PROJECT FINAL REPORT

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Project acronym: WATERPIPP

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1 Final publishable summary report

1.1 Executive summary

WaterPiPP is about exploring new public innovation procurement implementation and testing it in the water sector, in a context where European innovation potential in the water sector is blocked by a number of bottlenecks and barriers[2]. Methods and tools enabling the uptake of innovation in public procurement procedures must be found to override the barriers identified.

A strategy for Innovation Oriented Public Procurement (hereinafter "IOPP") good practices transfer to the European water sector was elaborated. It was built on the partner's network and state of the art of experiences on IOPP in Europe and OCDE countries. Five thematic working groups (involving local governments, public operators, regions, the water industries, water river basin organizations) assessed this strategy within their individual contexts. A consensus workshop provided joint recommendations for procurers in the water sector. At this occasion, a Water Innovation Procurement Forum (WIP) was launched to gather the key players. Awareness rising for the water sector was delivered thanks to five thematic workshops between the end of 2014 and the creation of the WIP in March 2015.

WaterPiPP partners actively helped local and regional authorities, water utilities, innovation and procurement agencies in the preparation of four pilot collaborative innovation tests.

In March 2015, a set of 15 recommendations were defined by the WaterPiPP consortium partners as well as the additional experts. Based on these practical and strategic recommendations, EIP Water and the project consortium started their joint proposition in fall 2015 and onwards. The WaterPiPP project enlarged its network by inviting more participants to the project's capacity building activities and more candidates to the accompanying measures of coaching and training.

A call of interest was launched to identify interested stakeholders to implement pilot activities of assistance for preparing innovation procurement in the water sector. It resulted in the following list of case pilots:

1. Viveraqua, Veneto Region, Italy: The TLC Network for the Integrated Water Service.
2. Acquedotto Pugliese, Puglia Region, Italy: Adaptive Water Management platform.
3. CAP Holding, Italy: Innovative solution for WWTP sludge valorisation.
4. Helsinki Region Environmental Services HSY, Finland: Decision support tool for investment pre-planning and capacity management.

A set of tools (guidelines, eLearning materials, training courses) was developed to help procurers to get the knowledge and know-how to proceed IOPP. The accompanying measures of coaching and training were implemented through several meetings with experts and the selected candidates.

The accompanying measures of coaching and training enable stakeholder community knowledgeable about innovative procurement and determine the public procurer more confident in undertaking PCP&PPI initiatives. It also contributed to identify, select, prioritize and prepare (potential) viable procurements, corresponding to real (common) challenges and needs in water sector, giving support and related training to the pilot procurers and mutualising on good practices available in other sectors.

[2] Barriers & bottlenecks to water innovation - EIP Water Report

1.2 Summary description of project context and objectives

1.2.1 Summary of the project context

Public procurement represents around 19% of the EU's GDP, an important lead market for innovators in particular in the water and climate change sectors. Innovation procurement of products and services can be used to:

- Deliver societal objectives requiring new solutions that are not available on the market or are too expensive,
- Solve problems related to the commercialization of innovative solution,
- Improve quality and efficiency of public services with a better value for money.

When talking about the procurement of innovative solutions in the water sector, three general ideas are commonly pointed out. The WaterPiPP project was designed to find solutions to:

- Scattered responsibilities and lack of expertise in procurement,
- Regulations leading to risk adverse tendencies,
- Lack of incentives for technology providers.

Indeed, procurement of innovative water-related services and technologies is often underexploited in the public sector due to fragmentation. The core of the WaterPIPP project is to help to change this. Evidences that innovative ways to access latest water-related services and technologies are feasible and effective, are provided. The complementarity of the consortium partners (public organizations, procurers, knowledge institutes and facilitators) supported by a Liaison Committee (composed of the key actors of the procurement innovation chain), was designed for bringing together the Demand and the Supply sides.

1.2.2 Summary of the project objectives

The WaterPiPP approach was designed in order to reach the following objectives:

- Gather together experts and practitioners in the area of water-related public procurement to facilitate exchange of knowledge;
- Act as an information hub providing the latest and most relevant information about the procurement of innovative products and services in the water sector (but also in other sectors if relevant, such as health);
- Create a community of practitioners who can openly discuss the procurement of innovative products and services in the water sector.

The project tested new approaches to stimulate the uptake of innovation in the water sector. To do that, the procurement power was mobilized, building practical and effective innovative procurement strategies, testing them and disseminating the outcomes for a larger scale adoption.

It contributed to unlock investments and deliver the solutions needed by the public sector to face water challenges. The process is also contributing to speed-up the development and the deployment of innovative solutions creating at the same time market opportunities for water innovation solutions.

1.3 Description of the main scientific & technical results

1.3.1 Expected outputs

The expected outputs and outcomes of the WaterPiPP project are:

- To define the state of the art of innovative procurement practices and potential adaptation to the water sector, including the definition of a methodology.
- To test the potential of innovation procurement to speed up innovation and market uptake of R, D&I results.
- To help public authorities to procure innovation when facing the challenge of the sustainable management of water resources.
- To explore potential synergies for the aggregation of public and private demand for innovative solutions in the water sector.
- To help groups of public authorities and relevant private procurers to progress in creating and collectively implement procurement strategies (Capacity Building and awareness raising on tools and testing phases of PCP and PPI).
- To create a collaborative platform of stakeholders and procurers for mutual learning and debate mid to long term needs requiring R&D&I of new technological solutions with potential role for PCP and PPI.
- To perform a collaborative preparatory phase for the pilots (PCP and PPI).

1.3.2 Main scientific results

A general finding from the case examples studied in EU and OECD countries was that there are various ways to link government demand with innovative supply in the pre-commercial stage, and that these activities may play a significant role in bringing the perceived risk of new technology adoption to an acceptable level for a public authority, thus facilitating public procurement of innovative solutions.

Based on these case examples, several bottlenecks were considered to be particularly affecting the IOPP water sector market. Corresponding recommendations were proposed to explain the way and mechanisms to be applied to avoid and fix the problem.

1.3.2.1 Scientific results based on EU case examples

Progress in enabling the market with innovative technologies which can ensure sustainable water use and re-use is highly dependent on removing the non-technological barriers that constrain the European market.

From a general point of view, we can affirm that some of the barriers identified by EIP on water coincide with the ones which were pinpointed in the project:

- Lack of funds for SMEs: many SMEs are innovative and develop excellent products and services. In their innovation process, when a prototype is developed they are often confronted with a lack of financial resources for further development, customization, demonstration and commercialization.
- Risk aversion of the water sector because this sector, as well as industrial sectors have a high capital-intensity and deal with high risk aversion for innovative technologies. Therefore, there is a low preparedness to act as a launching customer for innovative processes or products.
- Fragmentation of policies and regulations. In this sense, and notwithstanding the uniformity that is provided in the EU by the public procurement Directives, the “procurement tradition” between the different EU Member States differs considerably. This determines that their way of dealing with public procurement is formally different and their approach to the innovative procurement is therefore also different.
- PCP was traditionally excluded from the scope of the past Directives on public procurement and it has been only since recently when a new procedure to deal with the innovative tasks has been included in the Directives – innovation partnership -, in order to simplify and encourage the engagement between the investigation and research phase with the acquisition phase. Nevertheless, as pointed out above, it is still too soon to make a proper judgement about the usefulness utility of those new procedures, since there are no experiences available

that can prove the utility of this new procedure in relation to the encouragement of innovation. Alongside the latter, we can also mention that only very recently it seems that the approaches which give preference to low/lowest cost offers neglecting longer-term operational or lifecycle costs, are changing, which is indispensable for the encouragement of innovation.

- The water sector is also characterized by a complicated regulatory environment along/across the various political hierarchy levels that result in fragmentation (e.g. different regulations and standards per region).

1.3.2.2 Scientific results based on OECD case examples

The Build in Canada Innovation Program (BCIP) presents certain similarities with the Government of Victoria (Australia) Market Validation Program and the Small Business Innovation Research (SBIR) program of the United States. On the one hand, the aim consists in encouraging innovation from the demand side, meaning this, that the public authorities become qualified purchasers of innovative goods or services, by testing prototypes developed by Canadian businesses and providing feedback to help improve these innovative products before they are marketed to customers. So the BCIP helps fill the gap that exists during the last stage of research and development, where a business begins to move its innovations from laboratories and demonstrations to commercialization, by awarding contracts for qualified innovations.

The BCIP is restricted to SMEs, which is also a common feature with the Australian MVP and other SBIR-type programs.

On the other hand, these programs also differ in some aspects. In this sense, the BIPC explicitly addresses products already near TRL 7-9 ('commercial ready') meaning that it targets a later stage than SBIR and European pre-commercial procurement. The later allows for innovative new concepts to be developed (feasibility), to progress into product development (Proof of concept), and finally to enter the last stage of commercialization. On the TRL scale they more or less cover the levels 3-9. Thus CIPC rather corresponds with the Phase III in the US SBIR program.

Alongside the latter, there is another difference between them. In the BCIP, the government buys the first product for actual use, but it, carries out a testing in their operational context. However, they do not make commitment to buy the product beyond the first test product, but rather hope that the company can effectively use the government test results as proof of their product performance with other clients and 'catalyse' new business. In the SBIR and the Market Validation Program, the government takes no commitment to buy the eventual product developed through the correspondent process.

The BCIP, in other aspects, presents similarities to the European pre-commercial procurement and in this sense differs from the Australian and American programs. This occurs in relation to the formal instrument which is used to articulate the cooperation between the public and private sector: the BCIP derives in the awarding of a contract, which differs from what occurs in the MVP program which consists in awarding R&D grants. But it also presents differences with the European PCP approach because the latter is, in principle, open to EU companies of all sizes.

In this sense, we could affirm that while the Canadian program aims to encourage innovation amongst Canadian SMEs, the original aims of the European Community Procurement Rules are, on the one hand, the requirement to tender competitively most contracts for significant government expenditure and, on the other, to award those contracts only on the objective bases of quality and price. These rules also stimulated and facilitated the free movement goods and services and promoted inter-state trade.

As a consequence, we can establish another difference between the Canadian program and the European approach, consisting in that in most cases government awarded only one SME per a specific government solution. In the PCP scheme, European Commission requires several firms are selected to work on a specific challenge. Even in the last stage of the process, where a prototype is to be produced, there should ideally be at least two businesses working in parallel. With this guidance the European Commission aims to avoid preferential treatment of a single company and to create an open market.

1.3.2.3 Conclusions : strategic recommendations for the EU policy makers and the procurers

The IOPP procedures are not easy to implement and involve lots of steps and different possibilities which are developed by diverse stakeholders. The following diagram aims to facilitate the general understanding of the strategy on IOPP transfer to the European sector in a view. In this sense, the figure illustrates in which area of the different phases of the IOPP procedures should be placed the recommendations.

Firstly, the recommendations were not directly formulated departing from IOPP experiences in the water sector. They are related to the IOPP practices from a general point of view. This is due to the absence of specific IOPP practices in the EU water sector.

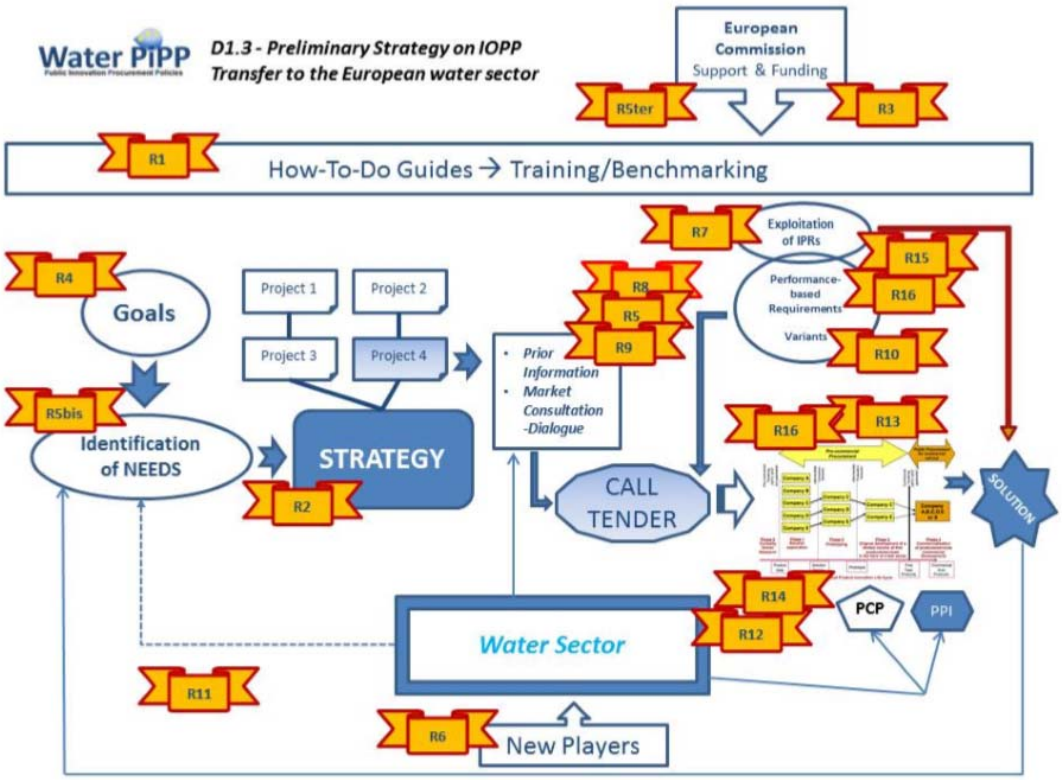
Secondly, we have observed that there is a general absence of an IOPP strategy from the demand side. Actually, public authorities launch specific IOPP procedures without having the previous and necessary global and overall view given by the correspondent strategies. The reasons for the latter mainly have to do with:

- Very high risk aversion to invest in innovative solutions which do not guarantee a 100% of success.
- The lack of knowledge regarding all these new procurement formulas.
- The additional funds seem to be insufficient in order to properly support the kick-off of IOPP.

From a strategic perspective, the most useful recommendations are those that allow for a reduction of the intrinsic risk of the innovative procurements process either by providing economic incentive to cover the risk or by increasing the scale of the project.

Very important are also the recommendations that increase the predictability of the technological path and allow for a wider room of manoeuvre in the definition of the procurement requirements and the assessment of the qualitative aspect of the offer, as they reduce the risks for both procurers and suppliers and link up better the pre-commercial stages of collaboration with the procuring phase.

Recommendations for IOPP in the water sector



Recommendation 1: Regulations in the EU: cultural orientation versus rational approach.

Recommendation 2: Lack of knowledge and skills regarding innovation management alongside the EU procurement.

Recommendation 3: Lack of incentives in the public sector and obligation of complying with budgetary duties.

Recommendation 4: Climate constraints alongside the EU affect differently the water sector in each Member State

Recommendation 5, 5 bis and 5 ter: Early identification and communication of needs: demand maps.

Recommendation 6: Special general difficult to access to public procurement for Small and Medium Enterprises.

Recommendation 7: Management of intellectual property rights.

Recommendation 8: Fragmented information about public procurement of innovation opportunities.

Recommendation 9: The need of market consultations.

Recommendation 11: Policy alignment (clean tech, sustainable procurement, environmental…).

Recommendation 10: The change in the demand side: admission of performance-based requirements (PBS).

Recommendation 12: Procurer-supplier collaboration.

Recommendation 13: Pre-commercial piloting and demonstration.

Recommendation 14: Public bodies as pilot users.

Recommendation 15: Performance-based specifications.

Recommendation 16: Catalytic procurement of test products.[3]

[3] For more details, refer to Deliverable 4.2. Lessons Learnt

1.3.3 Main technical results

Based on the scientific results of the first phase of the WaterPiPP project, a set of technical tools and methods were developed to support procurers in their understanding of the context and different phases of IOPP implementation. These capacity building activities contributed to precise the learning objectives, contents, subject matter content & analysis in the field of IOPP. They were addressing specific or new topics such as innovation partnerships, for instance. Practically speaking, workshops, webinars and conferences were organised and resulted in raising the attention of the volunteering practitioners on the crucial phases of PCP/PPI below:

- Needs identification, prioritization and description,
- State of the art analysis,
- Early market engagement,
- Procurement concept viability,
- Resource planning,
- Procedure structure design.

The accompanying measures of coaching and training enabled stakeholders' community knowledgeable about innovative procurement and determine the public procurer more confident in undertaking PCP&PPI initiatives. It also contributed to identify, select, prioritize and prepare (potential) viable procurements, corresponding to real (common) challenges and needs in water sector, giving support and related training to the pilot procurers and mutualising on good practices available in other sectors.

The 2014 Directives on public procurement assume that public procurement can enhance innovation. Innovation being a key element in stake to guarantee water quality and distribution, and in order to validate this assumption, the project examined how does the water sector bears any room for innovation, and how IOPP can help to improve innovation in the water sector.

1.3.3.1 Room for innovation in the Water Sector

According to the article "Innovation in the European Water Sector"[4] published by the Science Communication Unit of University of the West England: "*Water innovation can apply not only to new sustainable technologies but also to new partnerships extending across public administration, research and industry: new business models and new forms of water governance that are not only innovative themselves but can also stimulate and support innovations. Furthermore, innovation need not be an entirely new technology or concept; novel combinations or innovative ideas for improvements on current technologies, business models and systems, all have a role to play.*"

The Strategic Implementation Plan[5], of the European Innovation Partnership on Water identified eight thematic priority areas in which innovation could play an important role:

- Water re-use and recycling.
- Water and wastewater treatment; including recovery of resources.
- Water-energy nexus.
- Flood and drought risk management.
- Water ecosystem services.
- Modelling and Decision Support Systems.
- Smart technologies.

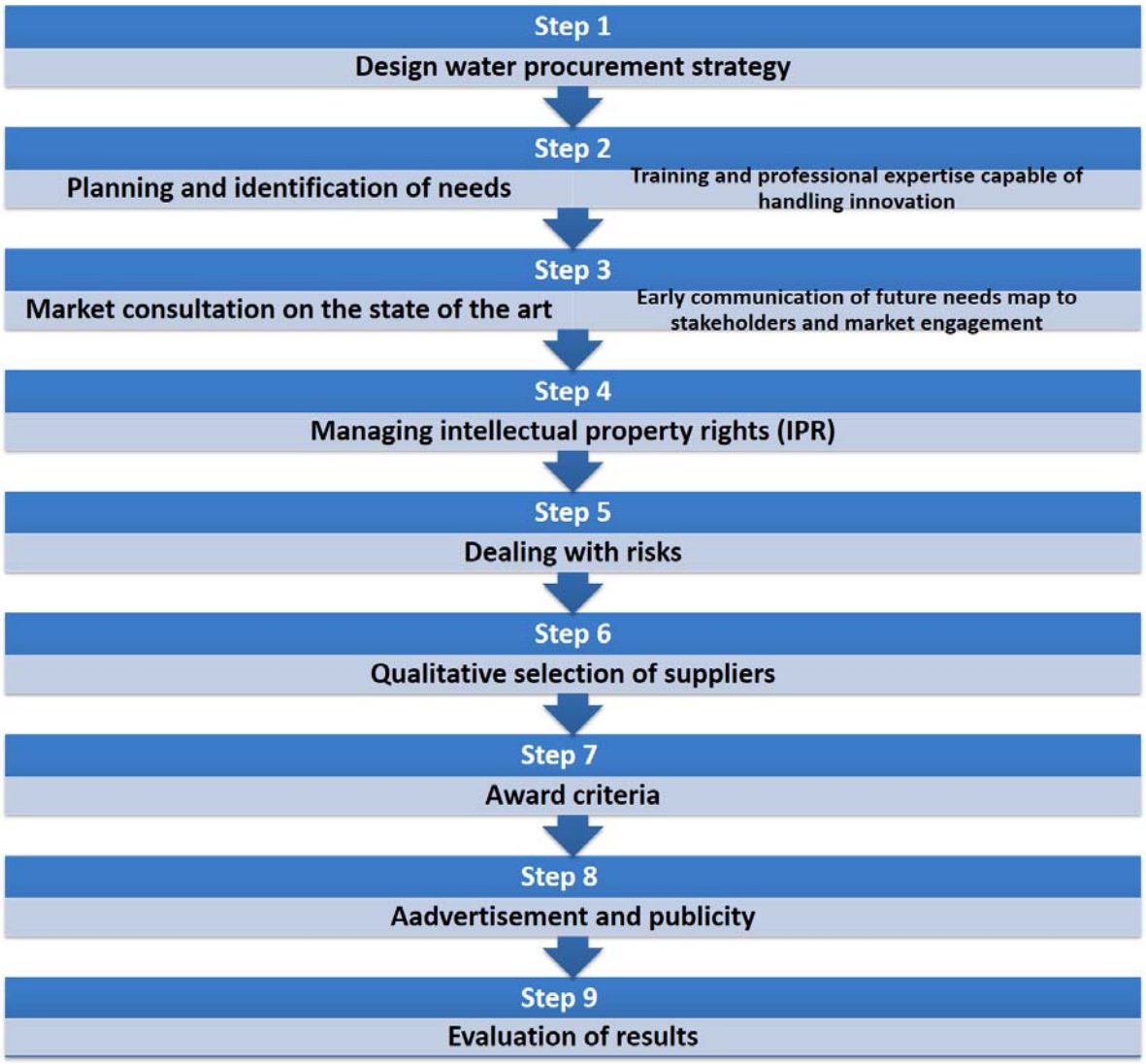
[4] Science for Environment Policy (2015). Innovation in the European water sector. Future Brief 10 produced for the European Commission, DG Environment. Bristol: Science Communication Unit. Available at: <http://ec.europa.eu/science-environment-policy>

[5] See: Strategic implementation plan. Available at<http://www.eip-water.eu/sites/default/files/sip.pdf>

1.3.3.2 Room for IOPP in the Water Sector

The water sector requires open standards and interoperability/scalability conditions and thus finds itself in a condition of restriction of its procurement channel and lock-in. In other words, the traditional procurement is unable to tender, contract with or foster the emergence of new players. Often, the public sector asks for the developments on an exclusive basis. Taking on board all the technology risks on the public sector side can induce paying a very high price and hence missing out the opportunity to share the risks and the economic benefits derivable from the developed solutions. As a consequence, the project foresees IOPP as an appropriate solution to help overcoming the following areas of improvement in the water sector.

As a possible response for the public procurers of the water sector, the How-To Guide for Implementation of IOPP Procedures developed during the project is proposing to go through a step-wise approach of the procurement for innovation.



1.4 The potential impact (including the socio-economic impact and the wider societal implications of the project so far) and the main dissemination activities and exploitation of results

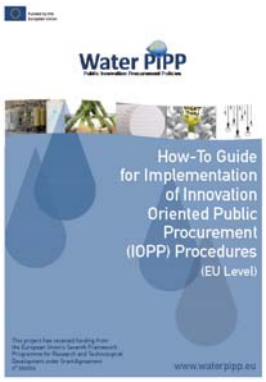
All the capacity building deliverables of the project are accessible from the public website and easily re-usable after the project. In addition, the contents of the capacity building materials were also transformed into two MOOCs (SP and FR). The project also elaborated a user friendly toolbox video (ENG).

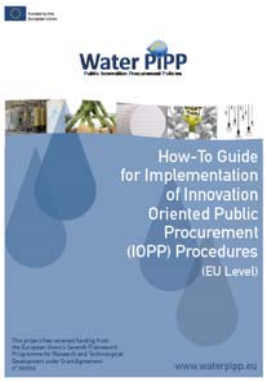
How-To Guide for Implementation of Innovation Oriented Public Procurement (IOPP) Procedures (EU Level)

Guide pratique pour la mise en oeuvre des procédures d'Achats Publics Innovants (API) (Niveau Etat Membre : France)

Guida all'implementazione delle procedure negli Appalti Pubblici per l'Innovazione (Livello stato membro : Italia)

Guía Práctica para la Aplicación de Procedimientos de Compra Pública Orientada a la Innovación (CPOI) (Nivel Estado Miembro: España)





Deriving from the How-To Guide for Implementation of Innovation Oriented Public Procurement (IOPP) Procedures (EU Level), the project elaborated several products such as MOOC (massive open online course) : "*Comment mettre en oeuvre des procédures d'Achats Publics Innovants (API) dans le secteur de l'eau?*", also translated in "*¿Cómo implementar Compra Pública Orientada a la Innovación (CPOI) en el sector del agua?*".

More example of the products of the project are presented in the Project Period Report for period 2 (July 2105 – December 2016).

1.4.1 Potential socio-economic impact and the wider societal implications

1.4.1.1 For policy-makers

Water is a cross-cutting topic in the EU research agenda and it remains at the centre of calls for proposals focusing on eco-innovation, the circular economy and nature-based solutions. WaterPiPP can be regarded as a precursor to further projects in the domain of procurement that have started recently or are about to start. Water and IOPP have been receiving more attention in EU research agenda since the start of WaterPiPP with the aim of providing further knowledge and evidence. As a result, it is assumed by the project partners that policy-makers may keep in mind the following statements:

- Projects answering the EC's EU Research and Innovation programme H2020 calls focusing on IOPP for proposal will provide policy makers with better evidence and solutions enabling them to further improve the quality of public services at European, national and local level.
- Policy makers can contribute to increasing demand for innovation by challenging the public institutions to identify and assess their needs while using public resources more efficiently. By means of different financial instruments and by setting ambitious policy objectives policy makers also have the possibility to promote joint procurements.
- In the future, policy makers at EU level should develop supply-side innovation policies that are complementary to the corresponding demand-side actions.
- Policy makers need to raise awareness on the purpose and benefits of IOPP among suppliers as not all SMEs and companies are sufficiently informed of this procedure and the opportunities it provides them in developing and bringing innovative solutions to the market.

These areas of investigation could profitably be promoting IOPP in the water sector taking into account the following conclusions elaborated during the final conference of the project "*Empowering public procurement for innovation in the EU water sector*" (9 to 10 November 2016, Zaragoza, Spain) :

- Water challenges cannot be effectively tackled by local or regional strategies only, as many of these challenges are present in all EU Member States and frequently are transboundary challenges. There is therefore a need for transnational and global strategies to help utilities tackle these issues collectively.
- EU level cooperation in IOPP is important. By pooling demand and thus significantly reducing risks, this cooperation has the potential to speed up public sector modernization, to provide better value for the tax-payers' money, create jobs, foster economic growth in the EU and fuel competition by avoiding vendor lock-in. Specific instruments and legal frameworks are nevertheless needed to facilitate procurers' pooling of demand.
- The needs of the public water sector are quite specific. Therefore, conclusions from IOPP practices implemented in other sectors cannot be simply converted to the water sector.
- One of the main barriers of implementing IOPP policies successfully is that the public water sector sees procurement predominantly as an administrative activity whose main aim is to buy existing solutions and not as a field of work that has potential to offer innovative solutions.
- Another significant barrier is related to risk: as a sector guided by long-term investments and constrained by strict budgetary rules, the water sector is naturally risk-adverse.

1.4.1.2 For procurers

The final conference of the project conclusions were that the risk in procuring innovative solutions can be significant. The project advocates that developing an IOPP strategy helps reduce such risks of missing its benefits whilst better avail benefits. Particularly relevant results for procurers can be summarised by the following priorities:

- Developing an organisation internal IOPP strategy for water
- Need for capacity building and training of procurers
- Fostering continuous dialogue and cooperation with suppliers and clusters
- Selecting the most suitable procurement approach
- Creating reliable, transparent and easily comprehensible procurement practices
- Exchange with other procurers with experience in IOPP

In addition to the above, and based on procurer's experiences from the WaterPiPP pilots, a number of issues were essential for the preparatory phases of IOPP. These messages are:

- Early market engagement and market dialogues can be used to learn whether the public need was defined well enough to start a procurement procedure, whether the technological state of the art is well known and whether the supply side is ready to invest in the development of new technologies.
- An increased exchange of international case studies presenting good practices can foster the implementation of more effective innovation procurement procedures.
- First time implementation of PCP is key as the procuring organisation can benefit from the experience for future PCP procedures. Still, the need of the organisation has to be clearly defined before going to the market. This enables the suppliers to provide innovative solutions that can meet the need in an adequate way.

1.4.1.3 For suppliers

From the supplier's point of view, the final conference of the project was also the occasion to stress out some important conclusions relevant for the private sector:

- More ambitious policy targets are needed that encourage procurers to request innovative solutions.
- Reducing leaks, early detection of pollutants, diffuse pollution, alternative (eventually 'green') infrastructure and the integration of 'big data' and ICT to manage activities are among the most important challenges in the water sector where innovative solutions are required and private suppliers, especially SMEs, play an important role.
- Two crucial issues that suppliers are facing when bidding for public contracts are the i) short length of the contract and ii) the limited exploitation capacities after the solutions have been developed.
- Suppliers are often not sufficiently aware of the innovation needs of the public sector. They should be informed at an early stage about upcoming public procurements, though, for example Prior Information Notices published on TED. Nevertheless, alternative communication and publicity mechanisms should also be explored.

1.4.1.4 Main dissemination activities and exploitation of results

The main dissemination activities of the project consist in the following:

- Project website (incl. 4 Newsletters, the "toolbox" video and project video).
- Innovation Procurement platform (incl. Water Innovation Procurement (WIP).
- Postcards promoting the WIP Water Group and the capacity building products of WaterPiPP for procurers.
- Participation to conferences and other events: WaterPiPP project partners intensively disseminated information on the project and its results during the second period of reporting. This includes, among others, the activities presented in Template A2.

In addition, the final conference brought together 76 public procurers working in local authorities and public water operators from various European countries, mainly from Spain, France, Germany, Italy and the Netherlands, along with representatives of the private water sector.

1.5 Address of the project public website and relevant contacts

www.waterpipp.eu

www.innovation-procurement.org

https://procurement-forum.eu/group/77883/discussion-group-water-innovation-procurement-wip

2 Use and dissemination of foreground

2.1 Dissemination measures available to the public domain

Several dissemination measures can be made available in the public domain as they demonstrate the added-value and positive impact of the project on the European Union. The following list of the activities are being implemented for insuring the sustainability of these measures:

- Raising Awareness on IOPP through WaterPiPP deliverables.
- Maintain the web site and the Platform.
- Dissemination of communication materials.
- Strengthening and consolidating the partnership among EU WaterPIPP members.

2.1.1 Raising awareness on IOPP through WaterPiPP deliverables

Partners of the project are promoting project products, as particularly helpful instruments made available in four major European languages (English, Spanish, French and Italian) and adapted to the local legislative framework context. In order to enhance capacity building and awareness-raising materials for public procurement expert in the water sector, several actions are being undertaken.

- Updated publication on the WaterPiPP website and on the professional social networks (Linkedin or twitter) including the link to the communication and the training material already produced and published on the WaterPIPP website,
- The following documents will be publicized into the national language (English, Italian, Spanish, and French): How-To Guides for implementation of IOPP procedures, Webinars, Toolbox for awareness raising, e-learning materials.
- (D2.5) Policy recommendations to the EIP was translated in Italian, printed in Italian and English version and distributed to some stakeholders. On voluntary basis, it could be translated also in other languages. The document will be also publicized on the project website and on the partners' websites.

2.1.2 Maintain the website and the platform

Due to the importance of further strengthening the awareness raising of IOPP in the water sector, the partners agreed to maintain:

- The website www.waterpipp.eu as the hub of the project outputs.
- The Public Innovation Procurement forum Platform http://innovation-procurement.org/.
- The link with the WIP group.

In particular, the WIP Group serves as an information and knowledge exchange hub on all topics related to innovation procurement in the water sector. This group enables the user to network, build their capacity and knowledge and helps to disseminate project's results and products. The group counted 55 international members. Most of them are professionals from different public institutions interested in applying PCP/PPI procedures and private companies supplying innovative water technologies.

On a longer term, the WIP Group will be available beyond the project's duration. On the one hand this is possible as the group is not a stand-alone platform, but is integrated into the Procurement Forum, a larger on-line platform which is made up of a number of virtual discussion groups covering different aspects of public procurement. The WIP group will therefore continue to exist and be open to other members of the Procurement Forum or new registries.

The WaterPiPP consortium also proposes to open the WIP Group to other projects working on IOPP in the water sector now and in the future. There are a number of calls from the European Commission that may result in projects that are interested in tapping into a pool of experts in the WIP Group and use the group as a communication platform to reach out

to interested stakeholders. One such project was already identified: The SMART.MET project (H2020) agreed to assess how it could use the WIP Group for their purposes. Indeed, starting from the need proposed by one of the case pilot, OIEau and a large consortium of partners submitted a proposal to the H2020 open call H2020-ICT-2016-1. The project PCP for Water Smart Metering was approved under the grant agreement No 731996 (Smart.met) for a duration of 48 months (started January 2017).

2.1.3 Dissemination of communication materials

Recent communication materials in general and the postcard of the project, which advertises the WaterPiPP products of interest to public procurers, will keep on being distributed.

The project's partners agreed to disseminate the paper-based material, on the occasion of future events/seminars/conferences, or to any interested professional actor, both at national and European level.

2.1.4 Strengthening and consolidating the partnership among EU WaterPIPP members

During the 3 years project, the partners mutually recognized the high quality of their Curriculum Vitae in providing support across a wide spectrum of topics: from the water sector, to procurement strategies, from IOPP, to training and consultancy services.

The consortium partners of the project consolidated and improved the excellent relationship build during the 3-years project, and decided to continue to sharing knowledge, useful information on the water sector in innovative oriented public procurement. Several recent EU projects were inspired by WaterPiPP includes several members of its consortium partnership (IOW, APE, Deltares…): namely Smart.met (No 731996) Project and NAIAD Project (No 206403).

Following page, Template A2 is listing the main dissemination activities of the project (publications, conferences, workshops, web sites/applications, press releases, flyers, articles published in the popular press, videos, media briefings, presentations, exhibitions, thesis, interviews, films, TV clips, and posters).

TEMPLATE A2: LIST OF DISSEMINATION ACTIVITIES								
NO.	Type of activities[6]	Main leader	Title	Date/Period	Place	Type of audience[7]	Size of audience	Countries addressed
1	Conference	*4*	Ecoprocura 2014 – Presentation on Procurement of innovation in the water sector" by ICLEI	25 Sept 2014:	Ghent/ Belgium			
2	Conference	5	EC Workshop "Let's support and coordinate systemic eco-innovation" Project presentation by Valentina Pinna,	29 Oct 2014:	Lombardy Region, in Brussels			
3	Conference	1	EIP Water Conference –WaterPiPP Liaison Committee Kick-off Event held back to back to the EIP Water Conference.	5-6 Nov 2014:	Barcelona / Spain	Water managers from the private and public sector (cities, regions and EU Member States), water-using sectors and innovation providers	400	Pan-European
4	Conference	1	EURO INBO Conference	12-15 Nov 2014:	Bucharest / Romania	Representatives of national administrations and basin organizations as well as of NGOs, companies, international and regional organizations,	134	Pan-European
5	Conference	4	10th European Water Association (EWA) Conference "Water in the Cities"– Participation and dissemination by ICLEI	17-19 Nov 2014:	Brussels / Belgium	Water policy makers, scientific community-researchers, Industry	120	Pan-European
6	Conference	5	Modernizing the public sector and boosting economic growth through Innovation	26-27 Nov 2014:	Lombardy Region, in Brussels			

[6] A drop down list allows choosing the dissemination activity: publications, conferences, workshops, web, press releases, flyers, articles published in the popular press, videos, media briefings, presentations, exhibitions, thesis, interviews, films, TV clips, posters, others.

[7] A drop down list allows choosing the type of public: Scientific Community (higher education, Research), Industry, Civil Society, Policy makers, Medias, Other ('multiple choices' is possible).

			Procurement organized by EC-DG Connect, with the cooperation of EUROCLOUD Italy and hosted by.					
7	Conference	9	WssTP-ERRIN H2020 Brokerage Event Dissemination by WssTP.	26-27 November 2014:	Brussels / Belgium	Scientific Community-researchers, water industry, large water users, SMEs, European and regional policy makers, finance experts	150	Pan-European
8	Conference	9	4th European Water Conference	23-24 March 2015:	Brussels / Belgium	Policy makers working on the implementation of the Water Framework and Floods Directives at national and regional level, as well as stakeholders with a legitimate interest in water policy	458	Pan-European
9	Conference	4	Water Innovation Europe 2015 – Presentation on "Water and the circular economy – The role of local governments" in the Session "Cities" with promotion of WaterPiPP by ICLEI.	24- 26 June 2015:	Brussels / Belgium	Scientific Community-researchers, water industry, large water users, SMEs, European and regional policy makers, finance experts, civil society	180	Pan-European
10	Conference	9	WssTP Brokerage and Working Group event - Dissemination of WaterPiPP promotion material by WssTP.	23-24 November 2015:	Brussels / Belgium	Scientific Community-researchers, water industry, large water users, SMEs, European and regional policy makers, finance experts	150	Pan-European
11	Conference	1	EIP Water Conference 2016 Promotion of WaterPiPP dissemination material through WssTP stand.	11 February 2016:	Leeuwarden, The Netherlands	Water managers from the private and public sector (cities, regions and EU Member States), water-using sectors and innovation providers	550	Pan-European
12	Conference	9	Water Innovation Europe 2016 - WaterPiPP promotion at the conference's exhibition area.	21-23 June 2016:	Brussels / Belgium	Scientific Community-researchers, water industry, large water users, SMEs, European	200	Pan-European

						and regional policy makers, finance experts, civil society		
13	Conference	9	WssTP Brokerage & WG Event 2016 - Dissemination of WaterPiPP dissemination material by WssTP.	23-24 November 2016:	Brussels / Belgium	Scientific Community- researchers, water industry, large water users, SMEs, European and regional policy makers, finance experts	180	Pan-European

2.2 Plan for exploitable foreground (Confidential[8] or public: confidential information to be marked clearly)

This section should specify the exploitable foreground and provide the plans for exploitation. All these data can be public or confidential; the report must clearly mark non-publishable (confidential) parts that will be treated as such by the Commission. Information under Section B that is not marked as confidential will be made available in the public domain thus demonstrating the added-value and positive impact of the project on the European Union.

None of the described information are relevant to the WaterPiPP project:

- Template B1: The applications for patents, trademarks, registered designs, etc. shall be listed according to the template B1 provided hereafter. The list should, specify at least one unique identifier e.g. European Patent application reference. For patent applications, only if applicable, contributions to standards should be specified. This table is cumulative, which means that it should always show all applications from the beginning until after the end of the project.
- Template B2: List of Type of Exploitable Foreground

[8] Note to be confused with the "EU CONFIDENTIAL" classification for some security research projects.

3 Report on societal implications

Replies to the following questions will assist the Commission to obtain statistics and indicators on societal and socio-economic issues addressed by projects. The questions are arranged in a number of key themes. As well as producing certain statistics, the replies will also help identify those projects that have shown a real engagement with wider societal issues, and thereby identify interesting approaches to these issues and best practices. The replies for individual projects will not be made public.

A General Information *(completed automatically when **Grant Agreement number** is entered.*

Grant Agreement Number:	619069
Title of Project:	WaterPiPP
Name and Title of Coordinator:	International Office for Water (Mr. François Touchais)

B Ethics

1. Did your project undergo an Ethics Review (and/or Screening)? • If Yes: have you described the progress of compliance with the relevant Ethics Review/Screening Requirements in the frame of the periodic/final project reports? Special Reminder: the progress of compliance with the Ethics Review/Screening Requirements should be described in the Period/Final Project Reports under the Section 3.2.2 *'Work Progress and Achievements'*	***No***
2. Please indicate whether your project involved any of the following issues (tick box) :	***YES***
RESEARCH ON HUMANS	
• Did the project involve children?	
• Did the project involve patients?	
• Did the project involve persons not able to give consent?	
• Did the project involve adult healthy volunteers?	
• Did the project involve Human genetic material?	
• Did the project involve Human biological samples?	
• Did the project involve Human data collection?	
RESEARCH ON HUMAN EMBRYO/FOETUS	
• Did the project involve Human Embryos?	
• Did the project involve Human Foetal Tissue / Cells?	
• Did the project involve Human Embryonic Stem Cells (hESCs)?	
• Did the project on human Embryonic Stem Cells involve cells in culture?	
• Did the project on human Embryonic Stem Cells involve the derivation of cells from Embryos?	
PRIVACY	
• Did the project involve processing of genetic information or personal data (eg. health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction)?	
• Did the project involve tracking the location or observation of people?	
RESEARCH ON ANIMALS	
• Did the project involve research on animals?	
• Were those animals transgenic small laboratory animals?	
• Were those animals transgenic farm animals?	
• Were those animals cloned farm animals?	
• Were those animals non-human primates?	

RESEARCH INVOLVING DEVELOPING COUNTRIES	
• Did the project involve the use of local resources (genetic, animal, plant etc)?	
• Was the project of benefit to local community (capacity building, access to healthcare, education etc)?	
DUAL USE	
• Research having direct military use	0 Yes 0 No
• Research having the potential for terrorist abuse	

C Workforce Statistics

3. Workforce statistics for the project: Please indicate in the table below the number of people who worked on the project (on a headcount basis).

Type of Position	Number of Women	Number of Men
Scientific Coordinator		1
Work package leaders	3	3
Experienced researchers (i.e. PhD holders)	3	2
PhD Students	2	
Other		

4. How many additional researchers (in companies and universities) were recruited specifically for this project?	**1**
Of which, indicate the number of men:	0

D Gender Aspects

5. Did you carry out specific Gender Equality Actions under the project?

○ Yes
● No

6. Which of the following actions did you carry out and how effective were they?

	Not at all effective				Very effective
❑ Design and implement an equal opportunity policy	○	○	○	○	○
❑ Set targets to achieve a gender balance in the workforce	○	○	○	○	○
❑ Organise conferences and workshops on gender	○	○	○	○	○
❑ Actions to improve work-life balance	○	○	○	○	○

○ Other:

7. Was there a gender dimension associated with the research content – i.e. wherever people were the focus of the research as, for example, consumers, users, patients or in trials, was the issue of gender considered and addressed?

○ Yes- please specify

● No

E Synergies with Science Education

8. Did your project involve working with students and/or school pupils (e.g. open days, participation in science festivals and events, prizes/competitions or joint projects)?

○ Yes- please specify

● No

9. Did the project generate any science education material (e.g. kits, websites, explanatory booklets, DVDs)?

● Yes- please specify: massive open online course

○ No

F Interdisciplinarity

10. Which disciplines (see list below) are involved in your project?

● Main discipline[9]: 5.2, 5.3, 5.4

○ Associated discipline[9]:

○ Associated discipline[9]:

G Engaging with Civil society and policy makers

11a Did your project engage with societal actors beyond the research community? *(if 'No', go to Question 14)*

● Yes
○ No

11b If yes, did you engage with citizens (citizens' panels / juries) or organised civil society (NGOs, patients' groups etc.)?

● No

○ Yes- in determining what research should be performed

○ Yes - in implementing the research

○ Yes, in communicating /disseminating / using the results of the project

[9] Insert number from list below (Frascati Manual).

11c In doing so, did your project involve actors whose role is mainly to organise the dialogue with citizens and organised civil society (e.g. professional mediator; communication company, science museums)?	○ ●	Yes No

12. Did you engage with government / public bodies or policy makers (including international organisations)

- ○ No
- ○ Yes- in framing the research agenda
- ○ Yes - in implementing the research agenda
- ● Yes, in communicating /disseminating / using the results of the project

13a Will the project generate outputs (expertise or scientific advice) which could be used by policy makers?

- ● Yes – as a **primary** objective (please indicate areas below- multiple answers possible)
- ○ Yes – as a **secondary** objective (please indicate areas below - multiple answer possible)
- ○ No

13b If Yes, in which fields?

Agriculture		Energy		Human rights	
Audiovisual and Media		Enlargement		Information Society	
Budget		Enterprise		Institutional affairs	
Competition	×	Environment	×	Internal Market	
Consumers		External Relations		Justice, freedom and security	
Culture		External Trade		Public Health	
Customs		Fisheries and Maritime Affairs		Regional Policy	×
Development Economic and Monetary Affairs		Food Safety		Research and Innovation	
		Foreign and Security Policy		Space	
Education, Training, Youth		Fraud		Taxation	
Employment and Social Affairs		Humanitarian aid		Transport	

13c If Yes, at which level?

- ● Local / regional levels
- ● National level
- ● European level
- ○ International level

H Use and dissemination

14. How many Articles were published/accepted for publication in peer-reviewed journals?	**0**
To how many of these is open access[10] provided?	
How many of these are published in open access journals?	
How many of these are published in open repositories?	
To how many of these is open access not provided?	
Please check all applicable reasons for not providing open access:	
❑ publisher's licensing agreement would not permit publishing in a repository ❑ no suitable repository available ❑ no suitable open access journal available ❑ no funds available to publish in an open access journal ❑ lack of time and resources ❑ lack of information on open access ❑ other[11]: ……	

15. How many new patent applications ('priority filings') have been made? *("Technologically unique": multiple applications for the same invention in different jurisdictions should be counted as just one application of grant).*		**0**
16. Indicate how many of the following Intellectual Property Rights were applied for (give number in each box).	Trademark	**0**
	Registered design	**0**
	Other	**0**
17. How many spin-off companies were created / are planned as a direct result of the project?		**0**
Indicate the approximate number of additional jobs in these companies:		

18. Please indicate whether your project has a potential impact on employment, in comparison with the situation before your project:

❑	Increase in employment, or	❑	In small & medium-sized enterprises
❑	Safeguard employment, or	❑	In large companies
❑	Decrease in employment,	☒	None of the above / not relevant to the project
❑	Difficult to estimate / not possible to quantify		

19. For your project partnership please estimate the employment effect resulting directly from your participation in Full Time Equivalent (*FTE = one person working fulltime for a year*) jobs:	*Indicate figure:* *10,8 FTE*

[10] Open Access is defined as free of charge access for anyone via Internet.

[11] For instance: classification for security project.

Difficult to estimate / not possible to quantify	❑

I Media and Communication to the general public

20. As part of the project, were any of the beneficiaries professionals in communication or media relations?

● Yes ○ No

21. As part of the project, have any beneficiaries received professional media / communication training / advice to improve communication with the general public?

○ Yes ● No

22 Which of the following have been used to communicate information about your project to the general public, or have resulted from your project?

☒	Press Release	☒	Coverage in specialist press
❑	Media briefing	❑	Coverage in general (non-specialist) press
❑	TV coverage / report	❑	Coverage in national press
❑	Radio coverage / report	❑	Coverage in international press
☒	Brochures /posters / flyers	❑	Website for the general public / internet
☒	DVD /Film /Multimedia	☒	Event targeting general public (festival, conference, exhibition, science café)

23 In which languages are the information products for the general public produced?

❑	Language of the coordinator	❑	English, French
☒	Other language(s)		Italian, Spanish

***Question F-10*:** Classification of Scientific Disciplines according to the Frascati Manual 2002 (Proposed Standard Practice for Surveys on Research and Experimental Development, OECD 2002):

FIELDS OF SCIENCE AND TECHNOLOGY

1. NATURAL SCIENCES

1.1 Mathematics and computer sciences [mathematics and other allied fields: computer sciences and other allied subjects (software development only; hardware development should be classified in the engineering fields)]

1.2 Physical sciences (astronomy and space sciences, physics and other allied subjects)

1.3 Chemical sciences (chemistry, other allied subjects)

1.4 Earth and related environmental sciences (geology, geophysics, mineralogy, physical geography and other geosciences, meteorology and other atmospheric sciences including climatic research, oceanography, vulcanology, palaeoecology, other allied sciences)

1.5 Biological sciences (biology, botany, bacteriology, microbiology, zoology, entomology, genetics, biochemistry, biophysics, other allied sciences, excluding clinical and veterinary sciences)

2 ENGINEERING AND TECHNOLOGY

2.1 Civil engineering (architecture engineering, building science and engineering, construction engineering, municipal and structural engineering and other allied subjects)

2.2 Electrical engineering, electronics [electrical engineering, electronics, communication engineering and systems, computer engineering (hardware only) and other allied subjects]

2.3. Other engineering sciences (such as chemical, aeronautical and space, mechanical, metallurgical and materials engineering, and their specialised subdivisions; forest products; applied sciences such as geodesy, industrial chemistry, etc.; the science and technology of food production; specialised

technologies of interdisciplinary fields, e.g. systems analysis, metallurgy, mining, textile technology and other applied subjects)

3. MEDICAL SCIENCES

3.1 Basic medicine (anatomy, cytology, physiology, genetics, pharmacy, pharmacology, toxicology, immunology and immunohaematology, clinical chemistry, clinical microbiology, pathology)

3.2 Clinical medicine (anaesthesiology, paediatrics, obstetrics and gynaecology, internal medicine, surgery, dentistry, neurology, psychiatry, radiology, therapeutics, otorhinolaryngology, ophthalmology)

3.3 Health sciences (public health services, social medicine, hygiene, nursing, epidemiology)

4. AGRICULTURAL SCIENCES

4.1 Agriculture, forestry, fisheries and allied sciences (agronomy, animal husbandry, fisheries, forestry, horticulture, other allied subjects)

4.2 Veterinary medicine

5. SOCIAL SCIENCES

5.1 Psychology

5.2 Economics

5.3 Educational sciences (education and training and other allied subjects)

5.4 Other social sciences [anthropology (social and cultural) and ethnology, demography, geography (human, economic and social), town and country planning, management, law, linguistics, political sciences, sociology, organisation and methods, miscellaneous social sciences and interdisciplinary , methodological and historical S1T activities relating to subjects in this group. Physical anthropology, physical geography and psychophysiology should normally be classified with the natural sciences].

6. HUMANITIES

6.1 History (history, prehistory and history, together with auxiliary historical disciplines such as archaeology, numismatics, palaeography, genealogy, etc.)

6.2 Languages and literature (ancient and modern)

6.3 Other humanities [philosophy (including the history of science and technology) arts, history of art, art criticism, painting, sculpture, musicology, dramatic art excluding artistic "research" of any kind, religion, theology, other fields and subjects pertaining to the humanities, methodological, historical and other S1T activities relating to the subjects in this group]

4 Final report on the distribution of the European Union financial contribution

This report shall be submitted to the Commission within 30 days after receipt of the final payment of the European Union financial contribution.

Report on the distribution of the European Union financial contribution between beneficiaries:

WaterPiPP lasted three years (01/2014 to 12/2016) and was granted 998 845 € by the European Commission (Total Cost: 1 332 545 €).

Name of beneficiary	Final amount of EU contribution per beneficiary in Euros
Office International de l'Eau (OIEau) – Coordinator	171022,59
Central Procurement Company (ARCA)	95765,01
University of Zaragoza (UniZar)	99075,81
ICLEI European Secretariat GmbH (ICLEI Europe)	115965,17
Agenzia Regionale per la Tecnologia e l'Innovazione - Regione Puglia (ARTI)	76478,98
Technical Research Centre (VTT)	81398,32
Stichting Deltares (Deltares)	44762,08
The European House – Ambrosetti SpA (TEHA)	114583,61
Water supply and sanitation Technology Platform (WssTP)	83571,89
Aqua Publica Europea (APE)	80118,29
Knowledge Transfer Network (KTN)	19565,72
City of Rotterdam	14069,78
Total	**996377,25**