Innovation Procurement
The power of the public purse

EU funded projects in the ICT domain
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Summary

Innovation procurement – Capitalising on innovative solutions to modernize public services

About this brochure

Projects:

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- SILVER – supporting independent living for elderly through robotics
- DECIPHER – safe mobile medical care for patients with chronic long term conditions
- THALEA – tele-detection and tele-care of high risk intensive care unit patients
- NYMPHA-MD – mobile services for mental health treatment
- UNWIRED HEALTH – mobile patient-centric care for heart failure
- INSPIRE – network of procurers to foster demand for innovation in eHealth
- STOP AND GO – telecare services for frail elderly with multiple conditions

**TRANSPORT:**
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- V-Con – optimizing road infrastructure through virtual modelling
- P4ITS – network of procurers preparing deployment of Intelligent Transport Systems

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- SMART@FIRE – smart personal equipment to reduce the risks faced by firefighters

Useful links
Innovation procurement – Capitalising on innovative solutions to modernize public services

The European public sector is facing significant challenges, including the need to modernise internal operations while delivering high quality public services. Innovation procurement can deliver solutions to these challenges and Information and Communication Technologies (ICTs) play a major role in this.

The EU research and innovation programmes FP7 and CIP, now grouped under Horizon 2020, offer support to innovation procurement in two complementary ways:

- In some cases, public sector challenges can be addressed by innovative solutions that are nearly or already in small quantity on the market and don’t need new research and development (R&D). This is when Public Procurement of Innovative solutions (PPI)\(^1\) can be used effectively.

- In other cases, the required improvements are so technologically demanding that there are no near-to-the-market solutions yet and new R&D is needed. Pre-Commercial Procurement (PCP)\(^2\) can then be used to compare the pros and cons of alternative competing approaches and to de-risk the most promising innovations step-by-step via solution design, prototyping, development and first product testing.

By developing a forward-looking innovation procurement strategy that uses PCP and PPI in a complementary way, public procurers can drive innovation from the demand side. This enables the European public sector to modernize public services faster while creating opportunities for companies in Europe to obtain a first customer reference and gain international leadership in new markets.


About this brochure

This brochure provides an overview of EU funded innovation procurement projects in the ICT domain. This includes projects in which public procurers from different countries around Europe pool resources to carry out PCP or PPI procurements together, plus coordination and networking projects that prepare the ground for new PCP or PPI procurements in the future.

European cooperation enables procurers to share the costs and risks of carrying out innovation procurements and find common answers to problems that are best tackled at European level for example to address issues such as cross-border interoperability, market fragmentation etc.

This brochure aims to share experiences about how different challenges of public interest in the EU can be addressed via innovation procurement. It provides also links where more information can be obtained so other procurers around Europe can use PCP and PPI approaches as well in the future.
Supporting independent living of elderly through robotics

As people get older, they face increasing risk of some severe condition that will affect their ability to continue living independently at home. The SILVER project carries out a PCP to get new robotics based technologies developed that will allow to care for 10% more elderly living independently at home by 2020, while maintaining the same amount of care staff.

Procuring local and regional authorities: City of Odense and region of Southern Denmark (DK), City of Västerås (SE), City of Vantaa and Oulu (FI), City of Stockport (UK), City of Eindhoven (NL).

Website: www.silverpcp.eu
Safe mobile medical care for patients with chronic long term conditions

DECIPHER aims to improve existing healthcare services across Europe by enabling secure cross-border access to existing patient healthcare portals and efficient and safe medical care of mobile patients in EU member states. The project is undertaking a Pre-Commercial procurement (PCP) to get solutions of special interest in the management of long-term conditions or unplanned care episodes.

Procuring partners: Fundació TicSalut (ES), ESTAV Centro (IT), TRUSTECH - Central Manchester Foundation Trust (UK)

Website: www.decipherpcp.eu
THALEA enables Intensive Care Units (ICU) to improve the care for acutely live-threatened patients by telemedicine and telemonitoring. Hospitals from Germany, Netherlands, Spain, Belgium and Finland initiate the joint PCP to get a highly interoperable telemedicine-platform developed for detection of ICU-patients at increased risk.

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

Website:
www.thalea-pcp.eu
Mobile services for mental health treatment

NYMPHA-MD focuses on next generation services for mental health treatment with a special focus on bipolar disorder based on the use of new technologies, open standards and open platforms. Procurers representing mental care hospitals from Italy, Denmark, and Spain carry out a joint PCP to provide a set of pilot experimentations implementing mobile ehealth services for bipolar disorder treatment in a real-world context.

Procuring partners:
Provincia Autonoma di Trento (IT), Mental Health Services Capital Region Copenhagen (DK), CSPT – University Hospital (ES).

Website:
www.nympha-md-project.eu
Mobile patient-centric care for heart failure

UNWIRED HEALTH aims to introduce a mobile care path for consumers in order to enable patient-centric care, using mobile devices, and converging interoperable platforms across multiple countries. The project carries out a PCP focusing on services coach patients with heart failures enabling education, motivation, remote monitoring, integrating and coordinating care provided by a hospital and the primary care physician.

Procuring partners: Fundacio Ticsalut (ES), NHS 24 Scotland (UK), Region South Denmark (DK)

Website: www.unwiredhealth.eu
INSPIRE aims at creating a network of contracting authorities to foster demand for innovation in eHealth, active ageing and independent living areas. It also targets at achieving practical impact on the use of PCP and PPI instruments through the INSPIRE Academy; linking innovation procurement activities and venture capital activities; and facilitating the introduction of new technologies and ICT-based services in the healthcare delivery system, through evidence based service – and business model thinking.

Partners:
Nordic Healthcare Group (FI), BITECIC (UK), AIAQS (ES), Resah-Idf (FR), TEHA (IT), BBG (AT)

Website:
http://inspirecampus.eu
**Telecare services for frail elderly people with multiple conditions**

In STOP AND GO, six local and regional procurers from 4 different countries plan to undertake together a public procurement of innovative solutions (PPI) 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. The project aims to develop tender specifications suitable for Europe wide deployment of the solutions.

**Procuring partners:**
- 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)

**Website:**
http://stopandgoproject.eu/
Improving traffic management performance

CHARM focuses on the move towards open modular traffic management architecture. The road authority procurers in CHARM undertake a joint PCP that aims to get new 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 (Intelligent Transport Systems).

Procuring partners:
Rijkswaterstaat (NL),
Highways Agency (UK).
Other traffic management authorities associated to the procurement: Department of Mobility of Works (BE)

Website: http://tinyurl.com/CHARM-PCP
Optimizing road infrastructure through virtual modelling

The V-Con project aims to improve the efficiency and effectiveness of the National Road Authorities by improving data exchange in the civil infrastructure sector. The PCP undertaken by the V-CON contracting authorities focuses on R&D for virtual modelling of road infrastructure.

Procuring partners:
Rijkswaterstaat (NL), Trafficverket (SE)

Other procurers associated to the procurement: Centre Scientifique et Technique du batiment (FR)

Website:
www.rws.nl/en/highways/v_con/
Network of procurers preparing deployment of Intelligent Transport Systems

P4ITS creates a network of public procurers experienced in cooperative Intelligent Transport Systems (ITS) and planning to deploy them in the near future. P4ITS aims at a more concerted approach to public procurement of innovative solutions (PPI) to support a wider market roll-out of cooperative ITS in Europe.

Partners: ERTICO – ITS Europe (BE), North Denmark Region (DK), AustriaTech (AT), ASFINAG (AT), Flanders Region (BE), Vigo City Council (ES), CTAG (ES), Finnish Transport Agency (FI), VTT (FI), Észak-Alföld Regional Development Agency (HU), ITS Bretagne (FR), City of Verona (IT), CRP Henri Tudor (LU), ITS Sweden (SE), Liguria Region (IT), OHL Concessiones (ES), TOPOS Aquitaine (FR)

Website: www.p4its.eu
Increasing the energy efficiency of high performance computing

The Partnership for Advanced Computing in Europe (PRACE) provides access to 6 leading-edge high performance computing (HPC) systems to academia and industry from around the world. In PRACE 3IP PCP the partners pilot joint procurement and joint ownership of innovative HPC prototypes, focusing with the PCP on high energy efficiency supercomputing.

Procuring partners: CINECA (IT), Forschungszentrum Juelich GmbH (DE), Genci (FR), EPCC (UK)

Website: www.prace-ri.eu/PRACE-3IP
More attractive and safer cities through smart building and street lighting

In ENIGMA five cities conduct a joint PCP on innovative lighting solutions addressing urban safety and energy efficiency issues. The PCP aims to make Europe's cities safer and more attractive while using energy efficient lighting solutions.

Procuring partners: Eindhoven (NL), Malmo (SE), Stavanger (NO), Comune di Bassano del Grappa (IT), Espoo (FI).

Website: www.enigma-project.eu
IMAILE will carry out a PCP focusing 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. These should address students within the subjects of Science, Maths and Technology, support different learning styles in an individualized way, and be accessible from any device including 'bring your own device' (BYOD).

Procuring partners:
Halmstad municipality (SE), Ministry of Finance of Saxony Anhalt (DE), City council of Viladecans (ES), Municipality of Konnevesi (FI), Oulu University Center of Internet Excellence (FI)

Website:
www imaile eu
Efficient and safe cloud services for governments' use

Cloud for Europe is a cooperation between 24 partners, public authorities and research institutions, across 12 countries. The main project objectives are to identify obstacles for the use of cloud services in the public sector, defining services that overcome these obstacles, procuring R&D from industry to find innovative solutions for cloud services.

Procuring partners:
Agency for a Digital Italy (IT), ministry of Finance, Tax and Customs (NL), Institute for the Public Administration Shared Services (PO), Ministry of Finance (Slovakia), National Institute for Research and Development (RO)

Website: www.cloudforeurope.eu
Towards a sustainable ecosystem for long term digital preservation

Today's libraries and archives preserve ever more digital media content and need efficient checks for electronic files. PREFORMA will use PCP to develop innovative tools to assess and correct standards compliance. Interacting with the IT industry, standardisation bodies and memory institutions, the project will provide a reference implementation of common file format standards and build a sustainable network for digital preservation.

Procuring partners:
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)

Website:
www.preforma-project.eu
smart@fire

Smart personal equipment to reduce the risks faced by firefighters

Every year, more than 100 firefighters lose their lives whilst saving others. The SMART@FIRE project aims to tackle this by undertaking a PCP that reduces the risks inherent to firefighting. The research and development focus for the PCP is on localisation systems, data transfer, visualization and sensors. SMART@FIRE is a cooperation between procurers of equipment for fire fighters and first responders.

Procuring partners:
Federal Home Affairs Ministry (BE), SDIS Fire Department Bouches-du-Rhone (FR)

Other procurers associated to the procurement: Fire Department city Dortmund (DE), Greater Manchester Fire and Rescue Authority (UK), National Disaster Response Agency (NL)

Website:
www.smartatfire.eu
Useful links

- Innovation Procurement

- Pre-Commercial Procurement

- Public Procurement of Innovative Solutions

- Innovation Procurement Platform:
online networking forum for procurers about innovation procurement
  https://www.innovation-procurement.org/

- Overview of Horizon 2020 EU funding opportunities for PCP and PPI

- Applying for Horizon 2020 funding for PCP and PPI–Horizon 2020 participants portal:
  http://ec.europa.eu/research/participants/portal/

- PCP/PPI Newsletter

- Past Events
  http://cordis.europa.eu/fp7/ict/pcp/events_en.html (subject of change)

- Future Events