



**SMART SPP**

innovation through sustainable procurement

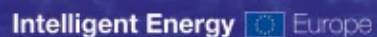
# Driving energy efficient innovation through procurement

A practical guide for public authorities

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# Driving energy efficient innovation through procurement

A practical guide for public authorities



# Contents

## Part I – Introduction

<b>I.1</b> Introduction to the guide .....	<b>5</b>
<b>I.2</b> Why encourage innovation through procurement? .....	<b>7</b>

## Part II – Quick reference

<b>II.1</b> Guiding principles for encouraging innovation .....	<b>9</b>
<b>II.2</b> Recommended Procedure .....	<b>10</b>

## Part III – The guide

<b>Step A</b> Identifying appropriate product groups .....	<b>14</b>
<b>Step B</b> Setting up a project team .....	<b>16</b>
<b>Step C</b> Defining your needs .....	<b>19</b>
<b>Step D</b> Informing the market .....	<b>22</b>
<b>Step E</b> Consulting the market .....	<b>24</b>
<b>Step F</b> Selecting the tendering procedure and prepare tender documents .....	<b>27</b>





# Part I – Introduction

## I.1 Introduction to the Guide

This guide is aimed at assisting public authorities in **achieving the most innovative, energy efficient solutions within their procurement actions**, particularly through increased dialogue with suppliers and producers. For the purposes of this guide an “innovative, energy efficient solution” can be considered as one which meets your needs with substantially increased energy efficiency leading to reduced related emissions of CO<sub>2</sub> equivalents (CO<sub>2</sub>eq.)<sup>1</sup> in comparison to currently available solutions. Any public authority, whatever size or location, can use the guide, but certain procedures may only be suitable for larger public authorities as they involve additional financial and human resources.

### Who should read the guide?

This guide is mainly intended for use by public procurers, and others directly involved with public procurement actions. The guidance provided in Part II assumes a certain level of knowledge about the procurement process and legal framework. *Part I* provides an introduction to the concept of energy-efficient innovation and procurement for other interested public sector actors. More information on the topic can be found on the SMART SPP project website at [www.smart-spp.eu](http://www.smart-spp.eu).

### How is the guide structured?

The guide presents a standard procedure designed to encourage innovative solutions which focuses in particular on active market engagement before tendering takes place. The procedure is split into six distinct Steps as indicated in *Figure 1* (on page 6). Each situation is different, and there is no one-size-fits-all approach to procuring the best, innovative solution. The procedure presented here should therefore be treated flexibly – some steps may take place in a different order, some may need to be repeated. The best approach to take may be dependent on a number of factors – including the type of product/service, the maturity of the market, the size of the contract, the size of the public authority, the ambition/political commitment of the public authority and procurement skills available.

- **Part II – Quick reference:** This summarises the purpose of the six steps, and provides a summary of some key guiding principles.
- **Part III – Detailed guide:** This provides detailed guidance on each of the six steps.

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<sup>1</sup>Greenhouse gas emissions are measured in the unit “CO<sub>2</sub> equivalents” which reflects that there are many different greenhouse gases, not just CO<sub>2</sub>, (e.g. methane), and that their global warming potential (strength) also differs. Throughout the rest of the document CO<sub>2</sub> is used for simplicity.

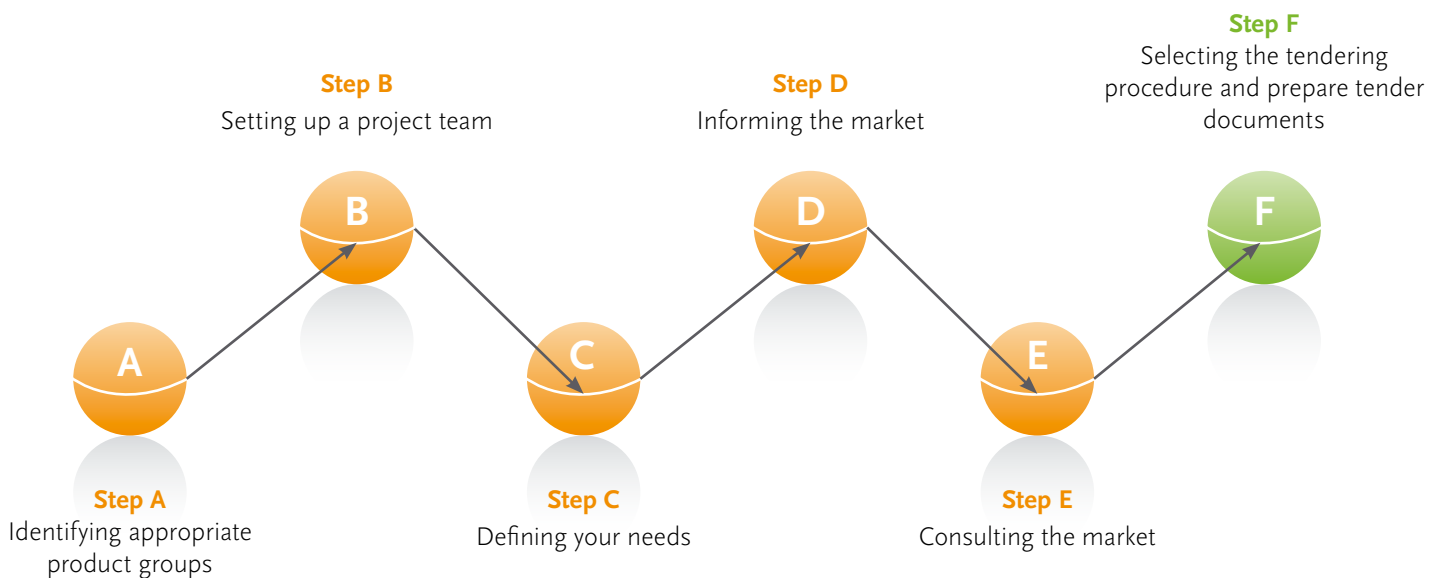
### Accompanying tools – life-cycle costs (LCC) & CO<sub>2</sub> assessment

Having clear data on both the potential CO<sub>2</sub> emissions reduction, and the costs over the lifetime of new innovative energy efficient technologies or solutions, is vital in making informed procurement decisions and in effectively balancing cost with improved environmental performance.

Acquisition costs are only one part of all costs that an authority pays for a product. Maintenance, operation and disposal may cause higher expenses than expected. Therefore, in order to support public authorities in making sounder, more efficient purchasing decisions, a tool to evaluate the life-cycle costs (LCC)<sup>2</sup> and CO<sub>2</sub> emissions of different technologies or solutions has been developed, to accompany this guidance.

**Figure 1**

6 Steps to Drive Innovation through Sustainable Procurement



<sup>2</sup> Life-cycle costs, also called “whole life costs” (WLC), are the costs that a product will cause to the contracting authority throughout the period of time that it will be used by the authority. For many types of products and especially for energy-consuming goods, the acquisitions costs may represent only a small part of all the costs that it may cause during its life span. Hence, costs for maintenance, operation and disposal are included when taking a life-cycle costing (LCC) approach.

## 1.2 Why encourage innovation through procurement?

### 1.2.1 For your organisation

Encouraging innovation in procurement basically means **trying to find the solution that best meets your needs – in terms of performance and cost**. From the point of view of the public authority, encouraging energy efficient innovative solutions in procurement can mean:

- **Using your resources more efficiently and getting the best possible solution**
- **Helping to meet local/national targets** – for example on energy efficiency and CO<sub>2</sub> emission reductions

### 1.2.2 For society

Taking a wider perspective, public procurement can be seen as a potentially **significant driver of innovation on the market**. Meeting the challenges of climate change will require significant technical progress to achieve more energy efficient solutions for the needs of society. “Innovation” can mean a variety of things – from the development of a completely new technology, to the new application of an existing technology, or a new service approach for meeting your needs.

As a major consumer, the public sector has a considerable potential in acting as a demand-side driver for encouraging innovation in both products and services.

According to the European Commission, public authorities “can make smart use of their large procurement budgets by requesting innovative solutions. In doing so, they can create the necessary demand for the development of, for example, more energy-efficient buses [...]”<sup>3</sup>. Major business associations such as the CBI in the UK also back this: “Public procurement is the biggest single customer-side driver that could be harnessed to catalyse business innovation activity.”<sup>4</sup>

“**Encouraging innovation**” covers a range of different scenarios within the procurement area:

- An authority wishes to act as a “launch customer” for the best available products on the market, and thereby encourage their greater market penetration.
- An authority wishes to purchase a product or service with an energy efficiency performance better than the market is able to currently provide, which would require certain small improvements in technology or new applications for existing technologies, but would not require major research and development (R&D).
- An authority wishes to purchase a product or service with an energy efficiency performance substantially better than the market is able to currently provide, and which would therefore require major investment in R&D.

<sup>3</sup> **European Commission (2006)**: Communication from the Commission to the European Council (Informal meeting in Lahti – Finland) – An innovation-friendly, modern Europe, COM(2006) 589 final. [http://ec.europa.eu/growthandjobs/pdf/COM2006\\_589\\_en.pdf](http://ec.europa.eu/growthandjobs/pdf/COM2006_589_en.pdf)

<sup>4</sup> **CBI (2006)**: Innovation and Public Procurement. A new approach to stimulating innovation. CBI innovation brief, October 2006. <http://www.cbi.org.uk/pdf/innovprocure0307.pdf>



## Part II – Quick reference

### II.1 Guiding principles for encouraging innovation

In achieving the most innovative, energy efficient solutions for your needs a few key guiding principles may be identified. The rest of this guide provides more detail on these points:

✓ **Treat the process as a specific project**

The procurement process aimed at achieving innovative, energy efficient solutions may best be treated as a project, with clear objectives, a clear work plan, indicating tasks, timeframes and responsibilities, and allocated resources.

✓ **Ensure you have high-level support for your project**

The more high-level support you have, the more you will be able to achieve and the greater the cross-organisational support you can expect.

✓ **Ensure you have appropriate technical, legal and management skills within the project team**

The more high-level support you have, the more you will be able to achieve and the greater the cross-organisational support you can expect.

✓ **Identify and communicate your needs in terms of performance and function**

Working out what performance or result you are actually trying to achieve is a critical first step. Then communicating this to the market in a way which allows them to suggest the best, most efficient way to reach that result (*see Box 3 in Part III*).

✓ **Consider how “attractive” a customer you are**

The bigger the potential contract, and also how important a customer the public sector is for the specific industry sector, the more interested suppliers will be in engaging with you and the better the offer you receive. If the contract amount is likely to be small, consider whether you can encourage other public authorities to join your action (*see Box 2 in Part III*).

✓ **Engage with the market to identify what is possible**

Companies themselves are best placed to know what potential alternative solutions exist, or are close to market readiness. Finding appropriate ways to engage with the market, whilst respecting company confidentiality and ensuring transparency, can greatly assist a procurer in knowing what is possible. Make sure to also look beyond your regular suppliers and engage with small- and medium-sized enterprises (SMEs).



### ✓ Give the market sufficient warning

Companies need time to develop new solutions. If you indicate your needs far enough in advance of actual tendering (at least 6 months to 1 year), the likely response of the market will be considerably better.

### ✓ Consider the full life-cycle costs of the product

It is simple economics that you should not only consider the purchase price of the product but also the costs of operation (particularly energy & water consumption), maintenance and final disposal. Yet, this is still relatively uncommon amongst European public authorities. A tool for calculating life-cycle costs within procurement is attached to this guide.

### ✓ Use non-financial award criteria intelligently

Giving sufficient weighting to factors such as energy efficiency (or ideally, actual CO<sub>2</sub> emissions – see accompanying LCC/CO<sub>2</sub> tool) when evaluating different offers is a good way to encourage the market to go as far as possible, whilst not risking significantly increased costs.

### ✓ Identify and manage the risks

Buying innovative solutions will inevitably entail a certain amount of risk, whether technical or financial. It is important to carefully consider what those risks might be and to make sure that it is clearly defined who (the public authority or the supplier) is responsible for carrying that risk, and that this be clearly included within tendering and contract documents. A piloting phase can help to substantially reduce risk (*See Box 1 in Part III*).

### ✓ Seek outside help if required

Think about whether outside expertise could help to improve your outcome. Procurers cannot be expected to have detailed technical expertise on all products and services. For larger contracts it may be worth paying for external technical assistance right from the beginning. Government agencies may also be able to provide certain help and support.

### ✓ Communicate your achievements

If you find an effective new solution to your requirements, share this knowledge with other public authorities and the general public. This will not only help others, but also publicly demonstrate your commitment to eco-innovation, and likely help drive down costs further for the future.

### ✓ Monitor the impacts

Introducing an innovative solution will not end with the signing of the contract. You should monitor how users adopt the innovation and identify if further actions are required. This can also be a helpful lesson-learning experience for future procurement actions.

### ✓ Monitor performance

Monitor the performance of the solution both in economic terms and in resource consumption to identify deviations and apply, if necessary, the damages/penalties foreseen in the contract.

## II.2 Recommended procedure

<b>Step:</b>	<b>→ Aim:</b>
 <p data-bbox="719 450 954 510"><b>Identifying appropriate product groups</b></p>	<p data-bbox="1023 421 1422 533"><i>To identify which procurement areas may be most appropriate for your innovation-driving actions, and to determine the possible level of ambition.</i></p>
 <p data-bbox="719 813 922 873"><b>Setting up a project team</b></p>	<p data-bbox="1023 784 1369 869"><i>To put together a team of staff with appropriate project management, technical and legal expertise.</i></p>
 <p data-bbox="719 1176 927 1214"><b>Defining your needs</b></p>	<p data-bbox="1023 1144 1437 1205"><i>To define the real needs of the organisation which the procurement action must fulfil.</i></p>
 <p data-bbox="719 1635 938 1673"><b>Informing the market</b></p>	<p data-bbox="1023 1603 1437 1715"><i>To give the market sufficient warning to respond to your future demands and to identify company contacts for later market consultation actions (Step E).</i></p>

### Key Questions:

- Which procurement actions / product groups should be targeted?
- What is our level of ambition (best available product, new technology / solution, highly improved energy efficiency, etc.)?
- What resources do we have to invest?
- How can we best implement a life-cycle costs (LCC) approach?

- What skills do we need in order to implement the project?
- Are there other public organisations interested in working with us?
- Do these skills exist within the organisation/consortium, or do we need external assistance?
- When will the different skills be required?

- What functional needs do we need the procurement action to fulfil?
- What energy efficiency/CO<sub>2</sub> emission performance do we currently have, and what performance do we wish to achieve?
- What potential solutions exist on the market or are nearing market readiness?
- Who are the main market actors?

- Are the relevant market actors aware of our intentions?
- Have we raised sufficient interest for effective market consultation

### Success Factors:



- Identify policies, strategies and targets which can support and direct your actions.
- Discuss opportunities with relevant internal colleagues.

- Ensure you fully explore the technical, financial and project management skills available within the organisation.
- Involve all relevant departments such as the environmental office, Mayors office, financial office, end-users etc.
- Don't be afraid to consider bringing in external help.

- Have clear information on the performance of your current product/ system.
- Involve all the relevant personnel in your organisation.
- If you lack technical or market knowledge look for assistance outside the organisation.
- Avoid being technically prescriptive.
- Be clear – Use the language of the market, and make sure the market understands your requirements

- Dedicate sufficient time and effort to this critical phase
- Make sure you communicate your functional requirements and performance targets clearly, and with as much detail as possible.
- Give companies sufficient time to respond to your needs – the more advanced warning the market has, the better the result.
- Reach as many companies as possible with your information, including SMEs, and those beyond your regular suppliers through using e.g. SME networks, business associations and trade unions.

... continuation of page 10/11

Step:	→ Aim:
 <p data-bbox="719 376 946 405"><b>Consulting the market</b></p>	<p data-bbox="1023 344 1442 461"><i>To assess the potential solutions which may be available on the market to meet the defined requirements, and to learn about future developments</i></p>
 <p data-bbox="719 1276 951 1361"><b>Selecting the tendering procedure and prepare tender documents</b></p>	<p data-bbox="1023 1261 1426 1402"><i>To determine which tendering procedure should be used and to develop a complete set of tender documents based around functional or performance-based specifications.</i></p>

### Key Questions:

- Are there any new, innovative technological solutions, processes, or contractual arrangements for the particular requirements we have?
- How near market-readiness are these new developments?
- Is there information on the likely cost compared to current practice?
- Is there information on likely energy or, more generally, CO<sub>2</sub> savings compared to current practice?
- Is there information on other environmental impacts (such as pollutant emissions, noise impacts etc.)
- Cross-check: Are our performance-based specifications understandable? Are our needs clear?
- What indicators, norms, calculation methodologies, testing procedures and standards should be referred to when drawing up technical tender documentation?
- Are we able to go for a standard commercial procedure or will a competitive dialogue approach or pre-commercial procurement be required?

- How certain are we about the solutions which the market may be able to offer? Is there a solution already or nearly commercially available?
- How clearly can we define our exact needs in the tendering documents?
- Should we look to pilot the solution before full-scale procurement?

### Success Factors:

- Engage with the right companies – those which can demonstrate they have a potential solution.
- Treat information from the market cautiously and seek additional third-party verified information.
- Make sure you have technical expertise at your disposal.

- Prepare specifications in terms of performance or function, whilst ensuring that they are precise enough to be understood in the same way by all participants of the tendering procedure. Outline verification requirements as clearly as possible.
- Ensure full life-cycle costs are considered when comparing offers, not just purchase/installation costs.
- Make intelligent use of award criteria to encourage the best possible energy/CO<sub>2</sub> performance at affordable cost.
- Ensure the tender documents do not prejudice the outcome in favour of certain participants.
- Ensure tender documents clearly outline how competing bids will be judged.
- Include contract clauses which encourage innovation.
- Ensure damages/penalties are included in the contract for major deviations from the costs and performance predicted in the tender.
- Make sure you request robust proof of the bidders' technical capacity.



# Part III – The guide



## Step A: Identifying appropriate product groups

- 
- **Aim:** *To identify which procurement areas may be most appropriate for your innovation-driving actions, and to determine the possible level of ambition.*
- 🔑 **Key Questions:**
- Which procurement actions/product groups should be targeted?
  - What is our level of ambition (best available product, new technology/solution, highly improved energy efficiency, etc.)?
  - What resources do we have to invest?
  - How can we best implement a life-cycle costs (LCC) approach?
- 📌 **Success factors:**
- Identify policies, strategies and targets which can support and direct your actions.
  - Discuss opportunities with relevant internal colleagues.
- 

### Actions to be taken

Not all procurement actions can be addressed at the same time, and some may be more appropriate to target than others. Additionally, as any new technology implies certain financial and technical risks (*see Box 1*) high-level decision-makers will need to be involved in discussions. **To determine the answers to the questions above, a number of actions should be carried out:**

#### Study your political framework:

- Strong political support for innovative procurement is highly valuable and will help determine your ambition level. Do you have a specific policy on fostering innovation? Do you have a policy addressing climate change or green/sustainable procurement? Are there other relevant policies which may support your actions and help define appropriate product groups (e.g. a sustainable transport/construction policy)?
- Are there specific policy targets which can help to set ambition levels? E.g. a reduction of CO<sub>2</sub> emissions by 20% by 2015.
- If a specific policy on innovation and procurement doesn't exist, consider whether one could be developed for the future.

#### Consider the relevance for CO<sub>2</sub> emissions

- Certain procurement areas can be considered high priority for targeted innovations to reduce CO<sub>2</sub> emissions:
- Windows and insulation, heating, cooling and ventilation systems in buildings
- Indoor and outdoor lighting systems
- Transportation of goods and people
- Energy consuming office equipment, such as computers, copiers and printers

### Consult within the organisation

- Once an initial assessment of potential product/service groups has been made, preliminary discussions should take place with other departments involved – in particular:
  - **Procurers** – to determine when relevant contracts are coming up for renewal, and openness/knowledge of new technologies.
  - **End-users** – to get suggestions on potential improvements, and to determine openness to change.
  - **Decision-makers** – to reach agreement on to objectives of the project, and to determine the resources available. As any new technology.
  - **Financial officers** – to discuss opportunities for implementing LCC

### Explore national support schemes

- Support schemes may be available to assist public authorities (financially or technically) with the procurement of innovative, energy efficient/CO<sub>2</sub> reducing technologies.

**Example:** The local authority of Bluetown has a Climate Change policy committing the authority to reducing CO<sub>2</sub> emissions from its own activities by 20% by 2015. A consultation meeting was set up with the procurement department and energy officers from the environment team to assess opportunities for achieving this aim, and areas where an innovative approach may be required. It was decided that office lighting would be a good area to focus on, as no lengthy contracts were in place, new LED technology is under development offering potentially large improvements in efficiency, and such a visible product group can offer useful educational benefits for staff.

### Box 1: Innovation & risk mitigation

Innovative solutions are by their very nature relatively new and untested. Therefore you are potentially exposing yourself to risks – technical risks (that the solution does not perform as expected) and financial risks (that final costs are higher than expected). These risks need to be taken into account throughout the project – in trying to assess the extent of the risk and also who is responsible for dealing with this.

- Consider drawing up a “risk register”, constantly updated over the course of the project aimed at identifying possible risks, their likelihood of occurring, the impact they would have, and who should manage the risk
- Consider including a piloting phase within the tendering procedure before committing to purchasing the full volume (*see Step F*).
- Make sure you have sufficient technical knowledge at your disposal (either from within your organisation or by bringing in external assistance), to properly assess technical risks.
- Ask suppliers to include a risk analysis and mitigation proposals as part of their tender bids.
- Introduce appropriate clauses into contracts indicating clear liability in the event of technical problems, or cost increases, as well as conditions for the renegotiation of contracts if required.

Legal risks can also be considered an issue when engaging with the market prior to tendering, and the guidance presented below is aimed at minimising such risks by ensuring that the basic principles of transparency, equal treatment and non-discrimination are met.



More information on mitigating risks can be found in the SMART-SPP report on Existing approaches to encourage innovation. This can be downloaded from: [www.smart-spp.eu](http://www.smart-spp.eu)



## Step B: Setting up a project team

- 
- ➔ **Aim:** *To put together a team of staff with appropriate project management, technical and legal expertise.*
- 🔍 **Key Questions:**
- What skills do we need in order to implement the project?
  - Are there other public organisations interested in working with us?
  - Do these skills exist within the organisation/consortium, or do we need external assistance?
  - When will the different skills be required?
- ⚠ **Success factors:**
- Ensure you fully explore the technical, financial and project management skills available within the organisation.
  - Involve all relevant departments such as the environmental office, Mayors office, financial office, end-users, etc.
  - Don't be afraid to consider bringing in external help.
- 

### Actions to be taken

#### Consider the skills required

- An innovative procurement action may be considered as a project. It is critical that you ensure that you have all necessary skills at your disposal for the duration of the action:
  - **Project management skills:** To manage the staff, work flow and budget.
  - **Technical skills:** In order to effectively assess new technologies, precisely define needs and interact with the market.
  - **Legal skills:** To ensure market engagement activities and tendering procedures are legally compliant.
- Other actors (end-users, external advice providers) may also need to be involved/consulted at specific stages but may not need to be part of the project team (*see Step C*).

#### Search for other public authority partners

- Joining forces with other public authorities in carrying out procurement actions may have a number of potential benefits, including receiving lower prices, and bringing in additional expertise (*see Box 2*). Explore within your networks whether other organisations may be interested in joining you.

#### Identify the project team members

- Do not limit your search to your department, look throughout the whole organisation (or consortium in cases of joint procurement) to identify the skills required.
- The different skills will be required at different stages of the process. Therefore an indicative timeplan is required.

#### Identify other key stakeholders within the organisation

- Success, both for the procurement action and for the practical application of the solution selected, will likely require the involvement of others beyond the direct project team, such as those indicated in *Step A*, particularly considering the end-users.

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<sup>5</sup> Where external consultants are used, there is always the risk of the specification or schedule being tailored to a particular party, thereby ultimately restricting or, in the worst scenario, even precluding competition. The contracting authority has a heavy responsibility to prevent preferential treatment for particular suppliers/service-providers. The Contracting Authority is, however, in principle not allowed to automatically exclude the consultants from participating in the procurement procedure. They should be given the opportunity to prove that, in the circumstances of the case, the experience which it has thus acquired was not capable of distorting competition.



### Consider external assistance

- If specific gaps are identified in the skills required, external assistance can be considered. Different types of assistance may be available:
  - **Government agencies:** certain agencies may exist to provide support relating to innovation or energy efficiency.
  - **Research institutes and consultancy services<sup>5</sup>** – to discuss opportunities for implementing LCC
  - **National/international networks** – Look for expertise from public authorities nationally and across Europe through professional associations and networks.
  - **Procurement agencies** – It can be an option to contract out the whole, or part of the action to a procurement agency operating on your behalf.



**Example:** In Bluetown it was decided that the project would be run by the procurement department, as the team directly responsible for carrying out the procurement and with experience in managing complex procurement projects. One of the town energy officers was brought in, to work part time with the team, to provide technical assistance. The technology & research institute at the local university was also approached and agreed to provide occasional assistance throughout the project for a small fee.

Following an invitation to other regional public bodies, the local schools authority also decided to participate directly in the procurement with an administrative officer participating directly in the weekly project meetings to be set up.

### Box 2: Joint procurement (JP)/bundling of demand<sup>6</sup>

#### What is joint procurement?

Joint procurement (JP) is where the procurement demands of two or more public authorities are tendered for jointly. Different types of arrangement can be found:

- **Central purchasing bodies** – permanent organisations which purchase on behalf of, or establish framework contracts for, a number of public authorities regionally or nationally.
- **Collaborative agreements** – between public authorities to join procurement actions either on a regular basis or for one off actions. These can also involve private organisations.

... continued on next page

<sup>6</sup> For more information see:

- **Joint procurement – combining public procurement actions,** part of the LEAP GPP Toolkit: [www.iclei-europe.org/fileadmin/template/leap/user\\_uploads/295FG\\_Tool\\_D.pdf](http://www.iclei-europe.org/fileadmin/template/leap/user_uploads/295FG_Tool_D.pdf)
- **OGC, Aggregation – is bigger always better?:** [www.ogc.gov.uk/documents/CP0072\\_Aggregation-is\\_bigger\\_always\\_better.pdf](http://www.ogc.gov.uk/documents/CP0072_Aggregation-is_bigger_always_better.pdf)

... continuation of Box 2

### How does it help?

Developing new solutions usually involves high costs, so economies of scale play a crucial role. For many new, innovative technologies having large orders early on can make a significant difference to justifying development and production costs, and in securing funding.

Bundling of demand by joining the procurement actions of several public authorities is one approach recommended to reduce risks and costs for individual procurers and also seen as beneficial in terms of knowledge sharing.

### When should it be considered?

As JP can be a relatively complicated, resource intensive and time-consuming process<sup>7</sup> a number of factors should be considered when deciding whether to take this approach:

- **Consider the market sector** – Market sectors differ in the potential role economies of scale can play, and therefore the value of using a JP approach.
- **Co-ordinating the needs of all** – Agreeing on a specification that addresses the needs of all members of a buying group may prove difficult and time-consuming. Aligning contract renewal dates can also be problematic. Only consider JP if everyone's needs can be adequately met.
- **Avoid supplier over-reliance** – If the bundled demand would most likely attract only very large suppliers who are not themselves reliant on their government contracts and therefore have strong negotiating positions, buyers may risk becoming over-reliant on these suppliers.
- **Avoid excluding SMEs** – Smaller companies may be automatically excluded from large contracts for capacity or geographical reasons. This could deprive the purchasers of offers of innovative products or services, and specialist or niche offerings. Using separate lots is one potential solution.
- **Consider the size of the consortium** – Although unlikely under European competition law<sup>8</sup>, if your consortium is large, it may be worth getting legal advice on whether it could constitute cartel behaviour.

<sup>7</sup> This may be true at least for the co-ordinating authority, for other public authorities participating there may well actually be considerable savings in terms of the time spent on the process in comparison to carrying out their own individual procurement action.

<sup>8</sup> To be subject to competition law you must be considered an undertaking engaged in economic activity. Provided the goods/services are being purchased for your own use this should not apply here.



## Step C: Defining your needs

- ➔ **Aim:** *To define the real needs of the organisation which the procurement action must fulfil.*
- ❓ **Key Questions:**
- *What functional needs do we need the procurement action to fulfil?*
  - *What energy efficiency/CO<sub>2</sub> emission performance do we currently have, and what performance do we wish to achieve?*
  - *What potential solutions exist on the market or are nearing market readiness?*
  - *Who are the main market actors?*
- ❗ **Success factors:**
- *Have clear information on the performance of your current product/system.*
  - *Involve all the relevant personnel in your organisation.*
  - *If you lack technical or market knowledge look for assistance outside the organisation.*
  - *Avoid being technically prescriptive.*
  - *Be clear – use the “language” of the market and make sure the market understands your requirements.*

### Actions to be taken

In encouraging innovation through procurement, one of the most important steps is to rethink your needs. Think in terms of what functional outcome you wish to achieve, and not in terms of a specific technical solution to achieve that outcome – innovative procurement allows the market to find the best solution. Defining your functional needs and also your energy efficiency target will set the basic parameters for your action (see Box 3).

#### Define your functional needs:

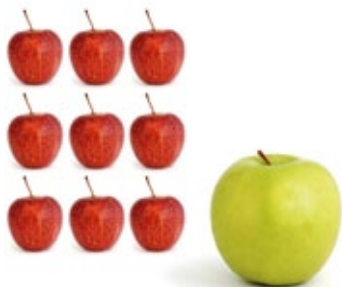
- Within the project team, and in direct consultation with the end-users, come up with a list of parameters which will help to define your functional needs. For lighting, for example, you would likely consider the lighting needs which different parts of the building have at different times of day, the brightness of the light, the colour of the light.
- Provide as much detail as possible without being too technical prescriptive. As the project progresses your needs will likely be refined. Market consultation and dialogue activities will help to ensure the correct expressions are used, especially when it comes to new innovative products and services.

#### Define your current energy efficiency/CO<sub>2</sub> emission performance:

- In order to assess the potential impacts of your procurement impacts – both in financial terms and also in terms of energy/CO<sub>2</sub> savings – it will be necessary to have clear baseline information on the performance of your current product/system. Having this information can also help you communicate the potential benefits of your actions within your organisation to ensure support.
- The accompanying *LCC/CO<sub>2</sub> assessment tool* can be used to carry out this task.

#### Define your energy efficiency/CO<sub>2</sub> reduction targets

- Having a minimum target is an important starting point for market engagement activities. You may have pre-set policy targets for your activities, or you may have a looser aim of simply improving energy efficiency or reducing CO<sub>2</sub> emissions. Having technical and market knowledge in the team will help to make an estimate of what might be realistic.
- The target set may be adjusted before final tendering if it is shown by the market engagement activities to be either too demanding or too easy. The use of award criteria in tendering (see Step F) can also help to go beyond minimum targets.



### Carry out some initial market research:

- Some basic market research at this stage is helpful to a) familiarise yourself with potential solutions, and also to b) identify key market actors such as business associations and key suppliers.
- At this stage this research is not intended to define the bidding documents but to identify the range of possible solutions the market can offer, without deciding for one in particular.
- Different types of research may be useful:
  - Company brochures, websites and telephone
  - Patent databases (such as esp@cenet), advice of patent experts
  - Participation in trade fairs, showrooms and membership in trade associations and other networks may also prove to be a useful source of information on market trends.

**Example:** Bluetown set a target of a 20% reduction in CO<sub>2</sub> emissions. The energy officer firstly investigated current baseline consumption for the three office buildings to be covered, and the schools authority provided average data for the last 5 years.

In defining needs, the university was requested to assist in proposing indicators which industry uses for lighting performance (e.g. luminous colour, angle of radiation, lumen output per watt etc.). End users were then directly consulted about their desk and room lighting needs. The weekly usage patterns of different parts of the offices and a typical school were then detailed, as was a description of the natural lighting (window surface & orientation, wall reflection). This was developed into a full description of needs.

Baseline research indicated that recently developments in LED technology could now provide potential solutions for indoor lighting, although the market was still at an early stage.

### Box 3: Functional or performance-based specifications

#### What are they, and why do they help?

A performance-based, or functional (or “outcome”) specification is one which describes the function or performance to be achieved rather than specifying the exact product or service which will achieve this. In other words it focuses on your actual needs, and lets the market suggest the best way in which these needs may be met, without being technically prescriptive. Some examples are given in *Table 1* on page 21.

For example, a school is looking to replace lighting equipment:

- **Traditional specification:** “Supply and installation of XXX light bulbs of XXX Watts, and XXX light fixtures”
- **Functional specification:** “Classrooms needs to be lit to XX quality for XX hours per day. Corridors needs to be lit to YY quality for YY hours per day...”

... continued on next page

... continuation of Box 3

Environmental performance characteristics can also be formulated in this way:

- **Performance-based specification:** The electricity consumption of the lighting system installed must be XX% lower than the current system.

Functional or performance-based criteria may be used as either minimum (technical) specifications or as award criteria (or a combination of both). For more information on using award criteria (see Step F).

### Legal framework

In public tenders the technical specifications may be defined either by reference to standards, or in terms of performance or functional requirements<sup>9</sup>. The technical specifications should:

- Give the suppliers a clear idea of what the procuring authority is looking for
- Ensure the comparability of the different offers received and thus to allow for a fair competition

Drafting a technical specification by using performance or functional requirements may require more care with regard to meeting these requirements. Be careful to strike the right balance between leaving enough room for the supplier to propose innovative solutions and at the same time being precise enough to permit the award of the contract.

**Table 1: Technical Vs performance-based specification**

<b>Technical specification</b>	<b>Performance-based specification</b>
<i>Replacement of oil-fired boiler providing a heating capacity of X.</i>	<i>Heating system designed to heat Room X to a temperature of X for X hours per day, and Room Y to a temperature of Y for Y hours per day, with a primary energy consumption of Z.</i>
<i>Purchase of petrol-driven cars with X seats, and X brake horsepower (bhp).</i>	<i>Purchase of a car with X seats, and storage volume of X, with a top speed of at least, a range of at least X before refuelling, a refuelling time of no more than X, and a average primary energy consumption per km of X.</i>

<sup>9</sup> This possibility was introduced in the new European Procurement Directives (2004/17/EC & 2004/18/EC), which set the legal framework for all European public sector procurement of goods, works & services. This was introduced as a new measure to counteract the common practice of public authorities giving advantage to standardised products and service over new and innovative solutions.



## Step D: Informing the market

- 
- ➔ **Aim:** *To give the market sufficient warning to respond to your future demands and to identify company contacts for later market consultation actions (Step E).*
- 🔍 **Key Questions:**
- Are the relevant market actors aware of our intentions?
  - Have we raised sufficient interest for effective market consultation?
- ⚠️ **Success factors:**
- Dedicate sufficient time and effort to this critical phase.
  - Make sure you communicate your functional requirements and performance targets clearly, and with as much detail as possible.
  - Give companies sufficient time to respond to your needs – the more advanced warning the market has, the better the result.
  - Reach as many companies as possible with your information, including SMEs, and those beyond your regular suppliers, e.g. through using SME networks, business associations and trade unions.
- 

### Actions to be taken

Giving clear information on upcoming procurement requirements early enough greatly increases the ability of suppliers to react to these demands.

#### Identify appropriate market information channels:

- Look well beyond your regular suppliers – innovative solutions may come from anywhere – maximise your geographical coverage, and try to reach SMEs who may not typically do business with the public sector.
- Look beyond your existing communication channels – try to consider which communication channels may best reach innovative companies. Trade associations and chambers of commerce should be contacted for their advice and specialist magazines and exhibitions identified. Using national and international networks of public authorities can also help to identify potential suppliers to address.
- It can be highly time-consuming to reach the right companies, but is critical to the success of your final tender. Dedicate sufficient time for this task.

#### Publish your requirements and invite interest:

- Produce a Prior Information Notice (PIN)<sup>10</sup> based on the definition of your needs developed in *Step C*. This can then be published directly through the market information channels identified above and posted directly on your own website.
- You may also send the PIN directly to companies which you have identified as potentially interesting.
- Provide as much clear information on the defined needs, usage patterns and expected performance within the PIN itself.
- Companies should be invited to declare their interest in the future tender and in participating in upcoming market consultation activities.
- To ensure full transparency, clear information on how the market consultation activities in *Step E* will be organised should be outlined within the PIN. Depending on the approach to be taken, the PIN can therefore also be used to ask suppliers to submit written proposals.

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<sup>10</sup> A Prior Information Notice (PIN) is a published statement from a public authority that it will tender for a certain product or service at a certain date in the future. This is a well-established form of early communication and can be published in relevant journals such as Tenders Electronic Daily (TED - <http://ted.europa.eu>).

### Hold seminars for potential suppliers:

- Put on a seminar for potential suppliers where you are able to explain your requirements in more depth and answer questions on the spot. This can be a highly effective way of raising market interest and also in helping to test the clarity of your requirements.
- Such seminars may simply provide information and the opportunity of questions to suppliers, or they may be set up as a form of technical dialogue aimed at more in-depth discussions about potential solutions – this second type of seminar is explored in more detail under market consultation (*see Step E*).
- Such seminars should be open to any interested company to participate and communicated widely through the market information channels identified.



**Example:** Bluetown developed a PIN based on the description of needs developed in Step C, which they published in both the national procurement journal and in the Official Journal of the European Union (OJEU). Additionally, the national associations of lighting manufacturers, and LEDs were directly approached, and agreed to include the PIN in their newsletters to all members. Specific LED lighting manufacturers identified during the initial market research actions in Step C were directly sent the PIN.

Suppliers were asked to register their interest and were informed that those who did so would be invited to participate in direct discussions at a later stage, prior to tendering.



## Step E: Consulting the market

### → Aim:

*To assess the potential solutions which may be available on the market to meet the defined requirements, and to learn about future developments.*

### 🔍 Key Questions:

- Are there any new, innovative technological solutions, processes, or contractual arrangements for the particular requirements we have?
- How near market-readiness are these new developments?
- Is there information on the likely cost compared to current practice?
- Is there information on likely energy or, more generally, CO<sub>2</sub> savings compared to current practice?
- Is there information on other environmental impacts (such as pollutant emissions, noise impacts, etc.)
- Cross-check: Are our performance-based specifications understandable? Are our needs clear?
- What indicators, norms, calculation methodologies, testing procedures and standards should be referred to when drawing up technical tender documentation?
- Are we able to go for a standard commercial procedure or will a competitive dialogue approach or pre-commercial procurement be required?

### ⚠️ Success factors:

- Engage with the right companies – those which can demonstrate they have a potential solution.
- Treat information from the market cautiously, and seek additional third-party verified information.
- Make sure you have technical expertise at your disposal.

### Actions to be taken

Effective and carefully organised dialogue with the market is a key way of gaining knowledge of what the market may be able to provide in response to your needs.

Although it is important to be prepared for market consultation, it is also important to remain flexible in adapting to potentially innovative solutions.

#### Box 4: The legal framework for market consultation

There is a legal distinction to be made between market research and consultation actions, and technical dialogue:

- a) Market research and consultation do not focus on a specific solution or concrete specifications (i.e. the contracting authority already making a specific choice), but rather on the range of possibilities and opportunities market players can offer. As these activities purely preparatory and form part of the internal reflections of the contracting authority, they are not amenable to review<sup>11</sup>.
- b) Technical dialogue aims to arrive at such a choice regarding the specifications or an overview of requirements. This is considered to be within the scope of the procurement process and therefore liable for review under European procurement rules<sup>12</sup>.

*... continued on next page*

<sup>11</sup> It cannot form the object of a complaint under the Remedies Directive (according to the case Stadt Halle (C-26/03).

<sup>12</sup> Recital 8 of Directive 2004/18



... continuation of Box 4

A concrete example of this distinction is the situation in which a contracting authority issues a market survey in case it wants to know what the market can offer regarding energy efficient gasoline cars and/or electric cars. If, for example, the choice has been made for electric cars, a technical dialogue could be launched in order to help specify the exact requirements.

As, in practice it is difficult to draw a clear line between the two situations any form of market consultation, all interaction with the market should be organised such as not to infringe the free movement provisions and the principles derived thereof (equal treatment, non-discrimination, transparency and mutual recognition).

The contracting authority may reduce the number of the parties to enter into consultation with, if a non-discriminatory procedure is followed. This procedure accompanied by an agreement of confidentiality should be drafted and made public in advance. Legal advice is recommended in such a case.

### Determine the method of consultation:

Different types of consultation activities may be carried out, perhaps with several types combined:

- a) **Open seminars & workshops:** Opening dialogue with a group of suppliers around the key questions mentioned above can be held with interested suppliers. As the forum is public, it is unlikely this format would provide detailed information on confidential technical developments and pricing aspects. For this, closed forms of communication would be required.
- b) **Solicit written proposals:** Ask suppliers to provide you with provisional proposals, containing information on, for example:
  - The proposed technical solution and its functionality
  - Information on CO<sub>2</sub>/energy savings achievable
  - The current status of development and market readiness
  - Costing indications
  - Potential risks
  - Testing standards they have used to determine figures and performance results

The information received in such proposals should not be used, however, to exclude suppliers from participation in the final competitive tendering procedure, and this should be communicated beforehand. It would likely be necessary to enter into confidentiality agreements with the suppliers in order to obtain useful information. An assurance of confidentiality could even be indicated in the PIN.

- c) **Closed discussions:** The most direct form of communication will be to hold direct discussions with potential suppliers behind closed doors. In such closed discussions it is critical to ensure that the basic principles of non-discrimination, transparency, and equal treatment are complied with. The results of such meetings should therefore be documented. When carried out before formal tendering takes place the outcome of these meetings should not be to further restrict potential competition but rather to open up the tendering procedures to other alternatives. Again, confidentiality agreements are likely to be required here.

### Define the participants in the consultation process:

- To ensure equal access to all market operators, all the companies indicating interest in response to the PIN, and any who attended information seminars should be invited to participate.
- You will need to ensure you have the capacity (within the project team, or by bringing in external assistance) to discuss the most important technical aspects and to overview the implications of the possible solutions for its organisation.
- Other actors such as research institutes and universities may also be invited to participate in such consultation activities. Their presence would stimulate the interaction between the Contracting Authority and the research world. Moreover, they would provide valuable input regarding the stage of development of certain technologies.

### Publish information on the outcomes of the consultation process:

- To ensure transparency and equal treatment it is advisable to publish the results of the market consultation round online, although of course not disclosing any confidential information provided. This publication should mark the official closing of the round.

**Example:** In Bluetown the 20 companies which responded to the PIN were asked to attend a workshop with the aim of understanding better how the market could respond to the needs described, and how these would need to be further refined. At the workshop, suppliers were also given the opportunity to discuss directly in private with the authority in order to provide confidential details about their own solutions. A confidentiality agreement was signed with any company taking this option.

The consultation indicated that the description of needs was mostly clearly understood, and suppliers were confident that cost-effective solutions would be presented in response to a tender within the next 6 months, but that LED technology is new and relatively untested. Certain requirements regarding the opportunities and costs involved in initial installation and technological compatibility issues needed to be clarified.

The project team also decided to research on the outcomes of current indoor LED lighting pilot projects happening across Europe and used this information to further develop the performance-based specifications.

## Step F: Selecting the tendering procedure and prepare tender documents



- ➔ **Aim:** *To determine which tendering procedure should be used and to develop a complete set of tender documents based around functional or performance-based specifications.*
- ❓ **Key Questions:**
  - *How certain are we about the solutions which the market may be able to offer? Is there a solution already or nearly commercially available?*
  - *How clearly can we define our exact needs in the tendering documents?*
  - *Should we look to pilot the solution before full-scale procurement?*
- ❗ **Success factors:**
  - *Prepare specifications in terms of performance or function, whilst ensuring that they are precise enough to be understood in the same way by all participants of the tendering procedure. Outline verification requirements as clearly as possible.*
  - *Ensure full life-cycle costs are considered when comparing offers, not just purchase/installation costs.*
  - *Make intelligent use of award criteria to encourage the best possible energy/CO<sub>2</sub> performance at affordable cost.*
  - *Ensure the tender documents do not prejudice the outcome in favour of certain participants.*
  - *Ensure tender documents clearly outline how competing bids will be judged.*
  - *Include contract clauses which encourage innovation.*
  - *Ensure damages/penalties are included in the contract for major deviations from the costs and performance predicted in the tender.*
  - *Make sure you request robust proof of the bidders' technical capacity.*

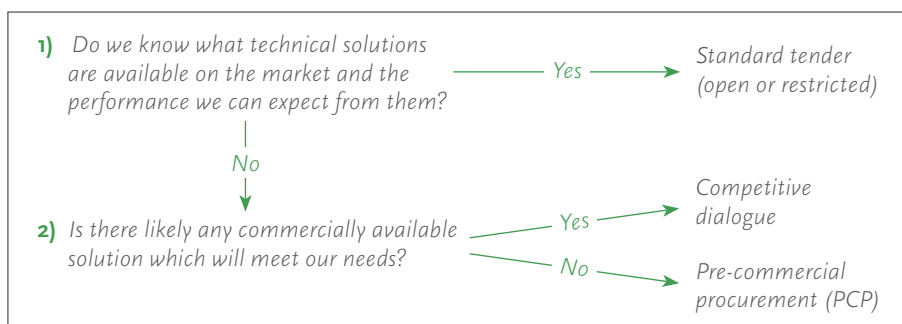
### Determining the procedure

Depending on the results of your market consultation activities undertaken in *Step E*, you will be able to determine the most appropriate form of tendering procedure, and prepare the tendering documents accordingly.

**There are three main types of procedure which are considered within this guide:**

- a) **Standard tendering procedures** – open or restricted calls for tender – either for an initial pilot or for a full procurement action.
- b) **Competitive dialogue** – to be used when tendering for particularly complex contracts allowing you to define your specifications in discussions with several potential suppliers within the tendering procedure.
- c) **Pre-commercial procurement (PCP)** – For the procurement of pure R&D services – i.e. for the pre-commercial development of a product/service.

**In order to determine which is appropriate for your case two key questions need to be asked following your market consultation activities:**



## Using a standard tendering approach

To ensure innovative outcomes are encouraged within your standard tendering documents a number of elements of the procedure should be ensured:

**a) Use functional, performance-based specifications:** As introduced in *Step C*, the specifications prepared in the tender documents should be expressed as far as possible in terms of required functional and/or performance outcomes (*more information on this can be found in Box 3 under Step C*). When finalising these specifications the following conditions should be kept in mind:

- **Ensure they are understandable and comparable** – Make sure you define your functional and performance-based specifications in terms which the market will understand – using accepted indicators, norms, test procedures etc. – and precisely enough to ensure they are understood in the same way by all participants of the tendering procedure using the experience gained during the early market engagement phase. Be careful to strike the right balance between leaving enough room for the supplier to propose innovative solutions and at the same time being precise enough to permit the award of the contract.
- **Assure neutrality** – The requirements must not prejudice the outcome of the tendering in favour of a certain participant. When using functional and performance-based specifications this is rather unlikely. However, your specifications may still require the use of some technically prescriptive criteria (e.g. to assure interoperability) so non-discrimination is a point you should keep in mind.
- **Ask for proof of technical ability** – Make sure that you demand adequate proof of the bidders' technical ability to deliver. Careful thought should also be given to how tenderers can prove their technical ability, as the offer of an innovative solution may require special abilities.

You will also need to consider whether the criteria you set will be minimum standards (i.e. specifications), or preferred standards (i.e. award/evaluation criteria) – see below in the section on “Defining award criteria”.

**b) Use life-cycle costs to assess the financial offer:** To make a full comparison of the financial offers, an LCC evaluation model should be applied. The accompanying *LCC/CO<sub>2</sub> assessment tool for procurers* may be used for this purpose.

### c) Defining award criteria:

- Using the Most Economically Advantageous Tender (MEAT) approach is a prerequisite for appropriately comparing the different offers received.
- In evaluating the financial offer, an LCC approach should be used (see above).
- Non-financial (quality) criteria may include several aspects, for example, supplier credibility and capacity, or maintenance and supply continuity guarantees. They may also include environmental performance criteria such as energy efficiency/CO<sub>2</sub> emissions.
- Evaluating offers on their energy efficiency/CO<sub>2</sub> emission performance is advisable even if minimum requirements are set in the specifications, as this encourages even better performance, provided they are given sufficient weighting in the evaluation<sup>13</sup>.
- It is important to be clear already in the Invitation to Tender (ITT) against which criteria the proposals will be measured. The weighting of each criterion must also be given, either as an exact number or as a meaningful range.
- Again the accompanying *LCC/CO<sub>2</sub> assessment tool for procurers* may be applied for the full evaluation of tenders.

<sup>13</sup> For example: When procuring a small car for use by the local authority's home care service, define fuel efficiency for mixed driving at a minimum of 17 km per litre in the technical specification. As award criterion state fuel consumption for mixed driving in terms of km/l. Each km above 17 km per litre should give an addition of x points in the evaluation. Alternatively the answer should be used in an LCC-evaluation. Taken from: Environment and public procurement – Guidance on criteria development; A common project between the EU-commission services (DG ENV) and the Nordic Council of Ministers, 2007.

- In addition, a fair comparison of bids will most likely require the evaluation to be done by a committee comprising the end-users, lawyers and technical experts (*see Step B*).

#### d) Putting innovation into the contract:

- Given the risks inherent in innovative solutions, ensure within your contract that these risks are at least partly borne by the supplier by stating appropriate damages/penalties for not meeting the performance levels indicated in their original bid.
- Within longer terms contracts (such as providing IT services) include contract provisions to oblige the provider to use new innovative, highly efficient technologies as they become available on the market (within certain cost constraints). Supplier suggestion schemes may also be used as continuous improvement drivers.
- Other potential clauses, particularly for highly innovative solutions, include:
  - Clauses that allow flexibility for possible amendments on performance, delivery time, etc. in case of justified problems with the development of the new technology.
  - Clauses that set milestones during the contract for periodical reviews and agreements in order to choose how to advance or to stop. Possible rewards in case of an early end by common consent.
  - Clauses that set an attractive method of payment for stimulating innovation (pre-payment for part of the R&D activities, third parties funding management, etc.).
  - Clauses that allow subcontracting with universities and other sources of knowledge and technology.
  - Clauses that include an agreement to make reference to the company when promoting the innovative improvements of the purchased goods or services.

#### e) Piloting:

As procuring innovative solutions inevitably requires a degree of uncertainty – whether technical or financial – about the ability of that solution to meet your needs, one option to add extra security is to add in a piloting phase. This could mean either:

- Letting a competitive tender for a small volume to pilot the solution, or
- Introducing a testing phase into a full tender. This would mean stating that the authority would commit to procuring the full volume tendered for on the condition that the selected solution performs satisfactorily during a piloting phase. If the performance is unsatisfactory the contract would be cancelled.

The second approach has the benefit that the supplier can be sure of a useful sales volume if successful. The first approach may be expensive, as scale economies will not be achieved.

**Example:** Based on the market information gathered during *Step E*, Bluetown opted for a standard tendering procedure, but given the relatively untested nature of the technology, opted for a piloting phase to be built in to the contract, to take place in a specific section of one office and one school.

Although market intelligence indicated that the only potential solution for meeting the requirements was LED technology, this was not required within the specifications, which were instead based on the functional and performance needs specified.

In the end eight tenders were received which met the minimum requirements. Working together with the selected supplier, the 6 months piloting phase achieved good results and consequently the full volume of lighting systems were installed.



## Using Competitive Dialogue

- 
- ❗ **Success factors:**
- *Respect principles of transparency, equal treatment and non-discrimination in particular during the dialogue phase.*
  - *Reimbursement – to compensate for engagement of suppliers in the dialogue phase foresee appropriate compensation.*
  - *Confidentiality – concerns that ideas might be revealed to competitors may present a barrier for entering the dialogue. Give appropriate assurance of confidential treatment already in the contract notice.*
- 

If there is still sufficient uncertainty following your market consultation activities you may opt to use the Competitive Dialogue procedure<sup>14</sup>. This uncertainty may be in terms of:

- Defining the technical means capable of satisfying your needs, or
- The legal and financial set-up of the contractual relationship.

The competitive dialogue procedure is a flexible procedure for use in complex projects where there is a need for the contracting authority to discuss all aspects of the proposed contract with potential suppliers. The competitive dialogue allows for discussion with suppliers and innovators during the tendering procedure to allow them to develop a solution based on a better understanding of the exact needs of the authority. It is different from the negotiated procedure in that the dialogue happens before final tenders are submitted.

### The competitive dialogue procedure:

An overview of the process followed is provided in *Figure 2*.

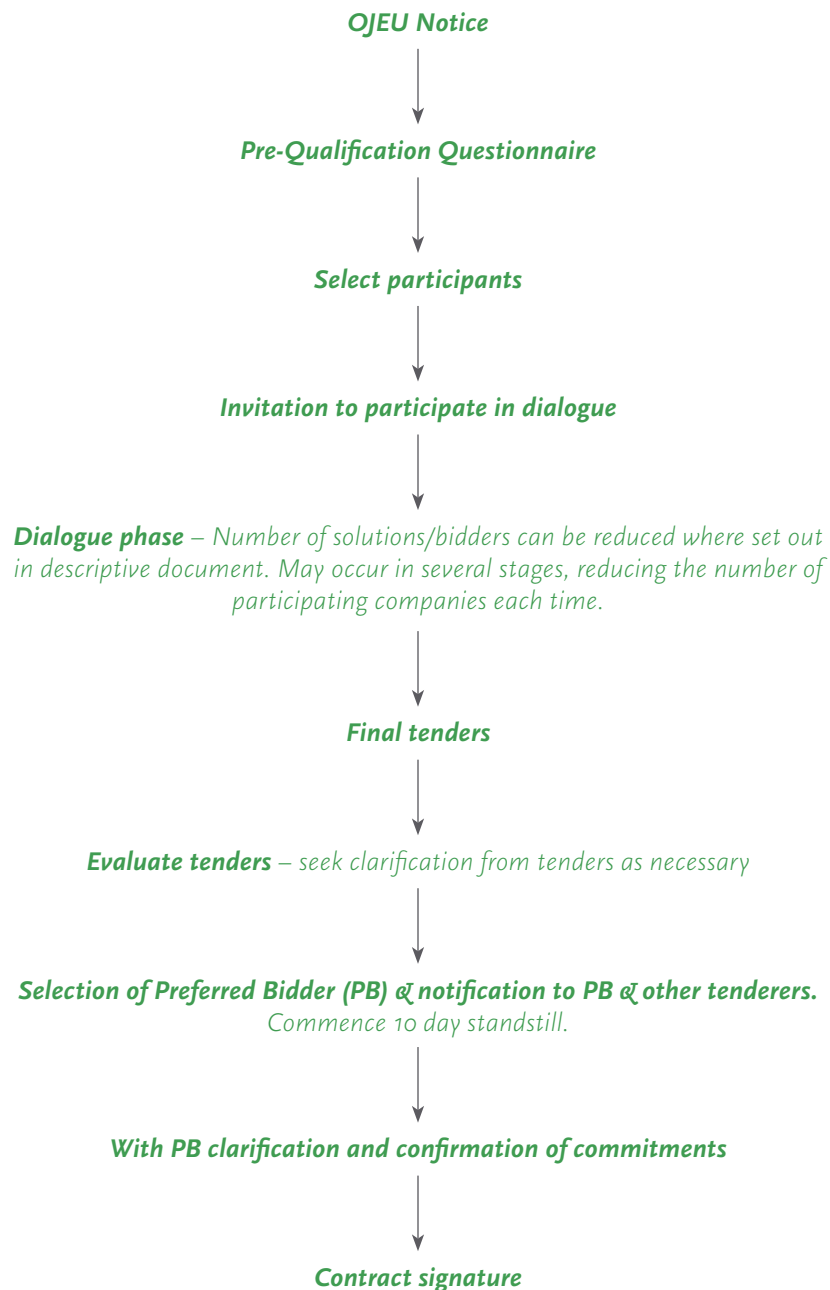
Rather than publishing an Invitation to Tender (ITT) containing a detailed specification, the initial Contract Notice and descriptive document should contain a clear outline of the needs and requirements for which solutions should be proposed – in a similar way to the functional, performance-based specifications described above. Evaluation/award criteria, against which the final proposals will be evaluated, should also be specified at the outset.

The dialogue phase may take place in several stages, and will usually take place with all suppliers separately. The number of participants may be reduced through asking them to submit outline proposals in writing, with the best being selected to continue. If you intend to take this approach it should be communicated within the Contract Notice.

During the course of the dialogue, you should ask the participants to specify their proposals in writing, possibly in the form of progressively completed/refined tenders. On the basis of these proposals the number of proposed solutions may be reduced by applying the award criteria stipulated in the contract notice. If you intend to take this approach it should be communicated within the Contract Notice.

When you are in a position to identify the solution(s) which is likely to satisfy your specified needs, you should declare that the dialogue is concluded, and ask the remaining participants to submit a complete tender. In the final stage, the number of the participants invited to submit a final offer should make for genuine competition. The final tenders will be evaluated against the criteria specified in the original descriptive document.

As only minor changes can be made to bids following the submission of final tenders, all commercial and pricing issues of any substance need to have been resolved prior to the request for final tenders.

**Figure 2***The competitive dialogue procedure<sup>15</sup>*

<sup>14</sup> The Procurement Directives state that the competitive dialogue procedure may only be used for the award of complex contracts. A contract can be considered as particularly complex on the basis of two aspects: a) technical complexity, or b) legal or financial complexity. So far there is no jurisprudence from the European Court of Justice on this issue making it difficult to give clear indications on the exact meaning of “complexity”. However as a guiding question it will always need to be checked if there is a considerable “element of uncertainty” or a “certain degree of complexity” which distinguishes the project from any other “normal” procurement. Recital 31 and Article 1(11)(c) shed some light on the scope of application of the procedure.

<sup>15</sup> Source: Competitive Dialogue Procedure, Office of Government Commerce (OGC), UK, 2006

### Dealing with confidentiality and equal treatment:

Giving suppliers assurance of confidentiality in the contract notice is vital to ensure their participation within the procedure. It is only with the agreement of the tenderers concerned that proposed solutions may be revealed to the other participants. In this case the contracting authority could ask the participants to base their final tender on a solution common to all.

Furthermore authorities “shall not provide information in a discriminatory manner which may give some tenderers an advantage over others”<sup>16</sup>. It is therefore advisable to document all information given during a meeting with a company and to ensure equal treatment of the others.

### Benefits & drawbacks:

- The Competitive dialogue procedure provides a structured tendering approach with more flexibility to develop innovative solutions, allowing for a constructive dialogue between suppliers and contracting authorities.
- On the other hand the process requires skilful managing and often needs more time than other processes. The process is seen as extremely resource heavy as a dedicated project team will need to meet regularly and for extended periods of time. In addition external advice may already be needed in the preparatory phases of the procedures.
- The process of constantly refining the proposals during the dialogue phase requires considerable investment for the economic operators concerned. It is advisable to foresee an adequate reimbursement. In this case the contract notice should stipulate conditions of payments or prices for participants of the dialogue.
- Suppliers may see a great risk that their ideas, solutions or other business secrets are revealed to their competitors: As contracting authorities in their effort to achieve the best final results, could transfer the best ideas between participants of the dialogue – or even use them to select or compile the solution on the basis of which final proposals will be invited.

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#### Further reading & guidance:

European Commission, Explanatory Note – Competitive Dialogue – Classic Directive:  
[http://ec.europa.eu/internal\\_market/publicprocurement/docs/explan-notes/classic-dir-dialogue\\_en.pdf](http://ec.europa.eu/internal_market/publicprocurement/docs/explan-notes/classic-dir-dialogue_en.pdf)

OGC guidance on the competitive dialogue procedure:  
[http://www.ogc.gov.uk/documents/competitive\\_dialogue.pdf](http://www.ogc.gov.uk/documents/competitive_dialogue.pdf)

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<sup>16</sup> Art. 29 (3) of Directive 2004/18/EC



## Pre-Commercial Procurement (PCP)

- ❗ **Success factors:**
- Form large groupings of local and regional authorities, or even national government bodies, which agree to conduct a pre-commercial procurement procedure jointly so as to reduce the risks.
  - Secure competition – invite multiple companies to come up with alternative solution proposals.
  - Procure each phase of the innovation development process as separate contract to reduce the risks and procure it as fixed price to avoid cost over-runs.



“Pre-commercial procurement (PCP)” is an approach which has been developed for the procurement of R&D services rather than actual goods and services. If the developed goods or service are to be procured this would need to be based on another separate tender. It is not a specific tendering procedure but an approach presented by the European Commission in its Communication “Pre-commercial Procurement: Driving innovation to ensure sustainable high quality public services in Europe”<sup>17</sup> which outlines how to organise the procurement of R&D services within the legal framework provided for by the EU Procurement Directives.

As R&D services fall outside the scope of the WTO Government Procurement Agreement (GPA) and the EU procurement directives there is no need to follow the procedures as laid down in the Directives. However, the principles of transparency, non-discrimination and equal treatment will have to be observed. As R&D services for new technologically demanding solutions will no doubt require considerable funding, PCP will necessarily require collaboration with like-minded authorities and bundling of demand and is often carried out with support from national government.

### Why apply PCP?

- If your market consultation activities indicate that there is currently no solution to your needs, PCP is a way to encourage the market to develop such a solution.
- Leaving a clear separation between the pre-commercial R&D phase and the roll-out of commercial end-products resulting from the R&D enables public purchasers to filter out technological R&D risks before committing to procuring a full-blown innovative solution for large-scale commercial roll-outs.

### Why apply PCP?

PCP can be applied as long as<sup>18</sup>:

- The value of the procured R&D services is more than 50% of the total value of the project.
- The benefits do not accrue exclusively to the contracting authority.
- That the R&D costs are at least partly shared by the supplier.
- The R&D services are procured at market price (and therefore do not include an element of state aid).
- The procedure may not be used to test existing prototypes, only prototypes which require further development.

Any follow-up procurement of commercial volumes of end-products will most likely require a competitive tendering procedure in accordance with the EU Procurement Directives. In case of doubt, it is advisable to seek assurance from the Commission's services.

<sup>17</sup> Com(2007) 799 Final: [http://ec.europa.eu/invest-in-research/pdf/download\\_en/com\\_2007\\_799.pdf](http://ec.europa.eu/invest-in-research/pdf/download_en/com_2007_799.pdf)

<sup>18</sup> According to Art. 16(f) of Directive 2004/18/EC

### The PCP procedure:

In PCP multiple companies are invited in competition to come up with solutions to the posed R&D problem. The procedure will go through a series of phases covering different stages of the product innovation life-cycle. These phases typically cover:

- Solution exploration,
- Prototyping
- Original development of a pre-commercial volume of first products in the form of the test series.

However depending on the progress of the development of the product at stake, the PCP process may start with prototyping or even with first product development up to test series.

A single framework contract for R&D services may be used, with each separate phase implemented as a specific contract to reduce risks associated with failure. In addition the contracts should be procured as fixed price to avoid cost over-runs.

Intermediate evaluations at the end of each phase should be foreseen and be used to progressively select the suppliers with the best competing solutions. To this end the framework contract should already contain an agreement on the future procedure for implementing the different phases, including the format of the intermediate evaluations. The intermediate evaluations can make use of the same criteria used for contract award. The tender specifications can become progressively more specific with each phase.

### Further considerations:

- A very high level of technical knowledge and understanding of the issues concerned is necessary to run a PCP procedure.
- Substantial funding will likely be required.
- It is critical to ensure that no action taken during the PCP procedure might preclude competition in any future commercial procurement action. Extreme care will have to be taken to assure that a level playing field is created allowing suppliers not having participated in the PCP to compete on an equal footing. It is necessary to use functional specifications in the tendering phase to allow new entrants or competitors, which did not succeed in the first stages of the PCP process, to propose their innovative solution that might fulfil the functional requirements now as the tender is published.

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#### Further reading:

European Commission web-portal on PCP:

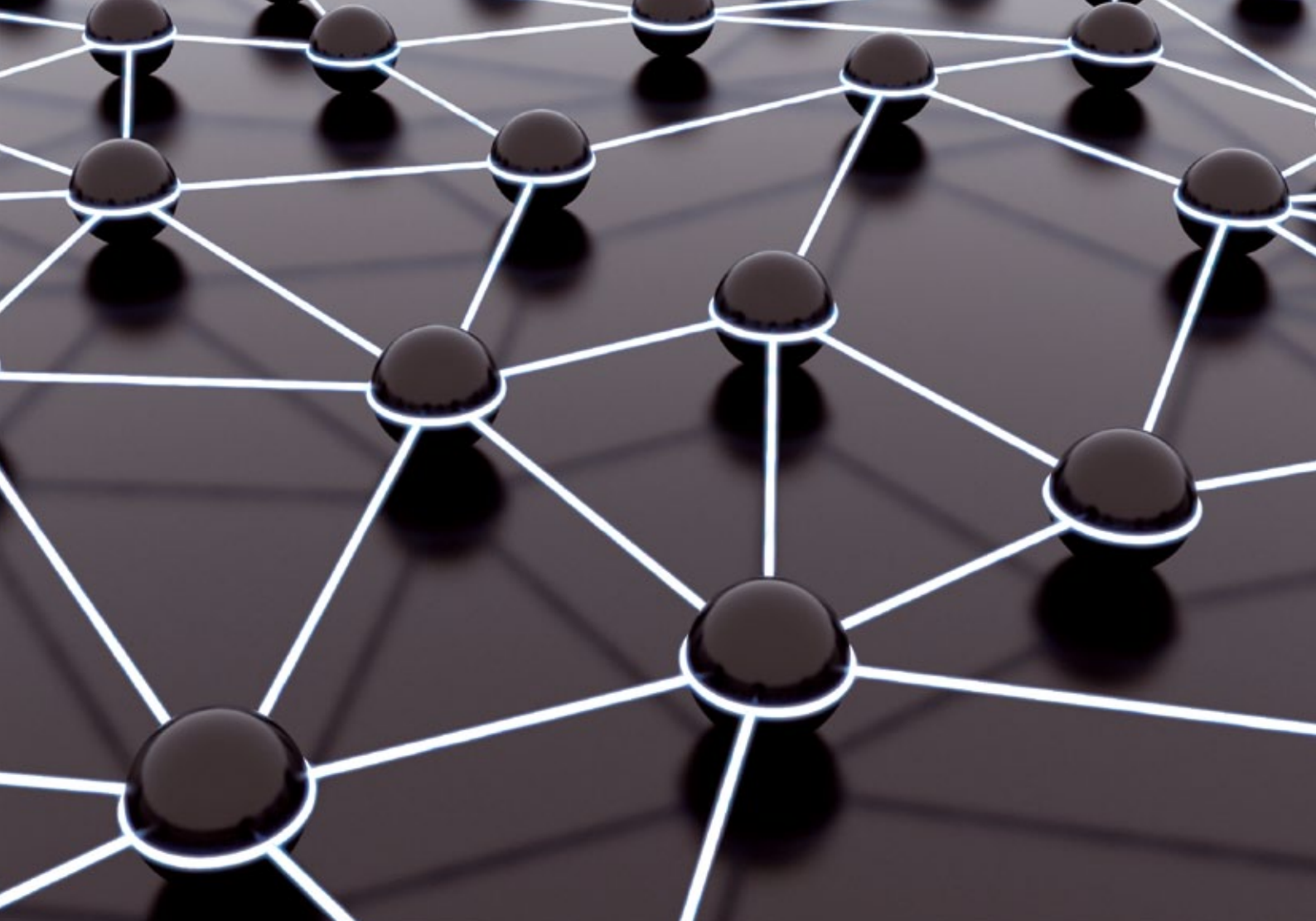
[http://cordis.europa.eu/fp7/ict/pcp/home\\_en.html](http://cordis.europa.eu/fp7/ict/pcp/home_en.html)

European Commission,  
Communication from the Commission to the European Parliament, the Council,  
the European Economic and Social Committee and the Committee of the Regions – Pre commercial Procurement:  
Driving innovation to ensure sustainable high quality public services in Europe, COM(2007) 799 final:  
[http://ec.europa.eu/information\\_society/tl/research/priv\\_invest/pcp/documents/commcp.pdf](http://ec.europa.eu/information_society/tl/research/priv_invest/pcp/documents/commcp.pdf)

European Commission,  
Staff working document accompanying the Communication,  
Example of a possible approach for procuring R&D services applying risk-benefit sharing at market conditions,  
i.e. pre-commercial procurement, SEC(2007) 1668:  
[http://ec.europa.eu/information\\_society/tl/research/priv\\_invest/pcp/documents/sec\\_2007\\_1668.pdf](http://ec.europa.eu/information_society/tl/research/priv_invest/pcp/documents/sec_2007_1668.pdf)

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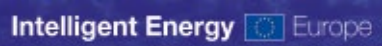


## SMART SPP – innovation through sustainable procurement

Running from September 2008 until August 2011 “SMART SPP - innovation through sustainable procurement” is a three year project which will promote the introduction of new, innovative low carbon emission technologies and integrated solutions onto the European market. This will be done through encouraging early market engagement between public authority procurers and suppliers and developers of new innovative products and services in the pre-procurement phase of public tendering.

SMART SPP is an initiative of the Procura+ Campaign, that is run by ICLEI – Local Governments for Sustainability and designed to help support public authorities across Europe in implementing Sustainable Procurement and help promote their achievements. *For more information visit [www.procuraplus.org](http://www.procuraplus.org)*

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