

PROMOTION OF PUBLIC PROCUREMENT OF INNOVATION FOR RESOURCE EFFICIENCY AND



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Roadmap joint or coordinated procurement strategy

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1 INTRODUCTION

1.1 BACKGROUND

The PPI4waste project aims particularly at making know-how on procedures for innovation procurement in waste management widely available and to make state-of-the-art solutions accessible to public authorities as procurers. This is done through a structured and coordinated action of networking, capacity building and dissemination.

This roadmap takes into account the results of other activities/work led by project partners, reported in (among others) the Report on Agreeing Common needs, the Common Report on targeted improvements, the Roadmap for progressive improvement, the Common Risk Management Strategy (all reports can be downloaded at: <u>http://www.ppi4waste.eu/virtual-library/reports/</u>).

PPI4Waste partners contributed to the preparation of this roadmap, as well as several experts working in the field of waste management¹. Furthermore, input from the Expert group created within this project this project has been received.

1.2 PURPOSE OF THE ROADMAP

As a follow up of the Sustainability Strategy, this roadmap for a joint or coordinated procurement strategy is defined and agreed by the buyer's group (renamed into "purchasing community"). The purpose of the roadmap is to explore the options procurers have for coordinated procurement as well as joint procurement and, where relevant, map the subsequent steps to be performed for this purpose. Networking and dissemination will focus mainly on the purchasing community.

The assumption is that if many procurers seek solutions for similar problems, innovative solutions will find their way to the market faster. If these procurers work together, this market uptake is further accelerated, because the provider has an immediate larger market (economy of scale). The further assumed advantage for the procurers is that this economy of scale reduces the risks of procuring innovative solutions for the individual procurer.

This roadmap focuses on how to promote *procurement* of innovation, not on exploring the potential impact of joint procurement on *stimulating* innovations. For the innovator, knowing the needs of a larger group can be a stimulus to further research and develop innovative solutions because it is more likely that it will result in faster uptake by the market. To what extent this is "more likely" is considered beyond the scope of the preparation of this roadmap and has not been researched beyond rather general statements of the experts involved.

2 DEFINITION OF JOINT OR COORDINATED PROCUREMENT

What should be understood under joint or coordinated procurement? In a straight forward definition, *joint procurement* is when 2 or more procurers with the same needs for either a technology or a methodology team up. The participants publish 1 tender (if need be with multiple lots).

In *coordinated procurement*, partners explore together the need for improvements with a focus on functional performances/standards, explore generic approaches to PPI, exchanging experiences, expert or peer exchange. Individual needs can be (re)defined into a more generic common need, if necessary by adapting the own organisation / process to the common need. Finally, each partner publishes its own tender.

¹ This includes experts from project partner Ministerie / Rijkswaterstaat next to the experts working on this project, the director of one of the Dutch intermunicipal associations and an expert with over 25 years of experience in waste management in more than 10 Member States and associated states.



Directive 2014/24/EU sets out the rules for procurement by public authorities and within a Member State and has options to stimulate that procurers work together and even to procure jointly, as long as a clear legal entity is responsible for the procurement. Concerning cross border joint or coordinated procurement, article 39 of Directive 2014/24/EU "Procurement involving contracting authorities from different Member States" offers three models of implementation. One option is to use an existing centralised body external to the procurers, the second is to let one of the contracting authorities handle the procurement for all partners and the third is to set up a dedicated legal entity in which the contracting authorities participate.

2.1 PRESENT STATUS

In almost all countries in the EU, municipalities have established some form of cooperation in the field of waste management. In its most complex form, a new public body is established with its own decision making structures and full transfer of specific tasks, budget and responsibilities from the participants. In its least complex form, municipalities only delegate specific tasks to one of the participants and decision making structures still rest with the individual participants (e.g. a central municipality takes care of the waste collection in a group of municipalities).

Cooperation between municipalities can take many forms in between, partly depending on the national legislation regarding cooperation between public entities, partly depending on the will of and needs perceived by the participants. In many member states this is a well-established practice: the Dutch legislation is from the 1950's and municipal cooperation in the field of waste management became common practice in the 1980's. In some member states, like Croatia, this is however not common practice.

Examples of institutionalised cooperation in the field of waste management:

LIPOR (Intermunicipal Waste Management of Greater Porto) is a Municipalities Association responsible for the management, recovery and treatment of the Municipal Waste produced in eight associated municipalities in the North of Portugal (Espinho, Gondomar, Maia, Matosinhos, Porto, Póvoa de Varzim, Valongo and Vila do Conde). Since its creation in 1982, Lipor has implemented an integrated waste management strategy, recovered, developed and built infrastructures, organised awareness campaigns for the population and tested and promoted diverse waste prevention initiatives. More information: lipor.pt

Contarina is a public company responsible for the management of waste from municipalities within the province of Treviso, in the Veneto region (Italy), in an area covering approximately 1,300 square kilometres with about 554,000 inhabitants, through an integrated system involving waste from production to collection, treatment and recovery. Contarina's approach enabled to recover for recycling 85% of the waste generated on this territory. More information: <u>contarina.it</u>

Snaga is a public company in charge of the waste collection system in Ljubljana and nine municipalities surrounding the Slovenian capital city. According to 2014 data, Ljubljana achieved a total of 60% of separately collected waste. A key ingredient for Ljubljana's successful results was the introduction of door-to-door collection, especially of biodegradable waste (kitchen and garden waste), as well as the optimisation of the collection method and collection transportation routes. More information: snaga.si.

Circulus-Berkel is the local municipal association, establish as a public legal entity, providing a waste collection service for 8 municipalities including the municipality of Apeldoorn (The Netherlands). In this cooperation the municipalities set the main objectives and targets for (separate) collection but do not determine the means of how to achieve the targets. The latter is done by Circulus-Berkel, which owns the collected waste and therefore has an incentive to stimulate new technology developments in order to reach higher levels of materials/product recycling. More information: <u>circulus-berkel.nl</u>

The motivation or internal drivers for cooperation is mostly very practical. Pooling resources is the obvious way to address capacities. Cost considerations are relevant: collection trucks can be used more efficiently, shared sorting facilities can be used more cost effectively, etc.

External drivers, to "push" municipalities to cooperate can be found in the adoption of national policies regarding the set-up of regional landfills, replacing municipal landfills (which are often not compliant with the EU landfill directive) as well as in the arrangements made between municipalities



and public, semi-public or private producers responsibility organisations (PRO's). On the interface between municipalities and PRO's decisions are made to procure goods and equipment, e.g. for separate collection.

As outlined above, it has been shown that joint or coordinated procurement as defined above is a common practice between neighbouring municipalities in the field of municipal waste management. The "lessons learnt" and benefits of joint procurement to procure innovation was one of the main topics of the Meet the Market event² held in the Netherlands.

Inter-municipal associations or cooperation appear only to exist of municipalities in one Member State. Examples of cross border associations have not been found. Noted is that the legislation regulating municipal cooperation in the Member States does not explicitly mention the option to establish municipal associations across borders. This implicitly means that it is not forbidden. Prior to the Waste Framework Directive (2008/98/EC), the proximity and of self-sufficiency principle was interpreted as an actual ban on cross border treatment of waste, making cross border municipal cooperation near to impossible. The Waste Framework Directive is more flexible in this with regard to waste disposal installations and of installations for the recovery of mixed municipal waste (see art. 16 Principles of self-sufficiency and proximity). Whether this also applies to collection of municipal waste is open for interpretation.

For this roadmap, preference is given to options that reach beyond neighbours in one country: cross border cooperation between neighbouring municipalities (or their public entities), between twin towns or sister cities in any twinning program or between municipalities as members of international organisations. The International Solid Waste Association (ISWA) or the project partners ACR+ and ICLEI are examples of such organisations.

Coordinated and joint procurement is therefore understood as "cross border".

2.2 EXPERIENCES IN OTHER PROJECTS

In the project "PRIMES – Green public procurement"³, in which the PPI4Waste partner ICLEI participated, pros and cons of joint public procurement have been extensively reviewed. A special training package has been prepared and suggestions to promote joint procurement have been presented.

An excellent study has been done on behalf of the Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs by BBG and SKI; "Support of the internal market policy for growth: Feasibility study concerning the actual implementation of a joint cross-border procurement procedure by public buyers from different Member States", published in December 2016⁴. This study analyses four examples of joint procurement and analyses the potential benefits and barriers. One of the key conclusions of this study is "that trust and partnership are the most important pillars in a Joint Cross Border Public Procurement procedure. More trust results in less coordination work and better functioning of communication".

The study does review four examples, although not in the waste management sector. In this report, the information of the study is used and an effort has been made to make the connection between the findings reported in this study and the waste management sector.

⁴ See: http://ec.europa.eu/DocsRoom/documents/22102/



² The Meet the Market events were hosted to bring together the procurers and the suppliers; detailed information can be found on http://www.ppi4waste.eu/when-procurers-and-suppliers-met/

³ <u>http://primes-eu.net/</u>, see the factsheet on Joint procurement

3 BENEFITS AND BARRIERS

Specific barriers and benefits of joint or coordinated procurement have been derived partly from the studies mentioned in section 2.2, partly from comments made during the Meet the Market event in the Netherlands by (mostly municipal) waste management experts.

3.1 BENEFITS

Potential benefits for the partners can be cost efficiency, risk management and experience sharing.

Joint or coordinated procurement can be **cost effective**:

Following the definition as outlined in chapter 2, the most obvious advantage is in avoiding double work. If the partners have a clearly defined and similar need for an innovative product or service, the tender documents will be very similar and substantial parts (if not all) can be prepared as one document.

It may also be assumed that due to a larger purchase volume, suppliers might lower the initial price.

Joint or coordinated procurement can contribute to risks management:

Joint or coordinated procurement includes sharing of the risks of innovative technologies; reducing the risk for each individual participant, either at the phase of risks identification or at the phase of risks mitigation.

Joint or coordinated procurement can enhance **knowledge and experience sharing**:

In the process of defining the procurement needs, there are some additional advantages in the fact that organisations can benefit from each other's experience and approach to PPI and specific waste management issues, thus benefiting from shared experience and knowledge on PPI and possibly improving their own performance in waste management prior to the tendering.

Next to these benefits for the procurer, joint or coordinated procurement brings together a diffuse market demand for innovative technologies, thus creating a larger and easier to access market for the producer, the innovator, to bring the innovation to the market.

3.2 BARRIERS

For the individual procurer, barriers towards PPI have been identified and approaches on how to overcome these barriers are discussed in other deliverables. Although there are very few examples, cross border joint or coordinated procurement bring a new, very specific barriers. First of all the **language** barrier and differences in the organisational cultures are very pronounced.

National waste management policies (and their implementation on local level) and especially the **implementation timeframes** should not be too different. Where one partner is searching for ways to introduce separate collection another might be a step further and searching for innovative ways of sorting specific waste fractions.

A further barrier brought forward is not matching **technical requirements** (or the complexity of Specifications) for equipment. This includes the procurement of equipment that should match with equipment already in service.

Differences in **financing sources** and structures are seen as a further barrier, certainly for joint procurement. If financing is from different sources, e.g. a state budget allocated to a municipality and a municipal budget, different administrative and reporting protocols might be needed, reducing the advantage of avoiding double work.



All these barriers can be overcome if the persons involved are sufficiently motivated to deal with them. The study by BBG and SKI makes this evident.

A more serious barrier is **limited knowledge on the progress or state of the art in other municipalities** (in this case in other countries). How can coordinated or joint procurement be on the agenda of the municipal decision maker if there is basically no knowledge of and possibly very limited interest in what goes on in other countries?

4 JCB-PPI IN THE WASTE MARKET

As sketched in section 2.1, joint or coordinated public procurement in the field of municipal waste management is common practice in many EU Member States. Cost-benefits are therefore presumed to be well understood. In the field of municipal waste management, the supply side typically consists of service providers and technology providers. Service providers are contracted by individual or a group of municipalities, examples are waste collection companies and waste treatment companies. Technology providers supply the "hardware" such as trucks and bins for the collection of waste and all kinds of equipment for treatment. In many cases, the service providers (the public or private waste collection companies) procure the equipment, not the municipalities. Often these service providers are private owned legal entities (Itd or Joint Stock Company) and thus this is no longer public procurement.

The challenge is to promote cross border joint procurement of innovation (JCB-PPI) in a market more and more dominated by public-owned or private-owned service providers and municipalities procure a service, the service providers procure equipment.

The above mentioned feasibility study concerning the actual implementation of a joint cross-border procurement gives three recommendations for the demand-side whether it is feasible to procure the respective good or service in a JCB-PPI procedure:

- Standardized goods or services (international standards) as there is no need for complex specifications or a common choice on the individual requirements of a product.
- Goods and services that do not involve a high proportion of delivery services or works on site as costs for logistics would make cross-border services more difficult.
- Products which are identified as having potential for achieving better prices and improved conditions (economies of scale, price differences between countries).

What also needs to be considered is that municipalities in different Member States are in different stages of adopting waste management solutions. One municipality might be searching for innovations for the collection of bio-waste, another is searching for innovations in bio-waste treatment. The report produced in this project "Common report on targeted improvements" indeed highlights these differences between the (municipalities in) Member States. Still, both are searching for innovations in the bio-waste recycling chain. The recommendation "Standardized goods or services" might limit therefore the options for *joint* procurement, as the final product or service to be procured is very different for each partner, while *coordinated* procurement for sure is an option because collection and treatment are interconnected parts of the processing of bio-waste chain. This is also related to the scale of the activity. Processing of bio-waste is more effective when large volumes can be processed, meaning that smaller municipalities in general don't engage in processing (although there are some interesting examples from Austria⁵ on communal composting systems).

Technical and legal barriers due to differences in legislation and differences in applied standards are evident. The same procurement legislation also offers possibilities to deal with these differences. Obviously, there are no legal barriers for procurers to discuss, research and explore, even in direct

⁵ See e.g. in Tirol <u>https://www.tirol.gv.at/umwelt/abfall/publikationen/</u> and in Steiermark http://www.abfallwirtschaft.steiermark.at/



contacts with the market, common needs, shared problems and possible solutions: technical dialogue can be used for national or cross-border PPI in order to seek or accept advice which may be used in the preparation of the tender specifications.

For *coordinated* procurement, in which a group of contracting authorities work together to define needs and solutions for their specific situation, the competitive dialogue can be used. It is used when contracting authorities still need to define the means of satisfying their needs or of assessing the solutions the market can offer. Again, similar to the use of this instrument at national level, in JCB-PPI the three models mentioned in chapter 2 can use the same instrument in the same way.

The EU procurement legislation adopted in 2014⁶ also offers the possibility of an 'innovation partnership'. This has been introduced to explore options or solutions that are not already available on the market. The contracting authority decides to set up the innovation partnership with one or several partners conducting separate research and development activities, in order to negotiate a new innovative solution during the tendering procedure. Examples of this "innovation partnership" in the waste management field have not been found.

5 STEPS TOWARDS COORDINATED OR JOINT PROCUREMENT

5.1 CAPITALISING ON PPI4WASTE PROJECT TOOLS

Coordinated procurement and joint procurement are common practice in the Member States where inter municipal associations (in any form) are common practice. Promoting procurement of innovation is addressed in this PPI4Waste project in which several actions were undertaken and tools are delivered:

- Reports as "Common report on targeted improvements" and "State-of-the-art of emerging solutions" show very clearly what the (technological) status is in the participating countries. Apart from showing the differences, these reports can also be used to identify the common grounds in the entire waste processing chain.
- General methodological support for PPI on a more generic level is described in the reports "Preliminary Contract and financial assessment model" and "Common Risk Management Strategy", as well as <u>training material</u> that can help to foster the general knowledge about PPI in local authorities dealing with waste management.
- The <u>meet the market events implemented by PPI4Waste partners</u> have been important dissemination events to promote PPI and at each of them the general principles of PPI have been discussed. The meet the market events all addressed different topics, ranging from technological solutions, decision support systems to objective based planning (especially relevant for municipalities that contract third parties for services). The solutions and methodologies discussed can serve as a starting point to identify possible content of the JCB-PPI; content that needs to be promoted and adopted by municipalities and other public contractors in waste management.

All reports are published on the website of the project and promoted at the procurement forum website and core elements have been taken up in the capacity building program of this project.

These tools and experiences can also be used by procurers that are interested in cross border procurement of innovation.

The publications of summaries and reports about best practices or methodological approaches is a passive form of communicating; passive means that it is entirely left to the reader to find the publications and follow up on the recommendations and suggestions.

⁶ Directive 2014/24/EU on public procurement



5.2 BARRIERS TO AND OPPORTUNITIES FOR JCB-PPI

The barrier of **limited knowledge on the progress or state of the art in other municipalities** in another EU Member State is considered the crucial barrier to address in promoting JCB-PPI. No matter how the other barriers are addressed, information on ongoing processes and activities in other municipalities or other procurers is essential and the starting point for any joint or coordinated procurement.

In general, information on state of the art and ongoing developments in waste management in a given municipality is not readily available. A straight forward internet search may show the state of the art in a given municipality, it seldom shows the planned developments or actual challenges a municipality is facing. It certainly does not show the political and policy driven option analysis, if made, for further enhancing the waste management system.

If indeed procurers in general don't explore what is done across the border, a more active approach is deemed necessary to promote JCB-PPI. The challenge is to motivate procurers to search for intentions of potential partners outside their "normal" horizon (geographical as well as with respect to technologies and services). It cannot be expected that staff in a municipality starts "at random" searching similarities in municipalities further away than their neighbours, let alone in other countries. More effective would be to find partners via already existing networks such as twin cities.

Other barriers such as **language**, **technical standards and norms**, **financing sources** or the **proximity** and **self-sufficiency principle** may complicate the process but are not expected to make the process impossible. The level of complications depends also on the actual technology of service to be procured. A treatment technology is geographically bound and will need to adhere to the language and technical requirements of the locations, procurement of a GPS tracking system to optimise route-planning for waste collection will need localisation but the main product is the same for all.

A barrier not earlier mentioned is potential market domination or even monopolization of the demand side. Given the large number of procurers, all the municipalities or their associations, this is not very likely to occur, certainly not in JCB-PPI. A problem related with this and with the legal aspects is the long period of some contracts, as Spanish concession contracts, sometimes up to 30 years.

The Report on Agreeing Common needs and the Common Report on targeted improvements, produced as part of this project, give some ideas about the technical needs. The before mentioned feasibility study gives some more recommendations on the directions (or products / services) that could be a topic of PPI. Considering the demand side, a split seems appropriate between collection related services and treatment and disposal. The first is a typical municipal activity, the second is most often managed by service providers that operate on a larger scale than municipal.

The first recommendation, *standardized goods or services* on municipal level relates to generic products / services such route optimisation tools in trucks or software to monitor and report on (separate) collection. (The term *standardized* appears to contradict *innovation* but should be read as *similar*, not as *well tested*, *proven* and *certified* technology.)

The second, goods and services that do not involve a high proportion of delivery services or works on site appear to more suitable to develop joint treatment facilities.

The third recommendation, products which are identified as having potential for achieving better prices and improved conditions is very generic and does hardly give any further direction.

5.3 KEY STEPS FOR STIMULATING JCB-PPI



Considering that the limited knowledge on the progress or state of the art in other municipalities is the main barrier implies that all other barriers can be dealt with if the first step, getting together based on a common need, is made. The reason or cause of this limited knowledge varies and can be based on any of the mentioned other barriers such as the perceived additional bureaucracy, or the proximity and self-sufficiency principle. Lacking internal drivers for change (push or pull) contribute to this. Recent experiences in the new Member States demonstrate this lack of internal drivers e.g. the establishment of regional landfill instead of municipal landfills has been accomplished only after substantial pressure from national governments (often driven simply by funding only these regional landfills). Limited knowledge can in these cases also be read as limited willingness.

To address the limited knowledge or limited willingness, a wider interpretation of the self-sufficiency principle to include explicitly the cross border cooperation could provide a driver, but only for those that indeed are willing to innovate and search for partners beyond the (national) region. Such a wider interpretation needs to be provided by the European Commission.

A further driver is to work with an external moderator or coordinator to bring parties together.

- The first task of the external coordinator is to explore the technological or methodological options. The reports produced in this project can be used as a starting point, focus on the identified common needs, prepare an overview of the key decision moments with a prospective calendar of actions. (A review of EU level tender notices could contribute to identifying trends and potential partners).
- 2. Next step is to actively approach procurers and ask for intentions related to those common needs and calendar of actions, asking municipalities to check the actions with their own calendar or planning.
- 3. The next step would be to make matches when these intentions overlap and start up a dialogue between the potential partners.
- 4. The final task for the moderator would be to formulate a procurement mechanism in accordance with the three models from the Directive. Essential at this stage is to build trust between the partners. After this, the next steps will be determined by the procurement model and the actual technical or methodological approaches chosen.

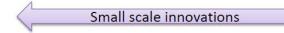
It is essential that the external moderator or coordinator keeps a focus on finding the right people, not the right organisations. Innovation is driven by individuals; organisations merely provide the general conditions that make it possible for people to be innovative. This means that the external moderator or coordinator should focus on quality, not on quantity.

The idea of an external moderator or coordinator bringing together partners from different backgrounds and different countries is possibly in itself an innovation. In the waste sector, also in well-established international organisations with municipalities as members such as ICLEI, ACR+ and ISWA there is little or no experience with this. In the framework of this project, a session was hosted at the final conference in September to "test the water".

The consensus at the final conference is that there are two main advantages for the implementation of coordinated (and joint) procurement: knowledge centralisation as well as the possibility to better balance demand and supply which would allow pushing for a change in the industry. Also, to drive PPI, decision makers need to focus on defining targets and leave the market to come out with solutions. This was supported by a comment made by the supply sector that to drive innovation, over-precise descriptions should be avoided and sufficient space should be granted in the tender to the supply side to propose solutions. A further comment made was that landfill prices often are so low that this results in a low need for alternatives. The consensus is outlined in the following diagram (presented by Ministrie at the conference):







MORE LEVELS OF COLLABORATION TO CREATE IMPACT



6 CONCLUSIONS

Joint or coordinated procurement in the waste sector is common practice in many Member States but limited to cooperation at national level.

Procurement is a strategic instrument and therefore the focus (of information provision on PPI) should be on decision makers (budget holders) and not on procurers.

The gain optimal benefits from JCP and to stimulate PPI, within any given cooperation focus should be on objective or target (performance) based procurement and leave the market to come up with solutions.

Objective or target based procurement instead of descriptive procurement benefits most from the "economy of scale" as it avoids the barriers identified in the previous chapters. The market can adjust better with solutions for each partner.

Coordination is crucial, and it is fundamental to have groups where all the actors involved can talk to each other, putting together stakeholders, waste-management companies, activities owners, municipalities, and so on, to have a shared and coordinated approach.

Objective or target based procurement requires trust between suppliers and procurers (decision makers). Too often procurers want detailed and specific requirements to be met, too often suppliers promise unrealistic solutions (such as plasma processing and producing diesel out of mixed municipal waste). Working in groups, as outlined in the previous paragraph, in early stages of the procurement process is essential to build this trust.

Working together with other cities (or municipal associations) is not in the culture or job description of civil servants and in that perspective national authorities and international organisations of municipalities can help to facilitate the process.

