



# **Publishable Final Activity report**

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policy mix instrument

Instrument: Support of the coherent development of research policies

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# 1 Project Execution

## **Objectives of the OMC-PTP project**

The OMC-PTP¹ project had as an overall objective to explore the potential of Public Technology Procurement as a new instrument to stimulate innovation by tapping the innovation opportunities that are present in the business-to-government (B2G) market that accounts for 16% of the European GDP.

This means that Public Technology Procurement is characterized by two dimensions:

- An operational procurement dimension
- A strategic policy dimension

Only a balanced approach between the policy making world and the operational procurement world can create a new instrument that can have a substantial effect on reaching the 3% R&D Lisbon goal.

The strategic objectives of the project to help unlock the potential of PTP as the overall objective were formulated as follows:

- to provide a thorough knowledge about the possibilities within the legal framework of the European public procurement law to increase more effective use of public technology procurement (PTP) to support R&D&I investment.
- to establish a platform for exchanging past and present experience in PTP. In particular, such platform should provide an opportunity for mutual learning between the Member States, stakeholders and procurement officials dealing with PTP matters.
- to identify and analyse good practices of PTP at operational and policy level.
- to elaborate a PTP Manual.

#### The legal framework for PTP

While PTP can be used as innovative and more strategic innovation policy tool, it has to comply with EU regulation. In particular directive 2004/18/EC is the important procurement directive. As this directive and its translation into national law and application is still not fully determined, it was necessary throughout the project, to monitor current developments and interpretations. The objective of this work package is to analyse the legal framework of public procurement rules and state aid in its connection to the new innovation policy tool and analyse the needs of PTP design to comply with the existing rules.

At the end of the first year of the OMC-PTP project it was concluded that there are no (major)obstacles under the EU procurement directives that prevent countries from

<sup>&</sup>lt;sup>1</sup> OMC-PTP started on 1 Jan 2007 and ended on 31 March 2009. It was funded within FP6 as an OMC-NET project (OMC = Open Method of Coordination). Partners in the project were: Instituut voor de aanmoediging van innovatie door wetenschap en technologie in Vlaanderen (IWT) – Belgium/Flanders; VDI/VDE Innovation + Technik Gmbh (VDI/VDE-IT) – Germany; Ministerie van Economische Zaken (EZ) –The Netherlands; Verket for Innovationssystem (VINNOVA) – Sweden; Mediterranee Technologies (MT) – France; Latvian Technological Center (LTC) – Latvia; Slovenske Centrum Produktivity (SLCP) – Slovakia; Dirección General de Modernización (DGM, former SATSI) – Spain; Department for Innovation, Universities and Skills (DIUS, former DTI) – UK; Technopolis Consulting Group Belgium; Institutul national de cercetare-desvoltare in informatica (ICI) - Romania

implementing PTP, including pre-commercial procurement. However practical implementation of methodology for PTP is missing. By the end of year 1 the question was no longer: PTP, can it be done? But: PTP, it can be done, but how to process it? An answer to this was given in the second year and is described in chapter 4 of the final brochure produced at the end of the project (see relevant section below).

#### A platform for mutual learning

In order to stimulate mutual learning workshops were organized. In total six successful workshops were held. An intranet section on the project webpage (<a href="www.omc-ptp.eu">www.omc-ptp.eu</a>) served as place to exchange information between project partners. Project partners informed the consortium by email about new developments or publications in their countries.

The OMC-PTP findings were also communicated to the outside world on different occasions.

#### Study of good practices

Practice cases- very few, if any of the cases are really about radical innovation- confirm the findings of other studies that public procurement of innovation is not very much visible, not well structured and efficient tools are not in use to deliver innovative solutions to the challenges we are facing. Most cases are dealing with integration type of technology, incremental innovation or diffusion. It turns out that the topic of PTP is rather new in Europe. A few countries are frontrunners and have shown first steps to implement innovation procurement in their policy and practice. In most countries, however, the topic is being followed with interest, but hardly any initiatives can be identified. Based on the rather thin practical experience it is considered premature to try to build a manual. We therefore call the final deliverable a brochure.

#### Development of a PTP manual<sup>2</sup>

Based on the findings of the project our document focuses on policies and concepts topped with some own conceptual thinking. The aim of the document is neither to prescribe how policy makers should handle procurement of innovation nor how to procure innovation but more to present a dish to the readers from which they can choose the bits that are applicable in their national/local context.

In the document it is explained that all necessary conditions and tools can be put in place to benefit from innovation while at the same time transforming the business-to-government (B2G) market into an attractive market for innovative companies.

Throughout the brochure recommendations are formulated how to define the role of public procurement in relation to other innovation policy measures and how to exploit

<sup>&</sup>lt;sup>2</sup> Based on the tendency to give innovation a broader content than just technology- related innovation it was decided to use Public Procurement of Innovation (PoI) in the manual rather than Public Technology Procurement (PTP). We define public procurement of innovation as the purchase of innovative products, services or processes through public demand with the aim to improve the performance and functionality of public services or to solve important socio-economic challenges. The purchase might include research and development. As regards to innovation itself, we adopted a practical definition: innovation is change for the better. Dany Jacobs and Hendrik Snijders use the definition: "innovation is the realisation of something new, with (hopefully) an added value."

the rules of the procurement framework in order to stimulate the procurement of innovative goods and services.

#### Stakeholders and their perspectives

When discussing public procurement of innovation, it is important to acknowledge that several different groups of actors may be involved in different capacities. A few examples of different roles that actors may play are: as the origin of demand; as regulators; as procurement procedure experts; and as potential suppliers. Most public procurement procedures involve only some of the potential actors. When it comes to procurement of innovation however, where the risk levels tend to be elevated and the time horizon longer than for regular procurements, chances are that most of the actors need to be considered.

Chapter 2 of the brochure approaches public procurement by introducing different actor perspectives and exploring their motivation for taking part in a procurement process. Each group of actors will be discussed one by one, followed by recommendations or suggestions directed to that actor.

#### Procurement of Innovation as part of a coherent innovation policy

Buying innovative solutions at public sector level comes along with great expectations, such as the creation of lead markets, boosting industrial innovation, better performing government, solving societal problems. However, this can only be achieved when a coherent policy is combined with a professional public procurement process.

A coherent policy means a procurement policy that is integrated in the innovation policy and addresses all relevant (government) stakeholders in order to incorporate the will to buy 'new' throughout all government decision makers. To this end it is necessary to align/coordinate the different policies relevant to public procurement. This is the subject of chapter 3.

The taxonomy of innovation policies developed by J. Edler and L. Georgiou<sup>3</sup> was chosen as the frame for alignment and coordination of public technology procurement with other policies that have an innovation stimulating effect. The set of these instruments form the tool box from which countries can select to build an innovation policy mix that is felt appropriate for a country. When building an innovation policy mix, a country takes also into account other policies such as the industry policy and specific domain policies. In building a coherent balanced innovation policy a government starts from a policy rationale.

## Policy development in different Member States

In recent years public technology procurement is being given more and more a strategic innovation dimension and is being considered as a new innovation stimulating instrument with a high potential. The brochure describes the policy approach to Public Procurement of Innovation in the UK, the Netherlands, the Flemish region of Belgium, Sweden, Germany and France.

What can we learn from comparing countries, now that we have described policy developments on public procurement of innovation in several member states? Can we define success factors for establishing a policy on procurement of innovation?

<sup>&</sup>lt;sup>3</sup> J. Edler, L. Georghiou: Public procurement and innovation- Resurrecting the demand side; Research Policy 36 (2007) 949-963

In the UK public procurement is acknowledged as an innovation policy instrument. A strategic approach, coordinated by the Technology Strategy Board, is under development. The Innovation Platforms concept facilitates horizontal coordination between government departments focussed on a specific technological or societal challenge. At the same time good practices were identified and studied, which led to recommendations for procurement policy makers and procurers.

The recently published Research and Innovation Bill may be the start of national policy development on public procurement of innovation in Sweden. However, a national policy debate seems necessary to address the possibility of conflicting interests. Political priorities have to be set. A pilot programme is being setup by VINNOVA to identify success and fail factors of procurement of innovation in practice. This is done by experimenting with different procurement situations.

In the Netherlands many different stakeholders have identified public procurement as a strategic instrument (at the government level and by various departments). There is no strategy on public procurement of innovation to integrate different policy initiatives. Rationales have to be made explicit in a policy debate, involving politicians so priorities can be set. An interdepartmental SBIR-programme has run for a couple of years now, but so far this has had little spill over effects to contracting authorities.

In Flanders, public procurement is embedded in the new innovation policy strategy. A pilot programme has recently started, initiated by the Flemish Innovation Agency IWT. The programme intends to involve different government departments by having them initiate a call and making means available for organising a procurement of an innovative solution. By realising good-practice examples the programme intends to build knowledge on innovation procurement and inspire contracting agencies.

The High-Tech Strategy in Germany also starts from major technological and societal challenges and operates horizontally, involving all relevant government departments and other stakeholders. Although public procurement of innovation is identified as an important policy instrument, this is not yet translated into a strategy on public procurement.

In France, industry support rationales are the main drivers for SME support initiatives. Public procurement of innovation is considered a possible policy instrument to support these companies. As opposed to the other countries described, the main objective in the policy debate is not to enhance innovativeness in general, but to support SMEs.

We can conclude now that in all described countries public procurement has been identified as a policy instrument to enhance innovation. In all countries it was mentioned in core documents, published by governments. However, development of a policy and first steps towards implementation is only starting to evolve in the UK, the Netherlands and Flanders. In Sweden, Germany and France policy on public procurement of innovation is in an even earlier stage of development.

In the plans of the UK, Germany and – to a lesser extent - Flanders we find explicit attention for horizontal coordination across policy areas. This is done by making public procurement part of an (innovation) policy strategy with attention for the opportunities of demand-based innovation policy (UK Technology Strategy Board, German High-Tech Strategy). Such coordination activities are not seen yet in the Netherlands, France and Sweden. This is possibly related to the fact that economic rationales are the main drivers for the attention for public procurement of innovation. In the Netherlands other rationales are present, but policy has been rather fragmented.

In both the UK and the Netherlands different non-related policy initiatives were initiated, which included attention for changing the practice of procurement professionals (PIANOo in the Netherlands and OGC/DIUS in the UK). All programmes on public procurement of innovation are in the pilot-phase or even before (SBIR-NL, SBRI-UK, the new Flemish and Swedish schemes). The pilots started so far (SBIR-NL, SBRI-UK, the Flemish scheme) have in parallel that innovation policy makers initiate them to research the opportunities of pre-commercial procurement.

The operational dimension of Public Procurement of Innovation

The procurement directives and their translation into national legislation are often perceived as forming an obstacle to procuring innovation. Chapter 4 shows that the procurement directives can be put to work in a way that facilitates the procurement of innovation rather than hampering it.

This chapter focuses on identifying suitable procedures and processes that can be pursued, whilst conforming to the provisions of the EC Treaty or the procurement directives on the basis of experiences and best practices as well as some conceptual development.

The following procurement procedures are dealt with in more detail:

- pre-commercial procurement
- design contest
- forward commitment procurement
- competitive dialogue
- negotiated procedure with/without publication of a contract notice

Public procurement of innovation is more than just applying a procurement procedure; it is a whole process whereby the procurement procedure is just one building block in the procurement process. Embedding the above mentioned procurement procedures in a process with systemic features facilitates public procurement of innovation. This will bring the demand and the supply side on the same wavelength in their search for change for the better through innovative solutions. While analysing the procedures suitable for procurement of innovation it became clear that some are innovative or can be applied in an innovative way such that public procurement facilitates the acquisition of innovative solutions.

There is a wide variation in procurement situations: there is no single procurement process that fits all situations. Depending on the type of procurement, a suitable procurement process can be put together comprising the appropriate building blocks. These building blocks can be grouped according to the different procurement phases: the preparation phase, the procurement phase and the contracting/execution phase.

During the project it was soon realised that public procurement besides stimulating innovation in the B2G can also have an impact on the B2B and B2C market since the public sector can also act as launching customer or take a catalytic role in the interest of society. The catalytic role of the Government is especially relevant to tackle environmental challenges and promote renewable energy or more generally if the government wants to transform markets in the interest of society.

A complicating factor while implementing PTP is the assignment of IPR between the contracting authority and the supplier. The IPR aspects are closely related to the pricing of PTP, especially in pre-commercial procurement: the more IPR is transferred to the contracting authority the higher the price to be paid by the contracting authority. It is argued that the required IPR and thus the value of pre-commercial procurement for the contracting authority, is dependent on the procurement position, the criticality of the innovative solution to the contracting authority and the degree of competition of the supply market. In order to translate the different IPR/pricing models into practice reference is made to appropriate legal language used in B2B in the context of the EC framework programs. Based on this analysis there is scope for combination of precommercial procurement and subsidies in particular situations.

In order to make sure that procurement of innovation makes up a substantial positive contribution to the 3% R&D goal it is considered important to roll-out PoI in a very

broad way covering the range from pre-commercial procurement over adaptation/integration type of procurement to diffusion of innovation. While procuring, the contracting authority can take one of the following procurement positions: direct procurement, cooperative procurement or catalytic procurement. This broad varied approach has its consequences on the procurement procedures and the assignment of IPR while implementing PTP.

In the final document that is produced options are formulated in chapter 4 how to handle these different situations taking into account the procurement position of the contracting authority as well as the position of the procurement project on the innovation cycle. In chapter 4 an overview of possible procurement approaches is summarized in a table.

#### **Conclusions**

Only a balanced interaction between the policy making world and the operational world can lead to a public service equipped for procurement of innovation. Policy makers should define the strategic role of public procurement of innovation in relation to other innovation policy measures. At operational level the rules of the procurement framework should be exploited at best using the procurement position and the position of the innovation on the innovation cycle as a frame. This frame allows to roll-out public procurement of innovation in the broadest way possible aiming at change for the better, contributing to the 3% R&D goal and transforming the B2G market into an attractive market for innovative companies. In this setting pre-commercial procurement deserves special attention but is not the exclusive focus of procurement of innovation.

# 2 Dissemination and use

The findings of the OMC-PTP project (referred to as deliverable D8) are made publicly available as a brochure titled: Exploring Public Procurement as a Strategic Innovation Policy Mix Instrument. It can be downloaded from the OMC-PTP website: <a href="https://www.omc-ptp.eu">www.omc-ptp.eu</a>