

PRACE 3IP (PCP)

High Performance Computing

EDUCATION

IMAILE (PCP)

Personalised learning needs

SAFETY

SMART@FIRE (PCP)

Smart Textiles ICT for fire fighters

Overview EU funded projects doing PPIs (CIP)

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



HEALTH AGEING

HAPPI (PPI)

Healthy Ageing

STOP AND GO (PPI)

Telecare for elderly with multiple conditions

ECOQUIP & LCB-HEALTHCARE (PPI)

Low carbon healthcare

TRANSPORT

FIRED-UP (PPI)

Vehicles Fire Fighters

SYNCRO (PPI)

Smart roads communication

SUSTAINABILITY

PRO-LITE (PPI)

Cities/Metro Lighting

INNOBOOSTER (PPI)

Office Furniture & Lighting

PROBIS (PPI)

Sustainable construction

SPEA (PPI)

Sustainable buildings

INNOBUILD (PPI)

Sustainable buildings

INNOCAT (PPI)

Sustainable catering

PAPIRUS (PPI)

Sustainable construction

EU funded CSAs/Networks of procurers (FP7/CIP/H2020)

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



HEALTH AGEING

SAEPP (preparing PCP)

Ambulance ICT

C4BI (networking)

Cities on healthcare

PRO4VIP (preparing PCP)

ICT for Visually impaired

EPP-eHealth (preparing PCP/PPI)

Cities on e-health

INSPIRE (Training PCP, link with VC)

E-health procurers

TRANSPORT

P4ITS (Preparing PPI)

Intelligent Transport Systems

TRANSFORM (Networking)

City/Regional transport

ICT

PICSE (Preparing PCP/PPI)

Cloud computing research cloud

COMPLETE (Preparing PPI)

Photonics broadband

SUSTAINABILITY

WATER PIPP

Water procurers

EURECA (prep PPI)

Green data centers

GREENS (prep PPI)

Energy agencies – CO2

CEPPI 2 (prep PPI)

Cities – energy consumption

SPP regions (capacity building)

PPI – sustainability

InnProBio Forum (capacity building)

PPI – bio based products

BRODISE

Cities brown field
decontamination

PPI4WASTE

Authorities
Waste management

Evidence on impact from successful examples

More info - PCP impact study- on: <https://ec.europa.eu/digital-agenda/en/news/quantifying-impact-pcp-europe-study-smart2014-0009>

European
Commission

- **Shortening of time-to-market:** UK National Health service PCP examples achieve reduction from several years to 18 months
- **Attracting venture capital:** Companies in UK NHS PCPs attract significant VC investment, enabling them to grow faster
- **Creating lead markets:** Companies in UK ministry of defence PCPs are selling now also to US department of defence
- **Retaining lead market position:** possible via sustained PCP/PPI procurements (e.g. 60 ys of supercomputing PCPs -> IBM, Cray, HP)
- **20% cheaper products and higher product quality:** evidence from US defense multi competitor, multi phase PCP-PPI procurements
- **Removal of supplier lock-in -> 20% cost reduction:** outcome of benchmarking of CHARM PCP on new traffic management centres thanks to move towards open architecture via PCP
- **Benefits on local economy:** Estonia PPI buying Mitsubishi electric vehicles increased local Estonian economic activity in related sectors

Data collected from first 7 ongoing FP7 funded PCPs



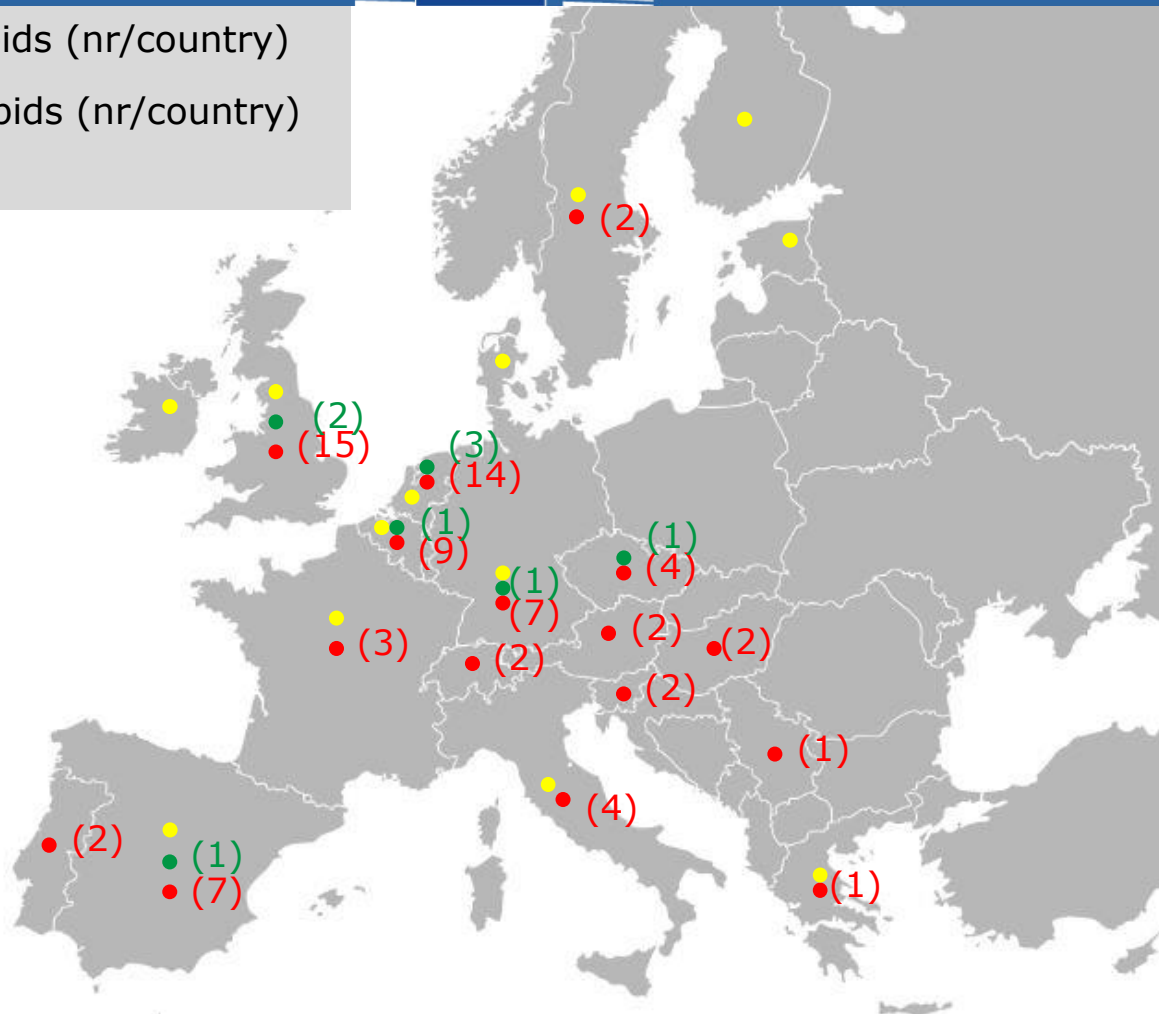
- 7 FP7 funded PCPs in ICT so far awarded contracts
 - 45 tenderers/consortia of tenderers have been awarded contracts in total
- Opening route-to-market for new players/SMEs
 - 75,5% of contracts won by SMEs (SME lead bidder, bidding alone or with partners)
 - Compared to 29% in public procurements across Europe

Mostly small young SMEs: 34,5% below 10 people, 81% below 50 people, 56% less than 10 years old
- Stimulating cross-border company growth
 - 33% 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% in public procurements across Europe
- Relevance of PCPs also to universities
 - 33% of winning contracts have university/R&D center partner in consortium
 - Winning SMEs are also often university start-ups
- Encouraging wider market commercialisation
 - Bidders offered on average 50% cheaper R&D price for keeping their IPRs (they see IPR value/real market beyond the first potential buyers, the PCP procurers)
- Creating growth and jobs in Europe
 - All bidders do 100% of R&D in Europe (except 1 doing 85% of R&D in Europe)

Geographic location winning bidders



- Companies in winning bids (nr/country)
- Universities in winning bids (nr/country)
- Procurers



Still companies out there that don't know about these procurement opportunities. Remaining 7 out of 14 FP7 PCPs will launch their call for tenders this year.

Who can help promote upcoming PCP/PPI call for tenders in their countries?

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



H2020 support to Innovation Procurement in 2016-2017

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





- ❖ **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 (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 !



Minimum 3 independent participants from 3 different MS or AC, of which minimum 2 public procurers (buyers group) from 2 different MS or AC

In addition, other entities can also participate

- In buyers group: also private/NGO procurers providing services of public interest
- In coordination/networking activities: any private/public type of entity (e.g. experts, end-users, certification bodies that assist procurers) that has no conflict of interest (no potential suppliers of solutions for the PCP/PPI)

Public procurers are contracting authorities or contracting entities as defined by the EU public procurement directives

MS = Member States

AC = Countries Associated to Horizon 2020



❑ **Buyers group**

- Beneficiaries that provide the financial commitments for the PCP or PPI.
- Min 2 public procurers from 2 different Member States or associated countries
- Shall represent the demand side for the innovations, a critical mass of procurers that can trigger wide implementation of the innovations, shall aim for ambitious quality/efficiency improvements in area of public interest.

❑ **Lead procurer**

- Public procurer in project appointed by the buyers group to lead and coordinate the PCP or PPI. Can be part of buyers group or not.

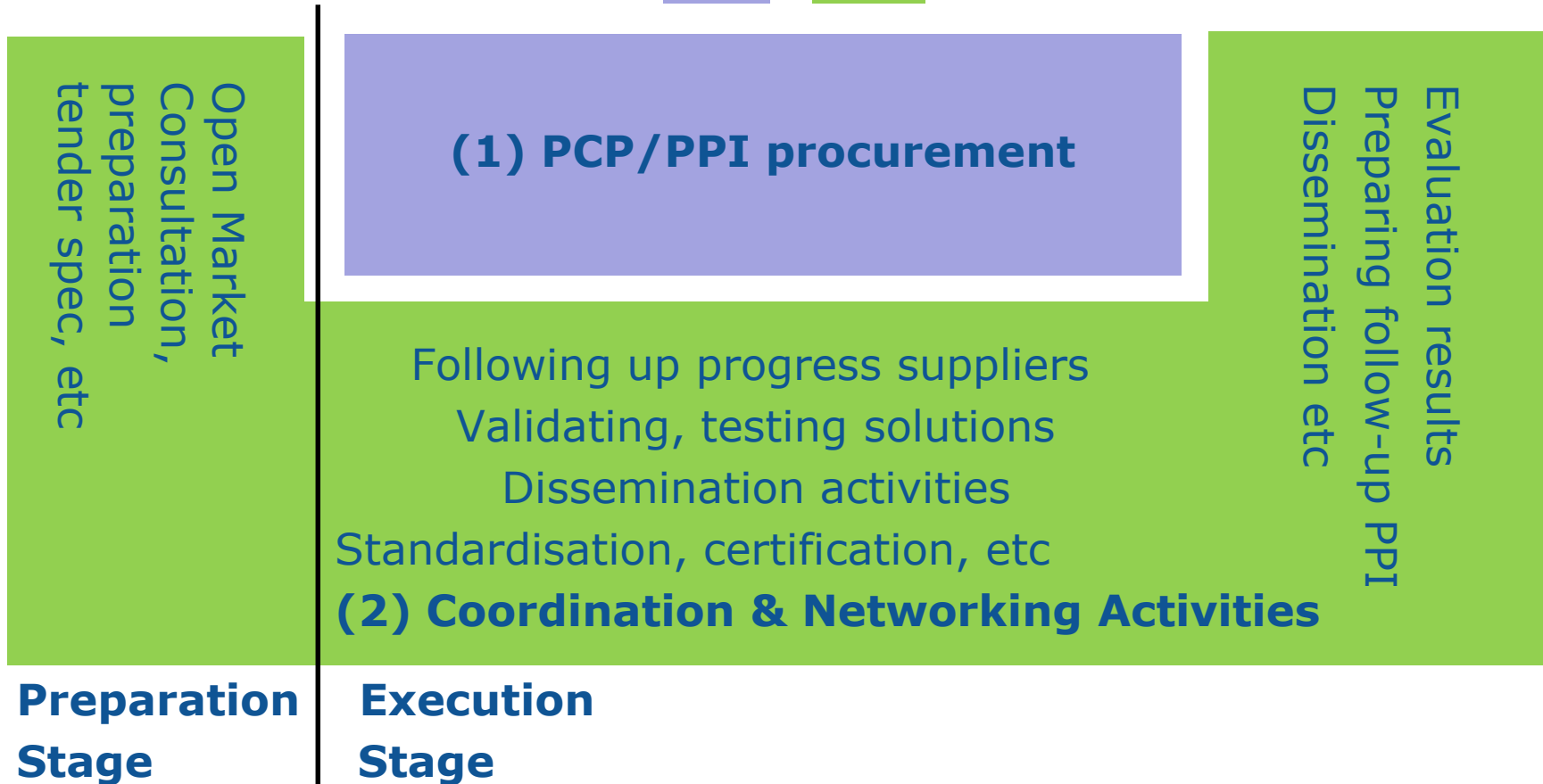
❑ **Subcontractors**

- Successful tenderers, selected by the buyers group & lead procurer as result of the PCP or PPI call for tender, to provide the R&D services (PCP) or innovative solutions (PPI).
- They do 'NOT' enter the grant agreement with the EC.

PCP and PPI actions – What is covered



PCP/PPI actions co-finance (1) + (2)



Every project goes through a preparation stage and an execution stage

PCP and PPI actions – Proposal preparation



In the proposal, the consortium shall already identify

- **A concrete 'common challenge' on which the PCP/PPI will focus**
(e.g. new solution needed to improve energy efficiency of data centres)
- **KPIs (targeted quality/efficiency improvements) for the PCP/PPI**
(e.g. target is energy efficiency improvement of min 30%)
- **Illustrating how this challenge fits in the innovation strategy / plans of the participating procurers that require innovative solutions**
(e.g. city procurer a/b/x aims to upgrade x/y/z data centres by 2018)
- Requested budget per participant and plan for preparing and executing the procurement + for the coordination and networking activities

Example proposal: contact IMAILE PCP project (www.imaile.eu)

Note this is an FP7 not H2020 proposal (differences in funding rates & proposal template)

Material Info day: Practical info how to find partners, how to prepare a proposal etc ([ppts + video](#))

Attractive success rates for proposers

PCP and PPI actions - Eligible activities



❑ **Preparation stage**

- Preparation of **one** joint PCP or PPI procurement per action
 - Open market consultation /verification of market readiness to meet procurement need
- Outcome
 - Agreed common tender specifications + Joint procurement agreement
 - Confirmation of availability of financial commitments to start PCP/PPI

❑ **Execution stage**

- Joint procurement of the R&D services (PCP) or innovative solutions (PPI)
- Follow-up of suppliers and validation of results
 - PCP: Validation/comparison of the performance of the competing PCP solutions against jointly defined criteria in real-life operational conditions
 - PPI: Evaluation of results of deploying and operating the procured solutions in real-life operating conditions
- Dissemination/exploitation of results

Other coordination/networking activities relevant to the action (e.g. preparation of follow-up PPI, contribution to standardisation / regulation / certification)

PCP and PPI actions – EU contribution



- ❑ **Reimbursement rate direct costs: Max 90% respectively 35% of eligible costs for PCP respectively PPI actions**
 - Eligible direct costs to carry out eligible activities defined in WP include:
 - Price of the R&D services (PCP) or innovative solutions (PPI) procured (if procurement conducted in compliance with requirements in Annex E WP)
 - Eligible coordination and networking activities
 - May include in-kind contributions (e.g. third parties putting resources at disposal of beneficiaries e.g. for testing of solutions)
 - VAT is an eligible cost unless for beneficiaries that can deduct it
 - Requested reimbursement for coordination and networking activities can comprise max 30% (for PCP) / max 50% (for PPI) of total requested grant
- ❑ **Plus 25% for indirect costs.** But, no indirect costs on the price of the PCP/PPI procurement or on 3rd party resources not used at the beneficiary premises
- ❑ **Pre-financing:** Yes, 1st pre-financing at start project for costs for preparation stage, 2nd pre-financing before execution stage for rest of costs (incl. call for tender)



OVERVIEW UPCOMING H2020 CALLS ON INNOVATION PROCUREMENT (PCP+PPI) IN 2016-2017



2016-2017 calls in support of PCP and PPI From "draft WPs"



2016 (~40 M€)

- **PCP actions**
 - E-health: 18 M€ ([PM-12](#))
 - ICT based solutions for any area of public interest: 4 M€ ([ICT-34](#))
 - Earth observation: 3 M€ ([EO-2](#))
- **PPI actions**
 - ICTs Ageing: 10,5M€ ([PM-13](#))
- **CSA actions**
 - Urban transport deployment: 2M€ ([MG-4.4](#))
 - Climate – environment- raw materials - resource efficiency: part of larger call ([SC5-27](#))
 - Civil protection: 1,5M€ ([2-DRS](#))

2017 (~84 M€)

- **PCP actions**
 - Robotics smart cities: 7 M€ ([ICT-27\(d\)](#))
 - Soil decontamination: 5 M€ ([SC5-26](#))
 - Broadband coms security: 10 M€ ([4-DRS](#))
 - Forensics: 10 M€ ([9-FCT](#))
 - Border control: 10 M€ ([13-BES](#))
- **PPI actions**
 - E-health standards: 8,26 M€ ([PM-19](#))
 - Supercomputing: 26 M€ ([EINFRA-21](#))
 - Energy efficiency: part of larger call ([EE-19](#))
- **CSA actions**
 - Competence centers & procurer networks any area preparing PCP/PPIs: 4 M€ ([ICT-33](#))

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

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

CSA actions: co-finance (100%) only coordination costs e.g. procurer networks preparing future PCPs/PPIs



Call deadlines in red

- Health Work program

- PM-12: E-health innovation in empowering the patient (€ 18M; 16 Feb 2016)

- ICT Work Program

- ICT-34: Open to ICT based solutions for any area of public interest (€ 4M; 12 Apr 2016)
- ICT-27(d): Robotics based solutions for smart city applications (€ 7M; 25 Apr 2017)

- Space Work program

- EO-2: Downstream earth observation services for public sector (€ 3M; 3 Mar 2016)

- Climate Work program

- SC5-26: Soil decontamination (€ 5M; 7 Mar 2017)

- Security Work Program

- 4-DRS: Broadband communication systems for disaster resilience (€ 10M; 24 Aug 2017)
- 9-FCT: Forensic tools/techniques for fight against crime/terrorism (€ 10M; 24 Aug 2017)
- 13-BES: Next generation info systems for border/external security (€ 10M; 24 Aug 2017)



Call deadlines in red

- Health Work program

- PM-13: Deployment of ICT solutions for active/healthy ageing (€ 10,5M; 16 Feb 2016)
- PM-19: Uptake of standards for exchange of digital health records (€ 8,26M; 14 Ma 2017)

- Research infrastructure Work Program

- EINFRA-21: Deploying innovative High Performance computing systems – platform driven e-infrastructure innovation (€ 26 M; 20 Sept 2016)

- Energy Work Program

- EE-19: Deploying innovative solutions for energy efficiency (part of larger call of € 47M; 7 June 2017)

Calls for Coordination and Support Actions



Call deadlines in red

• ICT Work Program

- ICT-33(a): European wide networks of public procurers preparing future PCPs or PPIs in any area of public interest that requires ICT based solutions
- ICT-33(b): European wide networks of competence centers on innovation procurement (€ 4M for ICT-33 (a) and (b) together; **25 Apr 2017**)

• Transport Work Program

- MG-4.4: Facilitating PPI on sustainable transport and mobility solutions in urban areas (€ 2M; **26 Jan 2016**)

• Climate Work program

- SC5-27: Preparing PCPs and PPIs in climate action, environment, resource efficiency, raw materials (part of a larger call of € 8,55 M; **8 Mar 2016**)

• Security Work Program

- 2-DRS: Situational awareness systems to support civil protection preparation and operational decision making for disaster resilience (€ 1,5 M; **25 Aug 2016**)



ICT is pretty wide domain. ICT covers all Information and Communication Technologies such as:

- Components and systems: embedded ICT systems, minituarisation / system integration, advanced thin large organic and large area electronics
- Advanced computing (e.g. customised and low power computing)
- Future Internet (e.g. smart novel Internet architectures and experimentation platforms,
- optical and wireless network technologies, cloud computing infrastructure and services, tools and methods for software development, web entrepreneurship)
- Content technologies and information management (e.g. big data handling, content handling and modelling, automatic learning language translation systems, creative industries / social media ICTs, ICTs for learning / teaching and gaming, multimodal natural computer interaction)
- Robotics
- Micro- and nano electronics, cross-cutting ICT KETs, photonics (e.g. (O)LED lighting)
- High Performance computing
- Cybersecurity / trustworthy ICT
- Human-centric ICT solutions



What is eafip?

A service set up by the DG CNECT (led by Stella & Corvers)

- Horizon 2020 supports groups of procurers to do joint PCPs/PPIs together)
- eafip supports single procurers to start PCP/PPIs on their own nationally

What does eafip offer?

Training across Europe

- 3 major events and 9 smaller workshops with procurers in different sectors between 2015-2018 to provide information and training on PCP and PPI

Register [here](#) to the first major event in Paris, 27-28 October 2015!

Toolkit and helpdesk

- Training is based on toolkit on why and how to implement PCP/PPI
- Helpdesk that will post replies to questions - FAQs online

Register [here](#) to stay up to date

Free local assistance

- For public procurers starting concrete PCPs and PPIs for ICT based solutions
- Includes legal assistance in the start-up and implementation of a PCP/PPI

Register [here](#) your interest in assistance before 10 November 2015

More info on Innovation Procurement:

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

- ❑ Ongoing PCP/PPI projects in ICT (and other) domains:
- ❑ <http://ec.europa.eu/digital-agenda/en/news/innovation-procurement-power-public-purse>

- ❑ More detailed info on modalities of PCP/PPI action instrument, evaluation criteria etc in General Annexes to the H2020 Work Program:
- ❑ http://ec.europa.eu/research/participants/portal/desktop/en/funding/reference_docs.html#h2020-work-programmes-2016-17

- ❑ Info about scope of each call topic, online drafting and submission of proposals on H2020 participants portal (search per topic e.g. ICT-34). Calls will be published when WPs are adopted (end October):
- ❑ http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/search/search_topics.html



Possible synergies between ESIF and Horizon 2020 on innovation procurement



Lieve Bos
Policy Officer Innovation Procurement
Innovation Unit (F2)
DG CNECT
European Commission

GENERAL RULE

IT IS NOT ALLOWED !!!!!

- To use ESIF and H2020 funding accumulatively to finance the same cost/expenditure item
- To finance the own contribution of the participant from H2020 or ESIF

CATEGORIES OF POSSIBLE SYNERGIES BETWEEN H2020 AND ESIF ON PCP/PPI

**Joint or
simultaneous
use of funds**

**Sequential
funding**

**Additional
funding**

**Alternative
funding**

A. JOINT OR SIMULTANEOUS USE OF FUNDS

**Different funding sources in the same project.
This is only possible if the cost items (eligible and submitted)
are NOT the same.**

Requires very strict financial management to separate the cost items clearly from the conception phase of the project and will only work if the funding decisions of H2020 and ESIF are synchronised.

The rules of both funding sources (ESIF – H2020) should be respected by all beneficiaries even if they receive co-financing from only one funding source.

A partner who receives co-financing from ESIF to participate in a H2020 project should also respect the H2020 rules and vice versa.



Possible scenario on PCP

- Preparation of the PCP procurement is supported by H2020 or ESIF
- In the framework of PCP action calls, some participants of the buyers group may receive co-funding from the ESIF and others from H2020.
- This case is applicable only if there is a clear distinction between budgets offered per OP and between expenditures co-funded by the ESIF (per OP) vs expenditures co-funded by H2020.

Example - each R&D provider is paid pro rata by each procurer in the buyers group according to the share of each procurer's contribution to the jointly committed budget.

Condition for success : synchronization between the ESIF calls and the H2020 PCP action calls

Coordination, Preparatory etc. activities are co-funded by H2020 (CSAs)

CO-FUNDING RATE 100% + 25% for eligible indirect costs

OR

Coordination, Preparatory etc. activities are co-funded by the ESIF (ESIF OPs or European Territorial Cooperation Programs)

DIFFERENT CO-FUNDING RATE PER PROGRAM AND/OR PARTICIPANT



<p>PROCURER A (Less developed Region)</p> <p>CO-FUNDS HIS CONTRIBUTION TO THE JOINTLY COMMITTED BUDGET THROUGH THE ESIF</p> <p>CO-FUNDING RATE up to 85% (for his contribution)</p>	<p>PROCURER C</p> <p>CO-FUNDS HIS CONTRIBUTION TO THE JOINTLY COMMITTED BUDGET THROUGH H2020</p> <p>CO-FUNDING RATE 90%* + 25% for eligible indirect costs (for his contribution)</p>
<p>EXECUTION OF A JOINT PCP</p>	
<p>PROCURER B (Transitional Region)</p> <p>CO-FUNDS HIS CONTRIBUTION TO THE JOINTLY COMMITTED BUDGET THROUGH THE ESIF</p> <p>CO-FUNDING RATE up to 60% (for his contribution)</p>	<p>PROCURER D</p> <p>CO-FUNDS HIS CONTRIBUTION TO THE JOINTLY COMMITTED BUDGET THROUGH H2020</p> <p>CO-FUNDING RATE 90% + 25% for eligible indirect costs (for his contribution)</p>

* New from 2016-2017 Horizon 2020 work programmes onward



Possible Scenario on PPI

Some procurers located in a less developed Region purchases the innovative solution co-funded by the ESIF (up to 85% rate) and other procurers in other MS are co-funded by H2020 (35% rate) to buy the innovative solution.

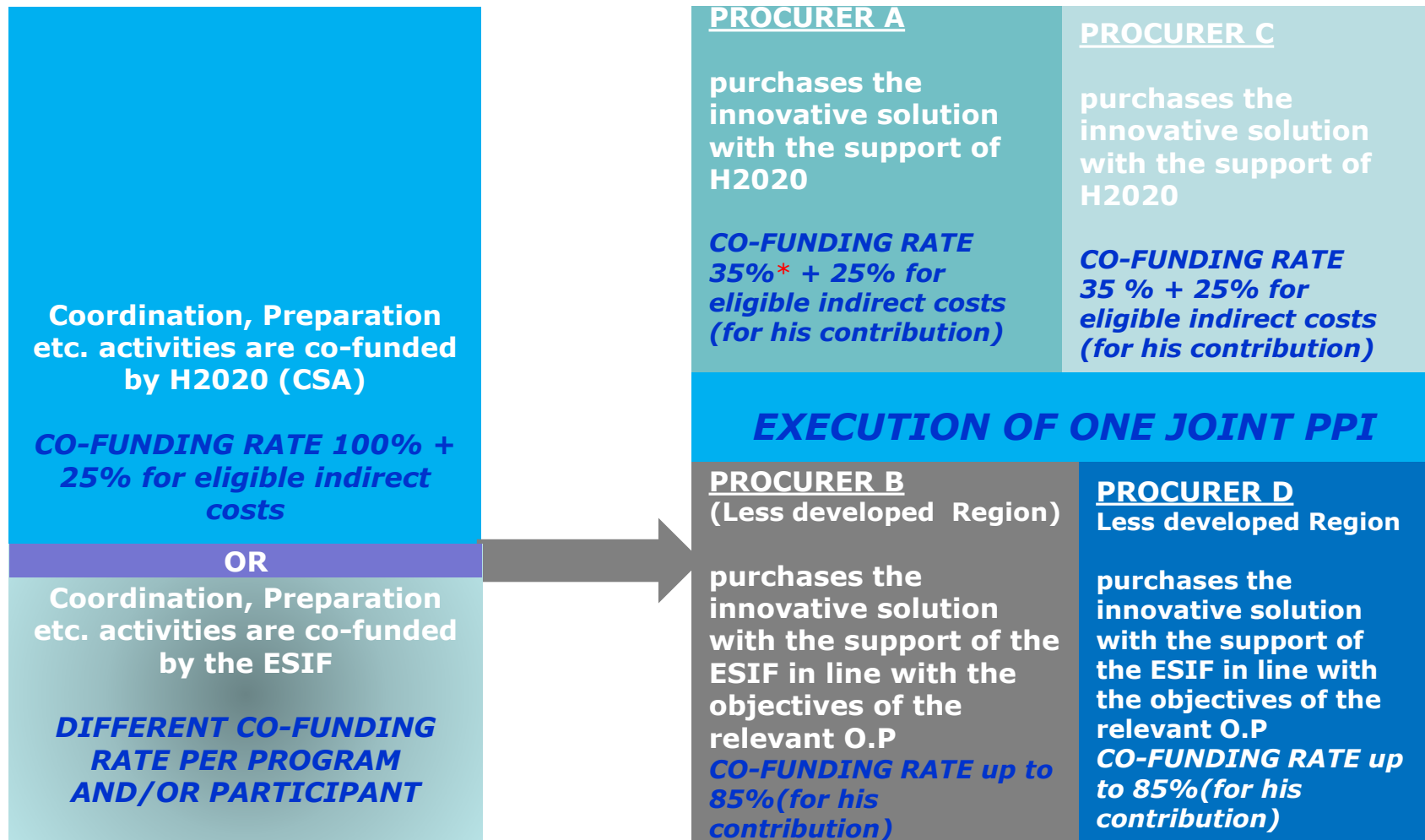
Preparation of the PPI may be co-funded either by the ESIF or by the H2020 (CSAs). In case they haven't received co-financing for the preparatory activities these can be co-funded by the PPI actions according to the rules applicable to these actions.

Applicable Scenario in cases:

- Under a joint Framework Contract/Agreement which provides the joint technical specifications separate specific contracts (possibly with lots) are implemented by the individual procurers according to their national law for the purchase of the innovative solutions they each individually need. The procurers pay individually the invoices corresponding to the innovative solutions each buys.

Or

- The lead procurer launches one procurement procedure, awards all the contracts and pays all the invoices on behalf of the group of procurers



* New from 2016-2017 Horizon 2020 work programmes onward

Possible scenario for the coordination and networking activities to prepare for PCP and PPI



In one project/consortium that prepares a future joint PCP or PPI, Procurers A and B from less developed regions are co-funded by the ESIF (up to 85% co-funding rate) and procurers B and C are co-funded by H2020 (via CSAs – if there is a specific call with co-funding rate 100% + 25% for eligible indirect costs)

- ❖ The execution of the joint PCP/PPI can follow one of the scenarios presented in the previous slides.
- ❖ Minimum conditions for success:
 - - Separate and distinguished cost/expenditure items even at project proposal level
 - - Synchronization and coordination between ESIF MAs and H2020 Managing Bodies
 -

PROCURER A
(Less developed Region)

Coordination and networking activities to prepare for a PCP are co-funded by the ESIF

CO-FUNDING RATE up to 85% (for his contribution)

PROCURER B
(Transitional Region)

Coordination and networking activities to prepare for a PCP are co-funded by the ESIF

CO-FUNDING RATE up to 60% (for his contribution)

PROCURER C

Coordination and networking activities to prepare for a PCP are co-funded by H2020 (CSA)

CO-FUNDING RATE 100% + 25% for eligible indirect costs (for his contribution)

PROCURER D

Coordination and networking activities to prepare for a PCP are co-funded by H2020 (CSA)

CO-FUNDING RATE 100% + 25% for eligible indirect costs (for his contribution)



**EXECUTION
OF A JOINT
PCP**

PROCURER A
(Less developed Region)

Coordination and preparation etc. activities for a PPI are co-funded by the ESIF

CO-FUNDING RATE up to 85% (for his contribution)

PROCURER B
(Transitional Region)

Coordination and preparation etc. activities for a PPI are co-funded by the ESIF

CO-FUNDING RATE up to 60% (for his contribution)

PROCURER C

Coordination and preparation etc. activities for a PCP are co-funded by H2020 (CSA)

FLAT CO-FUNDING RATE 100% + 25% for eligible indirect costs (for his contribution)

PROCURER D

Coordination and preparation etc. activities for a PCP are co-funded by H2020 (CSA)

FLAT CO-FUNDING RATE 100% + 25% for eligible indirect costs (for his contribution)



**EXECUTION
OF A JOINT
PPI**

B. SEQUENTIAL FUNDING

Separate successive and legally/financially not linked projects with alternating H2020 or ESIF support –
- First PCP and then PPI –

This is an easier way to combine funds with less risk of (involuntarily) creating double co-funding scenarios.

Sequential funding can go in both directions:
First ESIF and then H2020 or vice versa.



Possible Scenario

First PCP (H2020) to develop and test the innovative solution and then PPI (ESIF) for the deployment of the innovative solutions developed and tested through PCP and vice versa (ESIF for PCP and H2020 for PPI)

Example:

A group of Public Procurers from different cities are looking for a new sustainable public water supply system. It requires R&D. At first they implement a PCP (Phases 1,2,3) with the support of H2020 and different solutions are developed and tested.

Thereafter they implement a PPI with the support of ESIF/ERDF to co-fund the preparation of the call for tender and the purchase of these new solutions (each MA for the territory covered by its OP).

C. ADDITIONAL/PARALLEL USE OF FUNDS

ESIF money is not linked to a H2020 project (PCP/PPI), but a regional/national authority decides to co-fund a regional/national project or beneficiaries to enhance the H2020 project or programme in its region.

This may be particularly relevant to skills development or capacity building in innovation and cooperation

Example

Skills enhancement of the public procurer focused on the use of the innovative product that is purchased in the framework of a PPI that is co-funded by H2020

D. ALTERNATIVE FUNDING

- ESI Funds could be used for project proposals that have received positive evaluation under H2020 and could not be co-funded due to lack of H2020 funds under the call.**
- These proposals could be reoriented towards ESIF requirements and submitted at national/regional level, if this type and topic of project fits into the operational programmes of the concerned territories.

CONDITIONS FOR SUCCESS

- Include innovation procurement in the RIS3 SWOT and policy mix.
- Build PCP/PPI references into OPs in every relevant thematic objective.
- Ensure support of public demand driven innovation in the framework of the European Territorial Cooperation.
- Involve MA from the beginning to ensure availability of ESIF & synchronisation.



**Thank you very much for your
attention**



***Lieve Bos
Policy Officer Innovation Procurement
Innovation Unit (F2)
DG CNECT
European Commission***

Why split between PCP and PPI

This enables to...



- Get better and 20% cheaper products (US defense data)
- Use PPI also if no(more) R&D needed for procurement need
- Use a small budget PCP to de-risk a large budget PPI
 - PPI spec can be 'completely rephrased' benefiting from PCP lessons learnt
- Use conditions that encourage job creation 'in Europe'
 - Because PCP falls outside WTO rules
- Prevent foreclosing of competition & crowding out of private investment in R&D
 - Companies that are not financing their R&D via procurement/PCP (e.g. via grants, own company resources) can still bid for deployment contracts/PPIs
- Facilitates access to procurement market for SMEs
 - Gradually increasing contract sizes, tasks, required manpower
 - Stringent financial guarantee/qualification requirements: 'no' in PCP, 'ltd' in PPI

... above not the case if R&D is procured as part of/inside large deployment contract

Examples EU funded transnational PCPs

Traffic Management



CHARM

Project timing: Sept 2012 (48 months)

Value PCP: € 2,88M

Contact: ian.chalmers@highways.gsi.gov.uk

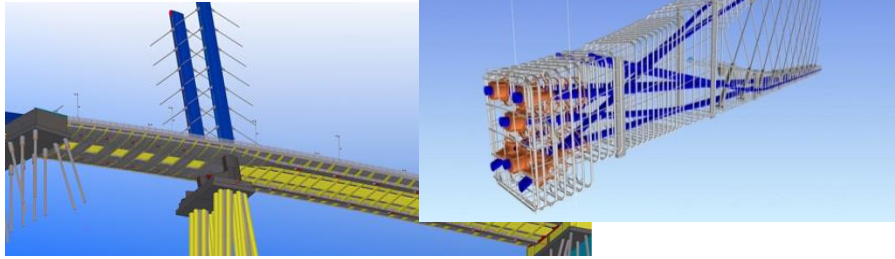
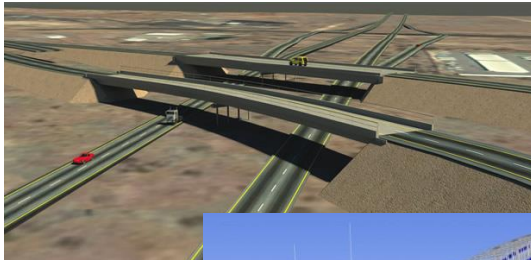
Project Website: tinyurl.com/CHARM-PCP

CHARM is a cooperation between 3 road authority procurers: Rijkswaterstaat (NL), Highways Agency (UK), Department Mobility and Public Works - MOW (BE). Other Traffic management authorities (e.g. Trafikverket (SE) associated to the project to follow-up its progress)

CHARM contracting authorities jointly procure R&D services via the PCP to move towards an open modular traffic management architecture by getting modules developed that will optimise network performance, increase road safety and reduce CO2 emissions by improving network management, incident prediction and prevention and cooperative ITS.

Examples EU funded transnational PCPs

Virtual Road Construction



V-con

Project Timing: Oct 2012 (48 months)

Value PCP: € 1,467M

Contact: benno.koehorst@rws.nl

Project Website:

www.rws.nl/en/highways/v_con

V-CON is a cooperation between procurers in the domain of road administration:
Rijkswaterstaat (NL), Centre Scientifique et Technique du batiment (FR), Trafficverket (SE), TNO (NL)

The PCP undertaken by the V-CON contracting authorities focuses on R&D for virtual modelling of road infrastructure.

Examples EU funded transnational PCPs

Digital preservation



Project Timing: January 2014 (36 months)
Value PCP: € 2,136M
Contact: borje.justrell@riksarkivet.se
Project website: www.preforma-project.eu



Procurers: Riksarkivet - National Archives(SE), Beeld en Geluid (NL), Koninklijk Instituut voor het kunstpatrimonium (BE), Greek Film Center (GR), Local Government Management Agency - LGMA (IE), Stiftung Preussischer Kulturbesitz (DE), Ayuntamiento de Girona (ES), Ministry of Culture - EVKM (EE), Kungliga Biltioteket - National Library (SE)

Other partners: Packet Expertisecentrum Digitaal Erfgoed (BE), Promoter SRL (IT), Fraunhofer (DE), University of Skövde (SE), University of Padua (IT),

The PREFORMA PCP addresses the challenge faced by memory institutions of increasing transfers of electronic documents and other media content for long term preservation. PREFORM intends to establish a long-term sustainable ecosystem of innovative tools and to provide a reference implementation of the most common file format standards for the assessment and for the correction of the collections to be archived.

Examples EU funded transnational PCPs

E-learning



Project Timing: February 2014 (42 months)

Value PCP: € 4,6M

Contact: Ellinor Wallin (ellinor@euprojektconsult.se)

Project website: <http://www.imaile.eu>

IMAILE procurers are: Halmstads Kommune (SE) and Alexandersson University Institute Varberg (SE), University of Magdeburg (DE), Municipality of Konnevesi (FI), City Council Viladecans (ES). Other partners: Region Saxony Anhalt (DE), Oulu IT Center of Excellence (FI), INOVAMAIS (PT), ENTER (Austria), INOVA Eszak-Alfold Regional Development and Innovation Agency (HU)

The IMAILE PCP will focus on new technologies and services for e-learning which address the challenge of providing the next generation of Personal Learning Environments (PLE) for primary and secondary school. This should address students within the topics of Science, Math and Technology, support different learning styles in an individualized way and be accessible from any device including to bring your own device (BYOD).

Examples EU funded transnational PCPs

Telemedicine for ICU-patients at increased risk



Thalea[®]

Project Timing: February 2014 (42 months)

Value PCP: € 1,55M

Contact: Legewie Volker (vlegewie@ukaachen.de)

Project website: www.thalea-pcp.eu

Procurers: University Clinic Aachen (DE), University Hospital Maastricht (NL), Parc Tauli Sabadell University Hospital (ES), Hospital East Limburg (BE), Northern Ostrobothnia Hospital District (FI)

Other Partners: Ministry for Research & Innovation North-Rhine Westphalia (DE), NLAgency (NL), AIAQS (ES)

Through the THALEA project, 5 hospitals from Germany, Netherlands, Spain, Belgium and Finland will initiate a joint Pre-Commercial Procurement focusing on getting a highly interoperable telemedicine-platform developed for detection of ICU-patients at increased risk.

Examples transnational PPI Sustainability



LCB-HEALTHCARE

Procuring better building solutions

Low carbon healthcare PPI project started 2006
Introducing more energy efficient LEDs in
network of over 20 hospitals in 8 EU countries

- 30% energy consumption saving
 - 88% maintenance savings
- Total cost savings enable take-in +10% patients



For more info: <http://lowcarbon-healthcare.eu/>

National brand names for PPI:

Forward Commitment Procurement (FCP) in UK

Technology procurement in Nordics (e.g. Sweden NUTEK cases)

Examples transnational PPI Sustainability



EcoQUIP

Delivering Efficiency, Quality and Sustainability in Healthcare

Project Timing: April 2012 (48 months)

Value project: € 2M

Contact: Gaynor Whyles (gaynor.whyles@jeraconsu)

Project website: <http://www.ecoquip.eu>

Follow-up of LCB healthcare project

PPI procurement for more efficient and sustainable healthcare solutions

Procurers: Bologna university hospital Authority (IT)

Erasmus University Medical Centre (NL),

Nottingham univ hospital & Rotherham NHS trusts (UK)

Such Deskidzka hospital (PL)

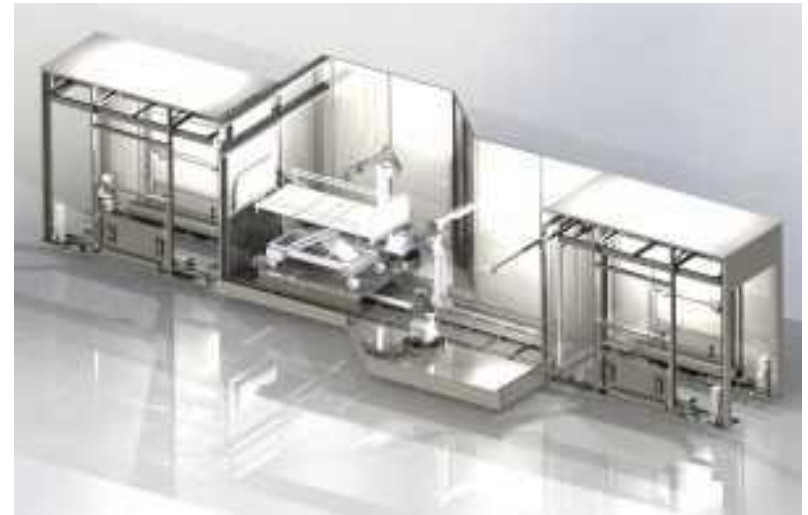
Erasmus University Medical Center

Sustainable robotics based bed washing

procurement won European PPI award 2014

Cost reduction of 35%

CO2 footprint reduction of 65%



Example transnational PPI

Health ageing



Project Timing: October 2012 (42 months)

Value project: € 4M

Contact: Dominique Legouge, Resah-Idf (d.legouge@resah-idf.com)

Project website: <http://www.happi-project.eu>

6 healthcare 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), NHS commercial solutions (UK), SCR Piemonte (IT), Centrale de Marchés Mercure (BE), Entente des hôpitaux (LU).

The French lead procurer is procuring (establishing a framework agreement with several vendors under French law) on behalf of the whole group of procurers to procure 5 different lots of equipment. All 6 purchasing groups can then setup specific contracts under their own national legislation to buy products from any of the vendors selected under the framework agreement. (Similar as is possible in Horizon 2020)

Lot 1: Fall detection and alert system

Lot 2: Treadmill for rehabilitation and analysis of walking disorders

Lot 3: Walking course for preventing falls and maintaining independence

Lot 4: Bed thermoregulation system

Lot 5: Chair enabling users to maintain independence and reducing effort for aides

Example transnational PPI Elderly Care

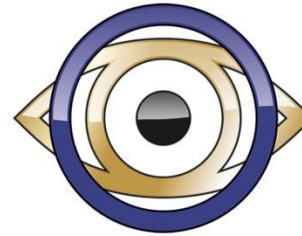


Project Timing: April 2014 (36 months)
Value PPI: € 17,2M
website: stopandgoproject.eu

STOP AND GO contains 6 procurers: Regional Health Agency Campania (IT), Health agency province Catanzaro (IT), Health agency Rome (IT), Eastern Cheshire Clinical Commissioning Group (UK), Health procurement agency/Junta de Andalucia (ES), Gemeente Helmond (NL)

The €17,2M PPI aims to trigger the market to deliver ICT based telecare services that enable to care for frail elderly that suffer from multiple conditions at the same time such as heart failure, diabetes, etc.

Examples EU funded network of procurers eHealth domain



PRO4VIP
PROCUREMENT FOR VISUAL IMPAIRED PEOPLE

Project Timing: February 2015 (22 months)
Contact: pmo.aquas@gencat.cat
Project website: www.pro4vip.eu

PRO4VIP is a coordinating and networking project with partners: Agència de Qualitat i Avaluació Sanitàries de Catalunya - AQuAS (ES), Barcelona Macula Foundation research for vision - BMF (ES), UCLPartners (UK), Berufshilfswerk - BWF (DE), Rittmeyer regional institute for the deaf - RITT (IT), University Salerno - US (IT), Friuli Venezia Giulia region - FVG (IT), Trieste AREA (IT), European Blind Union - EBU (FR), ECRIN European Research Infrastructure Network (FR), ZENIT (DE)

Low vision is globally increasing as a result of the ageing world population. The PRO4VIP network brings together healthcare procurers that aim to develop a joint innovation procurement roadmap for novel cost-effective ICT-based assistive technologies for visually impaired people and clinical tools that help physicians with the early detection of such conditions.

Examples EU funded network of procurers eHealth domain



European
Commission



Project Timing: January 2015 (8 months)
Contact: dexter.montgomery@nhs.net
Website: www.smartambulanceproject.eu

SAEPP is a coordinating and networking project with partners: NHS Commercial Solutions (UK), Ambulance Today (UK), University Medical Center Groningen - UMCG (NL), Falck (DK), Region Zealand (DK), INEM (PT), South Karelia Central Hospital (FI), BITECIC (UK), South East Coast Ambulance Service (UK), Yorkshire Ambulance Service (UK), Royal College of Art (UK), University of Sheffield (UK), University of West England (UK), Fibico (ES), TECNALIA (ES), Saimaa university of applied sciences (FI), Lappeenranta university of technology (FI)

The SAEPP network of ambulance procurers and users is preparing the ground for a PCP to develop an ICT-equipped ambulance of the future that enables a shift from a vehicles that services as a means of urgent transport to an on-board mobile treatment space. The objective of the ambulance redesign is to enable pre-hospital care in order to avoid unnecessary hospital admissions and the associated patient distress and hospital costs.

Examples EU funded network of procurers eHealth domain



EPP eHealth

Project Timing: January 2015 (24 months)

Contact: a.duran@bravosolution.es

Project website: www.innovationinhospitals.com

EPP eHealth is a coordinating and networking project with partners: Bravosolution (ES), Region Zealand (DK), Servicio Andaluz de Salud - SAS (ES), Servicio Madrilenio de Salud - SERMAS (ES), University Hospital Krakow (PL), dane-ianalizy (PL), Optimat (UK)

The EPP eHealth consortium aims to transform the market for eHealth solutions through dialogue and innovation procurement. The project will make progress towards this aim by creating a network of procuring organisations that understand the opportunities that eHealth can offer. The project will create a critical mass of procurers that will proactively develop forward looking procurement plans to create a coherent demand for eHealth solutions.