



Parallel Session

ICT-34-2018-2019

Pre-Commercial Procurement Open



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DG CNECT
Start-ups and Innovation Unit F3

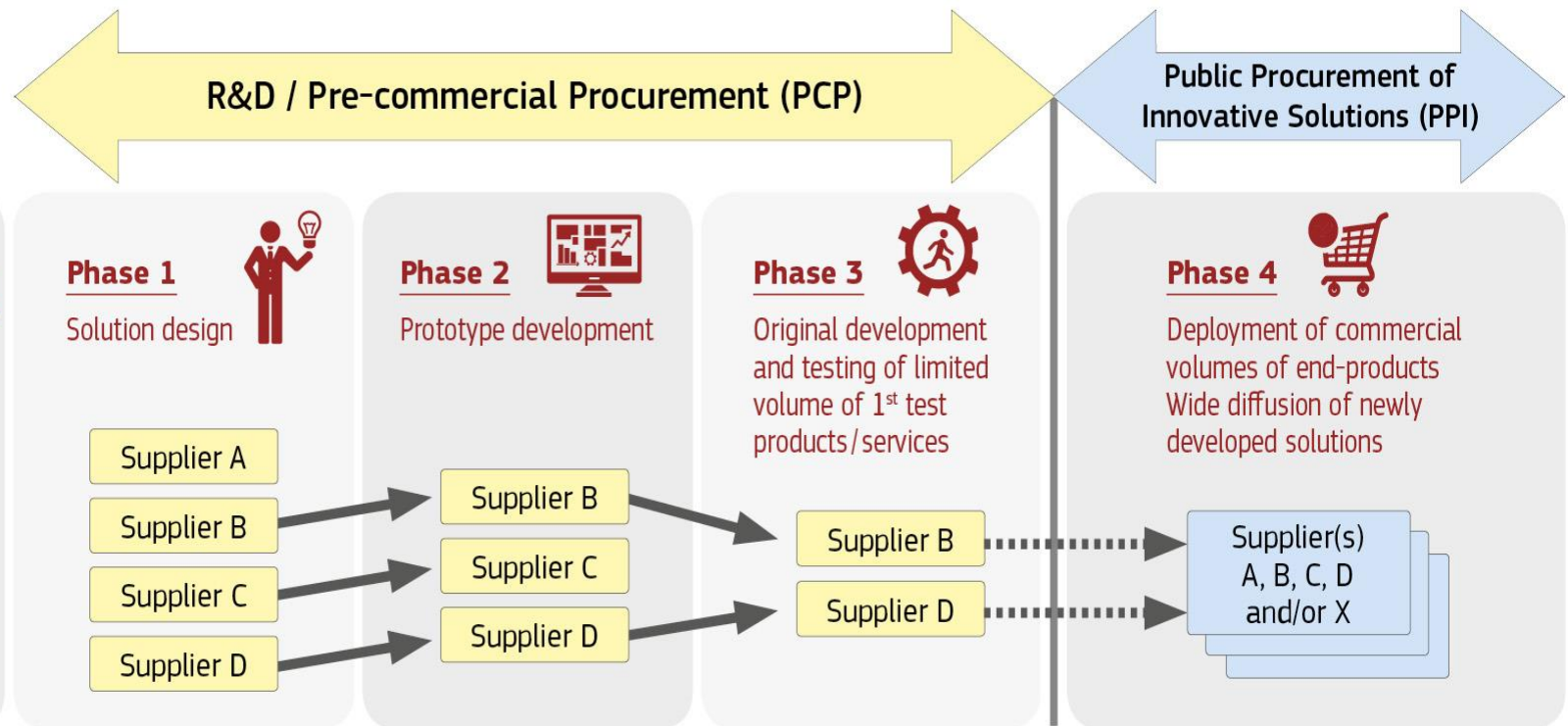
HORIZON 2020

Innovation Procurement = PCP + PPI / Complementarity



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



One joint PCP coordinated by the lead procurer



- In their proposal, consortium shall have already identified one concrete procurement need as proposed focus for the PCP that is identified as a **common challenge** in the innovation plans of the buyers group and requires R&D!
- One joint call for tender published EU wide
 - One joint evaluation of offers based on common tender specs
 - One lead procurer awarding all contracts in the name and on behalf of all procurers in buyers group
 - Each winning tenderer gets: 1 framework agreement to participate in the PCP + one specific contract per PCP phase (solution design, prototyping, testing)
 - One joint total budget (grouping financial commitments of all procurers in buyers group) from which all R&D providers are paid
- But, actual payments can be carried out centralised or distributed
 - Either all R&D providers paid by the lead procurer
 - Or each R&D provider paid pro rata by each procurer in the buyers group according to the share of each procurer's contribution to the common pot
 - Also supervising suppliers and testing of solutions can be centralised or distributed
 - Choice between testing all solutions of all R&D providers in 1 procurers site or on several sites procurers sites etc

PCP and PPI actions - Eligible activities



❑ **Preparation stage**

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

❑ **Execution stage**

- Procurement of the R&D services (PCP)
- 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
- Dissemination/exploitation of results

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



- ❑ **Reimbursement rate direct costs: Max 90% of eligible costs for PCP**
 - Eligible direct costs to carry out eligible activities defined in WP include:
 - Price of the R&D services (PCP) 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)
 - **Plus 25% for indirect costs.** But, no indirect costs on the price of the PCP 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)

Specific requirements PCP procedure (Annex E WP)



- ❑ Procedure: Compliance with applicable national procurement rules + compliance with additional specific requirements
 - Definition PCP (Horizon 2020 RfP and PCP communication)
 - EU-wide published open market dialogue and call for tender
 - PCP call for tender open for at least 60 days
 - Same objective evaluation criteria
 - Functional / performance based specifications
 - Best value for money award criteria
 - Majority of R&D activities performed in MS/AS

- ❑ IPR arrangements for PCP
 - R&D providers generating results in PCP shall own attached IPRs
 - Procurers shall enjoy royalty-free access rights to use R&D results for own use
 - Procurers shall also enjoy the right to grant or to require participating R&D providers to grant non-exclusive licenses to third parties to exploit the results under fair and reasonable market conditions without any right to sublicense



- ICT-34 is an open call for PCP actions in the ICT domain
- Supports joint pre-commercial procurement by group of (min 2) public procurers (+ possibly other procurers) to address a challenge in any area of public interest that requires ICT based solution
- Open to proposals requiring improvements on 1 ICT technology field & end-to-end solutions needing combinations of various ICT technologies
- Modernization of services of public interest whilst opening opportunities for industry & researchers to take international leadership in new markets

Specific Challenge

- The challenge is to enable public procurers **to collectively implement PCPs** in order to close the gap between supply and demand for innovative ICTs.
- The objective is to **bring radical improvements to the quality and efficiency of public services** by encouraging the development and validation of breakthrough solutions through Pre-Commercial Procurement.



- PCP actions targeting consortia of procurers with **similar procurement needs** that want to procure together the **development of innovative ICT based solutions** to modernize public services whilst creating growth opportunities for industry and researchers in Europe in new markets.
- This topic is **open to proposals for PCP actions in all areas of public sector interest requiring innovative ICT based solutions.**
- It is open both to proposals requiring improvements mainly based **on one specific ICT technology** field, as well as to proposals requiring end-to-end solutions that **need combinations of different ICT technologies.**



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

Requirements

- Proposals shall demonstrate **sustainability of the action** beyond the life of the project.
- Activities covered shall include:
 - **cooperation with policy makers** to reinforce the national policy frameworks and mobilise substantial additional national budgets for PCP and PPI
 - **awareness raising, technical assistance and/or capacity building to other procurers** beyond the project to mainstream PCP/PPI implementation
 - **remove obstacles** for introducing the innovative solutions to be procured into the market.

Expected impact

- **Reduced fragmentation of demand** for innovative solutions, by enabling public procurers to collectively implement PCPs, in areas which due to their nature are better addressed jointly, or which they would not have been able to tackle independently
- Increased opportunities for **wide market uptake and economies of scale** for the supply side through joint specifications, wide publication of results
- Contribution to **standardisation regulation or certification** to remove barriers for introduction of PCP innovations into the market



Funding instrument: PCP actions (90% funding rate direct costs + 25% indirect costs)

Funding: Indicative budget ICT-34: €6M for 2018 and €6M for 2019

Project duration: No min/max predefined

Deadline submission proposals:

2018: 17 April 2018

2019: 28 March 2019

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

MAGIC (PCP)

Post stroke recovery

EMPATTICS (PCP)

Chronic disease self-management

RELIEF (PCP)

Pain self-management

ANTISUPERBUGS (PCP)

Detection of superbugs

NYMPHA-MD (PCP)

Mental care for bipolar disorders

PCP in Human Brain Project

PCP on supercomputing / brain modelling

NIGHTINGALE (PCP)

Wearable sensors

STARS (PCP)

Stress reduction

LIVE INCITE (PCP)

*Life style interventions
in perioperative care*

PROEMPOWER (PCP)

Diabetes disease self-management

Overview EU funded projects doing PCPs (FP7/H2020)

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E-GOV

SELECTforCities (PCP)

Open City IT platform for cities

HNSciClouds (PCP)

Research Science Cloud

Cloud for Europe (PCP)

Cloud computing e-gov

PREFORMA (PCP)

Long term digital preservation

TRANSPORT

CHARM (PCP)

Traffic Management

V-CON (PCP)

Virtual road infrastructure modelling

EDUCATION

IMALE (PCP)

Personalised learning needs

SAFETY

SMART@FIRE (PCP)

Smart Textiles ICT for fire fighters

SUSTAINABILITY

PRACE 3IP (PCP)

High Performance Computing

MARINE-EO (PCP)

Earth Observation, marine-security

RESEARCH

QUACO (PCP)

More powerful quadrupole magnets

SMART-MET (PCP)

Smart Metering water sector

Examples EU funded transnational PCPs

Telemedicine for ICU-patients at increased risk

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Thalea^{'''}

Project Timing: February 2014 (42 months)

Value PCP: € 1,55M

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 initiated a joint Pre-Commercial Procurement focusing on getting a highly interoperable telemedicine-platform developed for detection of Intensive Care Unit -patients at increased risk.

Examples EU funded transnational PCPs

E-learning



Project Timing: February 2014 (42 months)
Value PCP: € 4,6M
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 focuses 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).

CHARM



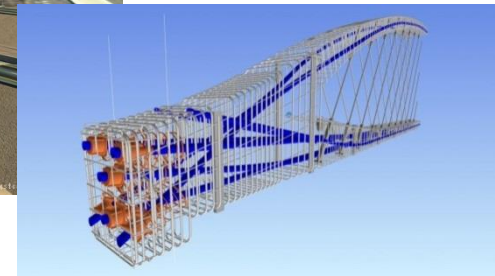
URL:<http://www.rijkswaterstaat.nl/English/about-us/business-opportunities/charm-pcp/index.aspx>

Road authority procurers: Rijkswaterstaat (NL), Highways Agency (UK), Department Mobility and Public Works - MOW (BE).

Joint procurement of R&D services via the PCP to move towards an open modular traffic management architecture by getting modules developed that optimises network performance, increase road safety and reduce CO2 emissions by improving network management, incident prediction and prevention and cooperative ITS.

Benchmarking: 20% expected cost savings

V-CON



https://www.rijkswaterstaat.nl/english/about-us/doing-business-with-rijkswaterstaat/v-con

Procurers: Swedish Trafikverket (SE), Centre Scientifique et Technique du batiment (FR), Rijkswaterstaat (NL) + network of EU road authorities

PCP to develop and test: virtual modelling for the construction of road infrastructure based on Building Information Modelling approach

Benchmarking: 30% expected cost savings



Proposal Template

PCP-PPI actions

Proposal Template in pdf format (for consultation) under topic conditions and docs on the topic page or on the how to participate/reference docs page on the participant portal

Editable word version of Proposal Template: downloadable after you log in to submission system to submit a proposal for a specific topic

Proposal template PCP/PPI actions

Structure according to evaluation criteria



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- Cover page
- 1. Excellence
 - Progress beyond state of the art
 - Clarity & pertinence of objective of the PCP/PPI–common challenge
 - Credibility of the proposed approach (check scope with call topic)
- 2. Impact
 - Expected impacts (check those under topic calling for the PCP/PPI)
 - Measures to maximise impact
- 3. Implementation
 - Project Plan: work plan, work packages, deliverables, milestones
 - Management structure and decision making procedures
 - Consortium as a whole
 - Resources to be committed
- 4. Consortium Members
 - Participants and third parties
- 5. Ethics and security (optional)

*Page limit: max 70 pages
For sections 1, 2, and 3 together*



- **Progress beyond state of the art**
 - **On the supply side:** What's already existing/under development? Shortcomings for the procurement need? Results of any IPR search? How demanding is the R&D/innovation suppliers need to do for the PCP/PPI?
 - **On the demand side:** What are most advanced solutions already deployed / to be deployed by customers? Shortcomings for procurement need? How ambitious are the quality/efficiency improvements targeted by the PCP/PPI compared to state of the art today?
 - **Framework conditions:** sectorial rules/policies, standardis, certification
- **Clarity & pertinence of objective of PCP/PPI – common challenge**
 - What is the **common challenge** addressed by the PCP/PPI?
 - PCP: multi-facet challenge? Confirm all in buyers group need all facets.
 - PPI: which portion of challenge is common core part vs local part?
 - How does it address an **unmet need** (buyers group+other potential users)?
 - Prior analysis: needs assessment, cost-benefit analysis, benchmarking?
 - Motivation to start PCP or PPI results from
 - Internal motivations? (Desire to improve quality / efficiency) and/or
 - External motivations? (e.g. regulatory obligations on water quality) etc



- Credibility of the proposed approach
 - **Proposed approach/methodology to achieve the project objectives**
 - Project specificities to implement H2020 WP Annex D/E requirements
 - Proposed lead procurer, buyers group, (third parties), (members sole participant) -> Final confirmation by end prep. phase during project
 - Approach preparation phase: market consultation, development common specs & evaluation criteria
 - Approach implementation phase: scope procurement, expected output, duration, budget, approach for joint evaluation offers (external experts or not, draft evaluation criteria), monitoring progress suppliers
 - PCP: nr suppliers/phase, procuring test products included or not
 - PPI: who buys what/how much (all exactly the same or not, FW contracts/lots or not), evaluation how long after real-life operation

- **Credibility of the proposed approach (ctd)**
 - **Link of PCP/PPI with proposed coordination/networking activities** to remove barriers for market introduction (e.g. standardisation, certification, awareness raising/training, preparation other PCPs/PPIs, etc)
 - **Identify how proposal addresses scope/challenge relevant WP topic**
 - E.g. if replying to call for PCP actions in e-health Work Program, explain also how proposal fits into e-health scope, objectives and policy context (e.g. link with e-health action plan)
 - **Objectives and performance indicators**
 - Define SMART objectives for PCP/PPI and coord/netw activities
 - Propose indicators that will allow to measure progress
 - **Link with other initiatives**
 - Link with other (inter)national initiatives (other PCPs/PPIs etc)



- Expected impacts
 - **Impacts in WP under the topic calling for PCP or PPI action**
 - **Impacts for all PCP/PPI actions in Annex H of Work Program**
 - More forward-looking proc., ambitious quality/efficiency improvements
 - Reducing fragmentation of demand for innovative solutions
 - Improving competitiveness and growth of companies via development of innovations meeting needs of European and global procurement mkt
 - **Any other impacts** (e.g. wider impacts on society/public interest)
- Measures to maximise impact
 - **Demand side measures to encourage wide deployment of solutions**
 - Plans to deploy and encourage other procurers to deploy solutions
 - Ways in procurement approach itself (e.g. KPIs) to maximise impact
 - Planned activities to remove barriers for market introduction
 - Plans for maximising use of outcomes/results of PCP/PPI



- Measures to maximise impact (ctd)
 - **Measures to encourage wide exploitation of results by supply side**
 - IPR arrangement encouraging suppliers to exploit solutions widely
 - To what extent PCP/PPI provides 1st customer reference to suppliers
 - Measures to ensure EU wide industrial interest/involvement in PCP/PPI (e.g. in market consultation, in sending in offers to call for tender)
 - **Communication activities and dissemination of results**
 - Draft communication/dissemination plan
 - Which target groups and communication means foreseen?
 - Covering communication *during PCP/PPI* about ongoing activities (e.g. market consultation) and benefits of undertaking a PCP or PPI
 - Covering measures for dissemination of project results/impacts *after PCP/PPI has finished* (e.g. quality/efficiency improvements achieved by procurers, new products produced by suppliers)



- **Project plan**
 - **Work plan** with work packages, deliverables, milestones (follow templates)
 - **Work Packages** (foresee separate work packages for)
 - Consortium management
 - Preparation stage
 - Procurement/tendering stage
 - Contract implementation stage
 - Communication and dissemination
 - Additional related coordination and networking activities
 - **Deliverables** (foresee following specific deliverables)
 - At end preparation stage: call for tender docs, report on outcome preparation phase, commitment on availability financial commitments
 - At end of tender evaluation: info on total nr bids received, data on winning tenderer(s), abstract of winning tenders + final ranked list of selected projects, final scores and qualitative assessment per evaluation criterion for each received bid, minutes of the evaluation meeting + assessment of results of tenderers in previous phase (PCP only)
 - At the end of action: assessment of validation of solutions resulting from PCP/PPI + demonstration of solutions to Commission



- Management plan and decision making procedures
 - **Organisational structure and decision making mechanisms**
governance, conflict resolution, quality management, potential changes in partners and/or reallocation of budget, approving deliverables, decision making for handling of any IPR related rights assigned to the buyers group
 - **Confirm consortium's commitment to make consortium agreement**
 - **Risk assessment and risk mitigation measures** (Table 3.2b)
- Consortium as a whole
 - **Consortium**
 - Complementarity beneficiaries
 - How beneficiaries will work as team
 - Critical mass to achieve wide deployment
 - **Other countries:** if any (see Annex A work program), explain why their participation is essential



- **Resources to be committed**

- How will consortium mobilise resources for project (incl. own contribution)
- Dependencies in mobilising resources (e.g. additional funding from national or other Community programs such as ESIF)
- Resources (financial or in kind) from third parties associated to beneficiaries

Don't forget to complete the Tables related to resources

- Estimated direct costs for PCP or PPI subcontracting -> Table 3.4
- Estimated costs for coordination and networking activities
 - Direct personnel costs (Table 3.4.b)
 - Direct costs of subcontracting (Table 3.4.c)
 - Other direct costs (Table 3.4.d)

**Thank you very much
for your attention**

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