
**Project activities 1.3:** Capitalisation of other projects' results

**Title of the deliverable:** 1 report on the knowledge capitalised from previous projects

**Contents of the report:** the repot aims at analysing previous projects (from different programmes) to link to the logic of innovation public procurement as a policy to promote innovation through the demand-side of the public administrations. The report reviews these projects and summarises the main learning that the iBuy project partners consider of relevance for the instruments.

***A report authored by:***

**Partnership of the iBuy project**

*National Innovation Agency of Portugal (activity coordinator)*

November 2018

# Contents

# 1. Introduction

"Innovation" can have multiple meanings but two definitions walk hand-to-hand in the context of European funding instruments[1] and OECD[2] discussions. According to the Commission notice *Guidance on Innovation Procurement*[3], "Innovation procurement" refers to any procurement that has one or both of the following aspects:

- buying the process of innovation – research and development services – with (partial) outcomes;
- buying the outcomes of innovation created of others.

In the first instance, the public buyer buys the research and development services of products, services or processes, which do not exist yet. The public buyer describes its need, prompting businesses and researchers to develop innovative products, services or processes to meet the need. In the second instance, the public buyer, instead of buying off-the-shelf, acts as an early adopter and buys a product, service or process that is new to the market and contains substantially novel characteristics.

Innovation procurement covers thus both R&D procurements, public procurements of innovative solutions and public procurements that purchase a combination of both R&D and the resulting innovative solutions.

Within the project consortium, three of the partners are organisations with a national intervention scope on the development/ design of innovation policies (Lithuania, Latvia and Portugal), while the other four are regional governmental entities or support agencies of regional governments, with attributions or competencies to control, manage or influence operational programs under the ESIF-ERDF funds (Balearic Islands, Finland, Greece and Romania).

Although innovation public procurement (IPP) can be recognised as a common emergent topic, the boundaries of public procurement of innovation are not exactly the same among partners, therefore different instruments, maturity level and purposes to use public procurement to address innovation can be found. The strategic use of public procurement to promote innovation, to buy products or services not yet in the market, to strength and raising R&D&I performed by SME's, or tackling societal challenges and needs in the regions, are goals in the spirit of some instruments but many regions are willing at the same time to use it to introduce and promote innovation in the procurement process and a tool to modernize public services.

Therefore, the capitalisation of other project's outcomes was considered a useful task (Task 1.3), in order to know what other partnerships have been doing and achieving before, and take advantage of the results of project's related to *iBuy*, which could be relevant for the IPP support in each of the regions and/or for the improvement of the targeted instrument. Projects were searched and analysed among several funding sources (INTERREG, H2020 or NATIONAL). The task was implemented in three phases:

Phase I- Information gathering

During this phase, information was targeted from projects related with public procurement of innovation concluded during the last five years, trying to find examples developed at national, regional or European level and gathering information about learnings concerning procurement activities, policy instruments implementation, or case studies

[1] Directive 2014/24/EU defines innovation as "*the implementation of a new or significantly improved product, service or process, including but not limited to production, building or construction processes, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations inter alia with the purpose of helping to solve societal challenges or to support the Europe 2020 strategy for smart, sustainable and inclusive growth"*;

[2] the OECD's Oslo Manual defines innovation as *"the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations"*;

[3] COM (2018) 3051 final, Brussels, 15.5.2018

focused in any particular interest ex. sectorial, organisational, etc… Using a project brief template, created to facilitate the gathering process and the harmonization of results, each partner produced two project briefs of different projects, resulting in a total of fourteen sources of project learnings.

Phase II –Discussion

These learnings were discussed and exploited according to the particular interests of each region to support IPP or importance for the designing of the targeted instrument.

Phase III - Reporting

From the pool of projects gathered, all the partners had the opportunity to analyse the learnings, including also some case studies, and report (using a statement identifying their relevancy) those that could be more useful for each particular national/ regional context.

## 2. Summary on learnings

2.1. Projects gathered features

One interesting characteristic of this exercise is that most of the projects were sectorial and not focused on a particular instrument. Sectors targeted by projects are well known domains of public procurement, as health care, transport, energy, construction.

Considering the involvement of *iBuy* countries within the pool of projects observed, only four countries are represented, Spain, Finland, Greece and Portugal, with a strong predominance of Spain and Finland.

Regarding the funding sources, it was observed that very few projects were nationally funded or ERDF co-funded. The targeted projects were concluded within the last three years which may explain the high concentration of the Horizon 2020 funding source. On the other hand, it might be speculated the confirmation of the recent interest of the subject by policy makers.

2.2. Value of projects learnings

At country/region level learnings from projects gathered were analysed and a statement was produced describing their relevance to the interests of each region.

**Statement Lithuania:**

Designed policy instruments set favourable conditions for public procurers to start using pre-commercial procurement widely, however it is still in the very early stage. In order to use the pre-commercial and innovative public procurement widely, contracting authorities as well as potential suppliers need to build their capacities regarding the development of innovative solutions. At the moment, there is still not enough examples of good practices shared to inform possible procurers about the possibilities this process presents and it creates the uncertainty and unwillingness to try new solutions.
Lack of information of good practices can be solved by preparing a manual (In *SPP REGIONS* - L1), which can serve as a starting point for any organization, both public and private, that wants to engage in PPI procedures. It can also contribute to achieving a common understanding on PPI by sharing first-hand experiences on real cases and current practices. In order to support IPP it is vital (In *P4ITS* – L2) to exchange knowledge between practitioners sharing first-hand experience on real cases and current practices, by analysing risks and barriers encountered vs. solutions and enablers adopted in different countries and/or sectors.

**Statement Balearic Islands:**

The Balearic Islands Government is currently establishing a public procurement program to boost the development of innovative new markets from the demand side, especially in the sectors fixed in the smart specialization strategy and in the Plan for Science, Technology Innovation and Entrepreneurship of the Balearic Islands.

To our IPP program is utterly necessary to make stakeholders aware of the importance that innovation public procurement should be considered an innovative strategy and goal oriented instead of a legal procedure (In *P4ITS* -L1 and in *PPI4Waste* -L2). As a strategy should be addressed through open market consultation (In *FABULOS* – L1) and market engagement (In CEPPI -L3) involving experts and specialists to ensure that demand and supply side clearly understand each other (In *EPP- eHealth* - Case study 2). Those points are crucial, transversal and applicable to all fields to know which is the state of art and capacity/capability of the market. Due to our lack of experience, we found in the “SPP regions” project some recommendations and criteria (L1 and L2) to engage in PPI procedures and to make them more sustainable as sustainability and transversality play a huge role in our strategy.

**Statement Finland:**

In Tampere region the bottleneck in utilization of the IPP at the moment is the fractured and sporadic use of IPP. The goal of the project is to achieve *strategic level change* in planning and utilization of the innovative public procurement. The aim is to find a feasible model(s) how IPPs are lead in Tampere region (and elsewhere) and to design *efficient systematic approach and employment of different models in IPP process management* in public sector organizations which are responsible of investments and decisions related to public development funds. In practice this means analyzing IPP case studies in related key RIS3 themes as *health care and social services, circular economy and smart mobility* and combining the analysis with efficient and sustainable models of IPP management and leadership. The analysis would support the preparation of the new programme period and the regional government reform and strengthen the role of IPP in it.

The most useful project briefs that would support the regional goals are related to the development of the systemic level and/or focused on (almost) similar RIS3 themes (In *InnoBuild* - Case Study 1; In *FABULOS* - L1, L2, L3 and Case Study 2; In *InnProBio* - Case Study 2; In *SPICE* - L1). On the other hand, the IPP should not be considered only as a legal procedure but rather an innovative strategy and a set of operational approaches in innovation strategy. The process of IPP includes the procurement of solutions both based on innovation of existing technologies and those which require R&D. Interesting thought would be to link PCP with venture capital as well as gap analysis and awareness raising of the politicians (In *P4ITS* - L1, L2, L3 and Case Study 1). Sustainable procurement in our region is related to circular economy and sustainable and ethical innovation policy development (In *SPP Regions* - L1, L2 and Case Study 1 & 2).

**Statement Romania:**

Procurement of Innovation can be a useful tool since the priorities in Europe have gone through changes in the last years. For instance, identifying and establishing a network of eHealth procurement organizations across the Europe within this sector can help gather information about the need for innovative solutions and research the interest in undertaking innovation procurement. There are some barriers to overcome though - the attitude of healthcare service providers and funders inhibits PPI adoption and implementation. Fear of change, user resistance and risk aversion typically characterize public officials *(*In *1 – L1)*. Also, the Public sector is known to procure the safest option which means, that innovative products or services that have not yet been tested in an operative environment are less likely to be accepted by the contracting side *(*In *EPP – eHealth* – L2*,* Case study 1*)*.

Another area in which the procurement of innovation is critical is the energy related field. Targeting sustainable approaches towards energy solutions through a pro-innovation procurement approach can help European cities make a more rapid progress towards their energy related objective. Studying what works and what doesn't in the public procurement of innovation can be done by engaging smaller, more autonomous bodies rather than municipal authorities. In the latter, concerns over new approaches, time investment, legal aspects are taking time to break down *(*In *CEPPI* – L1*)*. It has been found that the terms "innovation" and "procurement" put together sometimes have a negative impact on public officials because it gives the idea that it could end up costing more than the traditional solutions *(*In *EPP – eHealth* – L2, L3*,* Case study 2*;* In *CEPPI* – L2*,* Case study 1*)*.

**Statement Greece:**

Goal of the targeted policy instrument is to enhance and upgrade the RDI infrastructure of the Region, focusing on research institutions, in order to support dedicated innovation activities in the focus areas of RIS3, increase the capacity for innovation of regional R&I center and drive the supply of innovation according to the needs of the public sector.

In this context, more effort is required to promote public innovation and innovative public procurement. That is, raising awareness among policymakers and the public sector in general is of crucial importance for the success of a PPI program, since regional stakeholders often miss to identify the benefits of relative programs or lack the culture and mentality of innovation (In *EPP – eHealth* – L1). Secondly, as a preparation phase and before important procurement programs, it is deemed crucial for a successful procurement to host dedicated open consultation events (In *FABULOS* – L1), in order to gain market insight on the current state of the art as well as future developments and involve innovation providers from early on. Moreover, procurers need to overcome the barrier of attracting sufficient external finance in an adequate timeframe, by linking innovation procurement initiatives with venture capital activities (In *INSPIRE* – L3). Lastly, tenders for PPI or PCP projects should place emphasis on the results and impact sought through the procurement process and not on the procured products or services, since this will allow public decision makers to elaborate development planning strategies, unattached from specific equipment or specific services (In *PPI4Waste* – L2).

**Statement Latvia:**

In the case of Latvia one of the first steps planned to be made towards the establishment of the PPI will focus on the evaluation of the existing situation. The evaluation will cover the various issues as well as implement the mapping of the different public institutions, the possibilities and certain needs of such as the potential PPI demanders. Various projects also have mentioned the aspect of the market research both in the learnings and the main focuses of the project (In *P4ITS*-L3*;* In *INSPIRE*-L2).

One of the most important aspects to consider is the market engagement and the capacity of such to respond to the requirements of the demanders (In *CEPPI-L3;* In *SPICE-L3*), where the full potential of the market could be therefore broadened by the implementation of the new policies and directions of actions. Another relevant learning is based on the structured stakeholder ecosystem, which is the key platform capable of representing the needs of both demanders and suppliers, where the one has also been created within the SPICE described in the Case Study 1 (In *INSPIRE*-L1; In *InnoBuild*-L3; In *FABULOS*-L2).

**Statement Portugal:**

Public procurement is a powerful public policy instrument capable of producing various effects in society by addressing broad objectives of other public policies, namely the promotion of innovation. At the same hand Innovation procurement in public procurer's real life requires robust instruments to support it. Capacity building (In *EPP-eHealth* – Case study 2; In *SPP Regions* – L2) and funding are one of the most important dimensions to consider when designing policy instruments to support public procurers or need-owners.

Consequently, it must be evident and reflected in those instruments, the strategic goals for society (In *InnProBio* – L1), the positive discrimination of innovation (In *EPP-eHealth* – L2, L3), and a conscientious framework to promote less prescriptive specifications (In *PPI4Waste* - L2; In *SPICE* – L3) market engagement (In *SPICE* – L1, L3; *CEPPI* – L3, Case study 1) and if advantageous, sectoral approaches for example in the healthcare, transport or energy among others (In *INSPIRE* – L2).

# 3. Conclusions

3.1. Common gaps and interests regarding the instruments development

From the different valuable aspects described on each of the partner statements, and very much supported by the gathered learnings from the projects, it was possible to identify four common gaps (means that at least three partners have pointed it out in common), or interests regarding the instruments development.

**Strategic use of procurement** – procurement should not be faced and managed as a legal issue but a strategic tool helping to achieve different targets of public policies through innovation goal drivers. Sustainability is one of the powerful innovation drivers identified. A good approach is a clear top management framework, promoting the switch from prescriptive procurement, to objective orientated or performance orientated procurement.

**Capacity building, services and tools** – It was recognised that it would be very helpful for procurers and need owners to have at their disposal tools as good practices manuals and services to support the preparation of preliminary phases of the procurement process in order to fulfil lack of information and competencies.

**Market consultation** – Procurers would benefit a lot to put in practice structured procedures for open market consultations. That is a fundamental requirement for procurement of innovation, as a phase to gain market insights on the state of the art of technology and future developments in a certain domain.

**Market engagement** - The regular involvement with the market in innovation procurement was recognised as an enormous advantage for both demand and supply sides. It is not unusual that public procurers have a cautious feeling when "innovation" is associated to "procurement" due to the perception that will end up in a higher costing solution. On the other hand, buyers often fail to clearly communicate their needs and do not take sufficient activities to inform supply side.

3.2 Learnings and usefulness for *iBuy*

The regional level is absolutely relevant to consider, as a practical context to link procurement needs to regional development goals, including the RIS3. It is very likely that regional management structures are in a very good position to promote the strategic use of procurement to address Regional/National public policy goals. It was demonstrated that it has been produced extensive work from international projects in the subject, relevant for the IPP support in each of the regions and for the improvement of the targeted instruments. Very good material and information is available to support and inspire partners on their activities within *iBuy*.

## Annexes

Project briefs prepared after searching and analysing several funding sources (INTERREG, H2020 or National).

## Project identification

**Designation:** "InnoBuild: joint procurement strategy & implementation of a joint procurement for sustainable high tech building projects for senior citizens".

**Acronym**: *InnoBuild*

**Funding source:** Co-funded European Commission – DG Enterprise & Industry

**Period:** June 2012 – December 2015

**Participant countries:** Sweden and Norway

**Partners**:

Swedish municipality Falun

Norwegian municipality Lyngdal

Norwegian National Program for Supplier Development

Norwegian Agency for Public Management and eGovernment (Difi)

**Target topic:** Tentatively transnational innovative public procurement process


## Abstract

**InnoBuild**: joint procurement strategy & implementation of a joint procurement for sustainable high tech building projects for senior citizens is a triennial EU funded project, lasting originally June 2012 – June 2015. The European Commission granted InnoBuild a prolongation of 6 months, and hence the project period was June 2012 – December 2015.
In the first year of InnoBuild, the two pilot partners, i.e. the Municipality of Falu in Sweden and Lyngdal Municipality in Norway, planned for a joint procurement for sustainable high tech building projects for senior citizens. Their first objective was developing a joint public procurement strategy using innovative procurement methodology. The next objective was to have a joint procurement for sustainable high tech building projects for senior citizens. In the course of this year, the procurement process changed from one joint – to two collaborative procurement processes. The objective of the procurements was the main task in InnoBuild's year 2. The third objective was to implement the procurement in the construction phase, either by preparing for the building works, or by starting the construction work on the site. The project planned to conclude having one building project in each of the municipalities. The completion dates were after the closing of the project. Lyngdal has signed all contracts and the preparatory work has started. In Falun, the building is put up, and probably was moved into mid-2016.


## Main learnings

**Learning 1**: Language barriers are an obstacle to cross border tenders. Public procurers need to publish the tender in their official language(s) to attract bids from own country. Bids are submitted in the procurer's national language (most often).

**Learning 2:** InnoBuild is an innovative procurement project, and not a R&D project. However, there may be that parts of the project qualify to a R&D as a result of ideas given by suppliers or needs that cannot be fulfilled in the municipalities. Should that occur, the R&D-projects are not parts of InnoBuild, and the results are not implemented in the pilots.

**Learning 3:** Cross border learning is as important in the operating phase as in the project phase. Both municipalities were interested in maintaining contact after InnoBuild is completed. They have both suggested staff exchange programmes, e.g. for nursing staff to exchange ideas and knowledge.

## Case studies

**Case 1**: FUNCTIONAL REQUIREMENTS PROGRAMME

The ambition in the InnoBuild project was to develop and test a model that do not focus on detailed requirements to describe the buildings they were looking for. Instead, they focused on a model that stimulated the market to be creative in design and interested in needs of the actual users of the building: i.e. the elderly that will live there, and the staff that will work in these surroundings.

The purpose of the functional program was to describe the needs in such a way that it stimulates the market to novel approached and create innovative solutions in design and construction of tomorrow's sheltered housing for the elderly.

**Case 2:** CROSS PROCUREMENT - REGULATIONS

Falun, with its specialist expertise in the field of sustainable buildings, and Lyngdal, with specialist expertise in the field of welfare technology, worked together for three years on joint procurements. Although EC regulations are not sufficiently adapted to cross procurement. Legal advice on the differences in Sweden and Norway stated that to conduct one joint public procurement process would be a most uncertain legal exercise. The conclusion is confirmed in the EC new procurement directive. The municipalities ended up having collaborative procurement processes based on the same technical specifications and functional requirements (with the possible exception of country specific mandatory rules regarding building regulations etc.).

## References

**Contact information: website**:

For more information see www.innobuild.eu (reports, presentations)


Project Manager: Ronny Bjørnevåg ; Email: ronny.bjornevaag@lyngdal.kommune.no

## Project identification

**Designation:** "INNPROBIO: Forum for Bio-Based Innovation in Public Procurement"

**Acronym**: *InnProBio*

**Funding source:** Horizon 2020 - CSA

**Period:** March 2015 – February 2018

**Participant countries:** Germany, Netherlands, Poland, Unit. Kingdom

**Partners**:

FACHAGENTUR NACHWACHSENDE ROHSTOFFE EV – DE; B.T.G. BIOMASS TECHNOLOGY GROUP BV – NL; STICHTING NEDERLANDS NORMALISATIE – INSTITUUT – NL; UNIVERSITY OF HULL - UK MINISTERIE VAN ECONOMISCHE ZAKEN EN KLIMAAT – NL; UNIWERSYTET LODZKI – PL; ICLEI EUROPEAN SECRETARIAT GMBH (ICLEI EUROPASEKRETARIAT GMBH) – DE; NOVA-INSTITUT FUR; POLITISCHE UND OKOLOGISCHE INNOVATION GMBH - DE

**Target topic:** Public procurement networks on innovative bio-based products

## Abstract

**InnProBio**: Is the Forum for Bio-Based Innovation in Public Procurement, aimed to develop a community of public procurement practitioners interested in innovative bio-based products and services. The project discovered barriers and hurdles faced by public entities when procuring BBPS as well as the general level of information, awareness and experience existing between both producers of BBPS and public procurers.

By harnessing the potential of public procurement to foster innovation, InnProBio aimed to work with the public sector to develop tools for purchasers, facilitate the creation of buyers groups, and increase awareness and incentives in order to lower the barriers to purchasing. Thus leading to the opening of new markets of bio-based products in Europe. Several practical tools were developed and delivered to support the decisions of procurers with the complement of training sessions and guidance reports. Trainings for public procurers and decision makers on 'how to procure bio-based products and services' (BBPS) were carried out in the Netherlands, Germany and Poland.

InnProBio is EU funded CSA (coordination and support action) three years project which began in March 2015 and ended in March 2018. It was funded by the European Commission's Horizon 2020 Programme.

## Main learnings

**Learning 1**: A clear commitment to bio-based procurement in the form of a manifesto or a mission that provides a solid basis and mandate for public procurers helps to overcome barriers to recognition and acceptance. It will also provide visibility and authority through the support of political decision makers.

**Learning 2:** Environmental legislation and regulation can inhibit innovation by prescribing best available techniques and setting unreasonable deadlines. BBPS witness a high level of regulation. Where regulations should support BBPS, they act often more as a barrier than a trigger.

**Learning 3:** Developing and agreeing upon standards, thresholds, criteria and appropriate certification is viewed as the collaborative responsibility of those involved in bio-based value chains, from primary producers through to consumer product manufacturers and end of life managers. Developed standards will support procurers to take justified decisions when procuring new products.

## Case studies

**Case 1**: ATOOL SET ABOUT BIO-BASED PRODUCTS – A database

It can be found in this database, a range of bio-based products that are already on the market. For each product, it is possible to find information on the product itself, for example its specifications, bio based content, and sustainability certification. This database is only available in the English language. Clicking on one of the product categories is possible to make a first selection and further refine the search. Procurers can easily compare the different products of their interest.

**Case 2:** BIO-BASED PROCUREMENT TOOLS

A series of 4 good practice case studies, showing how bio-based procurement was done successfully in practice: a)Procurement of bio-based cups for hot drink vending machines by the Dutch national government; b) Procurement of recent construction works by a Dutch provincial government, which sought to include solutions made from bio-based materials; c) Innovation-oriented public procurement to purchase renewable (bio-based) aprons for the health sector in the Swedish region Skåne; d) Procurement of environmentally-friendly cleaning and maintenance services by Wilanów District, one of the Warsaw city districts.

## References

**Contact information: website**:

For more information see www.innprobio.eu (reports, presentations)

Project Manager: Moritz Westkämper ; Email: innprobio@fnr.de, from The Agency for Renewable Resources (FNR).

## Project identification

**Designation: "**PPI4Waste**:** promotion of Public Procurement of Innovation for resource efficiency and waste treatment"

**Acronym**: *PPI4Waste*

**Funding source:** Horizon 2020

**Period:** 2015-2017

**Participant countries:** Belgium, Germany, Croatia, Spain, Sweden, Netherlands

**Partners**:
ACR+; ICLEI; Zagreb Holding; University of Zaragoza; City of Mancomunidad del Sur; RISE; Dutch ministry for infrastructure and environment

**Target topic:** Procurement of innovation targeting effective waste management


## Abstract

**PPI4Waste:** The PPI4Waste project is dealing with the European Union's guidelines in waste management, with an emphasis on sustainability and innovation, including measures and activities related to green public procurement in the waste management sector. Project aimed to support resource efficiency, sustainable waste management and sustainable consumption throughout Europe by increasing innovative public procurement through networking, capacity building and dissemination. European Commission funded this project. It lasted from 2015 until 2017.
A number of activities took place within the project lifetime to help increase uptake of innovative waste solutions. The first step to reach project goals was to create interest group, which consisted of stakeholders involved with or interested in the procurement of innovative waste management solutions, purchasing community which gathered public buyers who are actively involved in the procurement of waste management solutions in public sector and expert group, composed of key experts at European level regarding waste management and PPI. Secondly, the capacity-building workshops was held in order to reinforce knowledge about PPI procedures. Other objective was to hold two workshops to discuss the needs and solutions for PPI in the field of waste and specific areas of waste management. At the end, the final conference was held to share the main findings of all research and activities implemented during the project's lifetime to help increase the uptake off innovative waste solutions.
After over three years of activity, the PPI4Waste project successfully created a critical mass of public authorities interested in purchasing eco-innovative waste solutions. It also explored the potential of new markets in the area of resource efficiency in the short and medium term and contributed to public sector innovation by mobilizing both SMEs and public authorities around this key topic.


## Main learnings

**Learning 1**: The project highlighted that joint or coordinated procurement in the waste sector is common practice in many Member states but limited to cooperation at national level (cross border cooperation is rare)

**Learning 2:** Procurement is a strategic instrument and therefore the focus should be more on decision makers and less on buyers. This would include a switch from prescriptive procurement, where specific equipment or specific services are tendered, to objective orientated or performance orientated procurement.

**Learning 3:** Joint or coordinated procurement can be cost effective regarding avoidance of double work and possible lower price because of large purchase volume

## Case studies

**Case 1**: GUIDANCE & CAPACITY BUILDING ON INNOVATION REGARDING SOCIO-TECHNICAL OPTIONS

Waste management solutions are being created and tested in different countries. However, not everyone can attend market engagement events and most of the time these people lack the knowledge and information to make good decisions. To ensure good PPI in waste management, guidance should clearly address the importance of having a risk management strategy and an innovation system analysis and show how to do this. Awareness raising and capacity building around PPI are therefore vital to ensure that the appropriate groundwork is laid for innovation procurement to be carried out successfully.

**Case 2:** STRENGHTEN & INNOVATIVE MULTI-STAKEHOLDER ENGAGEMENT – PUBLIC, PRIVATE, CITIZENS

PPI needs to consider not only the procurement of innovative products but also innovation at the organizational level, within the waste management process. The cooperative, results-focused approach used by Circulus-Berkel and 8 municipalities in the Netherlands, showcase how effective multi-stakeholder involvement can be. The question related to public target-setting was not so much about how the waste management needs to be done but rather about defining what needed to be done. The 'how' was dealt with by Circulus-Berkel.

For more information see: http://www.ppi4waste.eu/virtual-library/reports/step-4-lessons-learned/

## References

**For more information see:** www.ppi4waste.eu (project webpage)

## Project identification

**Designation: 'EPP – eHealth:** the main aim of this project is to mobilise the procurement power of healthcare institutions and major companies to help accelerate progress towards deployment and market uptake of eHealth solutions'

**Acronym**: *EPP - eHealth*

**Funding source:** Horizon2020

**Period:** January 2014 - December 2016

**Participant countries:** Poland, Denmark, United Kingdom, Spain

**Partners**: The University Hospital Krakow (Poland); Dane I Analizy (Poland); Optimat Limited (UK); Servicio Madrileno de Salud (Spain); Region Sjaelland (Denmark)

**Target topic:** the target of this project is to understand health care public buyers unmet needs, particularly in eHealth


## Abstract

EPP – eHealth: project aiming to mobilise the procurement power of healthcare institutions and major companies and to accelerate progress towards deployment and market uptake of eHealth solutions was funded by European Union program Horizon2020 and lasted from 2014 until 2016.
At the beginning of the project, the first task was to identify and establish a network of eHealth procurement organizations across the Europe within the sector. It was done by gathering information about their need for innovative solutions and awakening their interest in undertaking innovation procurement. After that, it was important to show, that there is a need for new solutions in eHealth sector which would later be communicated to potential solution providers. In this way, dialog between demand and supply side was created. Third objective required to prepare PPI strategy for eHealth. Consultations were held with costumers and supply side stakeholders to address demand side measures that are needed to accelerate the development and adoption of eHealth solutions. Fourth objective, after PPI strategy was created, eHealth procurers were informed about the design and implementation of it. In the end, four workshops were organized in order to target and raise awareness about PCP and PPI initiatives across Europe and to discuss new ideas and initiatives as well as providing procurers with good practices approaches.
In the end of the project, buyers learnt how to implement PPI and now they are more open to business partnership. Hospitals involved in the project will be ready to purchase new solutions based on their needs. Also, a network of buyers to jointly undertake procurement procedures was established. Secondly, project facilitated the dialogue inside stakeholders and also with suppliers which enables better communication opportunities.


## Main learnings

**Learning 1**: The attitude of healthcare service providers and funders inhibits PPI adoption and implementation. Fear of change, user resistance and risk aversion typically characterize public officials;

**Learning 2:** The Public sector is known to procure the safest option which means, that innovative products or services that have not yet been tested in an operative environment are less likely to be accepted by the contracting side;

**Learning 3:** Public officials operate with limited budgets and see innovations as involving more costs than the already made solutions. Public buyers perceive that innovation procurement could end up being more expensive than traditional procurement;

**Learning 4:** There are still concerns about interoperability between different equipment and between different healthcare systems. It creates a problem to make joint procurement between different countries healthcare institutions.

## Case studies

**Case 1**: ***Unmet needs identification challenges***

The failure to identify unmet needs until they become urgent problems is incompatible with PPI practices. PPI projects are more difficult to implement so it takes longer to accomplish them. Urgent-based working schemes should be clearly avoided in procurement procedures so long-term investment planning is essential for the success of Public Procurement process. In order to avoid these problems, the process of identification of needs should be facilitated with trained staff and clear policies and strategies in place. It would help to develop early demand maps.

**Case 2:** ***PPI tender execution success factors***

Buyers often fail to clearly communicate their needs and do not take sufficient activities to inform supply side. During the planning stage, demand side don't involve various specialists and they don't have enough knowledge themselves. It means, that their demands in some cases can be unclear. It is vital to ensure close relationship between demand and supply side by establishing activities to keep regular communication and to involve related experts from different fields in order to ensure that demand is clear and supply side understand what is wanted from them.

## References

**For more information see:** http://innovationithospitals.com/ (project webpage)


**Project manager:** Laura Sanchez Alonso; **Email**: l.sanchez@bravosolution.com

## Project identification

**Designation: Regional Networks for Sustainable Procurement**

**Acronym**: **SPP REGIONS**

**Funding source:** H2020

**Period:** *April 2015 – March 2018*

**Participant countries: Spain, Italy, France, UK, Netherlands, Denmark, Bulgaria**

**Partners**: ICLEI, ARPA, Bristol Council (UK), University of West England (UK), Réseau Grand Quest (FR), Gabrovo municipality (BL), Diputació de Barcelona (SP), Città Metropolitana di Torino (IT), City of Rotterdam(NE), EcoEnergy (BL), Ecoinstitut (SP), The Capital Region of Denmark (DE), Danish Enviromental Protection Agency (DE)

**Target topic:** *Creation and enlargement of regional networks for sustainable procurement*

## Abstract

SPP Regions was aimed at promoting the creation and expansion of European regional networks of municipalities working together on sustainable public procurement (SPP) and public procurement of innovation (PPI). The 7 networks involved in the project collaborated directly on tendering for eco-innovative solutions, whilst building capacities and transferring skills and knowledge through their SPP and PPI activities. 40 eco-innovative tenders were published, achieving savings of tonnes of CO2 emissions/year, primary energy savings every year, as well as purchasing of renewable electricity. The tenders within the project covered five sectors: Low emission vehicles, Food and catering services, Energy saving in public buildings, Green energy and Lighting.

The project intends to promote the creation and expansion of European regional networks through the assistance with sustainable tendering, access to specialist workshops and webinars and mentoring from existing SPP Networks. The project aims at the creation of SPP networks to demonstrate the commitment to sustainability, the development of regional supply bases, to increase influences through joint market engagement activities and using joint procurements to benefit from economies of scale.

## Main learnings

**Learning 1**: *As a result of the project, a manual called Procura+ has been created as a starting point for any organisation, both public and private, that wants to be more sustainable and innovative in their procurement approaches. In terms of approaching and integrating sustainability and innovation could be interesting for the project as it covers all the procurement process.*

**Learning 2:** *The importance of regional SPP networks in terms of collaboration on tendering, gaining knowledge, establishing sustainability criteria, framework agreements for the region, better tools of monitoring and internal benchmarking.*

**Learning 3:** *There are about 39 tenders related to the fields of food and catering, low emission vehicles, green energy, energy savings in public buildings and lighting that can be used as example and as a starting point for new tenders expected to launch for iBUY partners.*

## Case studies

**Case 1**: ex. ***Supplying sustainable mobility in Catalonia***

*In 2017 the Association of Catalan Towns and Counties (ACM) updated its framework contract which supplies general and police services with vehicles. Multiple contracts have been awarded to 24 suppliers, which offer electric, hybrid and petrol vehicles instead of the traditional diesel vehicles. In addition, contracts have been signed to supply electric motorbikes and bicycles, as well EV charging stations, training on efficient driving, and vehicle transformation services. The 4-year contracts, worth over €50 million, form part of the strategy of the region to move towards sustainable mobility and is expected to lead to an 87% reduction in diesel use.* More info

**Case 2:** ex. ***LED lighting in Hanham Wood Academy***

*The Cabot Learning Federation carried out the procurement lighting solutions for school buildings. The procurement aimed for the replacement of traditional fluorescent and incandescent lighting to low energy, low cost LED equivalents. A review of the lighting at Hanham Woods Academy (HWA) was undertaken as part of a funding application process for the lighting. A detailed life cycle costing evaluation and review of existing lighting was carried out, which resulted in a report showcasing the anticipated savings between operating costs and maintenance and service costs.When measuring against the previous contract as a benchmark, 97 tons of CO2 will be saved in 2017 with primary energy savings of 58%.* More info

## References

**Contact information: http://www.sppregions.eu**

***ICLEI – Local Governments for Sustainability – coordinator of SPP regions project - http://www.iclei-europe.org***

## Project identification

**Designation:** "Precommercial Public Procurement Mecaolivar project (second public tender)".

**Acronym**: *MecaOlivar*

**Funding source:** Co-funded European Commission – FEDER & Spain Government

**Period:** June 2014 – November 2015

**Participant countries:** Spain

**Partners**: Cordoba University, Centro de Mecanicación de Tecnología Rural y del Olivar

**Target topic:** Rural innovation, mechanization, prototype

## Abstract

**Mecaolivar**: The MECAOLIVAR project through strategies of R & D adapted to the demand of the business sector seeks to tender Pre-commercial PP for the development of prototypes that improve the technification and economic profitability of the olive grove, due to the continuous loss of income who is suffering. At the same time it intends to secure an innovative business fabric with capacity to develop commercial machinery that improves technification of this sector, increasing its competitiveness and international positioning.
Through Precomercial PP the project MECAOLIVAR will tender the development of 3 lines that will end in the construction of two precommercial prototypes in each of them. With this, it will be possible to build a service of public knowledge transfer generated by G.I. AGR 126 "Mechanization and Rural Technology" from the University of Córdoba Machinery manufacturing companies agriculture, by applying their theoretical knowledge to the development of pre-commercial products. Moreover, the University of Córdoba will see its innovative capacity in terms of productivity, research capacity and generation of results, by interacting with companies in the sector.

## Main learnings

**Learning 1**: With the know-how of the project and the tender, it has been possible to continue opening new lines of innovative public procurement through the Innolivar project in 2018

**Learning 2:** The Spanish tender law has changed in 2018 and this fact has delayed the implementation of new tenders based on the past success stories. In addition, in this tender the procedure has been suspended because one of the bidding companies has filed an appeal

**Learning 3:** We must keep abreast of legislative changes to be able to launch the bids correctly and not to waste valuable time on innovation processes

## Case studies

**Case 1**: PROTOTYPE BY STAGES

The lots of the tender are carried out in stages, in order to achieve a viable prototype: (1) In a first stage, possible solutions to the defined problem are requested. (2) In a second stage the feasibility of several chosen solutions is analyzed. (3) And in the third stage the prototyping is carried out.

**Case 2:** THINK TANK, PUBLIC-PRIVATE, KNOWLEDGE TRANSFER

The tender is a part of the ERDF project. During the project, different companies are identified that can provide solutions and that can then be submitted to the tender. Once the machines have been designed and prototyped to improve the application of phytosanitary products, care of the olive tree and harvesting of the olives, the results are exposed in different agricultural fairs. Moreover, the know-how accumulated during the process (2014-2015) allows to propose new research and developments that culminate in a new project and new public procurement pre-commercial innovations in 2018.
The tender is carried out through the Office of Strategic Projects of IPP of the University of Córdoba.

## References

**Contact information:** For more information see http://www.mecaolivar.com/, https://innolivar.es/, Tender 2014: https://contrataciondelestado.es/wps/poc?uri=deeplink%3Adetalle_licitacion&idEvl=Q1jetDWauuAQK2TEfXGy%2BA%3D%3D Tender 2018: https://contrataciondelestado.es/wps/poc?uri=deeplink%3Adetalle_licitacion&idEvl=NidyowNEtwoQK2TEfXGy%2BA%3D%3D

Project Manager: Mecaolivar: Jesús A. Gil Ribes gilribes@uco.es; Innolivar: Oficina de Proyectos Estratégicos de Compra Publica Innovadora innolivar@uco.es

## Project identification

**Designation:** Technology Integration in Home and Remote Care Services

**Acronym**: KotiDigi (HomeDigi) project

**Funding source:** Business Finland - Innovative Public Procurements

**Period:** 1.3.2018- 31.3.2019

**Participant countries:** Finland

**Partners**: City of Tampere; Smart Tampere programme and Health Tech providers

**Target topic:** Employing innovative and more efficient service production processes by using open definition process


## Abstract

The aim is to create an integration platform & dashboard for home and remote care services in Tampere. The aim is to support and strengthen the creation of business consortium and new jobs and to open up new markets to innovation partners and other health technology service providers.

With the help of integration platform a proactive follow-up of the needed services of the customers in home and remote care services is possible. The platform enables a quick overview of the client´s status and the needed service can be quickly provided in acute situations (24/7). The aim is to find a holistic technological solution that will develop the operative processes especially in home care and enables more user-friendly, safe and cost-efficient ways to utilize remote and health-technology.

The integration platform will be produced with the help of innovation partnership and open definition process. A pilot version of the integration platform will be created and piloted with vertical product solutions which are needed in the processes that are agreed to be developed and which are ready to be attached in the integration platform.

In the first phase in May 2018 an acquisition announcement for development partners was done. The theme of the announcement was “Integration Platform & Dashboard”. The City of Tampere received 14 bids (over 20 Companies) out of which 6 was chosen for continuation. The City of Tampere also requested more information of intended solutions from the selected companies. The negotiations with the companies were continued over the summer and in the beginning of September 2018 there was a final call for tenders with the announcement theme “Measurement Equipment Providers”. Total 14 bids were received and finally 10 of them were accepted as a partner in the development process. The pilot phase will begin in January 2019 with the pilots in the home care, heart care and diabetes care. The main aim of the pilot phase is to state the technical functionality.


## Main learnings

**Learning 1**: Despite it is very time consuming and demanding way of doing the procurement by using the open definition process the city learned a lot and gained comprehensive knowledge already during the process about the market situation and the solutions available.

**Learning 2:** The procurement process was an integral part of the innovation process.

**Learning 3:** The open definition process can be used especially when the city is acting as a client and the city is providing the platform where the development work can be done. Open definition process works best in pre-acquisition phase, e.g. in planning and determination phase.

## Case studies

The pilots will be done in the following service areas starting in 1 January 2019:

Case 1: Home care clients

Case 2: Heart patients

Case 3: Diabetes patients

There will be 10 – 15 clients in every pilot and the main task is to state the technical functionality. Based on the research of the cost-effectiveness of the solution the decision to go forward or not will be made.

## References

**Contact information:**


Jarkko Lumio, City of Tampere, Jarkko.lumio@tampere.fi and Tiina Karttunen, City of Tampere, tiina.t.karttunen@tampere.fi


KotiDigi project (only in Finnish): https://www.tampere.fi/tampereen-kaupunki/ajankohtaista/tiedotteet/2018/03/01032018_3.html,

Business Finland, Funding for Innovative Public Procurements: https://www.businessfinland.fi/en/for-finnish-customers/services/funding/public-services/innovative-public-procurements/

## Project identification

**Designation:** SPICE - Support Procurements for Innovative transport and mobility solutions in City Environment

**Acronym**: SPICE

**Funding source:** Horizon 2020 - EC DG MOVE – Coordination and Support Action

**Period:** *1.9.2016- 31.8.2018*

**Participant countries:** Finland, Austria, Denmark, Great Britain, the Netherlands, Belgium, Germany

**Partners**: ITS Europe (Belgium), City of Copenhagen (Denmark), Northamptonshire County Council (Great Britain), Austriatech (Austria), City of Hamburg (Germany), Ministry of Infrastructure and Environment (the Netherlands), North Denmark Region (Denmark), City of Tampere (Finland); Forum Virium (Helsinki, Finland)

**Target topic:** Gives public authorities an invaluable opportunity to share their experiences of procurement of innovative sustainable transportation solutions and to learn from each other.

## Abstract


Project objectives:

- To collect current practices on using public procurements for innovative solutions, assess those practices and summarise and share best practices in detail on various aspects of procurement
- To facilitate the dialogue between public procurers and industry
- To develop a set of recommendations as reference for public procurers and suppliers towards harmonised procurements of sustainable transport and mobility solutions
- To facilitate experience exchange, knowledge transfer, capacity building and raise awareness of procurement of innovative sustainable transport and mobility, using its stakeholder group (SPICE Stakeholders) as a platform
- To form a number of Common Buyer Groups to facilitate joint procurements during and after the project timeframe

Activities

- Collect current best practices in public procurement
- Assess best practices
- Identify legal and technical legal challenges
- Develop recommendations to support innovation
- Organise training and capacity building events to help implement the recommendations


## Main learnings

**Learning 1**: To select the best procurement procedure depends on the characteristics of the desired solution: High or low tech, maturity level of technology and the amount of potential suppliers there are on the market.

**Learning 2:** Distinguish correctly between R&D and procurement i.e. assess the marked readiness of an innovative solution and use the relevant legal framework fitting to either R&D or innovation.

**Learning 3:** Use all tools available in the Procurement Directive i.e. analyse type of procurement and desired result, acquire insight in the tools available in the Procurement Directive and combine procurement approaches, procurement procedures, and contractual approaches to achieve goals.

**Learning 4:** Use procurement tools to gather knowledge about innovative solutions.

**Learning 5:** Shift the focus to systems, users and integrated impacts.

*More information: http://spice-project.eu/recommendations/*

## Case studies

Case studies introduced here are examples done in the region. More case studies can be found here: http://spice-project.eu/best-practices/

**Case 1**: CONSTRUCTION OF THE TAMPERE TUNNEL (RANTATUNNELI)

For the construction of the Rantaväylä tunnel in Tampere, the Finnish Transport Agency (FTA) used a complete new procurement approach: the alliance model, this is a Competitive Procedure with negotiation. Due to the complexity of the project, negotiations with potential suppliers during the tendering phase were needed. But FTA also aimed with this approach to investigate the possibilities of a procurer / supplier cooperation in which risks and opportunities are shared. This led to significant savings in time and money.

More info: http://spice-project.eu/wp-content/uploads/sites/14/2017/07/Tampere_Alliance.pdf

**Case 2:** TAMPERE: PROCUREMENT OF E-BUSES AND CHARGING SYSTEMS

Main learnings of this case are how long term sustainable business models can be achieved or tested. Tampere purchased e-busses and charging systems due to no investment activities from the private side in this field. The aim was to achieve a system for one e-bus line that also provides a platform for future sustainable mobility. The case shows how to achieve feasible sustainable business models and how the private sector may be pushed into future investments.

More info: http://spice-project.eu/wp-content/uploads/sites/14/2017/07/Tampere.pdf

## References

**Project:** http://spice-project.eu/


**Contact information:** Piia Karjalainen, Dissemination Manager, ERTICO - ITS Europe, p.karjalainen@mail.ertico.com


**More info**: SPICE Best Practices: http://spice-project.eu/wp-content/uploads/sites/14/2018/05/Ertico-SPICE-Best-Practice_brochure-20pages-A5-finish_web.pdf

## Project identification

**Designation:** Future Automated Bus Urban Level Operation Systems

**Acronym**: FABULOS

**Funding source:** H2020

**Period:** 1/1/2018-31/12/2020

**Participant countries:** Finland, Estonia, Norway, Netherlands, Greece, Portugal

**Partners**: Forum Virium Helsinki (Finland), Ministry of Economic Affairs and Communications (Estonia), Municipality of Gjesdal (Norway), Municipality of Helmond (Netherlands), Municipality of Lamia (Greece), Sociedade Transportes Colectivos do Porto (STCP), Public transport service provider in the Metropolitan area of Porto (Portugal)

**Target topic:** *Pre-commercial procurement for an autonomous bus line of self-driving mini buses*


## Abstract

**ToR:** The FABULOS project focuses on how cities can use automated buses in a systematic way. The goal is to procure the operations of an autonomous bus line. Self-driving minibuses have already been tested in technical demonstrations in various countries, but a proof-of-concept for the management of autonomous fleets as part of the public transportation provision is not yet available. Furthermore, some parts of the driving automation need to reach a more mature stage in their development in order to be employable in normal urban settings, such as open roads. In other words, a demonstration of the economic, technical, societal and legal maturity of the solution needs is required. This should be carried out in a real-life setting, integrating automated minibuses into the public transportation ecosystem. The six partner cities are embracing this challenge by collectively procuring R&D for the prototyping and testing of smart systems that are capable of operating a fleet of self-driving minibuses in urban environments. These solutions should be all-inclusive: software, hardware, fleet and services. The cities play an important role by combining their efforts in supporting the market to develop such systems. This kind of intelligent transportation system and integrated transportation approach is key to facilitating the sustainable development of public transportation and for cities to be able to become car-free in the foreseeable future.


## Main learnings

**Learning 1**: **Open Market Consultation**: The Open Market Consultation was a preparation on a pre-commercial procurement challenge and request for tender. Successful procurement requires involving the technology companies and consortia from early on, to gain market insight on state of the art and future developments in the field of automated mini-buses. In order to achieve this, series of Open Market Consultation events were organised to refine and reposition the tender specifications.

**Learning 2: Preferred Partner Group**: To ensure the further validation of the PCP challenge definition, and more direct future market up-take for the solution, FABULOS has set up a "preferred partner" group of 12 follower cities/public procurers. They are entities that are neither lead procurer, nor members of the buyers group, nor third parties providing in-kind contributions to the PCP, but that have a special interest in closely following the PCP.

**Learning 3: PCP process set-up and definition of evaluation criteria**: Tentative care should be placed on the definition of requirements, both from a content and a procedural view. As to the definition of the PCP challenge the project partners must make clear the joint challenge scope, target audience, awarding and assessment criteria (functional, technical, technological) in a consolidated manner.

## Case studies

**Case 1**: **Procurement of autonomous bus lines**

*The procurement target is the operation of the autonomous bus line. The procurement of a solution (service-type procurement) instead of software (product-type procurement) is needed to create an analogous model with how the public transport authorities are currently procuring the (non-autonomous) bus lines. It is expected to be similar model to the future procurements of commercial autonomous bus lines operations. This means for example that in future the cities can procure traditional bus line operations for some districts and zones as before, but after the project, in addition also will be able to procure bus transport service in zones or lines that would be managed with autonomous minibuses instead.*

**Case 2: Preparing cities for hosting innovations**

Partners of FABULOS will be active in a) opening the data and service interfaces of cities for private companies to build and run their services, b) providing exemptions, testing grounds, storage facilities etc to companies to test their solution and c) reacting in an agile way to innovations and opportunities by quickly removing the barriers of innovation created by old regulation and practices. The case shows how public entities must be prepared and motivated in a diversity of cross-domain interventions in order to procure and host innovations.

## References

**ToR:** https://fabulos.eu


**Contact information:** Coordinator, Renske Martijnse-Hartikka, Forum Virium Helsinki, renske.martijnse-hartikka(at)forumvirium.fi, Tel. +358 40 683 7979

## Project identification

**Designation:** PREservation FORMATs for culture information/e-archives

**Acronym**: PREFORMA

**Funding source:** FP7-ICT

**Period:** 1/1/2014-31/12/2017

**Participant countries:** Sweden, Italy, Estonia, Belgium, Germany, Spain, Netherlands, Greece, Ireland

**Partners**: RIKSARKIVET (Sweden), PROMOTER (Italy), PACKED EXPERTISECENTRUM DIGITAAL ERFGOED (Belgium), FRAUNHOFER-GESELLSCHAFT (Germany), HOGSKOLAN I SKOVDE (Sweden), UNIVERSITA DEGLI STUDI DI PADOVA (Italy), STICHTING NEDERLANDS INSTITUUT VOOR BEELD EN GELUID (Netherlands), Koninklijk Instituut voor het Kunstpatrimonium (Belgium), GREEK FILM CENTRE (Greece), LOCAL GOVERNMENT MANAGEMENT AGENCY (Ireland), STIFTUNG PREUSSISCHER KULTURBESITZ (Germany), AYUNTAMIENTO DE GIRONA (Spain), Eesti Vabariigi Kultuuriministeerium (Estonia), KUNGLIGA BIBLIOTEKET/National Library (Sweden)

**Target topic:** Future Memory Standards for Long-term Digital Preservation

## Abstract

**ToR:** Memory institutions are facing increasing transfers of electronic documents and other media content for long-term preservation. Preservation models are often inspired by ISO 14721:2012, known as "the OAIS model", where transfers and preservation are built on information packages containing both data and metadata. Data is normally stored in specific file formats for documents, images, sound, video etc. that are produced by software from different vendors. Even if the transferred files are in standard formats, the implementation of standards cannot be guaranteed. The overall intention of PREFORMA is to research critical factors in the quality of standard implementation in order to establish a long-term sustainable ecosystem around developed tools with a variety of stakeholder groups. The tools should be innovative and provide a reference implementation of the most common file format standards for the assessment of the collections to be archived and for the correction of the collections. PREFORMA targets a wide digital preservation community, by providing specifications and feedback to developers, standard bodies and memory institutions. The PCP, following the rules for tenders in public sector, will match the memory institutions' professional knowledge and the suppliers' skills in development and promotion of products to create a win-win situation. Joint procurement will enable PREFORMA to build a sustainable network of common interest, where the public procurers can remain in contact and cooperate beyond the EC funding period.

## Main learnings

**Learning 1**: **Do not invent the wheel again**: Re-use standard methodologies for the evaluation of the results of the PCP and re-use best practices from other PCP projects.

**Learning 2: Joint Procurement is a hard task**: Working together gives added value, but requires a great deal of time and energy. Moreover, working together for the implementation of a joint procurement has proved to be a good practice for the project partners, as it leads to a clearer definition of the requirements and to a better control of the process and of the results.

**Learning 3: Copyright and IPR**: Partners need to analyse in every detail any possible issue related to copyright and IPR.

**Learning 4: Avoid self-referential approaches**: Partners need to be attentive to what is going on in the surrounding world, involve experts outside the project in order to ensure a wider impact beyond the project itself but also to enhance quality aspects inside the project.

## Case studies

**Case 1**: **Procurement of open-source toolset for conformance checking of digital files**

The procurement target is to develop an open-source toolset for conformance checking of digital files, intended for long-term preservation in memory institutions. Development of the conformance checker focuses on four use cases that facilitate the interaction between the supplier, academic research and memory institution: a) Conformance Checking at Creation Time, b) Conformance Checking at Transfer time, c) Conformance Checking at Digitization time and d) Conformance Checking at Migration time.

**Case 2: Open Source Approach**

PREFORMA is following an open source approach, with the aim to establish a sustainable research and development community comprising a wide range of contributors and users from different stakeholder groups. The open source nature ensures long-term availability of the software, beyond the memory institutions and suppliers involved in PREFORMA. All software developed during the PREFORMA project will be provided under two specific open source licenses: "GPLv3 or later" and "MPLv2 or later". All digital assets developed during the PREFORMA project will be provided under Creative Commons CC-BY v4.0, and in open file formats.

## References

**ToR:** http://www.preforma-project.eu/

**Contact information:** Coordinator: Borje Justrell, Riksarkivet, borje.justrell@riksarkivet.se, Technical Coordinator: Antonella Fresa, Promoter Srl, fresa@promoter.it, Communication Coordinator: Claudio Prandoni, Promoter Srl, prandoni@promoter.it

## Project identification

**Designation:** Support Procurements for Innovative transport and mobility solutions in City Environment

**Acronym**: SPICE

**Funding source:** H2020

**Period:** September 2016 – August 2018

**Participant countries:** Belgium, Denmark, Finland, Austria, Netherlands, Finland, Germany, United Kingdom

**Partners**:
1) North Denmark Region; 2) Ertico; 3) Northamptonshire county council; 4) Forum Virium Helsinki; 5) City of Tampere; 6) City of Hamburg; 7) City of Copenhagen; 8) Austrian Federal Agency for Technological Measures(AustriaTech); 9) Ministry of Infrastructure and the Environment of Denmark; 10) City of Copenhagen

**Target topic:** Facilitating public procurement of innovative sustainable transport and mobility solutions in urban areas

## Abstract

Support Procurements for Innovative transport and mobility solutions in City Environment lasting during the period of September 2016 – August 2018, being funded under H2020-EU.3.4. The main objective of SPICE is to provide a forum for facilitating the public procurement of innovative sustainable transport and mobility solutions in urban areas. The project aims to enable uptake of innovative and sustainable mobility solutions and to enhance the competitiveness of European industry in the transport and mobility services through smarter public procurements.

The project timeline has been identified as following:

Collect current best practice in public procurement -> Assess best practices -> Identify legal and technical legal challenges -> Develop recommendations to support innovation -> Organise training and capacity-building events to help implement the recommendations

## Main learnings

**Learning 1**: Lack of the best practice information where these was a problem gathering and summarizing information, as there was a lack of the accessible list of references on the relevant IPP projects. Also, there was a lack of trust for sharing the information that was not publicly accessible and delivered from the side of the project partners.

**Learning 2:** Proper criteria is needed for the PII, as there may happen, that the PPI can be hampered by having criteria which rule out innovative solutions. As an example, there was accessibility criteria example, given by one of the partners, for the buses, for which no offers for electric vehicles were submitted.

**Learning 3:** One barrier to unlocking the full potential of innovative public procurement was identified as the fragmentation of (policy) objectives between the administrative levels, silos and organisations.

## Case studies

**Case 1**: SPICE COMMON BUYERS GROUP

Using the stakeholder network SPICE has identified the group of buyers that share the same needs and plans for procurements. Such groups is the basis for the SPICE Common Buyers Group, which leads towards the harmonisation between solutions, to larger volumes to procure and to a more cost-effective procurement. The purpose is to ensure that during the project lifetime several groups are formed that go for the similar IPP and even if the common procurements are not being found, the exchange of the experience enables to improve the overall project outputs.

**Case 2:** SPICE WHITE PAPER

All the research done on the best practices and recommendations throughout the project have been compiled into the SPICE White Paper – "Procurement of Innovation: Obtaining innovative mobility solutions by applying a new procurement approach". The White Paper is ppt presentation which is designed to be used and customized by others according to their needs and the 100 slides consist of the following parts: (1) the legal aspects of procurement, (2) the processes behind common procurements, (3) the technical considerations involved in procuring electric vehicles, intelligent transport systems, and mobility services (including Mobility as a Service elements), and (4) the policy framework for procurement. In the final slides of the White Paper, SPICE gives some recommendations for improving the procurement process overall.

## References

**For more information:** http://spice-project.eu/

**Project coordinator:** Bahar Namaki Araghi (phone+45 20 98 43 93, E-mail: banar@dtu.dk)

## Project identification

**Designation:** Countries joining efforts to look for more sustainable energy solutions through a pro-innovation procurement approach

**Acronym**: CEPPI

**Funding source:** European commission's Horizon 2020 Programme

**Period:** April 2015 – June 2018

**Participant countries:** United Kingdom; Hungary; Germany; Poland; Spain

**Partners**: Optimat Limited;
General Assembly of Budapest;
Jera Consulting Limited;
Birmingham city Council;
ICLEI European Secretariat GmbH;
Steinbais GmbH & Co for Technology transfer;
Wroclaw Research Centre EIT;
City Hall of Castellon de la Plana;
Valencia foundation for Strategic Development and Urban Innovation.

**Target topic:** Coordinated energy related PPIs action for cities

## Abstract

CEPPI (Coordinated energy-related Public Procurement of Innovations) EU funded three -year project, that has lasted from the beginning of April 2015 until the end of June 2018, where the aim of the project was to demonstrate how European cities can make a more rapid progress towards achieving their energy-related objectives through the strategic use of public procurement.
The specific objectives of CEPPI have been set as:
• Identify and quantify future investment and procurement plans in participating cities that could be influenced to achieve a lower energy and/or CO2 outcome
• Develop and implement a practical procurement support programme that will build organisational capacity in city authorities in smart, sustainable, innovation procurement through action learning activities and thus progressively influence their procurement processes both during the period of the project and beyond
• Implement at least one PPI project in each of the five cities with the combined potential to reduce primary energy consumption by at least 33 GWh/year
• Develop procurement roadmaps to identify public tenders that might be ripe for more ambitious energy-related PPI projects after the end of the project

## Main learnings

**Learning 1:** It was found, that engaging smaller, more autonomous bodies in innovation procurement was easier than engaging municipal authorities. In the latter, concerns over new approaches, time investment, legal aspects are taking time to break down.

**Learning 2:** The combination of the words 'innovation' and 'procurement' as well as using the term 'innovation methods' was found to have a negative impact on the societies understanding and impression of the process. Instead, the project partners learnt to stress out that the project is aimed to deliver 'what you need, when you need it, at a price that reflects the value placed on the outcomes'

**Learning 3:** Market engagement is a cornerstone of innovation procurement, where the key purpose is to assess the capacity and capability of the market to respond to the requirements of the demanding customer.

## Case studies

**Case 1**: BUYER-SUPPLIER PARADOX

The ambition of the project was to break down the so-called buyer-supplier paradox, where the suppliers respond to customer demand and Customers tend to limit themselves to buying what is available – rather than asking for what they need. CEPPI aim was to change it by introducing the PPI intervention 'bridge' between the "if there was a solution to my problem we would buy it" and "if there was a demand we would invest to supply solutions.

**Case 2:** FIRE STATION – BUILDING REFURBISHMENT & MARKET SOUNDING PROSPECTUS

Valencia City Council launched its first public procurement of innovation process, aiming to improve the energy efficiency of the Central Fire Station. The procurement is intended to improve the Fire Station facilities, as well as increase the wellbeing of a workforce. Valencia, through the Fire Service and the Las Naves Foundation, took the opening step with a market sounding prospectus and preliminary market consultation. This was aimed at generating a space for technical dialogue with all economic and innovation agents who want to participate.

## References

**For more information:** www.ceppi.eu

**Project coordinator:** Optimat Limited

## Project identification

**Designation:** "Public procurement of innovation FOR cooperative ITS".

**Acronym**: *P4ITS*

**Funding source:** CIP – Competitiveness and innovation framework programme

**Period:** December 2013 – May 2016

**Participant countries:** Belgium, Austria, Denmark, Spain, Finland, France, Hungary, Italy, Luxembourg and Sweden.

AUSTRIATECH - GESELLSCHAFT DES BUNDES FUR TECHNOLOGIEPOLITISCHMASSNAHMEN GMBH; AUTOBAHNEN- UND SCHNELLSTRASSEN-FINANZIERUNGS-AKTIENGESELLSCHAFT; VLAAMS GEWEST; REGION NORDJYLLAND (NORTH DENMARK REGION); FUNDACION PARA LA PROMOCION DE LA INNOVACION, INVESTIGACION Y DESARROLLO TECNOLOGICO EN LA INDUSTRIA DE AUTOMOCION DE GALICIA; AYUNTAMIENTO DE VIGO; OHL CONCESIONES SA; TEKNOLOGIAN TUTKIMUSKESKUS VTT; LIIKENNEVIRASTO; Teknologian tutkimuskeskus VTT Oy; TOPOS - TOPOS AQUITAINE; ITS BRETAGNE; HAJDU BIHAR MEGYEI ONKORMANYZAT - LOCAL GOVERNMENT OF HADJU BIHAR COUNTY; COMUNE DI VERONA; REGIONE LIGURIA; LUXEMBOURG INSTITUTE OF SCIENCE AND TECHNOLOGY; CENTRE DE RECHERCHE PUBLIC HENRI TUDOR; ITS INTELLIGENTA TRANSPORTSYSTEM SWEDEN AB;

**Target topic:** Innovative procurement methods to help launch new intelligent traffic management systems.

## Abstract

Intelligent traffic management systems that allow vehicles to communicate with each other and other roadside infrastructure like traffic lights could help make big improvements in managing the flow of vehicles across cities. Moreover, investments in traffic management systems have proved to be more cost efficient compared to investments in new road infrastructure. These measures can enable drivers to adopt more environmentally-friendly driving habits that reduce fuel consumption and emissions, reduce stress and micro accidents, as well as making the traffic flow more fluid.

The project has developed an innovative EU-wide network of authorities planning smart traffic systems and willing to improve the market roll-out of the technology needed through Public Procurement of Innovation (PPI). Moreover the project network enabled a wide range of people from across the EU to explore common issues and themes on intelligent traffic management. P4ITS's focus on how to make the market roll-out of innovative C-ITS solutions in Europe happen using Public Procurement of Innovation faced the challenge of defining a common understanding of what PPI involves.

## Main learnings

**Learning 1**: A main conclusion of P4ITS is that PPI should not be considered a legal procedure, but rather an innovative strategy and a set of operational approaches that enhance the procurement of innovative solutions

**Learning 2:** P4ITS looked at how to tackle other PPI hurdles including EU procurement laws and how to operate in the space between R&D procurement and commercial procurement, cross-border procurement laws with different national approaches and national data protection legislation.

**Learning 3:** The project found that innovation procurement (including PPI and PCP) encompasses legal tools and procedures, which are demand side orientated, since the objective is a commercial procurement contract. This process includes the procurement of solutions both based on innovation of existing technologies and those requiring R&D.

## Case studies

**Case 1**: P4ITS Thematic Network

Rising public needs and interests require not only innovation per se, but also innovative ways to trigger, fund and support the R&D process up to the commercialisation of new products and services that will be answering these needs. P4ITS partners were able to achieve a common understanding on PPI by sharing first-hand experiences on real cases / current practices. The added value from P4ITS project came from a true exchange between practitioners sharing first-hand experience on real cases and current practices, by analysing risks and barriers encountered vs. solutions and enablers adopted in different countries and/or sectors in order to evaluate the transferability of approaches. Raising awareness for PPI as one approach (with areas of application, but also limitations) in a bundle of instruments is an important objective of the network. The message delivered will also mention the added value of PPI and the risks for the procurers when using this approach.

**Case 2:** Way forward for Public Procurement of Innovation in C-ITS deployment

Public procurement of innovation (PPI) has a great potential to boost the deployment of Cooperative Intelligent Transport Systems and Services (C-ITS) on our roads. By acting as early adopters, public procurers can drive the development of innovative ITS solutions from various vendors towards concrete mobility needs for people and goods. However, lack of strategy, knowledge and experience hamper this potential. This paper presents the recommendations on the way forward for PPI inC-ITS by the P4ITS consortium. More information you can find here

## References

**Contact information: website**:

For more information see http://p4its.eu/

Project Manager: Giacomo Somma; Email: g.somma@mail.ertico.com

## Project identification

**Designation:** International Network Supporting Procurement of Innovation via Resources and Education

**Acronym**: INSPIRE

**Funding source:** H2020

**Period:** 2013-2015

**Participant countries:** Finland, Austria, Spain, France, Italy, United Kingdom

**Partners**: NHG Consulting OY (Finland), Bundesbeschaffung GMBH (Austria), Agencia de Qualitat i Avaluacio Sanitaries de Catalunya (Spain), Reseau des Acheteurs Hospitaliers IDF (France), The European House - Ambrosetti SPA (Italy), Bitecic Limited (UK)

**Target topic:** Procurement of Innovation targeting the health system

## Abstract

Traditionally, Europe's healthcare system has predominantly focused on a hospital to outpatient care cycle. However, to meet the new demands presented by an ageing population, this focus must shift towards providing preventative and self-care – a shift that can only happen with the use of new technology and ICT-based solutions. But getting these technologies to the market is anything but straightforward, with one of the biggest obstacles being the initial procurement of innovative solutions. This is because, in general, health and procurement authorities have not yet embraced such novel, innovation-centric procurement instruments as Pre-Commercial Procurement (PCP) and Public Procurement of Innovation (PPI). The EU-funded INSPIRE project helped to change this out-dated approach to procurement by encouraging the use of PCP and PPI within the domains of eHealth, active ageing and independent living. The project focused on sharing and disseminating evidence on successful procurement practices from various European projects and providing support to European procurers operating in the health sector and looking to adopt these new collaborative procurement practices.

## Main learnings

**Learning 1**: INSPIRE addressed the confidence issue in PCP and PPI by creating a stakeholder ecosystem and a communications platform capable of inspiring public procurers from Member States responsible for defining the acquisition strategies for innovative solutions in eHealth, active ageing and independent living.

**Learning 2:** The project started by creating a sector-specific network of contracting authorities committed to using innovative procurement practices. This network then served as a hub for collecting and disseminating evidence and best practice scenarios on implementing PCP or PPI as a means for developing new technologies and ICT-based services within the healthcare delivery system.

**Learning 3:** The project linked innovative procurement initiatives with venture capital activities. R&D and innovative activities often face difficulties in attracting sufficient external finance in an adequate timeframe. Linking PCP with venture capital can provide the missing boost needed to complete the innovation chain.

## Case studies

**Case 1**: **Analysis of Innovation Procurement practices** - This document provides a systematized analysis of current State of Art in Innovation Procurement in the EU and of relevant innovation procurement cases from different Member States. The case studies can be found published in their totality on here. The aim is to understand and illustrate what are the challenges to be faced and the benefits to be achieved when implementing (in a proper way) PCP and PPI in Health sector (eHealth, Active Aging and Independent Living).

**Case 2: PCP/ PPI Gap Analysis and Recommendations** - evidence and analysis of the current gap in the adoption of the Pre-Commercial Public Procurement (PCP) and Procurement of Innovative Solutions (PPI) across the INSPIRE partner countries and European healthcare service systems. These findings have been validated and discussed via workshop sessions held in Helsinki, Vienna, Barcelona and London. A number of recommendations are made in this document to enforce the procurer's and innovation policy makers' awareness in the PCP & PPI and stimulate actions at different level of governance. The INSPIRE observations indicate that public authorities may not be yet prepared to set up a PCP&PPI strategy, either because they are not fully aware of its rationale or because they lack proper roles, mandates, skills, resources and metrics to implement it.

## References

**Contact information:**

Nordic Healthcare Group: SUZAN IKÄVALKO - suzan.ikavalko@nhg.fi; +358 50 5834292; www.nhg.fi

**website**: http://inspirecampus.eu/; **links:** https://cordis.europa.eu/project/rcn/110904_en.html;


iBuy
Interreg Europe
European Union
European Regional
Development Fund