



SMART SPP

innovation through sustainable procurement



Driving energy efficient innovation through procurement

A practical guide for public authorities

An initiative of:



Supported by:



A SMART SPP project publication (www.smart-spp.eu)

- Publisher:** The SMART SPP consortium, c/o ICLEI – Local Governments for Sustainability, 2011
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- Photos:** David Megginson, Flickr (Page 9) | dreamstime.com (pages 5, 10, 30, 33, 37, 39, 43, 45) | sxc.hu (page 1, 17, 26) | photocase.com (page 22)
- Layout and Design:** Rebekka Dold, Freiburg | www.rebekkadold.de
- Print:** Wuhrmann, Freiburg
- Disclaimer:** The sole responsibility for the content of this publication lies with the authors. It does not necessarily reflect the opinion of the European Communities. The European Commission is not responsible for any use that may be made of the information contained therein.
- Acknowledgements:** The SMART SPP project partners.
Thanks also to the following, who provided comments: Alenka Burja (European Commission, DG Environment), Anna Warrington (Forum for the Future), Max Rolfstam (Lund University), Annie Stålberg (Swedish Environment Management Council, MSR), Maria Josefa Montejo (Cotect Foundation), Katie Sutton (Kirklees Council), Paul McCormick (Exeter City Council), Eveline Venanzoni (Swiss Federal Office for the Environment, BAFU), Milena Nalbancheva & Todor Tonev (Union of Bulgarian Black Sea Local Authorities, UBBSLA), Melissa Stults (ICLEI US), Beat von Felten (City of Zürich), Lorraine Hudson (Bristol City Council), Ramona Apostol (Corvers Procurement Services).

Driving energy efficient innovation through procurement

A practical guide for public authorities

“Europe has an enormous and overlooked opportunity to spur innovation using procurement.”

“Public procurement of innovative products and services is vital for improving the quality and efficiency of public services at a time of budget constraints.”

(Europe 2020 Flagship Initiative - Innovation Union – COM(2010) 546)

Project partners:



Associate partners:

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Part I – Introduction

I.1 Introduction to the Guide

This guide is aimed at assisting public authorities in becoming “innovation-friendly” – that is 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 CO₂ equivalents (CO₂eq.)¹ 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.

Innovation is widely recognised as central to Europe's future economic development and international competitiveness. The European Commission has for this reason recently published a new strategy for promoting innovation within the EU - Innovation Europe (COM(2010) 546). This strategy strongly highlights the potential role it can play as a launching customer for new technologies and the potential benefits for the public sector in opening up procurement activities to innovative solutions.

The SMART SPP project (Innovation through Sustainable Procurement) was set up to help public authorities to procure innovative energy efficient solutions, and to implement pilot actions in several public authorities. This guide is the main outcome of the project, and builds on these real life experiences. More information on the project can be found at www.smart-spp.eu.

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 *Parts II and III* 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.

How is the guide structured?

The guide presents advice on how public authorities can make their procurement activities more innovation friendly. This advice is structured into six key activities which should be addressed within the procurement process. There is a specific focus on early market engagement, that is, how to get the best out of the market through effective dialogue with potential suppliers before tendering (see sections C – E):

“All cities today are facing huge financial and environmental pressures. We can only face these by finding new, innovative and highly efficient ways to meet our needs. Opening our procurement activities to innovative solutions will help to stimulate developments on the market, and help us achieve best value for money.”

*Imma Mayol Beltran, Deputy Mayor,
City of Barcelona (Spain)*

¹ Greenhouse gas emissions are measured in the unit “CO₂ equivalents” which reflects that there are many different greenhouse gases, not just CO₂, (e.g. methane), and that their global warming potential (strength) also differs. Throughout the rest of the document CO₂ is used for simplicity.



Although these activities are loosely chronological, different situations will require different approaches – there is no one-size-fits all approach to procuring the best, innovative solution. Certain activities presented here may be combined, repeated or unnecessary depending on your circumstances - 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 each activity, and provides a summary of some key guiding principles.
- **Part III – Detailed guide:** This provides detailed guidance on each activity.

Case studies

To illustrate the guidance given several examples have been included within the text. This includes a fictional example (“Bluetown”) running through the whole of Part III. It also includes real cases from innovative procurement activities undertaken by SMART SPP project partners.

Each of the public authority partners in the SMART SPP project undertook a procurement action for innovative energy efficient products:

- **Kolding (Denmark):** LEDs for internal lighting
- **Barcelona (Spain):** Electric vehicle recharging points; and office drinks and snacks vending machines
- **Cascais (Portugal):** LEDs for street lighting; electric vehicles
- **Bromley (UK):** LEDs for internal lighting
- **ESPO (UK):** Voltage optimisation technology.

More detailed information on each of these cases can be found on the project website at www.smart-spp.eu

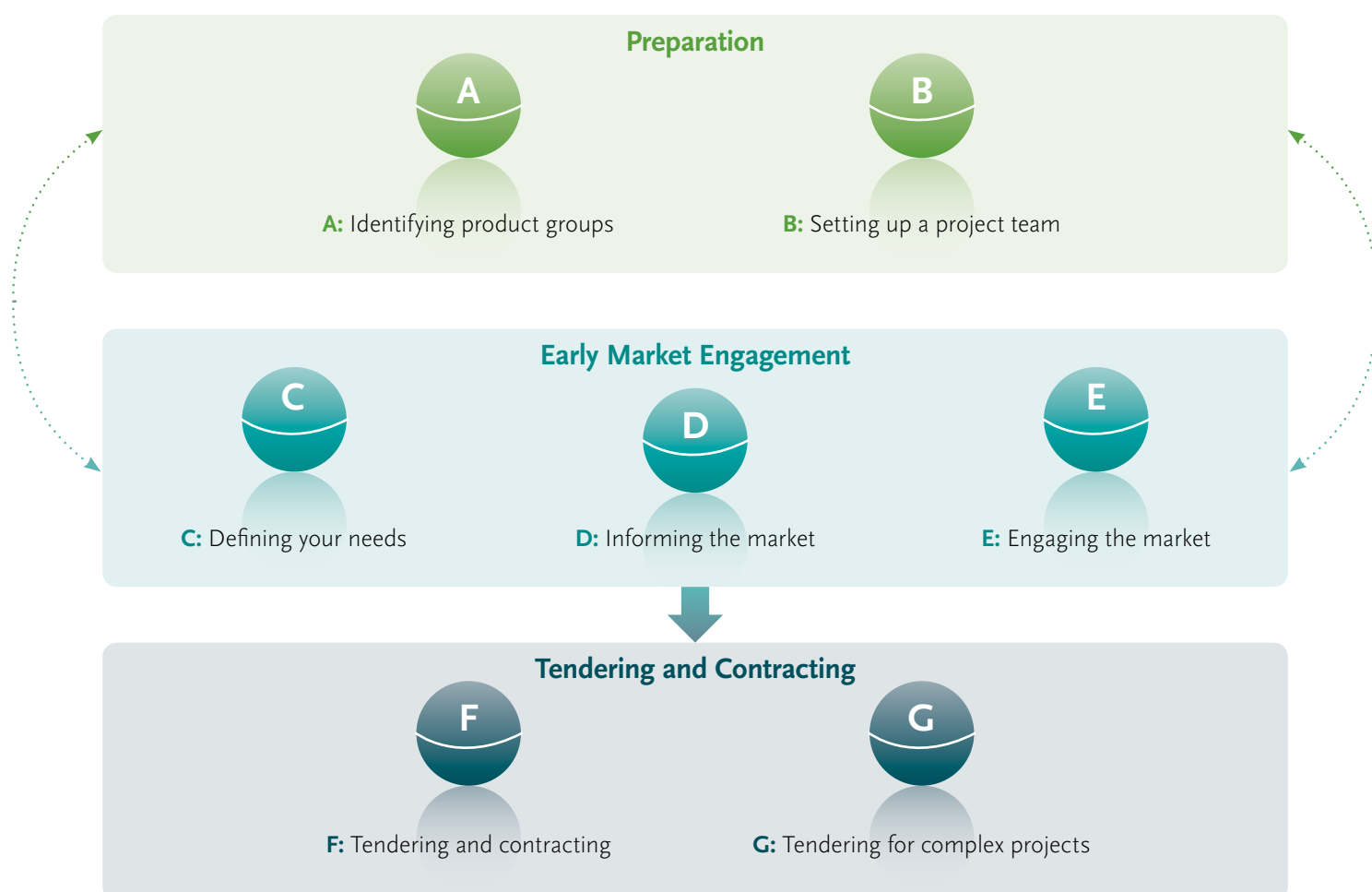
Accompanying tools – life-cycle costs (LCC) & CO₂ assessment

Having clear data on both the potential CO₂ 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)² and CO₂ emissions of different technologies or solutions has been developed, to accompany this guidance.

Figure 1

Activities to guide authorities through a flexible approach to drive innovation through sustainable procurement



² 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.

I.2 Why encourage innovation through procurement?

I.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 CO₂ emission reductions

I.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 [...]”³. Major business associations such as Confederation of Business Industry (CBI) in the United Kingdom (UK) also back this: “Public procurement is the biggest single customer-side driver that could be harnessed to catalyse business innovation activity.”⁴

In Spain, for instance, there are different strategies tackling the SMART SPP objectives. On the one hand, the Science and Technology National Strategy mention the need of taking measures to help the market penetration of research and development (R&D) results. Moreover, the National Innovation Strategy includes public demand as one of the five main areas to support innovation. Concretely, it sets the objective of mobilising 100,000 million euros towards a new economy by 2015.

³ **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

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

“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 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.





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:

Preparation

✓ 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

A complex project requires specific skills to carry through effectively, for example, budget management, technical knowledge, etc.

✓ Involve the user

In order to identify your real needs and to ensure that any new solution is successfully adopted, end-users must be consulted and involved at different stages of the process.

✓ 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.

✓ 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*).

Early Market Engagement

✓ 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*).

✓ 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, because they are at the heart of developing new technical solutions. 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). Many of the most innovative solutions come from small sized companies.

✓ 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 six months to one year), the likely response of the market will be considerably better.

In Portugal, use of an electronic procurement platform is mandatory for open procedures (for example, www.acingov.pt; www.anogov.pt, www.comprasgov.forumb2b.com, www.compraspublicas.com, www.infosistema.pt, www.tradeforum.pt, www.bizgov.pt and www.vortalgov.pt). The procedure must also be advertised in the Portuguese official journal ("Diário da República"). For direct award procedures, the contract award decision must be advertised in www.base.gov.pt, a specific site dedicated to public contracts, where all running procedures are published.

In Spain, most tenders are published in the BOE (the national journal) and/or regional official journals; in each administration Contractor Profile web section. Additionally, public administrations can also announce their tenders in the State Contracting Platform (www.contrataciondelestado.es), of the Ministry of Economy and Finance.

Tendering and contracting

✓ 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 and water consumption), maintenance and final disposal. Yet, this is still relatively uncommon amongst European public authorities. A tool for calculating life-cycle costs and CO₂ emissions (*LCC/CO₂ tool*) within procurement accompanies this guide.

✓ Use non-financial award criteria intelligently

Giving sufficient weighting to factors such as energy efficiency (or ideally, actual CO₂ emissions – *see accompanying LCC/CO₂ 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.

✓ **Make your tender SME-friendly**

Many innovative solutions come from smaller, more creative companies. Make sure you are not excluding this potential market. Consider splitting tenders into lots or encouraging consortia to bid, in order to make the volumes manageable. Also try to make the administrative needs and selection criteria for bidding manageable for smaller, newer companies .

✓ **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*).

✓ **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 or penalties foreseen in the contract.

II.2 Recommended activities



Identifying product groups

→ Aim:	? Key Questions:	! Success Factors:
To identify which procurement areas may be most appropriate for your innovation-driving actions, and to determine the possible level of ambition.	<ul style="list-style-type: none"> Which procurement actions or product groups should be targeted? What is our level of ambition (best available product, new technology or solution, highly improved energy efficiency, etc.)? What resources do we have to invest? Which contracts are coming up for renewal? How can we best implement an LCC approach? 	<ul style="list-style-type: none"> Identify policies, strategies and targets which can support and direct your actions. Discuss opportunities with relevant internal colleagues.



Setting up a project team

→ Aim:	? Key Questions:	! Success Factors:
To put together a team of staff with appropriate project management, technical and legal expertise.	<ul style="list-style-type: none"> 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? 	<ul style="list-style-type: none"> 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.



Defining your needs

→ Aim:	? Key Questions:	! Success Factors:
To define the real needs of the organisation which the procurement action must fulfil.	<ul style="list-style-type: none"> What functional needs do we need the procurement action to fulfil? What energy efficiency/CO₂ 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? 	<ul style="list-style-type: none"> 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.



Informing the market

→ Aim:	? Key Questions:	! Success Factors:
<p>To give the market sufficient warning to respond to your future demands and to identify company contacts for later market consultation actions (Activity E).</p>	<ul style="list-style-type: none"> • Are the relevant market actors aware of our intentions? • Have we raised sufficient interest for effective market consultation? 	<ul style="list-style-type: none"> • 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.



Engaging the market

→ Aim:	? Key Questions:	! Success Factors:
<p>To assess the potential solutions which may be available on the market to meet the defined requirements, and to learn about future developments.</p>	<ul style="list-style-type: none"> • 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, CO₂ 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? 	<ul style="list-style-type: none"> • Engage with the right companies – those which can demonstrate they have a potential solution. • Engage with the right people – try to ensure that technical people, as well as sales representatives participate in consultation. • Treat information from the market cautiously and seek additional third-party verified information. • Make sure you have technical expertise at your disposal.



Tendering and Contracting

→ Aim:	? Key Questions:	! Success Factors:
<p>To determine which tendering procedure should be used and to develop a complete set of tender documents based around functional or performance-based specifications.</p>	<ul style="list-style-type: none"> • 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? • How can we best encourage continuous innovation within the contract itself? 	<ul style="list-style-type: none"> • 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/CO₂ 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.



Tendering for complex projects

→ Aim:	! Success Factors:	
<p>To tender for products or services where a considerable amount of uncertainty remains about what the market is able to provide.</p>	<p>Competitive dialogue:</p> <ul style="list-style-type: none"> • 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. 	<p>Pre-commercial procurement:</p> <ul style="list-style-type: none"> • 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.

Actions to be taken



- Study your political framework to identify supportive elements
 - Consider the most appropriate product or service areas for addressing CO₂ emissions
 - Consult different stakeholders within the organisation to identify opportunities for change
 - Explore which national support schemes exist to help you
-



- Ensure you have the appropriate project management, technical and legal skills in your project team. Consider bringing in external expertise to fill any skill gaps
 - Consider whether other public authorities wish to set up joint procurement actions
 - Involve end-users and other stakeholders within the organisation in the process
-



- Define your needs in terms of function and performance. Do not be technically prescriptive
 - Define your baseline energy efficiency/CO₂ emission performance and set appropriate reduction targets
 - Carry out initial market research to assess what the market may be able to offer
-



- Publish your future requirements as widely as possible through the identified communication channels. Consider preparing a Prior Information Notice (PIN).
 - Hold information seminars for potential suppliers
-



- Set up specific consultation activities such as seminars, soliciting written proposals, closed discussions
 - Publish the conclusions of your consultation activities
-



- Determine the best procedure for tendering – standard, competitive dialogue or pre-commercial procurement (PCP)
 - Prepare tender documents and process in a way that encourages innovative solutions, and encourages smaller companies to apply
 - Prepare contract documents which encourage continuous innovation throughout the contract
-





Part III – The guide

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 or product groups should be targeted?
 - Which contracts are coming up for renewal?
 - 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 an 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 high level 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 (for example, a sustainable transport/ construction policy)?
- Are there specific policy targets which can help to set ambition levels? For instance, reduction of CO₂ emissions by 20% by 2015.
- If a specific policy on innovation and procurement does not exist, consider whether one could be developed for the future.

In Portugal, the National Strategy for GPP, approved by the council of ministers in 2007 (RCM n.º 65/2007), sets a target for the inclusion of environmental criteria in 50% of all tendering procedures by public authorities by 2010. It also defines priority product groups including lighting equipment, vehicles and transport services, and energy.

The ECO-AP (Energy Efficiency Program for the Public Administration) approved by the council of ministers in 2011 (RCM n.º 2/2011) aims to increase energy efficiency in public authorities and services by 20% by 2020. The measures proposed are based on the best international practices and are focused on behavioural change and adequate energy management.

In Spain, in addition to the already mentioned Science and Technology and Innovation National Strategies other energy efficiency related strategies include the “Spanish-Climate Change and Clean Energy Strategy” and the “Spanish Energy Saving and Efficiency Strategy” (and its subsequent Action Plan 2008-2012) which include items such as the use of new technologies for transport, the improvement of energy measures in public services such as lighting and water supply and the spread of Best Available Technologies. These strategies also promote powerful legislative measures such as the “Technical Building Code” (2007) and the “Buildings Energy Certification”.

In Denmark, climate and energy policy targets include a commitment to reducing CO₂ emissions by 20% by 2020 relative to 2005, and to achieving a 20% for renewables in gross energy consumption by 2011 and at least 30% in final energy consumption by 2020, in line with EU goals.

Consider the relevance for CO₂ emissions

- Certain procurement areas can be considered high priority for targeted innovations to reduce CO₂ 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
- Energy management systems for buildings

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/CO₂ reducing technologies.

In Portugal, the Energy Efficiency Fund (FEE) is available to fund and support energy efficiency projects contributing to the national targets defined under the National Action Plan for Energy Efficiency (PNAEE). Both public and private organisations are eligible.

The Plan for Promoting the Efficient Use of Electricity (PEPEC): promoted by the Energy Services Regulatory Authority (ERSE) is intended to financially support measures that reduce consumer electricity consumption in different sectors. Eligible promoters are consumer associations, business associations, traders, network operators, energy agencies, municipal associations, institutions of higher learning and research centers. LED semaphores are an example of a tangible measure implemented.

In Spain, the Action Plan (2008-2012) of the “Energy Saving and Efficiency Strategy” foresees supporting schemes for Public Administrations on energy efficiency investments for outdoor lighting and water supply installations, as well as measures to reduce the purchasing price of alternative vehicles. These kinds of subsidies are commonly managed by energy agencies (national, regional and local).

Example: The local authority of Bluetown has a Climate Change policy committing the authority to reducing CO₂ 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.

SMART SPP experience

Kolding has set a goal for reducing energy consumption by 8% between 2008 and 2015. Office lighting was identified by the environmental and energy departments as an area with significant energy saving potential. As influencing the CO₂ emissions of the local authority's energy supplier (for example, by switching to renewables) can be challenging, Kolding are focusing in particular on reducing the consumption needs of the products they purchase.

Barcelona organised internal meetings with all relevant departments and agents including the lighting, mobility, urbanism, environmental strategy, and economic promotion departments, together with the Barcelona Energy Agency and the 22@ District (a public enterprise in charge of a district focused on promoting design and innovation) to detect future needs and the possibility of including innovative solutions in their procurement.

In **Cascais**, pilot activities in the environmental interpretation centre (Pedra do Sal) demonstrated that 30% energy savings were achievable through replacing standard outdoor lighting systems with LED systems. This was therefore determined to be a priority area.

In both **Bromley** and **ESPO** LEDs and voltage optimising equipment were seen as ways of achieving an immediate reduction in carbon footprint, which is a key priority for all UK public authorities, with a relatively short payback period.



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

See also "Risk management in the procurement of innovation", European Union 2010.

BOX 1: Innovation and 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), organisational risks (for example, technical standards are under development) 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 its management.

- Take into account that delays in the tender process and in the delivery of the service might occur and calculate additional costs for risk management
- Make risks transparent, for instance, by drawing up a "risk register", which is continuously updated during 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.
- 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.
- Reduce the likelihood of risks: The procurement process could be split into separate contractual steps if high risks are expected. The next step could automatically start if the supplier has fulfilled the specifications of the first step and (other) conditions of the second step are met, for example, proto-type in the first step and larger production volume in the second step.
- Consider including a piloting phase within the tendering procedure before committing to purchasing the full volume (*see section F on Tendering and Contracting*).
- Mitigate risks: A "risk mitigation strategy" may include redundancies for service provisions.
- Allocate risks: Identified risks should be allocated in the contract according to their source and according to the potential benefit of a successful procurement. Technical and organisational risks may be allocated to procurer the contracting authority/procuring entity. Whereas turbulence risks (for example, change of regulatory or economic policies) may be shared between supplier and procurer.
- Risks should be covered by insurance where possible at an affordable price.

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. SMART SPP developed template agreements for the disclosure of information available at www.smart-spp.eu/guidance/templates.

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.
 - Do not 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 Activity 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.

Identify the project team members

- 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 *Activity A*, particularly considering the end-users.



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.

In Portugal, ADENE's (National Energy Agency) mission is to promote and perform activities of public interest in the energy sector, namely in the field of energy efficiency. The ADI (Innovation Agency) endorsed by the ministry of Economy and Innovation and the Ministry of Science, Technology and Higher Education, aims to promote innovation and technological development through cooperation with sectorial technological centres, professional associations and other public administration organisations.

In Spain this would include the National Energy Agency (IDAE) as well as regional and local agencies.

- Research institutes and consultancy services⁵: to discuss opportunities for implementing LCC.

In Portugal, LNEG (National Laboratory for Energy and Geology) is a research institute that has been active in the field of green/sustainable procurement since 2003 and provides assistance on sustainable procurement, LCC analysis and sustainable criteria development.

- National/international networks: Look for expertise from public authorities nationally and across Europe through professional associations and networks.

For example, the Spanish Federation of Municipalities and Provinces (FEMP). In Portugal, living labs (for instance, the Lighting Living Lab) are established to promote innovation and the development of research in new technologies and applications in different fields.

- 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 and 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.

⁵ 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.

SMART SPP experience

In **Barcelona**, for a tender on electric vehicle charging points, the Barcelona Energy Agency defined the technical specifications together with the UPC University and the environmental and mobility departments, taking into account previous experience from the 22@District, and with the assistance of Ecoinstitut Barcelona on sustainable and innovative procurement.

In **Kolding**, it was decided that the project would be run by the Department for Climate and Sustainability and the Building Department's Energy Section. The project team met every 14 days. It came clear that some technical skills were needed and the Danish Lighting Centre (DLC) was employed to provide technical assistance throughout the early market engagement. In addition the Department for Purchase and Tendering provided regular assistance on tendering issues.

LNEG, the national energy and geology laboratory provided technical assistance to **Cascais** Municipality throughout the early market engagement process for LED street lighting procurement. Besides LNEG, the team was composed of relevant local agencies and departments (the energy agency, environmental department, procurement department and public lighting department).

BOX 2: Joint procurement /bundling of demand⁶

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.

In Portugal, the ANCP (National Agency for Public Procurement) has been responsible for managing the Portuguese public procurement system since 2007, including the preparation of framework agreements for central administration and the management of the national procurement electronic platform.

CCE-AML (Electronic Procurement Central of the Lisbon Metropolitan Area) and the central procurement system of AMAL (Algarve Metropolitan Area) are responsible for the elaboration and management of framework agreements to be used by the municipalities of the corresponding metropolitan area.

... continued on next page

⁶ 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
- **OGC, Aggregation – is bigger always better?**: www.ogc.gov.uk/documents/CP0072_Aggregation-is-bigger-always-better.pdf

... continuation of BOX 2

In Spain, the new contract legislation (2007) foresees the possibility that public bodies adhere to the national centralised purchasing system (www.catalogopatrimonio.meh.es) and also the creation of Local and Regional Purchasing Bodies, such as the Catalan Central Supplies Commission ("Comissió Central de Subministraments").

What is joint procurement?

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 process⁷ 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 law⁸, if your consortium is large, it may be worth getting legal advice on whether it could constitute cartel behaviour.

SMART SPP experience

In order to ensure greater interest for suppliers, minimise prices and also to maximise the impact of the activity, **Kolding** decided to invite other local authorities to participate in the tender for LED lighting (published in February 2011). An information session was held for interested cities. Six other local authorities have agreed to participate in the tender and three have reserved the option of participating.

⁷ 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.

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



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/CO₂ 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).

The way you define your procurement needs may need to be revisited several times before actual tendering as you become better informed about what is technically and financially feasible, and how your needs should best be expressed in order for suppliers to understand. This section deals with activities you can take to inform yourself before engaging directly with the market.

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 and the brightness of the light. This should also consider important aesthetic aspects, such as the colour of the light, to ensure user acceptance of the final solution.
- Having as clear and detailed a definition of your functional needs as possible will help you to consult the market more effectively – letting the market give you ideas for how these needs can be met, or whether they are feasible at all. Your market consultation activities should help to answer these questions and also help ensure that appropriate technical expressions and industry standards are used.

Define your current energy efficiency/CO₂ emission performance:

- In order to assess the potential impacts of your procurement impacts – both in financial terms and also in terms of energy/CO₂ 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/CO₂ assessment tool* can be used to carry out this task.

Define your energy efficiency/CO₂ 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 CO₂ 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 it is shown by the market engagement activities to be either too demanding or too easy. The use of award criteria in tendering (*see section on Tendering and Contracting*) 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 CO₂ 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 five years.

In defining needs, the university was requested to assist in proposing indicators which industry uses for lighting performance (for example, 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 and 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.

SMART SPP experience

The City of **Barcelona** subcontracted the UPC University to run a study on “Implementation of a Charging Point Network for Electric Vehicles” which included the definition of technical specifications. In the case of vending machines, Ecoinstitut Barcelona carried out some initial literature research on energy savings, which were discussed in market consultation activities to confirm they were achievable.

In **Bromley**, instead of specifying “LED lighting”, in their tender, the terms “sustainable lighting” were used, opening the door for all alternative solutions to be evaluated against a common set of criteria related to price, energy saving and aesthetic factors.

In **Kolding**, the Danish Lighting Centre was central in determining the appropriate approach. The original idea of replacing fluorescent tubes with LED tubes using existing light fixtures was considered impractical at the current stage of market development. Therefore, the approach was revised with a view to replace incandescent bulbs, halogen bulbs and halogen pins with LED lighting using existing light fixtures, which redefined the scope of the tender. This was subsequently confirmed at supplier seminars as an appropriate decision.

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 need to be lit to YY quality for YY hours per day...”

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 section F on Tendering and Contracting*.

Legal framework

In public tenders the technical specifications may be defined either by reference to standards, or in terms of performance or functional requirements⁹. The technical specifications should:

... continued on next page

⁹ 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.

... continuation of BOX 3

- Give the suppliers a clear idea of what the procuring authority is looking for, and
- 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 versus performance-based specification

Technical specification	Performance-based specification
Replacement of oil-fired boiler providing a heating capacity of X.	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.
Purchase of petrol-driven cars with X seats, and X brake horsepower (bhp).	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.

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.*
- ❓ **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. Depending on the procedure followed, informing and consulting the market (*Activities D and E*) may take place simultaneously, such as through supplier seminars, for instance. However, they may also be undertaken separately – this section specifically examines the most suitable way to communicate your procurement intentions to the market.

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, chambers of commerce, innovation agencies and technology centres can be particularly useful for reaching smaller, innovative suppliers, as can specialist magazines, exhibitions and conferences. Using national and international networks of public authorities can also help to identify potential suppliers to address. For example, in Portugal the CPI (Portuguese Lighting Centre) is professional association for lighting suppliers. Regular national exhibitions also take place, for example on construction and public works.
- 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:

- Publish information about your procurement plans as widely as possible, providing as much detail as you can about your specific needs (*see section on Defining your Needs*). This can be published through your website, through electronic newsletters, in relevant publications, etc.
- Many public authorities now have a specific section on their website for potential suppliers, which includes information on upcoming tenders. It may also contain information on the procedures you follow, which can greatly assist smaller companies (often more innovative) in bidding for public contracts.



- One good way to publish such information is to produce a Prior Information Notice (PIN)¹⁰. This can then be published directly through the market information channels identified above, including the Official Journal of the European Union (OJEU) and posted directly on your own website.
- You may also send the PIN (or other form of information) 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 may be invited to declare their interest in the future tender and in participating in upcoming market consultation activities.
- If you intend to undertake later market consultation, clear information on how the these activities will be organised should be outlined within the PIN to ensure full transparency. Depending on the approach to be taken, the PIN can therefore also be used to ask suppliers to submit written proposals.

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 in the *section on Engaging the market*.
- Such seminars should be open to any interested company to participate and communicated widely through the market information channels identified.

Example: Bluetown developed a Prior Information Notice (PIN) based on a preliminary description of needs developed through internal discussion and basic market research, which they published in both the national procurement journal and in the Official Journal of the European Union (OJEU). Information on the upcoming tender was also published on their own website, which has a dedicated section on “doing business with Bluetown”. 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 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.

¹⁰ 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>).

SMART SPP experience

ESPO, on behalf of all SMART SPP project partners, published a PIN in the Official Journal of the European Union in April 2009, asking for companies to express interest in upcoming tenders for LEDs (indoor and outdoor), electric vehicles, and innovative heating and cooling systems. Over 60 companies expressed an interest and were invited to participate in the subsequent market dialogue meetings.

In **Barcelona**, participation in the national MOVELE project on electric mobility together with two other large Spanish cities (Madrid and Sevilla) and their commitment to installing electric vehicle charging points raised the interest of mainstream media and thereby that of the main relevant companies.

E: Engaging 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, CO₂ 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.
 - Engage with the right people – try to ensure that technical people, as well as sales representatives participate in consultation.
 - 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 (that is 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 review¹¹.
- 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 rules¹².

A concrete example of this distinction is the situation in which a contracting authority issues a market survey in order to discover what the market can offer regarding energy efficient gasoline cars and/or electric cars. If, for example, electric cars are then selected, 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 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. The list below presents some types of consultation approach, however many different forms of interaction may be envisaged as long as the legal framework is observed (*see Box 4*):

- a) Open seminars and 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 CO₂/energy savings achievable
 - The current status of development and market readiness

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

¹² Recital 8 of Directive 2004/18

- 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 a 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.
- d) Anonymous questionnaires: In order to collect reliable information without the need for companies to give away private information about their products or services, an anonymous questionnaire may be used asking suppliers whether they can meet each of the different proposed functional and performance needs of the authority. This may indicate to the authority whether their needs are realistic or need to be revised. This approach may be used either for written or face-to-face meetings provided anonymity is maintained.



Define the participants in the consultation process:

- To ensure equal access to all market operators, including all the companies which have indicated interest, for example, in response to a 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 Prior Information Notice (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 six 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.

SMART SPP experience

In **Barcelona**, a supplier seminar was held for the electric vehicles charging points tender. Representatives from 32 companies attended and were invited to complete an anonymous questionnaire indicating whether the currently defined performance specifications of the city could be met. The responses to the questionnaire, and subsequent discussion reassured the city procurers that the market could meet their needs and the contract was tendered on this basis.

In **Kolding**, two supplier seminars were held for the LED office lighting tender, first to inform companies of the city's intentions, and then, in a second round with companies still interested (also open to new entrants), to discuss the actual requirements in more detail. These discussions informed Kolding's decision on the technical specifications and award criteria, and provided further information on the ability of suppliers to meet other environmental criteria. These seminars also highlighted the need to include a pilot stage to the contract and to include consultancy and information within the contract (either mapping of rooms for the best LED solution or setting up catalogues for decentralised purchasers to give them guidance on which kind of LED Lighting is the best solution to their needs).

In **Cascais**, in relation to the tender for an outdoor LED lighting system a two-stage process was used. At an initial seminar, open to both suppliers and other public authorities, information about their intentions and initial requirements was presented. Following this 11 one-to-one meetings were held (about two hours each) with potential LED suppliers identified by Cascais, to discuss products available on the market. Prior to meeting, they were sent an outline of the criteria developed so far, to validate these. During the meetings suppliers questioned some of the criteria used as well as the values proposed and provided a better understanding of the most important issues related with this kind of technology. These discussions helped to determine the tender specifications and reassure the authority that the market could provide appropriate solutions.

F: Tendering and contracting



- ➔ **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?
 - Which tendering procedure is appropriate for your needs?
 - How can we best encourage continuous innovation within the contract itself?
- ❗ **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/CO₂ 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

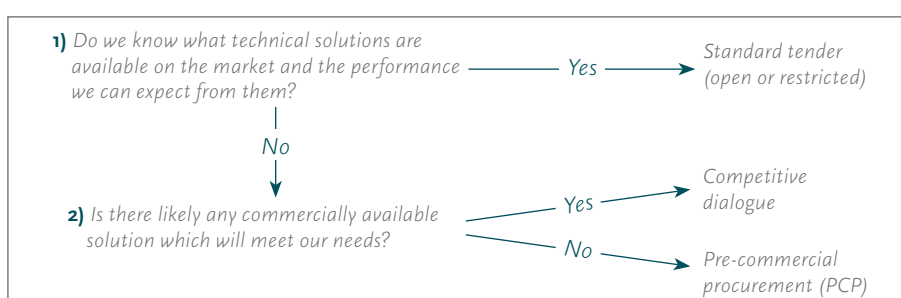
Any market consultation activities undertaken may well help to determine the most appropriate form of tendering procedure, and the preparation of the tendering documents.

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

- Standard tendering procedures – open or restricted calls for tender – either for an initial pilot or for a full procurement action.
- 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.
- Pre-commercial procurement (PCP) – For the procurement of pure R&D services – that is for the pre-commercial development of a product / service.

Competitive dialogue and pre-commercial procurement are dealt with in the section on Tendering for Complex Project.

In order to determine which is appropriate for your case two key questions need to be answered 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 *Activity C “Defining your Needs”*, 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 Activity 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 (for example to assure interoperability) so non-discrimination is a point you must 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 (that is specifications), or preferred standards (that is award/evaluation criteria) – see below under the point “Defining award criteria”.

b) Put “innovative” in the subject matter:

Make a reference to the fact that you are searching for innovative solutions in the title of the tender itself, as a way of more clearly advertising the opportunity to potential innovative suppliers.

c) 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/CO₂ assessment tool for procurers* may be used for this purpose.

d) Defining award criteria:

- To make a full comparison of the financial offers, an LCC evaluation model should be applied. The accompanying *LCC/CO₂ assessment tool for procurers* may be used for this purpose.

- 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, technical merit, aesthetic and functional characteristics, after-sales service and technical assistance, delivery date and delivery period or period of completion or maintenance and supply continuity guarantees. They may also include environmental performance criteria such as energy efficiency/CO₂ emissions as well as LCC.
- Evaluating offers on their energy efficiency/CO₂ 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 evaluation¹³.
- 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/CO₂ assessment tool for procurers* may be applied for the full evaluation of tenders.
- In certain circumstances, it may not be possible to apply non-financial award criteria. In this case focus should be given to developing tighter specifications, based on stronger market engagement activities prior to the preparation of tender documents.
- 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 Activity B "Setting up a Project Team").



e) 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 or 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.
- 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.

¹³ 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 European Commission services (DG ENV) and the Nordic Council of Ministers, 2007.

- Consider how to incorporate incentives for the supplier to continuously look to improve their service through innovation throughout the contract, for example, by focusing on the delivery of the service itself and not the technical details of implementation. This would for example, provide an incentive for the supplier to install fewer, more efficient devices to achieve the same overall service.
- 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.

f) 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 contracting authority should decide in advance whether it or the supplier should bear the costs of the pilot phase or whether the costs are shared between both.

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.

g) Framework contracts to promote further competition:

To help promote continuous innovation, you can consider signing framework contracts (which do not guarantee a specific sales volume) with several suppliers which meet your specifications. You can then organise a “mini-competition” between these suppliers for actual purchases, to provide an incentive for further development.

Example: Based on the information gathered during market consultation, 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 six months piloting phase achieved good results and consequently the full volume of lighting systems were installed.



h) Encouraging SMEs to bid:

Many of the most innovative, creative companies are SMEs. However, in many cases public procurement practices create significant hurdles to SME participation in tender competitions – particularly in terms of the size of contracts (which are often too large for smaller companies to bid for), the level of past experience demanded, and administration requirements. Making your tendering SME-friendly should expand your potential supplier market and increase the range of solutions proposed.

- Subdividing tenders into smaller lots
- Highlighting the possibility of forming consortia (this is typically an option SMEs are unaware of)
- Multiple framework contracts and mini-competitions (as outlined above)
- Keeping selection criteria and financial guarantees proportionate
- Keeping administrative needs to a minimum
- Allowing sufficient time for the preparation of tenders

More detailed advice on making procurement SME-friendly can be found in a document produced by the European Commission: European Code of Best Practices Facilitating Access by SMEs to Public Procurement Contracts (SEC(2008) 2193)★.

i) Focus on encouraging the use of innovative products within service contracts:

Many of the actual products used by public authorities are actually purchased by contracted service providers (for example, through construction, renovation or maintenance contracts for buildings). Consider setting conditions or providing incentives within these contracts to encourage the use of innovative products to fulfil the service.

★ http://ec.europa.eu/internal_market/publicprocurement/docs/sme_code_of_best_practices_en.pdf

SMART SPP experience

The **Eastern Shires Purchasing Organisation (ESPO)** signed framework contracts with several small providers of voltage optimisation technology without specific commitments to purchase. Mini-competitions between these framework suppliers are then organised for actual purchases.

In **Bromley** a pilot activity was undertaken to retrofit existing light fixtures to accept LED tubes. However, this pilot demonstrated that such an approach was overly time-consuming and judged impractical on a wider scale. Instead the approach being taken is to ensure for future renovation projects that LED fixtures are fitted as standard, with suppliers required to purchase the LED equipment through a framework contract currently being established.

In **Barcelona**, due to the specific conditions of the funding mechanism used for the electric vehicle recharging points tender, it was not possible to apply MEAT, and the lowest price approach was used. Due to this, additional effort was made during the tender development phase to ensure that the energy efficiency specifications were as ambitious as possible, yet still achievable. In the case of vending machines, the tender led to a pilot phase, and its evaluation will be used to propose a standard tender for vending machines for all City Council premises.

In **Kolding**, the call for tender for the supply of energy efficient innovative LED retrofitting lights was divided into three lots in order to give SME's the possibility to bid. It is possible to bid for one or more of the lots. A framework contract will be signed with one or more (maximum three) suppliers. A pilot project will be implemented with the successful contractor(s) replacing existing light with LEDs at a kindergarten and an elderly centre.

In **Cascais**, it was decided to switch municipal street lighting from the less efficient high-pressure sodium (HPS) lamps to energy saving lighting technology, such as light emitting diodes (LEDs). A pilot installation was undertaken in the surroundings of the Pedra do Sal Environmental Interpretation Centre which included the installation of an energy consumption monitoring system. This pilot showed that an energy saving of about 30% can be achieved only by retrofitting. If dimming capabilities are used the energy savings can be greatly increased.

G: Tendering for complex projects



➔ **Aim:** *To tender for products or services where a considerable amount of uncertainty remains about what the market is able to provide.*

❗ **Success factors:** *Competitive dialogue*

- *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.*

Pre-commercial procurement

- *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.*

Using Competitive Dialogue

If there is still sufficient uncertainty following your market consultation activities you may opt to use the Competitive Dialogue procedure¹⁴. 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.

¹⁴ 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.

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.

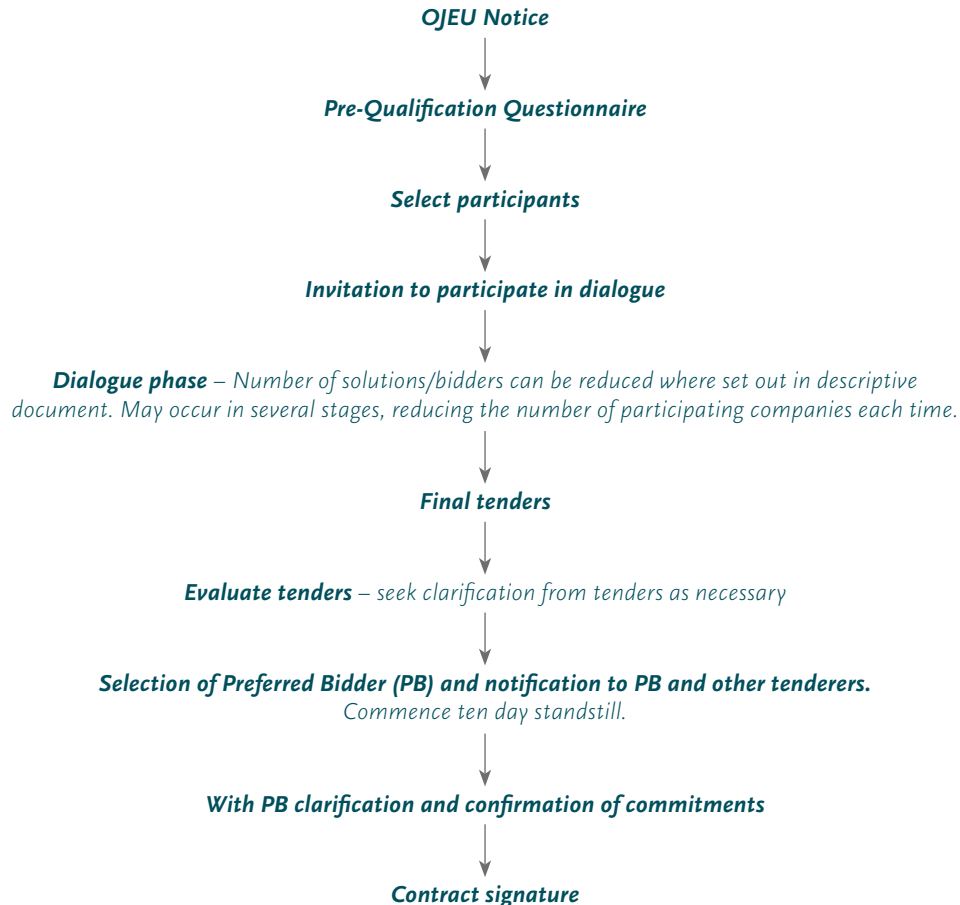
During the course of the dialogue, you should ask the participants to specify their proposals in writing, possibly in the form of progressively completed/refined tenders. On the basis of these proposals the number of proposed solutions may be reduced by applying the award criteria stipulated in the contract 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 procedure¹⁵



¹⁵ 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”¹⁶. It is therefore advisable to document all information given during a meeting with a company and to ensure equal treatment of the others.

Benefits and 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.



Further reading and guidance:

European Commission, Explanatory Note – Competitive Dialogue – Classic Directive:

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

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

Pre-Commercial Procurement (PCP)

“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”¹⁷ 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 World Trade Organisation (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.

When can it be used?

PCP can be applied as long as¹⁸:

- 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.

¹⁷ Com(2007) 799 Final: http://ec.europa.eu/invest-in-research/pdf/download_en/com_2007_799.pdf

¹⁸ 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:

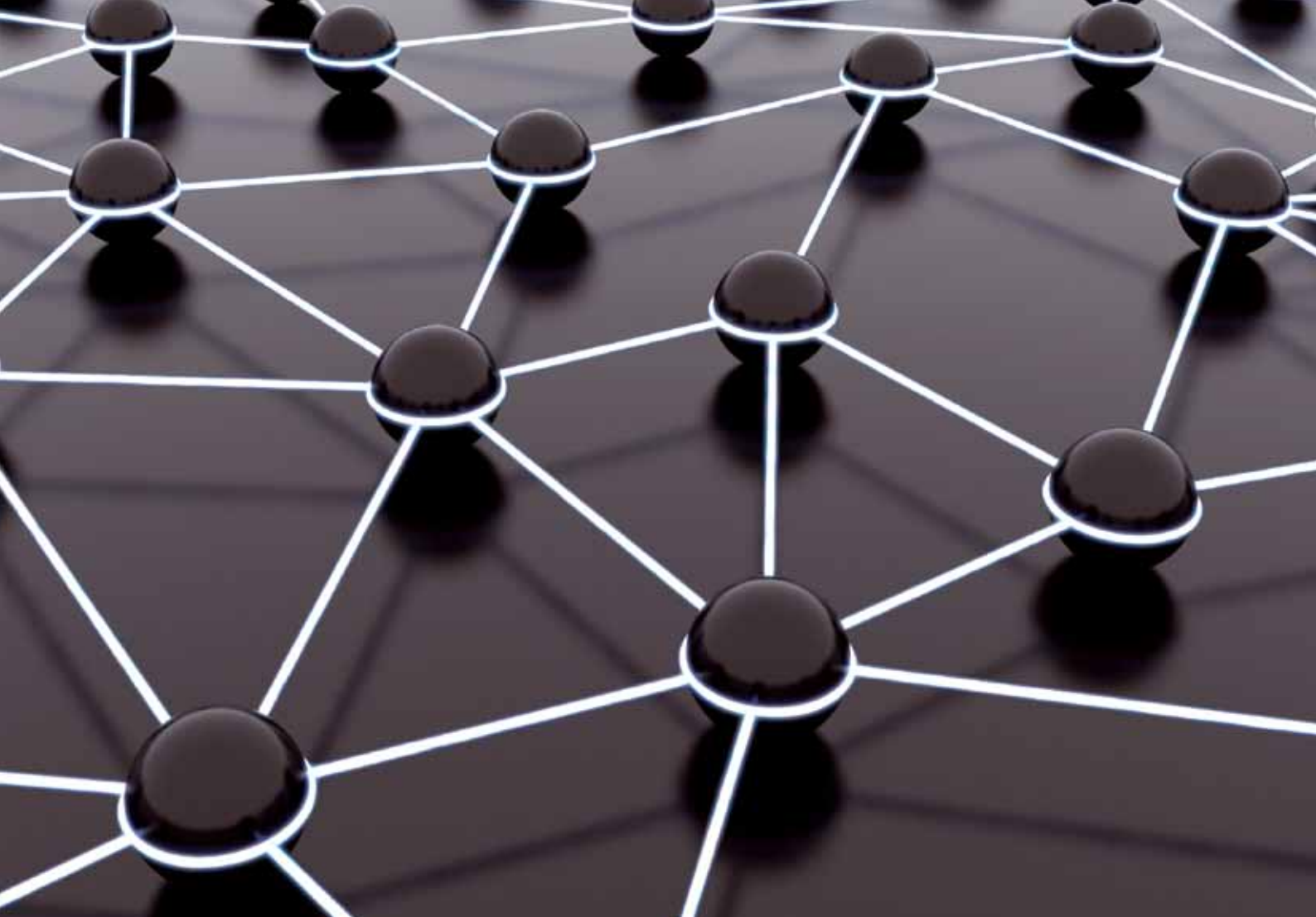
- A very high level of technical knowledge and understanding of the issues concerned is necessary to run a PCP procedure.
- Substantial funding will likely be required.
- It is critical to ensure that no action taken during the PCP procedure might preclude competition in any future commercial procurement 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.



Further information

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- Example of a possible approach for procuring R&D services applying risk-benefit sharing at market conditions, i.e. pre-commercial procurement, European Commission, Staff working document accompanying the Communication, SEC(2007) 1668:
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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 promotes the introduction of new, innovative low carbon emission technologies and integrated solutions onto the European market. This is being 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, 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

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