

## HOW NEW APPROACHES TO PUBLIC PROCUREMENT WILL CREATE NEW MARKETS







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#### INTRODUCTION

What is your dividend from the new approaches to public procurement? This book helps small- and mediumsized businesses navigate the dynamic changes taking place in public procurement. We introduce new trends, the different ways policies are implemented, the opportunities that arise and experiences to-date to help you identify opportunities and risks.

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The new approaches to procurement provide support to smaller businesses, and aim to move on from measuring benefits to transforming public services. Your strategy will determine how you navigate the transition and whether you will lead, follow or lag in the new markets.

#### **EUROPROC**

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### **PREFACE**

Nowadays there is a general consensus that the question is no longer whether or not the public sector should incorporate ecological, social and innovative aspects in their procurement decision-making processes but how to do it. The debate has broadened and the efforts towards enhancing the global coherence in public policies have intensified. Public procurement policies could obviously not escape the debate as the consequences of the acquisition of goods and services and the implementation of public works can not be underestimated. Sixteen percent of European GDP comes from public contracts issued by local, sub-national, national or European public bodies. Their effect on the global figure is important in itself and also as good practice to mark the path to be followed by other agents. The question therefore is not if or why but rather how, and as this is a dynamic process where there's always room for improvement, all those involved should work together as driving forces to lead the evolution of public procurement processes to higher standards.

Public authorities are committed to providing the best value for money in their purchases as well as taking responsibility for the effects of these decisions. Ways of incorporating the broad range of consequences of purchase decisions are becoming more sophisticated. Public decision makers have to increasingly consider not only the mere solution to the main need but also to analyse other types of considerations involved in the supplier selection. European institutions aim to lead the process towards making public procurement processes not only more transparent but also more consistent. Introducing certain aspects that were probably not considered in the past into the decision-making processes is driving all stakeholders to a win-win situation. This becomes even more relevant when public institutions have to restrict their budgets due to the current financial crisis and public sector accountancy has to struggle with performance indicators.

The willingness to make public purchases as green as possible is probably the bestknown new approach in public procurement policies. In recent decades, environmental tensions have continued to transform the mentality of both public buyers and citizens. Everybody agrees that the greener the product purchased the better. Recurrent public sector suppliers, among them many SMEs, have already invested to make their goods more eco-friendly, trying successfully to catch the attention of public buyers. Projects exist that take into account the complete life-cycle of a product or service including their carbon or water footprint, for public purchase decisions. So, very soon, in European public purchases it will also be important for the product or service purchased to be environmentally sound beyond the period of their life that serves the public authority. It is clear to everyone that more advanced technologies are at a strong competitive advantage. Preface Page 7

The need to turn public tendering processes into fully **electronic** processes is also no longer a topic of discussion. The advantages are obvious in terms of transparency, simplicity, speed, equal opportunities and minimising error, to name but a few. However, there's still some work to be done before all public procurement in Europe can be undertaken via safe and easy-to-use electronic platforms.

Therefore, it was relatively easy for the EuroPROC partners to choose the above mentioned topics to be included in the present guide. But, we felt that we should also cover other the new approaches that were drawing our attention and growing in importance.

Finding ways to improve undesired **social** situations via public procurement processes is under close consideration by a growing number of public authorities. In current times with severe financial crises affecting public purses in many European countries, social budgets are being dramatically reduced. There is little room for economic optimism in the short term and therefore public bodies are extremely interested in exploring new ways to fulfil their commitments to their citizens. More than ever before, public allocations have to be as efficient as possible and this goal can be tackled by considering the provision of goods and services that not only meet their immediate needs but also address other social challenges. Public organisations are eager to know how they can implement interesting solutions in this sense.

Even more challenging could be coupling **innovation** promotion and public procurement. Innovation Union is one of the seven flagship initiatives of the Europe 2020 strategy for a smart, sustainable and inclusive economy. Public procurement policies therefore are also clearly targeted by this strategy since both have a relevant quantitative and demonstrative effect. Proper public procurement policies could leverage the innovation efforts of the private sector to the public benefit, as illustrated by successful experiences of pre-commercial public procurement, and European policy is promoting the transfer of innovative knowledge from public to private agents and vice versa.

**EuroPROC** partners have already been working for more than two years promoting the access of SMEs to public procurement markets and so would like to contribute to this debate.

We are convinced this guidebook "Navigate Change –
How New Approaches to Public Procurement will create new Markets" will be one of the most interesting outputs of the project. The guide is not an internal document for the consortium members but for all the stakeholders in public procurement and it aims to encourage SMEs to lead the process to turn public procurement greener, more innovative and socially responsible and to benefit from electronic platforms.

We hope the reader will find interesting and useful insights in the guide that will lead to improvements in public procurement processes from which we, as citizens, will all profit.

Isidre Sala EuroPROC project coordinator Introduction Page 8

# INTRO—DUCTION

## WHAT IS YOUR DIVIDEND FROM THE NEW TRENDS IN PUBLIC PROCUREMENT?

Public procurement constitutes around sixteen percent of world GDP. It is an immense and diverse market in which globalisation and increased transparency are changing the competitive environment. This guidebook is intended for small- and medium-sized companies with an interest in international markets and the impact of new public procurement policies on their business prospects.

#### A DYNAMIC MARKET, NOT YET SETTLED

The new approaches public procurement presented in this book follow developments that have affected the majority of public authorities.

Firstly, governments need to respond to competitive pressures to provide better services at lower costs, but also seek to use global markets offering ever more effective solutions. Public vigilance on spending can be expected to grow with rising government transparency.

Secondly, the definition of value for money is changing. Value is measured not just in purchasing price but the sustainability of investment, including life-cycle costs and environmental and social impacts.

Thirdly, technology is changing the way governments solve major challenges, but also how they interact with providers using electronic procurement, open data and market intelligence to cut costs of EUR 50 billion in Europe alone, be more accountable and find better solutions.

Lastly, governments are under pressure to innovate. Major societal challenges such as ageing, climate change or accessibility require solutions that do not yet exist, or may not fit into traditional delivery systems. As a result, governments begin to accept that they need to share risks in finding new approaches with companies large and small.

Resulting from these conditions, four major new approaches to public procurement have emerged that have changed the way public procurement regulations and procedures are applied: green and socially responsible public procurement, public procurement for innovation and electronic procurement.

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#### OPPORTUNITIES AND THE RISK OF COMPLACENCY

For companies, the new approaches constitute a dynamic environment in which few common criteria or procedures are in place to help decision-making in the short-term. Companies face the challenging question of what strategy to follow in the light of these trends.

How can you tap into the EUR 436 billion in green funds pledged by global governments as part of their economic recovery measures?

Are you going to be a pioneer breaking new ground and defining future demand?

Are you an early follower, specialising in taking the pioneers' achievements to mass markets?

Or are you a laggard, competitive at delivering cost effective solutions to the mass-markets that are seeking the minimum in compliance with the new trends?

Whatever answer you choose, there are no shortage of opportunities, especially if you are proactive. Complacency may come at a high price with more agile competitors using the growing transparency and shift in criteria to offer sustainable solutions at competitive costs.

#### A GUIDEBOOK TO NAVIGATE CHANGE

Unlike large companies which benefit from a strong presence in many markets and the resources to weather transition times, smaller companies need to focus, prioritise and allocate limited resources carefully.

Four chapters introduce each of the often interrelated approaches, focusing strictly on the perspective of smaller companies. Insights into the variations in how these trends are implemented at national, regional or local levels are illustrated as a reminder of how fragmented markets often remain.

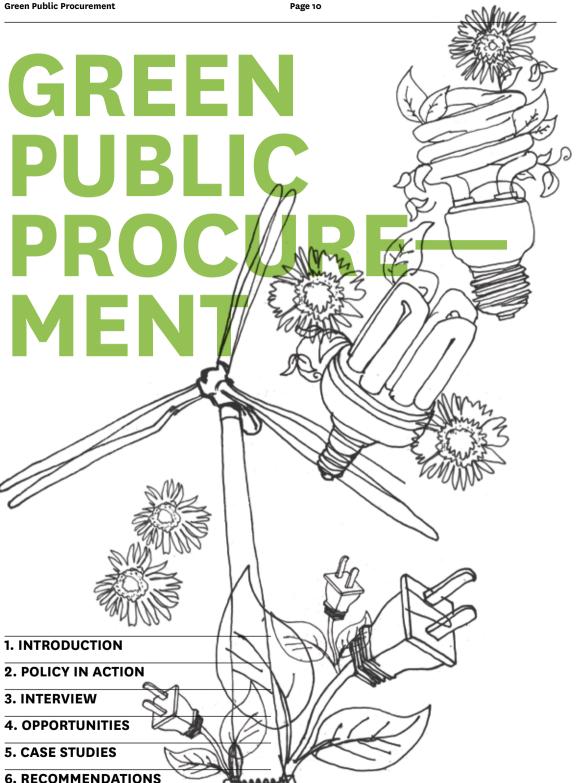
Similarly, specific opportunities are illustrated as trends in which new openings are created for smaller businesses. Case studies focus on concrete experiences within the new approaches, presenting successes and difficulties that emerged along the way.

#### STRATEGY CONSIDERATIONS TO GUIDE YOUR ACTIONS

Taken together, this guidebook should provide guidance to a business leader in understanding how public sector markets are changing and the critical transition phase that is likely to dominate developments in the short-term.

Public procurement is, and remains complex and multifaceted, and it is outside of the scope of a short guidebook to cover international markets, regulations and policies in detail. In this transitional phase, few reliable indicators provide quantitative insights and the new approaches bear differently on whether you are selling medical devices, cleaning services or energy to public authorities.

Hence, this guidebook should help you to question the impact of these trends on your market, to consider different outcomes of the current transition period, and whether your business is ready to turn the new trends into dividends.



#### INTRODUCTION

Green procurement policies will affect about fifty percent of European public tenders in the near future. Variations persist, but standards and certifications are available to guide businesses and best practices show that greening products and services can add significant value to buyers as well as providers.

Governments around the world aim to show leadership through green public procurement by implementing new regulatory requirements, life-cycle costing models, preferred practices and business cases. The overall aim is to address concerns about climate change, sustainable use of resources, health & safety, and waste management.

Another motivation for green public procurement is to shape trends in product development, production and consumption and thereby help to transform established markets. In recent years public purchasing has been a strong factor in creating major markets for green stationery and hospital supplies, electric or hydrogen fleets, fair-trade and organic foods.

New products, standards and business models may emerge as a result. With major public customers ordering green solutions, businesses should find it easier to invest in making their existing products and services greener or in developing innovative new green solutions.

In the procurement process, the contracting authority can include environmental standards in both the functional and performance requirements of products or services, as well as in the contract conditions. The total cost of ownership or life-cycle costing principles can be applied to evaluate the environmental impact of the goods and services together with the material costs. Hence, a product that is pricier may be more cost effective over its ten-year life-cycle by, for example, using less energy.

What green procurement means to the supplier varies greatly from one service or product group to another. Criteria are evolving but there are still few established and commonly recognised standards in place. This is partly due to the different ideological perspectives brought to standards that may be driven by consumers, environmental organisations, science or corporate interests. Furthermore, environmental impact is multi-dimensional and trade-offs are acceptable to some in order to achieve an overall environmental improvement.

Companies interested in responding to green procurement opportunities should therefore investigate thoroughly what standards apply in their markets of interest, or in which markets their products and services meet recognised standards and certifications.

#### **POLICY IN ACTION**

Political unity on the principle of green procurement has not yet delivered common European or global standards and practices. But a wave of investments into green solutions is evident, providing diverse opportunities across all levels of government.

Since 2002, several global organizations such as the OECD, have adopted recommendations for green public procurement. In 2003, the European Commission communication on integrated product policy recommended member states to adopt green public procurement policies by 2006, which at least 21 member states had adopted (six more under way) by 2010. A leading group, called the Green-71, was commended by the EU as having the highest volume of green public procurement. Globally, many national governments including the USA, Japan, Canada, South Korea, Australia, China, Thailand and the Philippines have adopted sustainable or green public procurement policies.

In 2008, the UK adopted the Climate Change Act, which calls for a reduction in carbon emissions of 80% by 2050 (measured against 1990 levels), and calls for central government emissions alone to be cut by 10% within the 2010–11 period<sup>2</sup>.

Policies on opening government data and encouraging greater transparency have coincided with industry initiatives such as the Carbon Disclosure Project, which has grown into a major resource for investor and supplier intelligence in which some 3050 (2010) companies disclose their greenhouse-gas emission data. UK government procurement agencies are thereby enabled to gain insight into suppliers and the impact of their supply chains.

At regional and local government levels similar green procurement policies can be found, often exceeding EU or national performance criteria by, for example, aiming for zero emission cities (e.g. Copenhagen CO<sub>2</sub> neutral objective) or reaching a 100% renewable energy goal to be produced within city boundaries (Eindhoven 2035 energy neutral objective). In all these cases procurement patterns have changed, opening new opportunities.

#### EUROPEAN PRIORITIES FOR GREEN PROCUREMENT

In Europe, a number of priority sectors for green procurement have been recommended by the European Commission<sup>3</sup>:









FOOD AND CATERING SERVICES



















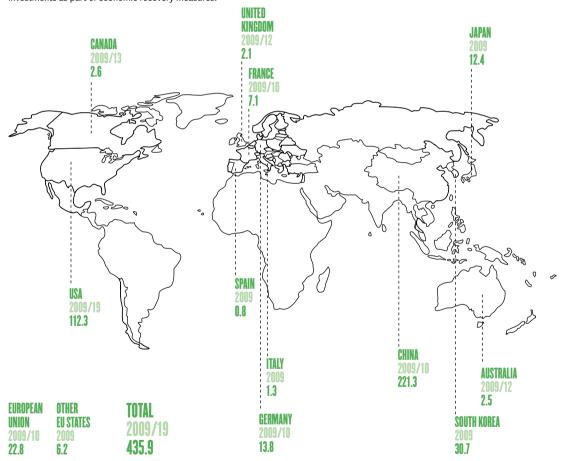
- 2. cutting central government emissions by ten percent in twelve months; decc.gov.uk/en/content/ cms/news/pn10\_059/ pn10\_059.aspx
- **3.** "Public procurement for a better environment", COM (2008) 400/2

As this market is by no means coherent or standardised, methods of evaluation also differ. In defining their requirements, purchasers often rely on existing standards and certification systems such as ecolabels. Worldwide there are over 400 ecolabels providing certification to companies (in 2011)<sup>4</sup>, applying different methods, geographies and degrees of rigor in compliance to items ranging from food to finanical services. There are also a broad array of industry standards, best practice and guidelines that the purchasers draw from including tools such as life-cycle assesment and product carbon footprints.

A central theme of green procurement is to establish the life-cycle cost / benefit calculation. However, there are often difficulties in evaluating existing products for comparative assessment. In the contracting authority this may lead to insecurity about benefits being achieved. There can also be uncertainty about the legal basis for including environmental performance criteria and therefore an aversion to seriously implement green procurement or take related risks.

#### **GREEN FUND FOR ECONOMIC RECOVERY**5

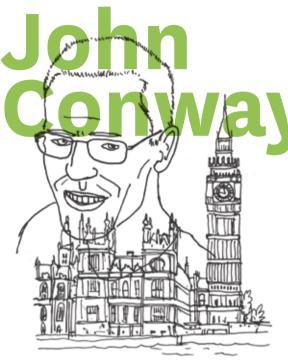
Funding (in billion EUR) allocated by global economies to green investments as part of economic recovery measures.



4. ecolabelindex.com

**5.** "A Climate for recovery: The colour of stimulus goes green", HBSC Global Research (2009)

#### INTERVIEW WITH



#### Mr Conway, could you explain how you would define what Green Public Procurement means in the UK today?

In the UK green public procurement means achieving true cost effectiveness through procurement of goods and services which reduce the environmental impact of Government activity. Therefore costs are assessed across the whole lifecycle to take into account the real cost of manufacture, supply, usage and disposal of a product or service. Our view is that, properly implemented, green public procurement should support fair and sustainable economic growth and the development of a green economy.

Government Buying Standards (GBS)<sup>6</sup> are an important mechanism for green procurement in the UK. They are linked to the criteria in the EU's Green Public Procurement (GPP) initiative. GBS now set sustainability specifications for the procurement of around 60 goods and services.

The specifications cover the environmental impact across the

#### **Policy Advisor**

Department for Environment, Food and Rural Affairs (DEFRA), United Kingdom John Conway is closely involved in the development of sustainability standards for a range of priority products purchased in the public sector, including transport and ICT. He is also responsible for promoting the acceptance and uptake of the standards across the public sector.

whole life cycle of a product or a service. They can enable innovative tenders that support the development of a green economy in the market place as well as the public sector. They also deliver long term cost savings. Examples of these include the furniture GBS which is estimated to deliver an overall net benefit of £40 million through greater use of recycling and reuse; and the transport GBS which is estimated to deliver an overall net benefit of over £7 million through the use of more efficient vehicles. Any company which could supply to the GBS specifications would be free to apply for the contract. We are increasingly looking at how green public procurement can go beyond setting specifications for contract tenders and achieve further environmental benefits in the supply chain by actively building relations with suppliers. Initial data indicates that over 70% of Government carbon emissions are in the supply chain.

### What kind of opportunities does your Green Procurement policy offer to European SMEs? Do they stand a competitive advantage by offering green solutions to UK public authorities?

The coalition government has committed all departments to publish a set of specific, targeted actions to achieve 25% of their business with SMEs. GBS are developed through a robust system that involves consultation with SME suppliers and impact assessments of proposed criteria have a specific section to evaluate the effect on SMEs.

The key challenge is now to mainstream SME procurement across the public sector to increase business opportunities

**6.** defra.gov.uk/sustainable/ government/advice/public/ buying/index.htm defra.gov.uk/corporate/ about/how/procurement/ policy.htm for them and to enable the public sector to benefit from their innovation and flexibility. This requires that procurement opportunities should be transparent, the procurement process made as simple as possible, and that a strategic approach to procurement gives SMEs a fair deal when they are subcontractors.

UK procurement is advertised externally to attract bids from a diverse range of suppliers. Actions taken to facilitate more opportunities for SMEs include Defra's Sustainable Procurement Policy Statement which promotes business opportunities through supply chains for SMEs<sup>7</sup> and a move towards greater standardisation of contracts. This is supported by:

- Pre-Qualification Questionnaires amended to ensure that it is not just public sector but other relevant experience that is considered in awarding contracts.
- Electronically issuing contract tenders.
   Using the "OJEU notice of contract template" to flag up tendering opportunities thought suitable for SMEs.
- Publicising more widely forthcoming contracts, e.g. through a new Defra e-tendering portal, Supply2Gov (now Business Link Contract Finder), CompeteFor.<sup>8</sup>
- 4. Encouraging prime contractors to open up their supply chains to SMEs.
- Encouraging prime contractors to publish sub-contracting opportunities on websites such as Compete For that may be particularly suited to SMEs.
- Making wider use of outcome-based specifications to drive innovation – this is an area where SMEs tend to have an advantage.
- Seeking to ensure that SMEs and other firms acting as subcontractors are paid promptly.

#### Is there a consolidated Green Procurement process across UK agencies, and are there other international markets following the same rules?

In line with other member states the UK agreed to a voluntary target that by 2010 50% of all public procurement would be green. This means compliance with the core criteria of the EU's GPP criteria.

The wider UK public sector is not bound by central government commitments on sustainable procurement as part of a consolidated process. However the environmental benefits and costs savings offered by GBS means that they are used by many organisations. Defra co-ordinates a national approach to sustainable public purchasing by developing training for organisations with an interest or role in sustainable procurement including local authorities and the NHS.

## How does your agency deal with unsolicited offers from companies that have innovative, or even ground-breaking solutions that could have a transformative environmental impact? Who can a company turn to, to present their solutions?

The details of these companies are collected on an innovation database. This is currently being developed to be made available to all UK public authorities online. They may also be used to inform the development of more challenging GBS in the future. We would expect a SME with an innovative service would begin by engaging with procurers in the organisation they were hoping to do business. They could also use the opportunities for suppliers' service offered by purchasing organisations such as Buying Solutions.

# The key challenge is to increase business opportunities for them [SMEs] and enable the public sector to benefit from their innovation and flexibility.

#### Many SMEs are looking to find the ideal early market for their green solutions. Would you recommend the UK as such a market?

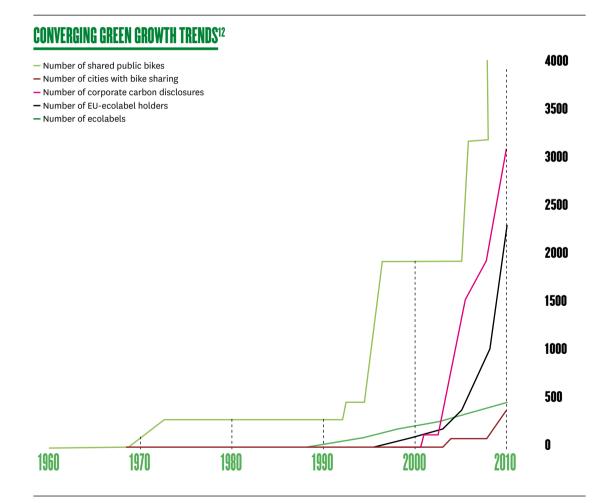
Cabinet Office has launched a package of measures to make sure that SMEs are in a good position to compete for contracts. The key measures include the launch of a contracts finder database which will become the place to find public sector opportunities over £10,000.

This approach is complemented by longer standing innovative procurement methods that go beyond GBS, such as the Small Business Research Initiative. This runs open competitions to develop ground-breaking solutions to challenging policy and procurement problems<sup>a</sup> and the Forward Commitment Procurement, which seeks similar outcomes but by means of a long-term dialogue with possible market suppliers. Defra has put in place a suppliers' engagement programme that among other things arranges events for suppliers at which there are opportunities for SMEs to interact with procurement staff.

- **8.** defra.gov.uk/corporate/ about/how/procurement/tenders.htm
- **9.** innovateuk.org/deliveringinnovation/small businessresearchinitiative.ashx
- **10.** bis.gov.uk/policies/innovation/procurement/forward-commitment
- 11. defra.gov.uk/corporate/ about/how/procurement/activities.htm

#### **OPPORTUNITIES**

Fifty percent of all public procurement will be greened in the near future, making green procurement a reality for almost all types of products and services. Providers with a life-cycle approach, incorporating green considerations into all aspects of their solutions are likely to not only emerge as winners but also as better-run businesses.



12. "Free city bike schemes", Søren B. Jensen, City of Copenhagen (2000); "Bikesharing: history, impacts, models of provision and future", De Maio, Paul, USF Journal of Public Transportation (2009); Ecolabel.eu; Carbon Disclosure Project; Peter Midgley, gTKP; ecolabelindex.com It is estimated that, in the short term, green procurement can affect at least 50% of all public procurement expenditure, or an annual EUR 3,200 billion in the world economy or EUR 1,250 billion in the EU. These are staggering sums making up about 7.5% of world GDP.

As a result, it may no longer be viable to consider the design and development of greener services and products for public procurement as a optional consideration, but rather a necessity in which many players, both new and established, are actively promoting new solutions.

What may be more important are the trends in which the evaluation of products and services against green (and other sustainability criteria) are combined with new technological developments and business models that lead to the creation of entirely new markets and service areas.

One of the most visible such developments is the rapid growth of public bicycle systems around the world, which for 40 years saw no major impact, but in 2005 was unlocked by developments in RFID and mobile technologies to add a new mode of transport to more than 200 global cities with hundreds of millions of rides carried out each year.

This model is increasingly applied also to cars and motorbikes, shaping an entirely new industry of shared transportation and the supporting healthy and sustainable lifestyles.

Similarly, developments in electric vehicles, LED lighting and provision of renewable energy through fragmented rather than centralised power stations and utilities companies are beginning to explore new business and service models. These may equally prove transformative to established industry sectors that are dependent on public procurement.

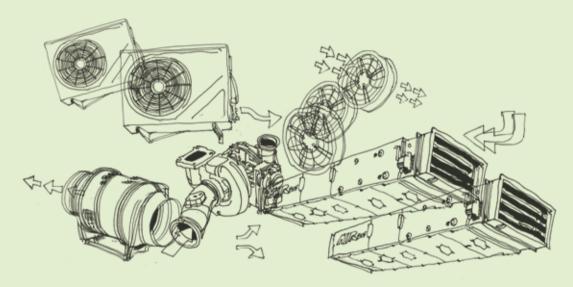
#### INTEGRATED PRODUCTS AND WHOLE-LIFE IMPACTS

In its Life-Cycle Initiative, the United Nations Environment Programme points to several practices that businesses can adopt to successfully create value out of life-cycle management, such as (eco-) design approaches, life-cycle analysis (LCA), life-cycle costing (LCC), eco- and energy labelling, environmental product declarations, ecological and carbon footprint analyses, environmental performance indicators, and social sustainability assessments – in addition to capability development approaches that are essential for actual implementation<sup>13</sup>.

#### 

13, 14. "Life-Cycle
Management: How business
uses it to decrease footprint,
create opportunities and
make value chains more
sustainable", UNEP/SETAC
(2009)

## STRETCHING THE LIMITS OF GREEN AIR-HANDLING



When Hyresbostäder, a public real estate company in Växjö, planned to build two passive-energy houses, a central issue concerned air handling units.

The mandatory criteria for the air handling units was a plate heat exchanger with at least 85% heat exchange rate, compared to the conventional 65%. At the time of the tender, there was no air handling unit with the requested specification on the market. IV Produkt AB, a medium-sized Swedish company producing air-handling units, developed a new product for this project according to the high performance levels demanded that significantly advanced the state-of-art in the field.

For IV Produkt AB, this procurement was both interesting and challenging, since Hyresbostäder and their owners, the Municipality of Växjö, chose to conduct an entirely new procurement and project development model as compared to previous practices.

IV Produkt AB helped a municipality reach ambitious energy targets for passive houses. Strict performance criteria in a negotiated procurement procedure created an opportunity for the company to show its ability to break new ground in air-handling, opening international markets.

Hyresbostäder applied the rarely used Negotiated Procedure<sup>15</sup> model for two reasons. Firstly, the project contained technical risks impossible to evaluate beforehand. Secondly, there was no technical solution available on the market. Thirdly, the customer wanted to make sure that they would be able to have an extensive dialogue with the different tenderers before making any decisions, without breaking the strict legal framework of The Public Procurement Act.

To establish the performance objectives the customer put the final energy performance into a so-called Building Energy Specification Table (BEST), which served as a joint basis for all tenderers. Whilst the first level of tendering primarily focused on the insulation of the building, highly efficient air handling was early identified as a direct prerequisite to meet the energy performance stipulated in the BEST tables.

As IV Produkt have developed its entire air handling product range with a strong Life Cycle Cost (LCC) focus ever since 1991, the company was well placed to deliver the advance required. Almost all construction companies that were bidding for the project contacted IV Produkt AB to partner early on in the process. In the final selection of contractors chosen by Hyrsebostäder, the design ideas of IV Produkt were part of the winning concept.

In the detailed planning of the project, IV Produkt acted as experts on energy efficient air handling units, going beyond its conventional role as suppliers. Senior R&D personnel were involved in developing the final solution and meeting the project's strict energy demands.

Hyresbostäder, repeatedly emphasized that this project was to contribute to the development of a new, more incentive-based and risk/profit-sharing approach taking new technologies from previous practice of small scale pilot projects, and extrapolating them into a new full scale demonstration project and starting to build a new industry standard. IV Produkt AB considers that this result was also achieved in their business and market development.

#### **MEASURABLE GREEN BUSINESS GROWTH**

As a market leader in energy efficiency performance, IV Produkt understood that the demands of this project would set an example to be followed by others.

This turned out to be true, and the project itself got Europewide recognition resulting in many international study-visits. By developing this solution, IV Produkt advanced its control solutions one step further in terms of freeze protection, something that the company is now capitalizing on across its portfolio.

Whilst the company has not directly replicated the solutions from Hyresbostäder, IV Produkt AB have been able to sell several similar solutions and several of IV Produkt's European export partners use this project as an effective Showcase. Finally, the company gained an industry reputation for "making it possible", gaining a positive profile as a project partner.

NEGOTIATED **PROCEDURE** 



















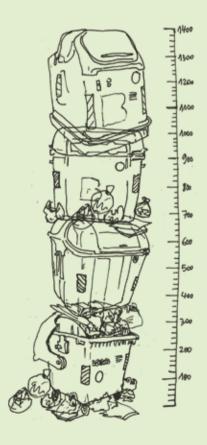
15. Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public works contracts,

public supply contracts and public service contracts

## PILOTING: EVALUATING INTELLIGENT WASTE-MANAGEMENT SYSTEMS

Urbiotica is a technology start-up, created out of the vision that cities could be managed more efficiently through the use of technology and real-time information. Urbiotica develops sensors specifically designed for cities' needs to gather real-time information of parameters such as mobility, to significantly improve the efficiency and quality of urban services.

Waste management costs cities around 20% of their total spending. A major inefficiency is the collection of containers, a process that would benefit from real-time information on their fill level, so that collection routes could be optimized to save resources and improve the overall service. In 2009, Urbiotica launched its urban waste sensor solution.



Waste management constitutes twenty percent of municipal spending. Urbiotica applied latest sensor technologies to the challenge and won Barcelona's global call for urban solutions, leading to a six-month pilot as a step towards procurement.

The City of Barcelona operates the 22@ Urban Lab to enable innovative companies to pilot their solutions in partnership with relevant city agencies, such as the Waste Management Agency. The goal of the Urban Lab is to a) help companies in their solution development, b) provide a pre-procurement dialogue and piloting stage to evaluate innovative solutions, c) allow companies to present unsolicited solutions, and d) provide an accountable and transparent process.

In 2009, 22@ Urban Lab joined forces with eight other global cities to launch a global call for solutions (Living Labs Global Award) that could help the city select the best solutions to be offered piloting opportunities. An international panel of experts and key decision-makers from the city evaluated the 150 entries from 38 countries, selecting Urbiotica's Intelligent Urban Waste Management Solution as the winner. In 2011, Urbiotica signed a Memorandum of Understanding

with the City of Barcelona, to pilot and evaluate their solution in the city. The Agreement consists of the following terms:

Urbiotica will implement a pilot installation of its waste management sensors in cooperation with the respective agencies.

Urbiotica will carry their own expenses for this pilot; no financial transactions will take place.

The City of Barcelona will provide executive support to implement this pilot, and assure a detailed evaluation of the system and its impact.

The City of Barcelona will publicise the pilot, its results and impact.

The duration of the pilot is 6 months.







#### EXPRESS NEED, CALL, PILOT, EVALUATE, AND PROCURE

Urbiotica has benefited from Barcelona's innovative approach to invite companies to present their solutions through its published challenge. This offers an important channel for companies to proactively present their solutions through a structured process, and help influence the procurements planned in the future.

It can be estimated, that for a company like Urbiotica to present their solution to a city in such a proactive way would represent a significant cost averaging about EUR 8,000 to make a cold-call. The process offered by Barcelona reduced this cost to about EUR 250 in time invested to present the solution through the 22@ Urban Lab call for pilots. This freed-up resources to help a lead customer evaluate the solution through an extensive pilot. In addition, Urbiotica gained international recognition as a solution provider which has been awarded by one of the world's prominent cities, contributing significantly to the credibility of a small start-up company.

#### **IDEA TO PILOT IN WASTE MANAGEMENT**



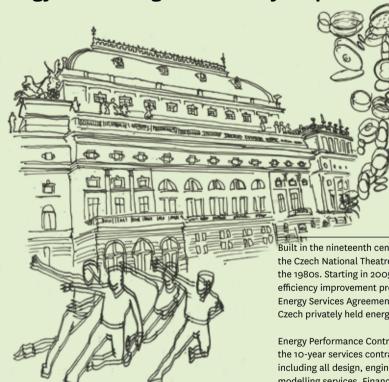






## PROFITING FROM ENERGY SAVINGS AT THE CZECH NATIONAL THEATRE

ENESA won the investment contract to upgrade the installations at the national theatre, recuperating profits on investments through sharing the resulting energy cost-savings over a ten year period.



Built in the nineteenth century, the last refurbishment of the Czech National Theatre's four buildings took place in the 1980s. Starting in 2005, the theatre started its energy efficiency improvement programme and tendered a long-term Energy Services Agreement won and concluded with ENESA, a Czech privately held energy services company, in 2006.

Energy Performance Contracting<sup>16</sup> principles form the basis of the 10-year services contract representing a turnkey solution including all design, engineering, auditing and business modelling services. Financial guarantees for energy savings form an essential part of the service agreement, guaranteeing that entire project costs (initial investment, financial cost and service fees) will be paid from savings achieved over the contract term. Savings are monitored on a monthly basis and verified according to contract procedures.

Upgrades to the energy and utility systems have been implemented in phases. Improvements include the modernisation of heating, cooling (air-conditioning), ventilation, lighting- and energy control systems. Photo voltaic panels were installed on the roofs of two buildings and integrated into the energy system of the theatre.

#### AN EFFICIENCY DIVIDEND FOR ALL

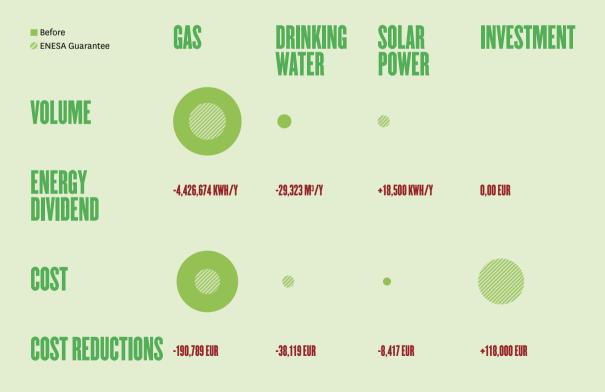
Already in the first year, the energy savings constituted EUR 230,000 annually, or about a third of the Phase 1 investments of EUR 920,000. This high rate of savings is expected to grow with Phase 2 investments of EUR 260,000 into photo voltaic panels still to come.

Significant potentials have further been identified in using new technologies to fine-tune the system by improving the building operations and energy consumption behaviour to further reduce energy and operational costs, and thereby increase the return on investment for ENESA.

Since ENESA is refinancing investments through a percentage of costs saved, it is evident how the business model can deliver both an environmental and cost-saving benefit to the theatre, as well as generate an achievable profit margin for ENESA. The illustration below shows a basic calculation indicating that when investment is spread evenly over 10 years as an annual cost, a cost-saving of around EUR 237,000 (compared to EUR 118,000 in investment) is achieved, of which a percentage is awarded to ENESA. By allowing for a reward based on the costs saved, an incentive remains throughout the contract duration to improve performance.

Energy Performance Contracting enabled the procurer to open an opportunity for private finance into the upgrade of the theatre, whilst at the same time giving the contractor sufficient flexibility to adjust investment priorities against expected results. As the case showed, the investment returned revenue early on in the project enabling ENESA to seek out further efficiencies, rewarded under the contract, over the remainder of the contracting period. This model of turnkey energy contracting and facilities upgrade emerged in the 1970s and has since grown into a major global industry with the US, Japan, Germany and Austria considered pioneers.

#### THE JOINT ENERGY DIVIDEND



## PROCUREMENT OF GREEN HOTEL SERVICES THROUGH NORDIC GOVERNMENTS

Governments in the five Nordic countries are jointly developing a procurement standard for hotel services that is set to provide clearer guidance to the market and become a template for Europe-wide criteria.

The Nordic Region covers Iceland, Norway, Finland, Sweden and Denmark and has a long tradition of close collaboration in policy, regulation and market developments. The 2009–12 Environmental Action Plan outlines the key measures that will help the region reach its sustainability goals, with particular attention paid to the role of Green Public Procurement<sup>17</sup>.

A programme was set up to build on the national action plans in place in each of the Nordic countries to guide green aspects of public procurement, and establish common criteria to be adopted. These are then presented to the European Union as recommended criteria to be adopted across the 27 Member States.

For companies providing services to the Nordic governments, this means that early on they adopt high standards of compliance that are likely to set European standards, opening new markets for them.

Europe's hospitality industry delivers one billion overnight stays at European hotels, representing a significant industry at an average cost of EUR 100 per room / night. Using public procurement to trigger a reduction in the environmental impact of hotel services is therefore seen as a high priority area.

Tourism accommodation and services already represent 37% of the EU Ecolabel licenses with 392 certified hotels and 252 hotels certified by the separate Nordic Ecolabel<sup>18</sup>. With 44 Tourism Ecolabels<sup>19</sup> in place globally according to Ecolabel Index, it is clear that hotel service providers face a challenge in choosing the right certification partners.

IMPACTS	MITIGATING APPROACHES
Climate change impacts due to energy use	Decreasing energy use for heating and electrical appliances, favouring renewable energy sources, promoting environmental communication and education by environmental management system.
Climate change due to methane emissions from food waste disposed to landfills	Reducing and better sorting/ recycling/composting of food waste
Shortage of non-renewable energy sources	Decreasing energy use for heating and electrical appliances, favour renewable energy sources, promote environmental communication and education by environmental management system.
Shortage of non-renewable resources and environmental burden from the production of both non-renewable and renewable resources	Reducing the amount of waste, better sorting and recycling of waste, promoting environmental communication and education by environmental management system.

Proper waste water treatment

and separate collection of hazardous waste fractions.

17. Environmental Action Plan 2009-2012. ANP 2008:736, Nordic Council of Ministers, Copenhagen 18. nordic-ecolabel.org

19. ecolabelindex.com

Pollution of surface waters,

ground waters and soil

### WHAT CRITERIA DO HOTEL SERVICE PROVIDERS NEED TO FULFIL TO WIN NORDIC PROCUREMENT?

With different standards and varying requirements of certification bodies, an effort has been launched to set demand-side common expectations for procuring hotel services by Nordic governments.

Based on the different criteria promoted by the national procurement guidelines for hotels, the Nordic and European Eco-Labels, and the green procurement action plans the Nordic Council of Ministers in 2009 presented a common set of public procurement criteria for hotel services. The subject matter for the procurement should be 'Environmentally friendly hotel services', presenting the following criteria:

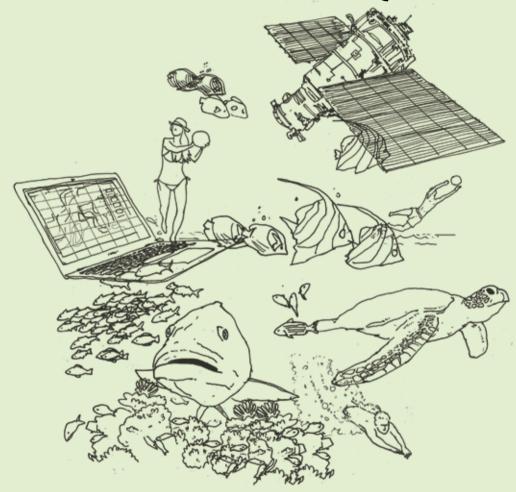
#### COMPARATIVE COST OF ECO-LABELLING HOTELS

	NORDIC ECOLABEL	EU ECOLABEL	VIABONO (GERMANY)
Application fee	EUR 2,000	EUR 2-660	EUR 3-950
Annual fee	EUR 1,400- 6,500	EUR 750	EUR 10 / room

ТҮРЕ	CRITERIA	POINTS
Core Criteria	Lighting is demand-controlled in > 80 % of the guest rooms	1
	Additional EU Ecolabel: >80% energy efficient light bulbs	
	Dispensers for soap and shampoo installed in > 90 % of guest rooms	1
	Guests have an opportunity to recycle their waste in their rooms into at least three fractions, which are then collected and handled appropriately	1
	Hotel fulfils the criteria of EU eco-label for tourist accommodation service or the criteria of Nordic eco-label for hotels	5
Technical Specification	> 22 % (50% EU Ecolabel) of the electricity comes from renewable energy sources, as defined in Directive 2001/77/EC	
	The water flow of the taps and showers excluding bath taps < 12 l/m (EU Ecolabel 9 l/m)	
	All waste water is treated.	
	Hazardous wastes must be collected and handled separately as listed in Commission Decision 2000/532/EC of 3 May 2000.	
	Waste is recycled into the categories that can be handled separately by the local waste management facilities.	
	Demonstrate capacity to carry out the service in an environmentally sound manner and include evidence of regular training for staff.	
Contract Conditions	Supplier must within two years show evidence that attention has been paid to increasing energy efficiency and decreasing climate change impacts.	

### BARCELONA BUYS CUTTING-EDGE SATELLITE TECHNOLOGY TO MONITOR WATER QUALITY

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Starlab inspired the City of Barcelona with an unsolicited offer to replace its existing coastal watermonitoring sensors with satellite data that is maintenance-free and has no environmental impact. This opened new markets in other international coastal cities. Starlab, a small, young high technology company based in Barcelona, had the idea of developing a solution to monitor the quality of coastal waters using satellite data. Emerging out of a research programme on monitoring coastal waters funded by the European Space Agency²o, the team of business-oriented scientists approached the Barcelona City Council with the idea to help the city monitor contamination and water-quality in a revolutionary way.

Starlab is an R&D company specialising in Earth observation, aiming to develop new and alternative methods for remote sensing applications. Starlab provides services based on satellite data to offer customized solutions to their clients.

Starlab's solution provides an online service presenting coastal water quality indicators based on satellite data. At any time, the most up-to-date data, updated every hour, 24 hours a day and seven days a week would be accessible to city experts and the general public. Data is delivered in the form of maps that offer qualitative information on the relevant environmental parameters. The service includes an alert system to warn about potential dangers.

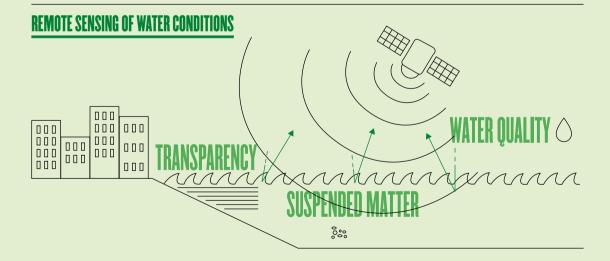
Starlab approached Barcelona's environmental management team with the idea for this coastal water quality monitoring service. The city's team had never used services based on satellite images and were excited to explore the opportunity and have a first experience. The solution could lead to major cost-savings in comparison with in-situ measurements and maintenance of instruments, reducing also the environmental impact of monitoring activities.

Once the solution was described in sufficient detail, it took around 4 months to conclude the procurement process funding and the customisation stage. Since implementation began, Barcelona City Council has started using the water quality service based on satellite data to monitor its coastal waters as part of its Integral Management Programme for the Coastal Area. The general public has access to the most up-to-date information of the environmental coastal conditions by looking at the satellite maps.

#### A VERSATILE GREEN ALTERNATIVE OPENS NEW MARKETS

With the City of Barcelona, Starlab was able to take cuttingedge research to the market. The procurement process enabled the company to develop and deploy the first commercial application of its solution, which is now being marketed with the help of technology export programmes to coastal cities in Europe and South America in particular.

Starlab's solution is easily exportable to other cities as they can acquire satellite images all over the world. A customization process in close contact with the client remains essential to understand and match them with the technical solution and Starlab benefited from initially working with a local client to to refine the solution and gain market intelligence about the real value of the solution.



**20.** MarCoast Consortium gmes-marcoast.info

#### RECOMMENDATIONS

## Design green value for both the government and its customers

Governments are becoming more sophisticated and customerfocused service providers using new models to provide more individualized service experiences to their constituents. How can green solutions help improve both the economics and qualities of those experiences, and provide end-users with a notable upside? To achieve this, you can refer to best practices in related fields, study the strategy in services and excellence by your customers, and use expertise by research centres, expert consultancies or partner companies.

## Your big green strategy choice: lead, follow or lag

Not everyone can be a green pioneer, yet being a leader may have strategic advantages in an environment where standards are changing rapidly and variations persist. Typically, pioneers setting new standards can demand a premium price. Yet, you may also choose to identify the pioneers and follow them closely, letting them break new ground and rather specialise in supplying the markets they create. Lagging, appears to be a risky option linked closely to your ability to compete on lowest cost for customers that themselves are lagging in implementing green policies.

## Find the markets that best meet your standards

You may already fulfil a number of certifications or standards and may find that in some markets, these already give you a competitive advantage. Start by evaluating the greenness of your own products and supply-chain using common methodologies and compare the results to different standards. As a second step, review risks and easy advances to move up the compliance ladder and secure a step-wise entry into more sophisticated markets.

## Follow relevant technology trends closely to prepare for break-throughs

Environmental performance will see radical changes through new technologies such as electric vehicles, bio-degradable products, sensors or management systems. By tracking such developments carefully you can protect your portfolio and invest timely in necessary partnerships and adaptations to avoid being surprised by sudden advances.

# Why not be bold and invent a ground-breaking new business and service model that sets its own standard?

Consider if a bold innovation in the combined business and service model might not allow you to create new markets with their own standards of evaluation, as achieved by outdoor advertisers or bike-sharing companies in the past. Make sure you bring the target buyer along for the ride, and clearly explain the benefits to be achieved.

## Gather market intelligence on most commonly used criteria in your product area

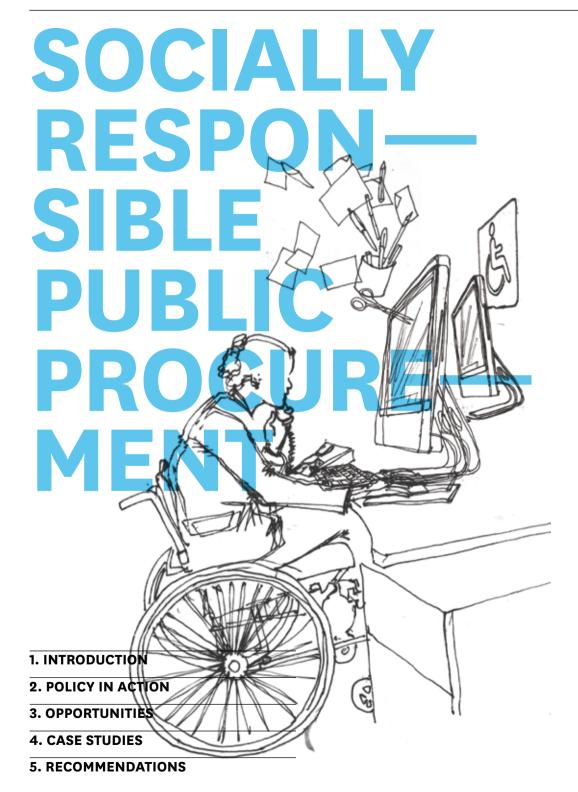
Identify the most common evaluation criteria for your product and service range used by contracting authorities, possibly by sending out questionnaires, carefully reviewing their policies and contract specifications, or using other forms of gathering market intelligence. Invest in dialogue with contracting authorities to develop a common trajectory of development and evaluation. Tell your customers how green you are, and where you are going. Focusing on your strengths you should build your brand as a green provider, gain peer recognition and public awareness. Awards, certifications and thought leadership are good tools that can be promoted through media, direct communication and conferences.

# Partner with pioneering buyers if you want to make sure to be ahead of the game

Pick out the pioneers in your market, those that tend to procure according to higher standards and try to partner with them on pushing the commonly perceived limits. By advancing your products with them you can have a strong platform to market achievements to other customers that may be inspired to follow their models of evaluation and procurement.

#### Review different standards offered through certification frameworks carefully

Consider certification frameworks available in the market, such as the European Eco-label, and how they can be used to your advantage. Review carefully how these certificates are maintained and how their evidence helps your customers maintain trust in what you have to offer and what environmental benefits will be created.



CONTRIBUTORS: KRISTINA BJURLING, ALBERT FONTANILLES, NINA JURETZKA, IRMA KUUKASJÄRVI, TORBJORN LAHRIN, CHONG-WEY LIN. ANNA LIPKIN. COLLAN MURRAY

#### INTRODUCTION

Policies to encourage social and ethical compliance have emerged in a growing number of markets. Regulations generally allow public buyers to consider social impacts in tenders and require evidence of performance, creating opportunities for compliant suppliers.

Increasingly governments in Europe and beyond are trying to use public procurement to directly achieve social policy objectives. Whilst social responsibility falls under the widely adopted definition of sustainable development (the three components are economic and social development and environmental protection), it has lagged the innovation and more regulated implementation of environmental protection measures.

Like large companies, procuring authorities are under growing pressure to act in a socially responsible manner, in line with emerging consumer preferences for sustainable products such as fair-trade products, green energy or organic food. Scandals in upstream supply chains (such as child-labour in coffee production) also constitute a direct political risk. The growing pressure from mass NGOs, media and social networks has emerged as an important activist force monitoring conditions.

Multilateral international agreements, such as the International Labour Organisation (ILO) Convention Declaration on decent work conditions and labour rights, and the UN Convention on the Rights of Persons with Disabilities² provide reference points and standards for social responsibility.

More recently, the EU has identified public procurement as a tool to promote the social agenda of Europe. In its guide to taking account of social considerations in public procurement<sup>3</sup> the EU outlines its vision and legal basis on which contracting authorities and policy makers should more actively seek to achieve social objectives through public spending.

At times heated debates have been conducted to establish whether European procurement directives are compatible with activism in areas such as fair trade or decent work – since the substance of public procurement is tied to the cost-effectiveness of a tendered offer. It is considered an established legal fact that regulations do allow for socially responsible procurement, meaning that companies that adhere to high social standards and integrated product and service designs respectful of their social impact may gain a competitive advantage in a growing number of tenders with social considerations.

- 1. United Nations General Assembly (2005). World Summit Outcome, Resolution A/60/1, adopted by the General Assembly on 15 September 2005
- 2. Adopted by the General Assembly in resolution A/ RES/61/106 on 13 December 2006
- 3. "Buying Social A guide to taking account of social considerations in public procurement", European Commission (2010)

#### **SOCIAL OBJETIVES**

Each of the objectives presented here is anchored in European policy, global conventions or declarations that seek to protect and establish specific social frameworks. They are based on the non-exhaustive list of objectives published by the European Commission<sup>4</sup>.

### EMPLOYMENT Opportunities

YOUTH EMPLOYMENT Long-term unemployed, older workers Persons from disadvantaged groups People with disabilities

### **DECENT WORK**

CORE LABOUR STANDARDS
DECENT PAY
OCCUPATIONAL HEALTH AND SAFETY
SOCIAL DIALOGUE
TRAINING
BASIC SOCIAL PROTECTION

## SOCIAL AND LABOUR RIGHTS

COMPLY WITH NATIONAL LAWS, COLLECTIVE AGREEMENTS PRINCIPLE OF EQUAL TREATMENT FOR WOMEN AND MEN OCCUPATIONAL HEALTH AND SAFETY FIGHTING DISCRIMINATION ON OTHER GROUNDS EOUAL OPPORTUNITIES

### **SOCIAL INCLUSION**

FIRMS OWNED BY MINORITY GROUPS
FIRMS EMPLOYING PERSONS FROM MINORITY GROUPS
COOPERATIVES, SOCIAL ENTERPRISES, NON-PROFIT ORGANISATIONS
EMPLOYMENT OF PEOPLE WITH DISABILITIES

4. "Buying Social A guide to taking account
of social considerations
in public procurement",
European Commission
(2010)

Special emphasis is given to the applications of these objectives across the supply chain – within or outside the economy within which the procurement takes place. This means that companies may need to provide evidence of compliance even by sub-contractors and their suppliers.

Governments may pick and match objectives according to their policy preferences and social priorities, leading to a high degree of variation in application.

### ACCESSIBILITY AND DESIGN FOR ALL

ACCESS FOR PEOPLE WITH DISABILITIES TO ALL PRODUCTS AND SERVICES

**ETHICAL TRADE** 

COMPLYING TECHNICAL SPECIFICATIONS
COMPLYING PERFORMANCE CRITERIA
CORPORATE SOCIAL RESPONSIBILITY
VOLUNTARY COMMITMENT TO SOCIAL VALUES AND STANDARDS

**HUMAN RIGHTS** 

PROTECT AGAINST HUMAN RIGHTS ABUSE

SUPPORT FOR SMALLER BUSINESSES ALLOW SUFFICIENT TIME TO PREPARE BIDS ENSURE PAYMENT ON TIME SIMPLIFY QUALIFICATION REQUIREMENTS ANNOUNCE SUBCONTRACTING OPPORTUNITIES DIVIDE TENDERS INTO LOTS

#### **POLICY IN ACTION**

Implementation of policies varies among states and authorities, reflecting differences in the interpretation of law, in standards, or simply different voter priorities. Social considerations may, rather than create new markets, even act as a barrier and require legal precedents to open opportunities.

Some governments have created laws and regulations to embed social considerations in public procurement. For example, the US Section 508 of the Rehabilitation Act<sup>5</sup> is a standard to assure the usability and accessibility for disabled citizens to technologies procured by public entities – from websites to devices – and set up a procedure of effective certification for each component before supply is considered.

Germany is the largest public procurement market in Europe with spending in excess of EUR 420 billion annually. With just 7.2%, it has the lowest rate of tenders published EU-wide. Politically, views are divided on whether the already sophisticated regulatory conditions on procurement in themselves are more functional to achieve social objectives.

A good illustration is Germany's promotion of Werkstätten, or sheltered workshops for the disabled and blind, which have a preference in procurement contracts for which they compete. They are often part-owned by municipalities who assign smaller contracts to them directly. If in tenders their offers are up to 15% above the lowest priced tenderer, they are to be given preference. Yet, it appears that to-date Werkstätten have had to claim this right in court, since procurers appear to extend more trust to conventional contractors. Whilst a Werkstatt may apply from all EU countries for this privilege, few applicable contracts appear to be above the EU tendering threshold and it is unclear as to how the required certification as a Werkstatt can be replicated in other member states.

In Denmark, measures to promote the unemployed were incorporated into contract conditions for services with high local employment content such as cleaning, catering, waste collection and admin services. Contractors get subsidies of up to 50% of salaries.

#### **LONDON SOCIAL PROCUREMENT**

#### EUR 4.7 BILLION PROCUREMENT SPENDING / 2010



#### 352 WORK PLACEMENTS 650 APPRENTICESHIPS / FUR 4.7 RULION



#### 1 WORK PLACEMENT 2 APPRENTICESHIPS / EUR 14 MILLION

Scandals emerged out of the use of granite in landmark buildings like the Danish National Opera. Investigative journalists revealed that the material, provided at a low cost of EUR 30–50 / m² was produced under dangerous working conditions in China, whereas the same stone originating from Europe would have cost EUR 150 / m² 8. As a result, social considerations regarding working conditions in the supply chains have gained prominence.

The Netherlands published a 5-year plan to make 100% of its EUR 40 billion annual public spending sustainable.

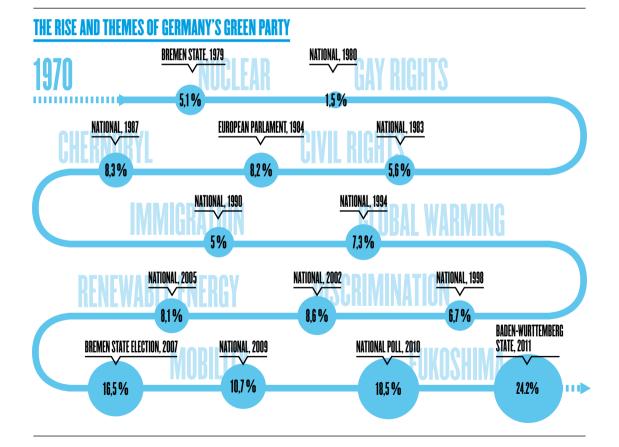
At local government level, the Greater London Authority promotes socially responsibility in its EUR 4.7 billion procurement spending primarily to extend the supplier workforce to provide training and jobs unemployed and socially excluded citizens<sup>10</sup>.

#### ENFORCEMENT, CHECKS & FOLLOW-UPS

Social considerations are rarely the subject of public procurement. Instead, they are often reflected in contract performance or sub-contracting clauses.

Buyers typically lack the capacity to monitor performance in the supply chain, especially in third countries. It took activists in Denmark and Sweden to expose working conditions at Asian supplies. Yet, scandalous exposure is a major shared risk to suppliers and buyers alike.

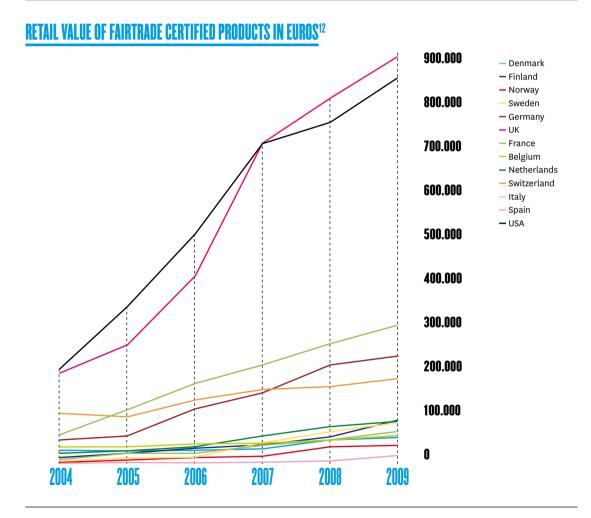
Sweden is developing a variety of tools such as the CSR-Compass<sup>n</sup>, continued improvement and reporting tools, and compliance checks in partnership with international organisations that help to turn social considerations into tangible requirements.



- 9. Dutch National Action Plan for Sustainable Procurement, Ministry of Economic Affairs, SenterNovem (2007)
- **10.** Central Responsible Procurement Team, Greater London Authority Group
- **11.** Swedish Environmental Management Council (SEMCo) csr-kompassen.se

#### **OPPORTUNITIES**

With markets for socially responsible consumer goods growing by up to 700 percent over fifteen years it can be expected that policy-backed markets for universally designed, accessible, ethical and integrating solutions are likely to pose a major and irreversible economic opportunity.



**12.** Fairtrade International estimate of products sold under Fairtrade certification

#### PRICING SOCIAL IMPACT

Given that social considerations are broad and at times have indirect purchasing impact, or lead to the evolution of markets without explicit statistical reference, it is difficult to quantify their explicit economic opportunity in public procurement. Yet, certain trends from related markets, such as fair-trade compliant goods may serve to illustrate the potential upside for providers that actively include measures of social responsibility in their services tendered to governments.

Whilst it is illegal under EU Directives for a procuring authority to demand a specific certification, the performance criteria of prevailing certificates such as Fairtrade can be applied to the technical specifications. Hence, by fulfilling some or all of such social considerations, providers may a) enter a privileged smaller group of qualifying providers, b) be qualified to submit variants under tenders and c) be in a strong position in pre-procurement dialogues to raise the expectations of the procuring authority to meet higher standards and take social considerations into account. In all, these factors combined should relieve some of the pressure on cost by excluding lowcost providers and reducing the circle of likely providers. Companies that plan and design their supply chains according to high ethical and environmental standards are likely to reap benefits in public procurements designed to maximise their social impact. Especially aspects of gender equality; integration of minority, unemployed and disabled individuals (especially in local provisions) and guarantees of decent working conditions in all parts of the supply chain appear to be priorities in the short-term.

## NEW MARKETS BY DESIGN AND ACCESSIBILITY

Design is another key enabler of growth and has proven repeatedly to open or revolutionise markets. Universal Design or Design for All principles are found in technology specifications, such as the US Section 508 requirements introduced earlier. Companies that integrate accessibility for all in their products and services are likely to invent new solutions that can create new value propositions and markets. Further, design may act as a differentiator in the functional performance evaluation and feature in life-cycle cost calculations where relevant. The ability to protect the intellectual property of designs may further add value to investments in universal design.

Universal design may also reveal opportunities in markets that span between public services and private consumption. With 650 million disabled people in the world<sup>13</sup>, accessible products procured by the public sector may only be one aspect of your market potential.

Astando, the provider of the e-Adept system for pedestrian accessibility tailored around the needs of the world's 161 million visually impaired<sup>14</sup> is piloting a solution for the City of Stockholm at an annual cost of EUR 369,000 with a direct economic return of EUR 17 million. e-Adept has revolutionized a market previously attended by social services personnel, transport contractors, and physiotherapists by consolidating the savings and benefits gained by the procuring authority into an alternative business proposition worth an annual EUR 35 billion on a global scale<sup>15</sup>.

### BUILDING YOUR CORPORATE AND EMPLOYEE BRAND

Social objectives in public procurement by the European Commission call for 'Voluntary Corporate Social Responsibility' that represents no legal obligation, but an intangible objective that can make business sense. Attracting highly motivated and capable employees is as much a benefit of building a culture of social responsibility'6 as the ability to qualify for ethical public procurements.

Studies have found that corporate social responsibility is a factor influencing employee engagement, talent attraction and retention, and motivation. This in turn communicates in the overall mission and values making the company a brand recognised by public procurers through various types of engagement.

# ACCESIBILITY FOR THE VISUALLY IMPAIRED IN STOCKHOLM

The city discovered that a convergence of its accessibility agenda and new technologies deployed in the city could give rise to an entirely new solution: e-Adept, developed by Astando, is transforming the lives of thousands of visually impaired citizens.

Stockholm's City Council declared in 1999 its intention to be the most accessible capital city in the world by 2010. To achieve this goal the Easy Access programme was started with the Stockholm Real Estate and Traffic Administration implementing different measures. Initially, investments were made into physical adaptations of pedestrian crossings, bus stops, playgrounds, installing ramps or hearing devices in public buildings.

Yet, these Easy Access measures failed to meet the needs of the visually impaired, representing the needs of about 1.7% of the world population, who petitioned for better solutions. As a result, the digital pedestrian network programme was started in 2005 (now e-Adept).

Astando, a medium-sized company with responsibility for the city's road database was commissioned under its framework contract to develop a digitized pedestrian road network and develop related services.

Stockholm linked the go-ahead to the outcomes of two consultation meetings involving, amongst others, the National Association for the Blind and a newspaper for the visually impaired. Ideas regarding a navigation aid on mobile phones were presented, inviting comments from participants. Shortly after, Astando was commissioned to carry out a pilot project together with its sub-contractors MoSync to investigate the possibilities to navigate using a mobile telephone and the pedestrian road network database.

Meanwhile, the Swedish Post and Telecom Agency had initiated a study on navigation tools for people with disabilities available in Sweden. Easy Access, as well as projects in the City of Malmö (with Regis and Wayfinder Systems), and Dalarna region (Handitek and The Teknikdalen Foundation) were highlighted. The agency offered development funding if groups co-operated and created open services, thereby launching the development of e-Adept.

As a development objective, Stockholm specified that the mobile phone should become a navigational aid for disabled users, without specifying technical details. Development work involved visually impaired end-users closely, and in spring 2011 trials commenced with 20 users testing e-Adept unattended.

## A BUSINESS MODEL TO OPEN MARKETS AND SPREAD THE BENEFITS

Ownership of the project results were clarified by an agreement signed in 2010 by all investors (City of Stockholm, The Swedish Post and Telecom Agency, the Swedish Transport Administration, Astando), making them joint owners of the source code and project results.

Astando's business model is to spread solutions developed with one city to other cities to increase the impact and share costs for continuing development and maintenance. The exploitation agreement by all owners ensures that the software can be spread to other cities without license fees.

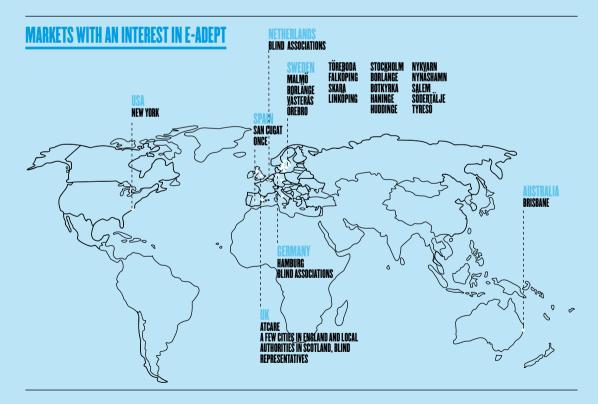
New participating cities fund their share of data maintenance and take responsibility for promoting the solution through their internal implementation processes. Cities are free to maintain their own server functions or contract a service provider, including Astando. Any late generation Nokia handset can be used, which are the preferred devices for visually impaired users because of their Acapela speech synthesis.

Pilots in Stockholm have shown that the direct economic impact of e-Adept on a visually impaired citizen is about EUR 940 per year and for the city as a whole amounts to EUR 2,200 in benefits to the economy per user. Hence, e-Adept offers great value to cities. In Stockholm, pilots have shown that e-Adept would return EUR 17 million to Stockholm against an annual maintenance cost of just EUR 370,000<sup>17</sup>.

Cities appear to have the following difficulties in taking up a solution like e-Adept:

- Allocating a budget for creating a pedestrian road network database
- Handling unsolicited solutions like e-Adept to launch procurement
- Dedicating the right person to lead the process
- Assigning sufficiently motivated people to overcome internal barriers
- Measuring the whole-life cost and benefit of e-Adept

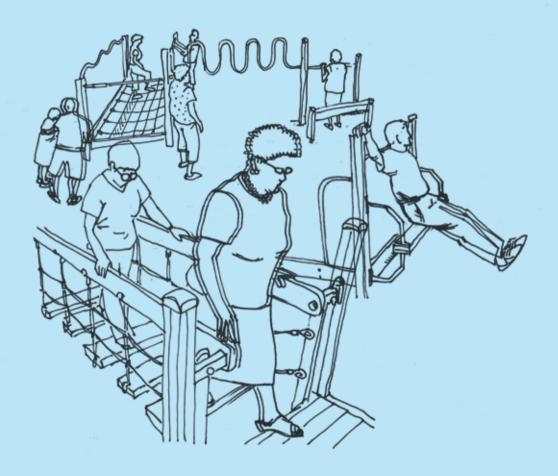
In short, innovation in most cities is stifled by a procurement preference for apparently more predictable traditional solutions, similar to previous investments.



17. "Connected Cities: Your 256 Billion Euro Dividend", Royal College of Art (2010)

# PLAYGROUNDS FOR ALL AGES: BUYING A SOCIAL VISION

Lappset approached customers buying playgrounds with the idea that they are not just children's facilities but community centres for all ages – from o to 100. Local governments in Spain were the first to pick up the vision procuring not just equipment but a community concept with real impact.



Lappset Group is a family-owned medium-sized international company in Finland manufacturing outdoor playground equipment with the highest standards of environmental protection and durability as a provider of long-life outdoor equipment.

To retain a competitive edge as a high-value producer, Lappset invests in research and innovation activities to respond early to major trends in society in partnership with research agency and government customers. This way, Lappset assures a constant dialogue with customers to learn and share new insights that affect the procurement expectations.

One of the research programmes invited children and seniors to take part in a study on how intergenerational groups could play and exercise together. The results were impressive, showing a range of benefits to health, independence and inter-generational connections. Studies have further shown that exercise promotes mental and physical health in all age groups. As we get older, the need for maintaining coordination skills, balance and muscle strength without stress and pressure to perform increases. Outdoor activities also revitalize our senses.

As a result of this project, and based upon experiences of the participating seniors, the company started to develop a series of outdoor exercise equipment for seniors which today are called the Senior Sport equipment.

Lappset's concept for senior citizens comprises a set of Senior Sport products dedicated user groups for aged 65+, installation, training instructions and a guidance service. In June 2005, after around ten months of dialogue around the local authority of Santa Coloma de Gramanet's need to offer more engaging services for the well-being of seniors, Lappset won the procurement of the first Senior Sport installation.

Whilst the subject of the procurement was technically comparable to a playground, the solution comprised a design and combination of components assembled to maximise the social impact in the community. Further, Lappset included training activities in which their in-house physiotherapist instructed the leader of the Santa Coloma de Gramanet daycentre to become a qualified instructor for his senior clientele.

In 2006, Diputacion de Barcelona, an association of local governments in the province of Barcelona ordered 35 Senior Sport installations. The associations typically order equipment in bulk with a view to providing solutions to the ageing society and complementing the services of day-centres with physical, outdoor activities.

In 2010 Senior Sport had been supplied to three out of the four provinces in Catalonia, and significant progress is being made in building on the high impact achieved in the first deployments to reach broader Spanish and international markets.

## COMPETITIVE EDGE BY REDEFINING SOCIAL IMPACT

Lappset did not follow trends in procurement but instead decided to lead the market into addressing a new area of major societal concern. By focusing on the ageing society as a new theme and launching its 0–100 concept, Lappset helped its customers to re-think what outdoor play equipment could achieve and thereby positioned itself as a first-mover in a wide-open market place.

Media coverage, satisfied citizens, offering services to complement the equipment all contributed to rapid initial success but were also backed-up by a company with a sustainable environmental policy and an accountable value-chain that met the scrutiny of other social and ethical concerns.

Furthermore, Lappset opened a new chapter of Design for All by designing equipment that not only serves seniors or children, but is happily used across generations.

# STOCKHOLM COUNTY: BUSINESS RISK & VALUE IN RESPONSIBLE PROCUREMENT

Instrumenta AB supplied surgical gloves made in Pakistan under terms of the Code of Conduct of Stockholm County. An independent spot-check revealed breaches of compliance, triggering a continued improvement programme to mitigate future risks.

Stockholm County Council implemented a Code of Conduct in 2007<sup>18</sup> as part of its contract conditions to all suppliers. This formed part of a sustainable procurement pilot programme jointly carried out with two other major Swedish counties. All suppliers must subscribe to the conditions stipulated in the Code of Conduct for all parts of their supply chain and and may be subject to spot checks at which the contracting authority verifies compliance.

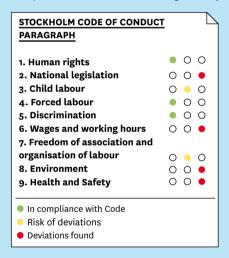
SwedWatch, a non-profit organization monitoring ethical procurement and conduct of companies, in 2007 exposed major ethical misconducts in the medical instrument industry that led to an increased public awareness of the origin of goods commonly used by public organisations<sup>19</sup>.

Instrumenta AB, a Swedish SME won a contract to supply surgical gloves to Stockholm County Council declaring its fulfilment of the Code of Conduct conditions of contract. In 2010, SwedWatch was commissioned to carry out a compliance check with the Code of Conduct. Special attention was placed on the role of the Pakistani suppliers of the gloves, based in the city of Sialkot which had been the focus of SwedWatch's 2007 revelations on the risks in the supply chain of simple healthcare products, including the risk of child labour.

The compliance check was carried out in partnership with Pakistani NGOs who visited the suppliers and their subcontractors, interviewing employees and management,

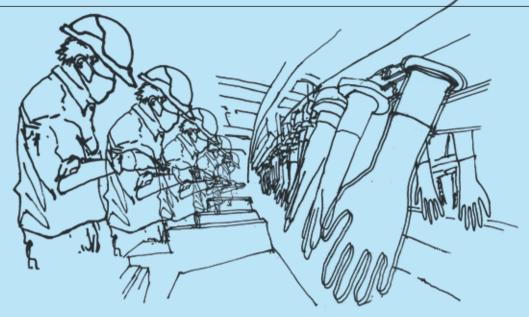
and verifying certificates of inspection. Compliance was checked with Instrumenta itself through material proof of their own adoption of the conditions as well as by their suppliers.

The spot check resulted in the following summary report:



With significant evidence of non-compliance, Stockholm County Council was legally in a position to terminate the contract with Instrumenta as there was a material breach of the Code of Conduct terms. As a direct result of the compliance check, the contract with Instrumenta was not

18. "Social responsibility in procurement. Code of conduct for suppliers" Stockholm County Council, Skåne Regional Council and Region Västra Götaland (2010) **19.** "The dark side of health care", SwedWatch (2007)



extended and instead awarded to Tillquist, a competitor that had the second best-value proposal in the original tender. Stockholm County Council felt re-assured by Tillquist as the company had been exposed in the 2007 SwedWatch report and had since implemented a continual improvement programme providing evidence of progress towards greater social responsibility.

SwedWatch recommends that contracting authorities do not terminate contracts with non-compliant firms but rather work together with them to resolve the issues. Instrumenta took the situation as an opportunity to instigate a series of reforms in their operations and those of their suppliers and so ensured they were well positioned for future public tenders.

## COLLABORATE: CHECK, LEARN, IMPROVE, PROVE COMPLIANCE

Whilst many authorities implementing socially responsible procurement actions report that it is very difficult for them to collect evidence of compliance by subcontractors in the lower parts of the supply-chain in third countries, the SwedWatch compliance checks have shown an effective mechanism to expose conditions and realities, and cause non-compliant suppliers to review their processes.

At the same time, the process also highlighted generic conditions that counter efforts to increase compliance, such as the fact that prices for manufacturers had not risen since 1982, causing significant economic pressure hindering adoption of environmental, health and safety and labour protection measures.

Stockholm County Council, in the end, had to opt for the second-cheapest provider (Tillquist) who had adopted measures to fully adhere to the Code of Conduct. This indicates that as social procurement standards begin to be established as the norm there may be a move towards acceptable price releases.

## SWEDWATCH RECOMMENDS QUESTIONS FOR SUPPLIERS:

- 1. Do you have a person at management level responsible for ethical and social requirements?
- 2. Do you have knowledge of where the products supplied under the contract are made?
- Do your requirements include the ILO's core conventions, Article 32 of the UNCRC, the country's safety and labour laws, and rules on minimum wage?
- 4. Are the social requirements part of your contracts with suppliers?
- 5. Have you inspected your suppliers regarding social responsibility?
- 6. Have you set targets and adopted a timetable to resolve any known problems?
- 7. Do you work in any way to counter union discrimination at suppliers?
- 8. Have you adapted your business to enable providers to meet the social requirements?

# RECOMMENDATIONS

# Incorporate social considerations in design & delivery

Consider whether your company and products are socially responsible and whether you could strengthen compliance with expectations by public procurers by incorporating a higher degree of social considerations in your design, delivery, sourcing and operations.

# Plan the premium the market will pay for social responsibility

Plan the role of social considerations in the value added by your products and services and study your market segment closely to identify if premium prices have been achieved in procurements in your area that have valued social responsibility.

# Engage customers in dialogue about whole-life social procurement value

Engage your customers in a dialogue explaining them the whole-life value proposition of social procurement and motivate them to adopt better practices and whole-life performance evaluation.

# Transform your business through universal design

Consider if universal design approaches and radical innovations may lead you to entirely new and more compelling value-propositions with which to a) open new markets and b) move out of commodity supplies into high impact solutions.

### Select & adopt key emerging standards and certificates

Plan compliance with emerging product and service certifications that are used as references by public authorities such as Fairtrade to build a portfolio of evidence of your socially responsible business. Understand the value and integrity of different certificates – the State of Sustainability Initiatives project aims to provide comparisons and guidance<sup>20</sup>.

# Pick early and pioneering markets

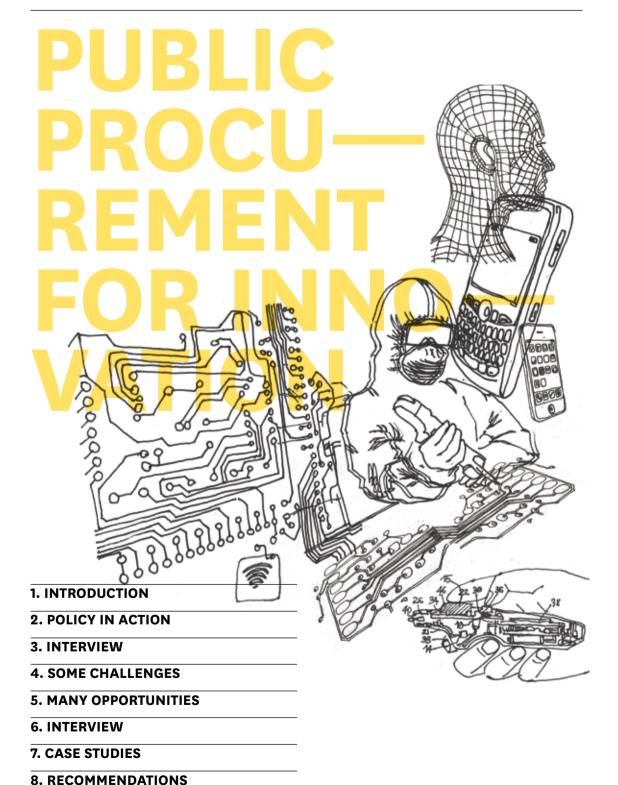
If your products have a high degree of social integrity consider which markets are the pioneers in socially responsible public procurement and which are those picking up the issue to prioritise market entry.

# Build your brand and attract talent through social responsibility

Consider whether adopting a corporate social responsibility policy implemented across your organisation can help your business to gain not just more contracts, but strengthen its employer brand and overall recognition.

# Investigate your own supply chain

Use social criteria or standards to review your own supply chain carefully, including sub-contractors to your providers and identify key risks. Assign management responsibility for improvement and compliance.



## INTRODUCTION

Innovation is a growing agenda for governments to respond to sustainability, quality and technology challenges. Innovative procurement is a set of tools to buy the development of new solutions or advancement of known ones through R&D and innovation.

Europe is only one of several global economies concerned about whether traditional, cost and specification-based public procurement is an effective way to obtain solutions to public service acquisition needs. As a result, measures have been implemented under the umbrella term of procurement for innovation broadening the possibilities public agencies have to purchase not only ready goods but also R&D (Research and Development) activities and to enable producers to offer more innovative solutions.

Several trends coincide that put innovation high up on the policy agenda to achieve a variety of goals:

**Quality of services & experience:** Governments need to deliver highest quality services whilst facing budget cuts.

**Competitiveness:** Governments want more competitive economies aiming to use public procurement to support development of new solutions for global markets.

**Sustainability challenge:** Economic, environmental and social impacts of investments call for more integrated solutions.

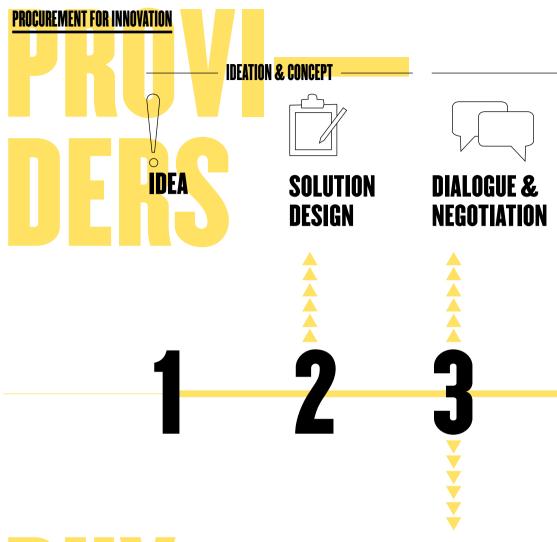
**Technology change:** Growing availability of technologies such as the internet, mobile phones, electric vehicles and sensors can radically transform services to create new efficiencies, leaps in quality and new challenges.

**Society is changing:** Societies are ageing, meaning that the financial burden on a shrinking working-age population is unsustainable without innovations in healthcare, assisted living and therapies.

**New Challenges:** Migration, internationalisation and changing legislation require public organisations to change procedures.

Procurement for innovation is seen as a recipe to deal with a whole package of challenges and should offer a major opportunity for growth to companies that embrace new technologies and services. The European Union has established six lead market initiatives' in which societal challenges coincide with opportunities for companies to become world-class competitors in major global markets: e-health, sustainable construction, protective textiles, biobased products, recycling and renewable energies.

Technically, procurement for innovation is a special form of interaction between public purchaser and private producer, ususally resulting in a form of dialogue. It differs from traditional cost-based tendering in which pre-defined parameters such as specifications and price determine the outcome. Traditional procurement reaches its limit when the solution to a challenge is unknown and needs to be found through R&D, exploration or design processes.





ANOUNCE-MENT



**NEED EXPLORATION** 

MARKET Intelligence



# PARTNERING / RISK SHARING **COMMERCIALISATION MARKETING SALES TEST TYPE** REQUEST FOR PROPOSALS **PILOT EVALUATION**

PROCUREMENT FOR INNOVATION

**COMMERCIAL PROCUREMENT** 

## POLICY IN ACTION

International trade regulations allow governments to use exceptional procedures to procure innovations. National governments are at varying stages in adopting or implementing policies, creating a diffuse marketplace with some major opportunities.

Outside the defence industry, experiences with innovative procurement remain limited meaning that few precedents and legal challenges have been established.

The European Union plays an active role through its support programmes on competitiveness, innovation, technology uptake, energy and sustainability. Such programmes provide funding to government agencies that can co- or fully-finance procurement of innovation, pilot implementations or training of government agencies on using innovative approaches to solve major problems.

Five instruments anchored in European procurement regulations are aimed at promoting innovation:

**Pre-Commercial Procurement**<sup>2</sup> is used to varying degrees in Europe and concerns R&D in the phase before commercialization or full deployment. R&D can cover activities such as solution exploration and design, prototyping through to the development of a limited volume of first products or services in the form of a test series. Authorities are generally encouraged to divide large projects into smaller packages to open them to SMEs and to retain flexibility in contracting different phases.

Governments are expected to consider the ownership of intellectual property in negotiations of pre-commercial procurement agreements with suppliers to encourage diffusion of innovations in the market place, in return for discounts in development costs.

Flanders, the UK, Belgium and the Netherlands are active users of the procedure already, whilst countries like Sweden and Finland are presently reviewing implementation. Markets considering adoption are likely to launch pilot programmes in the coming years.

**Negotiated Procedure**<sup>3</sup> (see page 18) can promote innovation by allowing the contracting authority to consult with several producers to define the final contractor through consultation and negotiation as long as: a) tenders are irregular or unacceptable; b) providers cannot establish the price; or c) the contract is for research, testing or development<sup>4</sup>.

Competitive Dialogue was introduced in 2004 as a new procedure intended to be used in complex projects where all aspects of the procurement need to be discussed with candidates. The dialogue is conducted at a very early stage in the procuring process on a one-to-one basis with several providers, before the basis for the tender is drawn up. Participants are invited and selected on the basis of a descriptive document. They may be paid for their effort when engaging in very complex or extensive dialogues.

**Forward Commitment** procurement is a process in which the government makes tangible declarations of demand, providing the market information of unmet needs and agrees to purchase a product or service that currently may not exist.

**Design contests** are primarily intended in areas such as procurement of architecture, planning, engineering or data processing in which a design is chosen by jury and implementations are tendered out separately.

- 2. "Pre-commercial procurement: driving innovation to ensure high quality public services in European communities", COM (2007) 799 final
- **3.** EU Public Public Procurement Directive 2004/18/EC
- **4.** communities.gov.uk/ documents/localgovernment/ pdf/annex-3.pdf

In the US, innovative procurement has a long tradition a strategic tool for building industries of special importance to the state. The Small Business Innovation Development Act requires central government departments to set aside 2.5% of R&D programmes for small businesses with EUR 12 billion paid out to SMEs by 2010.

In response to the economic crisis, the US Recovery Act has generated new opportunities in innovative procurement worth about EUR 45 billion to address healthcare, infrastructures, green energy and public services. Roughly EUR 114 billion, or 20% of spending of the Recovery Act go to SMEs. It is open to international providers, with, for example European firms securing more than two thirds, or EUR 700 million, of the wind-energy contracts in the first half of spending.

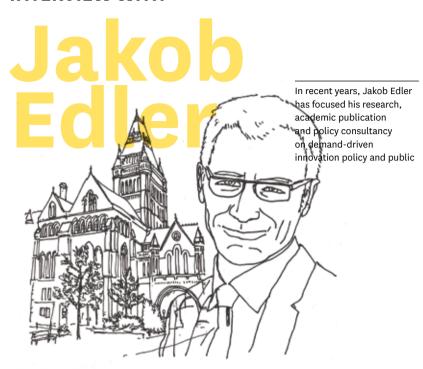
### US RECOVERY ACT INNOVATION SPENDING (EUR MILLION)<sup>5</sup>

18.752 7.268 72.684 47.245 21.805 7.632 ENERGY EFFICIENCY IN FEDERAL 3.271 2,471 1.454 58.147 43.610

29.074 21.805 21.805 INCREASE ENERGY EFFICIENCY IN LOW-18.171 13.810 8.359 7.995 30.527 **MODERNISATION OF** 18.171 45.271

29.074

#### **INTERVIEW WITH**



Professor of Innovation Policy and Strategy, Executive Director, Manchester Institute of Innovation Research, University of Manchester

procurement for innovation.
He is currently co-leading
the large scale project
"Understanding
Public Procurement
for Innovation". 6

Professor Edler, Innovative Public Procurement is meant to deliver positive impacts such as more efficiency in public services, cost reductions, greater social and environmental impact, the creation of lead markets and entirely new service models. How would you define the main opportunity innovative public procurement can represent for European SMEs?

In cases in which public buyers are willing and able to engage in innovation procurement, the main opportunity for companies arises from finding a public client that shares the risk of adopting an innovation, and by doing so creates a test market for novel ideas that can trigger off a broader market, both public and private. Even more, public needs – well defined and articulated – can trigger off new ideas for solutions. Engaging with intelligent public buyers can thus push companies to develop innovations. SMEs are especially well placed for those new solutions as they are often more agile in reacting to new challenges. The biggest challenge for the SME, therefore, is to actively search for opportunities to approach public buyers, to engage in innovation oriented discourse. Moreover, SMEs can benefit from being second-tier suppliers in larger deals done by large companies.

This, however, depends on the ability of the first tier suppliers to pass the innovation impulse from the public sector on to the supply chain.

We are aware of the many variations among national, regional and local governments and the gaps between policy vision and actual realities. Should SMEs in Europe devise their product and service strategies around more innovative public procurement? What tangible results can they expect to see in the short- and medium-term?

This relates strongly to the answer given above. Unfortunately, the standard across Europe still is conservative, efficiency driven procurement rather than innovation procurement. But there is a window of opportunity at the moment as innovation procurement experiences a great push from the EU and national governments. Lip-service has turned into a rethinking of the benefits of innovation procurement already. All companies, and certainly SMEs, need to stress that through providing innovations to public clients they contribute both to the efficiency and cost-savings agenda on the one hand and the need for improved services on the other hand. Each offer to public buyers must tick both boxes, and this can best

be achieved through stressing the total cost of an innovation, whereby the high initial price of a new service or product pays off over its life-cycle.

This total-cost approach must be at the centre of SME strategies, to support those public buyers that go for innovation in their business case. If this is established, SMEs stand to gain a lot from innovation procurement, using engagement with public buyers as a laboratory for new solutions and a test bed for existing innovations.

You are an expert in the development of lead markets, i.e. those markets for advanced products and services that are supposed to be more open to innovation. What would be your reflections on such decisions and are lead markets going to be national, trans-national regions (e.g. Scandinavia) or groups of very agile and sophisticated cities and regions that spearhead new developments?

There is no uniform answer to this question. It depends on the kind of innovation and most importantly the structure and properties of the market. In a "lead market" new technologies or services are introduced which may later the design of these which is generally accepted as "dominant design" in the global markets.

Innovations introduced in lead markets (often also called test markets) thus diffuse broadly. Lead markets have a set of characteristics. For various reasons buyers in those markets are able and willing to pay a higher price for a novel idea, they do not rate the risk and cost of adoption very high, but cherish the potential added value of the innovation.

In addition, lead markets show good general framework conditions for the product or service and also often the capacity to generate the innovation (supply and supply chain competencies). For different product and service categories, lead markets are different. The decision which market to target as test and lead market is dependent on the specific innovation, it is different for any category of product. Companies have to look at the range of conditions for launching an innovation, and, above all, need to understand if the demand pattern in their chosen launch market is likely to be developing in other markets as well once the innovation is introduced and diffusing. If demand is too specific, companies may successfully create niche markets, but not lead markets. We have found that in many public organisations market and technology intelligence is low and not systematic, with little evidence of what knowledge they had upon publishing their calls.

# What can SMEs that want to use innovative procurement opportunities to open new markets do to assure that procurement agencies are in fact aware of their solutions and seriously consider them for procurement?

While public procurement is not driven by those inside the public bodies that understand the application of innovation and the underlying markets, companies, and especially SMEs, face a tricky challenge.

The main message would be: engage, engage, engage.

SMEs should be pro-active, not only waiting for tenders, but establishing relationships with technical and procurement people in public bodies that have or may have a need for their solutions. They must be aware of the internal fragmentation within public bodies, thus supporting those within the public body who actually understand the added value of innovation when trying to get the argument through.

It is all about a business case that needs to be attractive for those who want to have a better solution and those who traditionally drive the procurement process. Equally, SMEs should use their larger private costumers in their engagement with public bodies, presenting joint cases to them, being present at fairs etc. Furthermore, it is important that all the history of supplying to public bodies is well documented and success stories of innovation supply to public bodies are spread continuously.

Companies often appear not to trust the fundamental idea that innovative procurement can lead to new solutions that can be commercialized across Europe and beyond. Could you point us to any evidence that in fact even smaller companies can invent new solutions in partnership with a procuring agency and find open markets elsewhere?

There is no reason to believe that SME are structurally unable to supply innovation to public bodies and therefore diffuse their innovations more broadly. As stated earlier, this is possible in those cases in which a certain new solution is likely to be demanded elsewhere. For example, in the whole area of sustainable procurement, if a small company comes up with an eco-innovation for waste management in local authorities, why should other local authorities not take it up? For instance, various firms, mainly SMEs, have developed new services around electronic ticketing linked to an electronic identity card in cooperation with local bodies that took the risk. Further diffusion of those services is underway. It is challenging, but it is possible as long as there is a similar need elsewhere.

## SOME CHALLENGES

Consultations with public and private decision-makers highlighted four challenges to successful procurement for innovation. Initiatives are underway to overcome these, but companies should be aware of issues that remain likely to affect their participation in innovative procurements. Companies should further consider becoming part of solving these challenges through active participation.

## FLAWED AWARENESS AND MARKET INTELLIGENCE

The lack of knowledge on behalf of the procuring authority on the current state of the art of the planned procurement may distort the creation of fair opportunities. If a contracting authority does not know what is possible, how can it invest in sensible R&D, or instead use an available solution to avoid re-inventing the wheel?

The EU Expert Group Report on Public Procurement for Research and Innovation<sup>7</sup> raised the concern that contracting authorities need to be better informed and must establish mechanisms for companies to present new solutions that are not solicited by tenders, but may significant value.

## LACK OF COMMITMENT TO INNOVATION IS THE BIGGEST BARRIER

When companies enter markets with innovative solutions they often discover that lean, radical and high-impact innovations are not well-received by the public buyers. Whilst innovation in public procurement should be driven by balancing quality of service, cost effectiveness and sustainability impacts, many public authorities remain conservative rather than innovative in their procurement decisions.

Companies approach innovation often from the total cost of ownership principle, highlighting significant longer-term cost savings to public authorities as an argument for innovation. Yet, departments always fight to retain or increase their budgets and therefore may not have an incentive to cut costs but instead look for other efficiencies.

Procuring innovation requires a leap in the commitment by public leaders to announce challenges, take risks, open markets and improve decision-making.

#### **COST SHARING IS NOT A REALITY**

All agencies and companies consulted for this guidebook have indicated that it has practically never been possible to come to an arrangement on sharing costs (or giving a rebate). As a result of failed negotiations, authorities tend to cover the full cost of R&D and insist on owning the full intellectual property rights, thereby making diffusion of solutions harder.

In cases where companies have tried to exploit the results of innovation projects, they have largely found that markets were less open than expected, discouraging them from taking exploitation into account in future project negotiations.

#### MARKETS ARE NOT TRULY OPEN

Despite regulations to the contrary, procuring authorities tend to try to award contracts to local providers even if this means copying solutions existing elsewhere or accepting higher costs. When it comes to innovative procurement, trust appears even more of an issue since the exact outcomes may not be known. Furthermore, unreasonable requirements on market references affect both large and small companies adversely and seem to serve the purpose of exclusion rather than opening possibilities.

Companies and public leaders consulted for this chapter reported that the often quoted legal insecurity has rarely stopped an innovation project to be implemented when all stakeholders were fully committed to the programme.

**7.** "Public procurement for research and innovation", Wilkinson Report (2005)

# **MANY OPPORTUNITIES**

Public procurement for innovation is coming, yet it is caught in a transitional stage. Interested companies should allocate sufficient resources and carefully consider their role in this dynamic environment.

#### A TRANSITION PERIOD

Procurement for innovation remains a process of transition rather than a concluded policy. Despite this, significant opportunities exist when looking at the macro-trends of policies and planned investment into areas such as energy, climate change, transport, and health.

Innovation will be required to achieve the objectives stated by governments not just of the society as a whole, but their own public services. Yet, what remains less clear is how procurement for innovation will be implemented and whether the majority of public agencies will accept innovation as an inherent organisational value.

Companies should therefore devote sufficient resources to planning any engagement with procurement for innovation. Understanding your customer not just in terms of policy announcements but also their ability to act and execute will only be the first step.

You are likely to enter relatively uncharted territory also in the forms of contract together with your customer, adding to insecurities on all sides. Finally, it is unlikely in the short-term that public authorities will have a single protocol and approach to procurement for innovation, meaning that you in fact may need to spread best practices amongst your customers to support the process.

Innovative procurement may also be considered the high-level aspect of the objectives of green and socially responsible procurement, as neither are feasible without a degree of innovation and experimentation. In all of these, we highlighted the opportunities and variations that can determine how your company may engage in innovation projects with the public sector.

## INNOVATIVE COMPANIES SHOULD THRIVE

For small- or medium-sized companies with innovation capabilities, innovative technologies or innovative business ideas the market should offer significant growth opportunities as a direct result of the increasingly higher profile that innovation in public procurement is gaining. Yet, the tangible short-term markets may be fewer than the policy noise suggests.

Regional and national agencies consulted for this chapter are consistent with the report from Sweden, rated second in the World Economic Forum's Global Competitiveness Report 2010–2011, that the country is committed to procurement for innovation yet remains engaged in a policy debate on how best to address and organise actions in the area.

#### **INTERVIEW WITH**

#### Senior Vice President Oracle Corporation

Global Public Sector, Healthcare, and Education



## Dr Rada, what in your opinion constitutes innovative public procurement?

There can be many definitions, I will divide them into four:
- Process: How a government goes about understanding the problem it wishes to solve, looking at best practice in other governments as well as the private sector, consulting vendors on their opinions ahead of issuing a Request for Information or Request for Proposal.

- Objectives: How ambitious they are: if they wish to streamline or automate processes, re-think the way the agency or group works or only provide a layer of productivity increase. If they wish to use procurement to encourage the development of new technologies (eg. electric fleets) or play safe with existing ones.
- Products: Encouraging open standards, combining open and conventional sources in software, encouraging interoperability and using mobile services. Be ahead in terms of supporting the trends in the industry (eg. use of standards). - Contracts: Many of the IT implementations in the public sector can be long-term multi-year projects, similar to building an airport or a port infrastructure yet they are treated differently and the consequence is that governments end up with point solutions, rather than platforms and then the rotation of personnel makes the problem worse. A multi-year project (Smart City is a good example) requires many components to be implemented over a long period of time and with organizational changes. This needs much more innovative forms of procurement. One can start with modernizing the revenue side (tax, fees, etc) to create a solid base and then move onto the many services for citizens. In other words, innovative public procurement requires innovative processes, objectives, products and contracts.

Europe is promoting the use of innovative procurement policies to stimulate innovation in the overall economy to reach the goals set out in the Lisbon agenda. From your insight and experience, what are the opportunities that innovative procurement could bring?

The main opportunity is to look for creative solutions that, by definition, involve a combination of companies. Examples include critical areas such as local lighting, to reduce consumption but also to reduce local government costs. These projects require many players big and small. So, projects that need to solve big problems one step at the time. Another example is closed-loop energy systems, community cloud computing which can serve local governments, schools, the police and others. In other words, project-based rather than point-solution based procurement. There is a case to be made for government IT to be treated as infrastructure projects in many if not most cases rather than seen simply as providing fragmented solutions to individual agencies, local governments or citizens.

With your global perspective on the reality of public procurement around the world, could you illustrate the differences between policy declarations and the realities for businesses that try to sell innovative products and services? Are the European and other major markets already driving innovation through public procurement?

The reality is that procurement is seldom innovative in the public sector from a technological or a project point of view. There are many reasons including risk aversion by civil servants and their political bosses, the inertia of a system where for example, every agency believes that it is different even from similar ones in other countries. This precludes platform sharing, inter-operability and so on. In many European countries they continue to heavily customize systems which means that they cannot migrate to the next technology or take advantage of upgrades. Part of the reason is that public sectors are driven by administrative laws that are specific to each country, or even a state, yet this assumes that "specific rules" have to become components of the system. This is not the case anymore as in IT systems today you can architecturally separate rules from their execution and change the rules using natural language rather than "hard code" them on the software. This is a critical innovation and changes the way we look at systems.

One good example is in the field of security in law enforcement, where everybody criticises the information silos as an impediment to better policing yet the Requests for Information and Proposals that explicitly ask for how to overcome this with unified platforms are rare to non-existent.

What, in your experience, are the projects in which public procurement has really delivered an impulse to innovation and thereby also helped to create new markets for Oracle and other companies?

Shared services are the one that comes to mind. Smart grids could be another and also other "smarts" like smart roads and cities, but they are not seen in this way. As I explained before, this requires the public sector to buy architecture and a road map where individual products might change over a period of 3–5 years of implementation. Interestingly these are infrastructure-type of investments as this is what shared services are as well as the forthcoming G-Clouds.

Small companies considering investment in sustainable and innovative products and services will see their success depend largely on whether their products are considered only on cost or also against broader criteria. What advice would you give SMEs in planning their strategy for European and global public markets?

As in my earlier comment, the question is how the requirements are outlined and if the intent is to encourage innovation on, for example, environmental technology then this should have more weight in the evaluation. My advice to SMEs is to evaluate the project well first and foremost, especially as the public sector asks for terms and conditions which might be very strenuous.

What are the criteria you would recommend for choosing early markets for innovative solutions and what do you think will be the determining future drivers on innovation and high value-added sales for such companies (e.g. green, fair-trade, social considerations, open-systems, private finance)?

Smaller companies should focus on specific niches (these can be very large), create a clear reference and then scale qualifying in detail the deals as well as which market and countries to focus on. Broad approaches will not work in the medium term but focused ones have a greater chance of success.

Electronic public procurement is intended to provide better access to international markets, greater transparency and should extend the reach of public procurement tenders. Yet, it appears that platforms are fragmented and may not offer unified intelligence on global markets and may not in themselves be used as instruments to drive innovation.

This is correct. Furthermore sometimes countries require references and examples in their own territory and even EU references are not considered valid. This is not only detrimental to the common market but also to the capacity of SMEs and even large companies to grow and participate.

This requirement should be explicitly forbidden in the EU.

# MARKET FOR SERVICE INNOVATIONS IN CITIES

Together with forty local governments Living Labs Global has developed effective mechanisms to help authorities collect market intelligence and launch innovative procurement projects in partnership with 450 companies and research centres from around the world.

Systematic market intelligence remains a major challenge to public buyers who try to find solutions to new challenges, especially when it comes to technology-based services. At the same time, smaller companies that develop high value-added services for cities have faced an impossible challenge to understand the needs of a public sector market that globally consists of some 567,000 local authorities.

By definition, innovative procurement should be the instrument for governments to purchase new or advanced solutions to meet their challenges, yet few local governments actually have a systematic market intelligence process in place. According to the City of Stockholm, whilst 3–500 public employees participate in their e-services initiative, a EUR 65 million investment programme, it is no-one's job to see if adequate solutions may have been developed elsewhere. Hence, all projects start from scratch relying on framework contractors for solution development.

For cities, this means that by default the wheel is being reinvented in each project. For smaller companies that develop such niche solutions and may not be a regular contractor to all relevant authorities this effectively cuts them out of their own market since they never learn about the need in the first place.

#### THE COST OF TRANSPARENCY

Companies therefore typically resort to unsolicited proposals to cities, which can come at a cost of EUR 7,500–12,000 per city and typically generates 10% interested leads and as little as 2% in contracts. What is more, with public authorities not having procedures in place to receive unsolicited proposals, companies are likely not to receive any feedback on their proposal that could help product development.

As a response to these conditions Living Labs Global, a non-profit association based in Copenhagen since 2004, has brought together 40 cities and 450 companies producing innovations to provide deeper market intelligence, a process for unsolicited proposals and introduces pilots as a valuable pre-procurement step. Importantly, it cuts the cost of contacting cities by 99% through centralising the collection of market information and making it openly accessible.

To achieve this, Living Labs Global provides the following processes:

Companies present their solutions to cities in the form of concise Showcases that are regularly reviewed online by some 60,000 users from 3,000 cities around the world.

#### Cities present their challenges through calls for pilots,

in which companies are invited to present Showcases for an opportunity to receive full (non-financial) support from the city to pilot their solution over typically a 6-month period, helping to evaluate impact before procurement specifications are written.

**Cities and companies benefit from a documented evaluation process** offering varying depths of evaluation depending on whether a city employee is generally informing itself about the state of art in a field, or whether it is selecting a solution for piloting with help of an international evaluation panel. In all cases, the process is documented and useful feedback provided to companies.

Cities and companies meet regularly and maintain discussions through regular Living Labs Global Summits around the world.

#### **UNLOCKING INTERNATIONAL MARKETS**

This process has opened a significant number of procurement opportunities for innovative companies with local governments. In a market where the large number of local governments have no unified voice and as buyers rarely communicate their challenges and demand, Living Labs Global provides companies with important real-time intelligence on emerging public procurement interests.

This process has delivered a more transparent preprocurement process, and also helped to provide companies with confidence in entering a lead market of 40 cities with a total of 120 million citizens. In the case of Urbiotica's Urban Waste Management System (a case covered in this chapter), or Astando winning the call for pilots for 'The Future of Biking' in Copenhagen the two small companies have rapidly moved from inventing a new solution to delivering first international market experiences.

Efforts of working with cities have paid off by helping them to become more engaged in working with international companies to identify innovative procurement opportunities. Living Labs Global together with the City of Barcelona has, for example, co-organised 14 international matchmaking summits with companies delivering innovative solutions to cities. Its 22@ Urban Lab is now a single point of contact for companies submitting unsolicited proposals for innovation and pilot projects to the city with a guaranteed response time and report.

## CONNECTING LARGE AND SMALL SUPPLIERS

Since 2010, large companies like Oracle Corporation with a major public sector client base in high-technology have worked with Living Labs Global to build an eco-system of small companies as partners for innovative public procurement projects that require niche expertise, or specific high value-added solutions.

This allows small companies to become part of the supply chain and benefit from the global reach of marketing, lobbying and intelligence of a major global firm. The online community of buyers and innovators continues to develop with a plan to engage 500 cities and 5,000 companies as active collaborators. The Living Labs Global Award is considered a premium certification of excellence, presented in 2011 by a consortium of eight global cities from Europe, Asia, America and Africa. For the 250 participating companies, the Award helps also to receive a signal from the market as to their emerging demand, and open the next round of pilot opportunities.

#### LIVING LABS GLOBAL CITIES AND MEMBER COMPANIES



# ENTERING THE GLOBAL MARKET WITH A KILLER-APPLICATION IN TRANSPORT

Trip Convergence, a small company from New Zealand experienced first-hand how hard it can be to launch an innovative solution into the public procurement system and discovered that persistence, bigger thinking and teaming up with end-users may just turn out to be better investments.

Trip Convergence Ltd is a start-up ridesharing service provider and was founded by two enthusiastic entrepreneurs in 2004 in Auckland, New Zealand. The company was formed to commercialise 'express carpooling', a system for carpool formation that the co-founders had invented and begun the patent process for.

Although located in New Zealand, the company is seeking markets for its innovation worldwide to commercialise its patents covering formalised express carpooling in New Zealand, Australia, the USA, and pending in Canada. Despite a grant for U.S. market development by New Zealand Trade and Enterprise, Trip Convergence have found a number of barriers in entering markets. These experiences are indicative of some of the challenges also faced by other companies seeking to benefit from innovative public procurement opportunities.

In particular, innovators are faced with a lack of available funding or procurement programmes that can advance their solutions. Trip Convergence focused on building funding opportunities for research, development and deployment through three lines of activities:

**The political process**, lobbying elected officials to understand and support express carpooling.

**Unsolicited presentation**, by informing regional and city transportation agencies.

Applying for grants tendered by relevant research, innovation and pilot programmes.

The goal of the activities was to pave the way for public procurement. Two common responses from both politicians and agencies illustrate the challenges faced in initiating innovative procurement processes:

"How can we consider buying from you if you are the only supplier of this service?

"We will decide what we want to do, and call for proposals. We are not interested in unsolicited ideas."

The team behind Trip Convergence has invested about EUR 275,000 into developing their solution, intellectual property protection, developing international markets, carrying out an IDEA project for the U.S. Transportation Research Board, and initiating an independent Auckland project with several supportive external stakeholders. About EUR 165,000 of these costs were covered by project grants and revenues, the majority through the market development grant by New Zealand Trade and Enterprise.

## CREATING A MARKET, NOT JUST SELLING

After 6 years of extensive and costly efforts, the team has adapted their strategy and is helping to launch the international Ridesharing Institute (starting in 2011) to set realistic targets and develop holistic strategies based on research. The Ridesharing Institute has the target of doubling the number of ridesharers by 2020, thus inspiring decision-makers and investors and creating a common action plan from which Trip Convergence hopes to benefit.

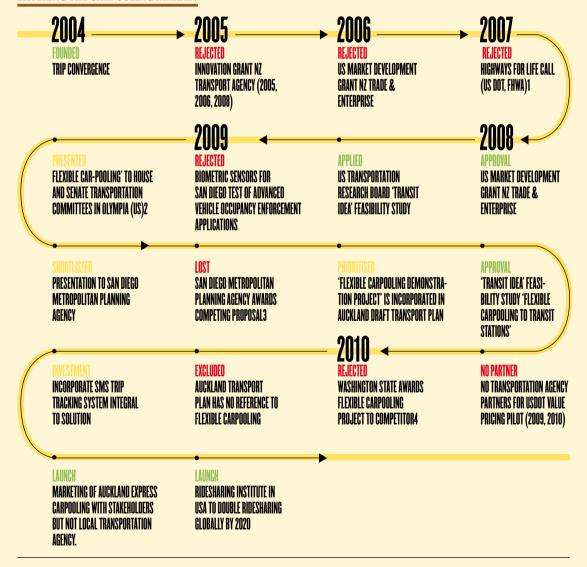
#### THE EXPRESS CARPOOLING PROCESS



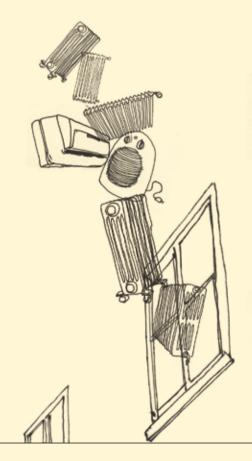
In San Francisco this system is known as 'casual carpooling' and 'slugging' in Washington DC where it got started in the 1970s and grew of its own accord on corridors that had special carpool lanes with HOV3 (carpools with at least 3 people) and HOV4 requirements. About 10,000 people participate each day in each of these cities.

The addition of pre-screened membership, transfers of valuable ride-credits between riders and drivers based on trips taken together, and the establishment of well branded and conspicuous meeting-places adapts the above system into a more formal part of the transportation system.

#### **ENTERING THE CARPOOLING MARKET**



# CREATING THE MARKET FOR INNOVATIVE ENERGYEFFICIENT WINDOWS



In a cold country such as Sweden conserving energy in houses generates real savings. Windows were the weak spot of energy conservation, leaking ten times more energy than walls. After triple-glazing was introduced in the 1970s there were no significant new improvements until 1990.

As a result, the Swedish Government Agency NUTEK (today the Swedish Energy Agency)<sup>8</sup> arranged a technology procurement under its Innovative Technology Procurement Programme for more energy-efficient windows. Recent advances by glass producers bringing more insulating glass onto the market made it feasible to attempt a push in energy efficiency of windows.

## GROUPING BUYERS AROUND AN ATTRACTIVE GOAL

NUTEK set up a call with the objective of reducing energy loss of windows by 50%. One challenge in the building industry was its high degree of fragmentation and absence of buyers willing to take the risk of a technology leap. Hence, the call was organised together with groups of private sector buyers to guarantee a demand and minimum take-up in the market.

With the government not actually buying any windows itself, but funding the technical advance, it was critical that the

8. This case was elaborated with material provided by VINNOVA, the Swedish Innovation Agency.

With growing energy concerns, the Swedish government observed that windows were failing to live up to their significant savings potential. NUTEK's technology procurement grouped buyers and public subsidies to reward innovative mid-sized manufacturers that doubled energy efficiency.

buyer group committed itself to procuring a certain number of square meters of the windows that met specifications. To add further incentive, the government offered a subsidy of 30% to any new windows sold up to a certain total volume. Experts were consulted in developing the specifications for the call including interested potential customers in the buyer group, experts and representatives from several Swedish public housing organisations.

Upon publication, the predominantly medium-sized manufacturers expressed two concerns. One was the technical challenge presented to them and the other the willingness of the market to adopt the products beyond the initial buyers group. Yet, the significant energy cost savings to end-users also provided a strong incentive that could sustain upgrades.

#### Round 1:

With 6 months for development, 21 companies responded to the call. 13 of these delivered solutions that met the performance criteria which were prototyped for testing at a research institute. Four windows met the specifications under testing, with each manufacturer receiving a EUR 10,000 reward. Two companies were chosen as winners, a large manufacturer and an SME, receiving EUR 20,000 each and a deal to sell several thousand of these windows to the buyer group.

Yet, it was clear that these windows, perceived by architects and builders as too clumsy, would never be attractive to a larger market. As a result, a second round of procurement was started.

#### Round 2:

The buyer group wished to continue development to get both an energy efficient and aesthetically pleasing window. The Swedish Government offered potential suppliers free consultancy time with architects to support design. Five manufacturers submitted new windows. Four of the producers had participated in round one, while one company was new to the procurement. In this round, there were no "winners" announced, but all of the windows complied with the new specifications.

After the procurement was finished, the Swedish Government actively promoted the qualities of the new windows to house owners and the public. The overall process lasted 5 years.

## ACCELERATING EFFICIENCY AND DEMAND

Consumer windows offer few possibilities of protecting innovations through intellectual property rights. Hence, instead manufacturers follow industry leaders and competitors closely, adopting innovations organically. A new product that enters the market successfully will usually trigger similar solutions to be developed by others.

In the first round, the winning companies delivered a 60% reduction of energy loss in their designs, which was a major success, yet the results were considered clumsy and too light-absorbing. But the buyers got incentivised by the promising energy savings that could be sold on to customers.

Continued development through a second round of technology procurement, resulted in windows that had a slightly lower reduction in energy loss of about 40%, but a significantly improved design and positive market uptake. As a result, the overall standard of energy efficiency was significantly raised.

An unintended, but lasting effect was that Swedish manufacturers, usually medium-sized businesses gained a higher degree of competitiveness through energy efficiency just as manufacturers from the Baltic States entered the Nordic market with low-cost products. Companies instead of losing out to competitors, managed to increase their market-share.

# HOW TALLINN BECAME THE WORLD'S FIRST CITY TO DEPLOY MOBILE PARKING

Inspired by the vision of two Swedish mobile phone operators, Tallinn embarked on deploying a radical innovation that transformed the way parking has been managed ever since and gave rise to NOW! Innovations, a small pioneering company operating in twenty cities in Europe and the US.

It is easy to see why mobile parking started in Estonia: on the one hand there was almost no parking infrastructure in place, whilst on the other the largest coin was worth just EUR 0.06. And importantly, every driver also had a mobile phone. Today over 80% of all parking payments in Tallinn are made with a mobile phone.

Mobile parking was first introduced commercially in Tallinn in 2000 as a value-added service by two Swedish-owned mobile operators, EMT and Tele2, to their subscribers. The operators developed an agreement with the local government of Tallinn, in which the city would pay 20% revenue share on collected fees. This arrangement was more cost effective for the city as it did not need to invest in parking meters nor collect cash from them, which involves personnel who need to handle large amounts of coins that later need to be counted and processed.

The end-user further paid a convenience fee of EUR 0.32 per transaction. This constituted a premium of about 20% of the average initial parking fee. The rapid user-uptake (35% of transactions already in 2000), despite the premium cost was probably a result of not having to handle coins, which in an average parking session would have amounted to 18 coins weighing around 100g. Furthermore, using mobile payments made it easy to pay for the time actually used, rather than over-paying to be on the safe side.

## CONSOLIDATING THE INNOVATION MARK-UP

Over the years, the over 20% revenue share paid by Tallinn was reduced to just over 10% as the solution became more established and used in over 80% of on-street parking transactions. Despite the City of Tallinn not procuring innovation as such, it enabled the service providers to invest and develop their solutions against a higher initial margin that gave the providers confidence to undertake investments into technology development.

One of the beneficiaries was Trigger Software, a small software company based in Estonia that developed the mobile parking solution offered by Tele2. The innovative technology provider to Tele2 laid the foundation of what later became the development team's start-up NOW! Innovations in 2003.

Ever since, NOW! Innovations has worked hard to export Tallinn's success story internationally, as Estonia is among the smallest of the EUR 30 billion potential market. As a result, the team accepted an investment by Helmes, a major Baltic software development company, in 2005 and in 2006 entered the Belgian market. In early 2011 the company received a major investment from a group of venture capitalists, including the Estonian Development Fund, a government-owned investment fund created to help Estonian high-tech companies expand internationally.

In Belgium, the Estonian business model was adapted to local circumstances with equal success – after only two years already 35% of the payments were mobile. In total, by now, 13 Belgian cities offer mobile parking service launched by NOW! Innovations. In some countries, like the Ukraine, the main challenge is to get consumers to accept paid parking in general. In such markets the company helps develop legislation and parking policies before a procurement or concession takes place.

The US, long lagging in mobile solutions, has also finally woken up to see the benefits of mobile parking, and has become NOW! Innovation's most important market. Three cities are operating the solution and another half a dozen are in the pipeline. European SMS services are replaced by interactive voice response and smart

phone apps. The US has also become a lead market to develop electric vehicle charging solutions, in which the company believes the US will overtake the European markets.

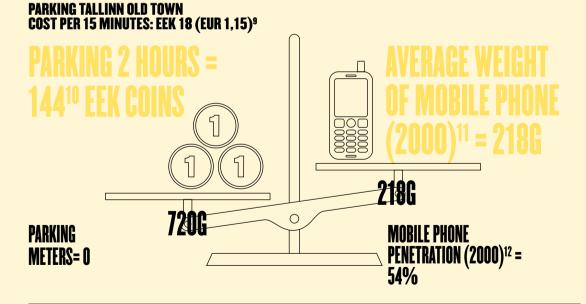
Agreements with municipalities have become fairly standardised, with the key issue becoming the timeframe within which the parking fees need to be transferred to the parking authority. In some cases, the transfer has to be immediate (the fees go directly to the municipality), in others NOW! Innovations has up to 6 weeks after the end of each month. For the end-user, the extended timeframes can create more variety in payment options, including mobile operator billing, and post-paid accounts.

#### PILOT, FIND MARKETS, EVOLVE, INVEST

NOW! Innovations is a success story characterised by a number of key features:

- Estonia's technology and business friendly policies
- No prior parking service, stakeholders or infrastructures
- High mobile phone penetration among customers
- Partnering with a major mobile phone operator
- Early success story motivated team and investors to expand
- Need to internationalise made NOW! Innovations global early on
- Learning from customers in several markets improved offer
- Immense commitment, persistence and mobility of the core team

### **WEIGHING THE CASE FOR MOBILE PARKING IN TALLINN**



9. City of Tallinn

10. Ciscoins.net

11. "Life cycle of a cell phone", Environmental Literacy Council (2004) **12.** Statistical office of Estonia

# REINVENTING THE PUBLIC BICYCLE

In 2010 more than two hundred cities operated more than one million public bicycles, growing from seven cities in 2000. This spectacular growth was made possible by the global reach of a small group of multi-nationals. Yet, Modular is making in-roads into this market with a focus on design, common sense and sustainability.

Modular is a small company that has been designing and selling urban furniture that focuses on bicycle parking to governments since 2003. Initial challenges included putting sustainability on the agenda and motivating cities to understand that bicycle parking is an integral part of city life. Like many other companies, Modular experienced the challenge that cities were procuring according to their own plan, with little room to receive unsolicited proposals. As a result, the company began to rely on opinion-makers in cities to position the products and solutions, leading the company to get increasingly distracted from its core products to follow the demands of these intermediaries.

#### **KICKSTARTED BY DESIGN**

Starting in 2008, the company took a bold step to design a public bicycle system, Urbikes, which won several international awards. Urbikes is the result of a true analytical study into how the generic public bicycle systems replicated by multi-nationals in cities like Paris, Barcelona or Hangzhou expanded so quickly and why they were not sustainable and, in many cases, were dying under their own success.

The team studied the standardized sales process and how during decision-making processes cities lacked critical data like the reason why planning errors were repeated in most of the 200 public bicycle systems rather than there being continual improvements. A key feature of these systems, according to the team, was that the public bicycle was delivering too many functions.

As a result, the company designed the public bicycle as a piece of urban furniture and focused rigorously on its sustainability and environmental impact. Sustainability, for Urbikes, means life-cycle-costing – or the longevity of the solution at minimum cost. Furthermore, the company decided to focus on the user as the customer rather than the public authorities.

#### LEAD CUSTOMERS ON THE DOORSTEP

In 2008, the City of Granollers in Spain chose Urbikes because its management system was integrated with the existing parking infrastructure of the city rather than deploying new servers, networks and kiosks. The maintenance costs for the bike were also lower than alternatives as the bike was designed to work without a chain and with other non-standard components that do not get stolen. The City bought the bikes, parking furniture, and the management system.

This gave Urbikes the opportunity to take their basic R&D process from the drawing board to the street, evolving the solution with every phase of implementation and with the changing needs and characteristics of cities. Hence, the procurement made the development of the product possible.

The City of Vic realised that large-scale public bicycle systems suffered from the uni-directional clustering of large numbers of bikes and instead chose Urbikes in 2010 to provide fewer units for the town centre. In this second implementation, experiences from Granollers helped to improve the planning to deliver a more focused system, leading to an 80% reduction in maintenance costs.

#### ADVANTAGE THROUGH PLANNING

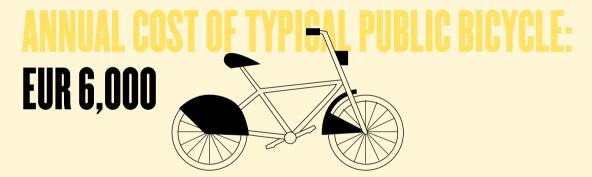
In other cities, Urbikes found that many deployments of public bicycle systems were not based on technical analysis but motives such as the availability of economic stimulus funds that needed to be spent – irrespective of the very high maintenance costs associated with conventional systems. Yet, the company continued to invest in R&D, joining with the Ytech foundation led by the pioneer of public bicycles in Amsterdam in the 1960s.

In 2011–12 Urbikes will launch the electric bicycle as a new public transport service, for which citizens will be more inclined to pay, strengthening the sustainable business model of Urbikes as compared to its larger competitors.

#### **GLOBAL FOLLOWING OF USERS**

Urbikes draws on the enthusiasm of a global community of supporters to carry its manual and electric systems to the market, using the end-user voice to open procurement opportunities. Its initial market, as a result, has gravitated towards the Netherlands where agreements for pilot implementations in Amsterdam have been closed.

#### A WINNING PUBLIC BICYCLE PROPOSITION





# RECOMMENDATIONS

# Negotiated procedures may open markets

Through negotiation, you may be able to explain the competitive or technological advantages of your products without investing in time-consuming anonymous tendering processes.

# Cover a niche for larger consortia or corporate partners

You can participate in larger consortia in the special role of providing advantages to the negotiation phases through your specialized knowledge, resources or capabilities.

### Bring your cuttingedge research to the market through a procurement for innovation

If you have leading research and a strong business case, you should have a fair chance of convincing public purchasers to invest in the final stages of your R&D and innovation process.

# Gain competitive edge in bidding by trading costs for ownership

You can gain a competitive advantage by lowering prices in return for intellectual property exploitation rights, the value of which relies on a strong exploitation plan being in place.

# Consider the risks and benefits of forced licensing to purchasers

Public purchasers may demand forced licensing of results to third parties to avoid supplier lock-in. Consider your policy and business model carefully to avoid commercial risks.

# What are the implications of giving a free license to the contracting authority?

A public authority may grant exploitation of results to third parties to you, yet demand to retain rights to a free license. This trade-off may well be worth the commercial down-side if it provides you a) an initial success story, b) the flexibility to engage in commercialisation to third parties, and c) that another company picks up the opportunity in your place.

# Plan for a higher acquisition costs due to elaborate process

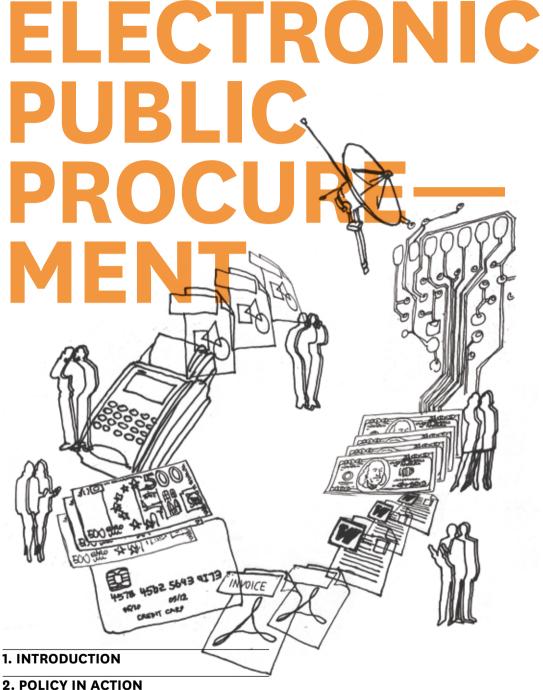
Innovative procurement procedures were designed for large projects originally and may be more complex than your prior experiences due to requirements for the time, documentation and non-routine nature of the process. This may disadvantage you against larger companies that may have more acquisition resources.

# You may only deliver one phase of the project

Procurement of R&D can be split into phases stretched over a period of time to ensure competition between producers, but also to reduce contract sizes and increase flexibility. You should therefore be aware that you may have to repeatedly tender against competitors to remain on the project.

# Parallel competing projects may run next to yours and the better result moves on.

Contracting authorities are encouraged to divide projects up not only into phases, but minimise risks and extend flexibility by launching parallel projects representing different approaches to the same challenge. Evaluations at the end of each phase may therefore favour a competing approach to receive the next round of development funding.



- 3. OPPORTUNITIES
- 4. CASE STUDIES
- 5. RECOMMENDATIONS

# INTRODUCTION

Competitive companies can grow their sales through e-procurement whilst public purchases gain efficiency. However, uptake varies greatly and existing national platforms do not interoperate, making it often difficult for non-resident companies to participate.

Electronic procurement (e-procurement) is widely used in both the public and private sectors. As a basic definition, e-procurement can be thought of as automating purchases, fulfilment and invoicing of products and services on the basis of pre-agreed contracts.

In industries such as automobile, chemicals and logistics, electronic data interchange and electronic documents have been used to interchange data for supply-chain operations for a long time.

In the public sector, e-procurement is mostly used for common items such as office supplies, foodstuffs, and protective clothing. Today, electronic data exchanges are taken over by supplier networks and direct system connections. In recent years, many European governments have implemented e-procurement platforms that allow companies

to create accounts, follow publication tenders, bid for tenders and, in some instances, manage all stages in the procurement process electronically.

E-procurement processes follow general European guidelines for public procurement except that call periods are shortened. Available forms of e-procurement include open and restricted procedures, negotiated procedures, auctioning and the competitive dialogue for complex projects.

Once a winner has been chosen, all companies that have submitted proposals must according to European law be informed of the winner and the award criteria. There is a tenday period, in which complaints can be issued to the courts of law. Once contractual agreements have been established, order fulfilment, invoicing and payment can ensue.

### BENEFIT OF ELECTRONIC PUBLIC PROCUREM





FOR STRATFGIC SOURCINI





REDUCE REOUISITION AND



IMPROVE MARKET TRANSPARENCY TO COMBAT CORRUPTION



REDUCE REDUNDANCY AND WASTE



IMPROVE COMPLIANCE WITH SOURCING



REDUCE ADMINISTRATIVE COSTS

1. "E-procurement: A guide to successful e-procurement implementation", Heywood et al. (2001)

# **POLICY IN ACTION**

The long-awaited cross-border standardisation of e-procurement is coming slowly, and in the meantime companies have to accept that some markets may only be accessed by overcoming barriers. Companies should take these variations and developments into account in selecting their marketplace.

Many European countries have created national e-procurement systems, with the consequence that some European countries are more advanced in their use of technology-enabled procurement, at the expense of cross-border interoperability. This has the added and adverse effect, in that it can be difficult for non-resident companies to participate in the national procurement systems, despite European legislation and efforts designed to promote exactly such cross-border participation.

Several of the national systems are simply not designed for non-resident companies with fundamental issues such as lack of multi-language support and requirements for national tax identification numbers or reference cases (See page 84 and interview on page 56 with Dr. Juan Rada).

Several programmes to promote such cross-border participation have been launched by the EU. As an example, PEPPOL<sup>2</sup> under the European Commission's Competitiveness and Innovation Framework Programme, is aimed at creating a European standard and electronic platform for cross-border electronic public procurement (See page 82).

Many national procurement portals work by tendering out public framework contracts over the EU thresholds.

## EUROPE: A SINGLE MARKET OF E-ISLANDS

Implementation can vary between voluntary platforms such as the Danish government procurement platform SKI (see page 84), to mandatory platforms for all public agencies (except the defence), such as France's Marches Publics<sup>3</sup>. In Spain<sup>4</sup>, the system is only mandatory for the central government, thus limiting the impact due to the high degree of non-centralised public spending.

In Denmark, for example, whilst the SKI portal is Englishlanguage, the actual tender specifications are published only in Danish. Once companies have established themselves as providers under framework contracts they may quickly gain an advantageous position in relation to future tenders. As a result, in 2010, the Danish public procurement framework contracts were criticized for allowing buyers to pick existing suppliers for new services and assign additional tasks without open tendering. Sweden has been requested by the European Commission to change its laws that require bidders to present a Swedish tax identification number as a prerequisite for being accepted as a supplier to the public sector<sup>5</sup>. Companies that do not comply cannot use the Swedish e-procurement systems. In the UK, by contrast non-resident companies can participate but have to register through a special process.

## PUSHING FOR ACCOUNTABILITY AND TRANSPARENCY

Some countries have used the possibilities of online procurement systems to combat corruption. In Slovakia, the government has gone a step further and published all tenders and all awarded contracts on the public portal. Such initiatives make it difficult for public decision-makers to adversely select preferred partners as awarded contracts can be compared with the actual incoming bids.

In 2010, the UK government has required public agencies to publish all awarded contracts over EUR 700 and to place all tenders over a certain amount on the electronic tendering platforms, in an effort to combat corruption and fraud and to give suppliers opportunities to undercut existing prices.

### UK PUBLIC PROCUREMENT SPENDING BY AREA (IN BILLION EUR)<sup>6</sup>

SOCIAL CARE
21,264
CONSTRUCTION
19,862
PROFESSIONAL SERVICES OTHER
18,791
FACILITIES
11,084
ICT
11,051
DEFENCE
10,952
PROFESSIONAL SERVICES
CONSULTANCY
4,148

PERSONNEL RELATED
3,996
PROFESSIONAL SERVICES TEMPORARY
STAFF
3,996
TRAVEL
3,586
VEHICLES
2,985
WASTE MANAGEMENT
2,972
ENERGY & UTILITIES
2,523
MARKETING & MEDIA
2,158

OFFICE SOLUTIONS
2,141
ENGINEERING GOODS
2,025
LOGISTICS
1,393
OPERATIONAL GOODS
1,374
CLINICAL & MEDICAL
445
FUELS LUBRICANTS & GASES
389

# **OPPORTUNITIES**

In 2010 Europe realised only ten percent of its aspired EUR 210 billion spending through e-procurement, losing out on major efficiencies. A major push in adoption will open new markets, yet companies should study developments in their specific product portfolio carefully.

EUR 420 billion or 3.55% of GDP are spent annually by EU governments on openly advertised public procurement?. Of this, estimates are that by 2010 about 5% was procured electronically. This implies that the total European market for public e-procurement is around EUR 20 billion. This is significantly below the original ambition of EUR 210 billion, or 50%, of annual e-procurement announced by the EU in 2005.

According to the Pan-European Public Procurement Online Project (PEPPOL), a project to promote a standardized e-procurement platform, a greater uptake could create savings of over EUR 50 billion for European governments<sup>8</sup>. Other estimates are that processes such as e-auctioning could lower prices for public purchases by as much as 23%.

#### PUBLIC PROCUREMENT OPENLY ADVERTISED TO EUROPEAN COMPANIES

- More than 40 EUR million
- More than 20 EUR million
- Less than 20 EUR million



Given the volumes of public procurement and the relatively low uptake of e-procurement, the future potential in terms of growth is therefore significant. Major efforts are being undertaken by the EU and Member States to reach the 50% e-procurement goal in the short-term to realise the many benefits.

Countries with high cost bases, such as in Northern Europe, have implemented national procurement systems like SKI in Denmark (see page 84), thereby opening significant opportunities for non-resident companies with lower cost bases to participate in these platforms. If formal and language barriers on participation can be overcome, there should be significant opportunities for competitive providers.

E-procurement opportunities vary across markets. The Greater London Authority<sup>9</sup> annually spends EUR 4.7 billion on public procurement, of which 13% or EUR 522 million are awarded to SMEs. Policies in London aim to increase the share of SME spending and the UK is very active in pushing e-procurement.

Overall, information technology, energy and consultancy are often the major single posts being procured by public offices through e-procurement, as the Danish e-procurement expenditure shows. However, by comparison, the UK general public procurement spending data shows that areas such as social care, construction or facilities constitute the overall largest volumes of public procurement.

To understand the opportunity of e-procurement a company needs to study its sector carefully. A first factor is to understand which markets purchase a relevant product portfolio by e-procurement today, and what percentage of the total spending is procured electronically.

Secondly, companies may review the trends towards greater adoption of e-procurement in their product portfolio.

A product line may be a candidate for introduction to e-procurement, offering the chance for becoming a first mover. Or e-procurement may represent an expanding market-share eating into traditional ways of purchasing.

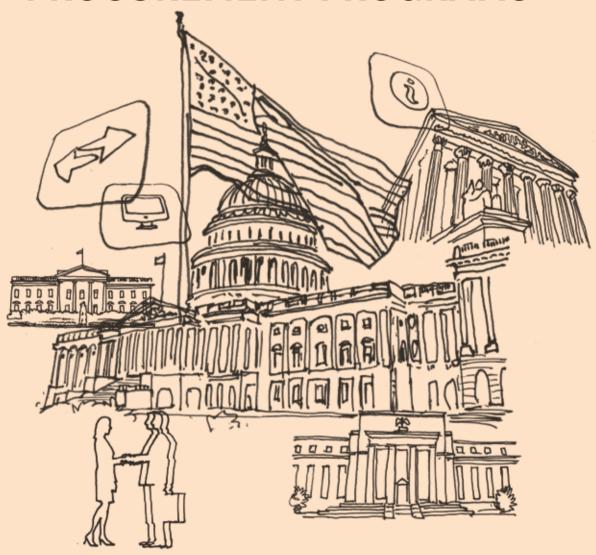
### DENMARK — EUR 2 BILLION<sup>10</sup>

E-procurement in million EUR by area of expenditure

ENERGY
540
CONSULTING
220
TELECOM AND DATACOM
140
STATIONERY, OFFICE SUPPLIES,
PRINTING AND SCANNING
140
FOOD AND DRINK
120

FURNITURE
60
RESEARCH AND LABORATORY EQUIPMENT
60
CARS
40
BUILDING MATERIALS, ELECTRICAL
MATERIALS, TOOLS AND WOOD
20
KITCHEN EQUIPMENT
20
OTHER
20

# BROADENING THE ONLINE REACH OF THE UNITED STATES PROCUREMENT PROGRAMS



The Federal Business Opportunities website makes sure procurement is done on fair and even terms for all sizes of businesses. Federal agencies have to post contracts over USD 25,000, offering a platform with additional support to pitch for public contracts.

The FedBizOpps (FOB) is the single point of entry for Federal buyers in the US to publish business opportunities above USD 25,000. Interested vendors can search for opportunities and pitch for them via online profiles. The platform is part of the larger US government General Services Administration web space, the Integrated Acquisition Environment (IAE). Tools help in doing business efficiently with governmental organizations through services and portals such as the Acquisition Central<sup>11</sup> and the US Small Business Administration<sup>12</sup>.

# ONE CLICK TO REACH THOUSANDS OF OPPORTUNITIES

FedBizOpps has an extensive search functionality providing access to over 22,000 opportunities including special programs such as the Recovery Act. Functionality also includes the ability to create profiles and to follow certain themes, to search certain types of opportunities, and to set opportunities aside for later. These functionalities reduce the requirement to actively follow publications of tenders, and thus save time and costs in ways that especially benefits smaller businesses.

To bid on the platform companies must register with the Central Contracting Registration (CCR)<sup>13</sup>. This requires the company to submit bank information, taxpayer ID, and a Data Universal Numbering System (DUNS) number provided by Dun & Bradstreet. It is possible for non-US companies to create accounts on the platform, provided that the necessary DUNS and other industry codes are obtained. However, for several areas such as defence, infrastructure and of a military nature, there are limits to the participation of non-US companies.

## PREFERENCE FOR SMALLER BUSINESSES

Many contracts are reserved for small- and medium-sized enterprises, as described in the process by the Federal Acquisition Regulation (FAR). This ensures that smaller businesses receive a fair portion of federal contracts. The platform does not in itself handle transparency issues, but is supported by other platforms such as the Federal Procurement Data System¹⁴ providing access to all contracts over USD 3,000 and the Electronic Subcontracting Reporting System¹⁵ for reporting and registering subcontracting activities.

#### **ACCESSIBILITY COMPLIANCE**

One important aspect of the platform is the requirement for compliance with the Section 508 of the Rehabilitation Act of 1973. This requires that the federal government only acquire electronic and information technology goods and services that are accessible by persons with disabilities. Any vendor is thus required to comply with these regulations.

# OPENING UP PUBLIC CONTRACTS TO SMES

By launching several new and innovative initiatives, the UK government has gone far in allowing SMEs better chances to participate in public procurement. Combined with better transparency, the aim is to help cut public spending and to reduce bureaucracy for SMEs.



Smaller providers are engaged in a dialogue with government agencies by a Crown Commercial Representative for SMEs and dedicated product surgeries to initiate more general dialogues around solution areas. In this way SMEs are given the opportunity to pitch innovative services to a panel of senior public procurement and operational professionals.

#### **CUTTING DOWN REQUIREMENTS**

Bureaucracy has been reduced by eliminating pre-qualification questionnaires from all central government procurement under EUR 140,000. This provides more flexibility for procurers to choose the methods by which they prequalify potential suppliers. Furthermore, prequalification data can be sent in once for common commodities, reducing the process of repeatedly supplying the same information to bid for contracts.

With additional initiatives such as reporting and feedback processes, involving representatives from industry review panels, and creating interchange programmes between public sector and industry, the UK government has opened up the public procurement process to new ideas and processes. The official aim is to have 25% of all public contracts being delivered by SMEs, and it remains to be seen whether the government can reach this aim.

Downing Street's social community website Number10<sup>16</sup> set up a blog to ask what problems small- and medium-sized enterprises encountered with public procurement. From the many answers the Cabinet Office concluded that procurement procedures had to be changed to better accommodate SMEs.

As a response, the government launched a number of initiatives<sup>17</sup>. The launch of a Contracts Finder Website<sup>18</sup> for contracts worth over EUR 14,000 is designed to make public procurement more transparent, as well as making the process more efficient for companies through means such as receiving contract details via email. Any company – including non-UK – can register for an account online and be part of the platform, although the international sign-up process is a little different from the procedure for national companies which involves a Government Gateway card.

# TRANSPARENCY CREATES OPPORTUNITIES

All councils are encouraged by a transparency pledge to publish details of any spending over EUR 700<sup>19</sup>. Information about contracts and contract information is only available on websites of participating councils but is expected to be aggregated through open data activists. Whether this initiative will offer market intelligence for international companies will emerge, although in principle active businesses could identify opportunities to under-cut existing suppliers.

# A BUSINESS DIVIDEND IN CROSS-BORDER E-PROCUREMENT

Alfaılab, a medium-sized technology company is a pioneer in using e-procurement in line with European standards and has witnessed significant business returns on early technology investments associated with being a first mover.

Alfa1lab is a software and IT consultancy company founded in Denmark in 1997, with resource facilities in Peru and Lithuania, and representation in the UK and the US as well Traditionally Alfa1lab has had an emphasis on telecommunication services and infrastructure. Since 2007 the company has worked on developing open software and standards for e-procurement. Alfa1lab works internationally with clients from various European countries – through the PEPPOL project (see case study on pxxx) alone the company has had contractual work with public authorities from eight different European Union countries.

Solutions developed by Alfaılab match the requirements of public customers with European regulations and offers customers to do transactions electronically (mainly e-ordering and e-invoicing).

#### **SOLID EXPERIENCE OVER YEARS**

Alfatlab has, for example, been invoicing Danish public customers electronically for several years and this has been a great success. E-procurement standards assure compliance simplifying procedures and keeping administrative overhead to absolute minimum.

Alfatlab is one of the first companies to use PEPPOL and has concluded their first cross-border PEPPOL transaction. This was an invoice they sent to the Swedish National Financial Management Authority where Alfatlab were able to issue an electronic invoice through their internal financial system, send it through the PEPPOL infrastructure, and immediately receive a reply from the client that the invoice had been received and had been validated to comply with their requirements. For both customer and supplier the administrative savings were significant.

#### THE COST OF BEING A PIONEER

One major hurdle Alfatlab has encountered is the practical implementation of technology and standards, for example in e-invoicing. Compliance with new standards and technology naturally meant that existing Enterprise Resource Planning (ERP) software was not adequate and the company had to invest in developing new technology.

European initiatives such as PEPPOL and Open e-PRIOR, for example, address these issues by providing a standardized interface for electronic public procurement, both on a message (document) level and on a transport (sending/receiving documents) level, and as ERP vendors and service providers begin to adopt these standards these barriers should ideally disappear.

There is also the prospect of a community emerging around the new technological requirements of e-procurement that in time will make it easier for small businesses to integrate their ERP system to open standard platforms.

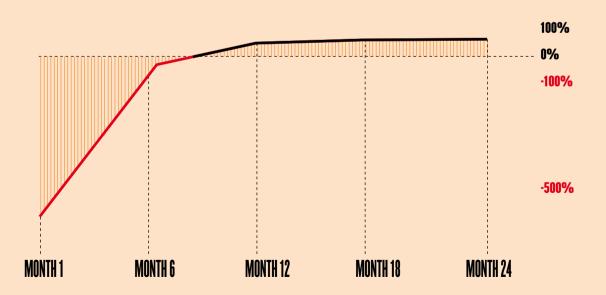
#### A DIVIDEND ON INVESTMENTS

For Alfaılab, the investment in developing and integrating software compliant with new standards and requirements was part of a business decision to participate in a market. A lot of the technology that Alfaılab has developed has subsequently been released as open source and is available for other companies to lower their investment.

Alfatlab can now more easily respond to public tenders, provide catalogues for public contracting authorities or simply use systems for basic document transactions like order and invoices.

According to the experience of Alfarlab, e-procurement also simplifies the administrative procedures with the contracting authorities, ultimately making complying vendors more attractive.

### ALFALAB'S PROJECTED DIVIDEND FROM E-ORDERS/E-INVOICING



# A EUROPEAN STANDARD FOR E-PROCUREMENT – WITHOUT BORDERS

Twelve European countries work together with the European Commission to establish PEPPOL, an open European procurement exchange to overcome technical and regulatory barriers and open a cross-border e-procurement market by 2012.

Several European nations are developing e-procurement systems to harness the advantages and cost savings associated with electronic procurement in public purchases. However, few of these national procurement systems are easily accessible to suppliers from other countries. Consequently, companies and public organizations in Europe are missing out on the potential savings of a more efficient market. The PEPPOL project aims to target this shortcoming by developing and piloting a European standard for e-procurement with a number of additional services to handle both pre- and post-award processes.

PEPPOL (Pan-European Public Procurement On-Line<sup>20</sup>) is a large scale project 50% funded by the European Commission to provide standards-based IT infrastructure and services for cross-border public e-procurement in Europe. It is financed by the European Commission's Competitiveness and Innovation Framework Program's ICT Policy Support Program. Several EU Member States are participating in the project to harmonize and encourage the use of electronic public procurement by businesses, and SMEs in particular.

is designed to manage the entire process of procurement, including the pre-award phase, tendering, procurement, as well as invoicing. Furthermore, PEPPOL aims to create processes for future refinement of the e-procurement platforms.

By joining national platforms on one standard, European companies – enterprise-level and small- and medium-sized – can respond to any European tenders across the union. The program estimates potential cost savings of up to EUR 50 billion, through efficiency gains, more efficient markets, and cost-savings in the purchase of products and services by public institutions.

PEPPOL is designed to create future European electronic procurement standards for a range of industries. For example, the PEPPOL transport network allows the private sector to bid for public sector contracts anywhere in the EU. This means that an Italian company will be able to bid for a contract with the Danish government, exchanging the various documents in a completely secure electronic environment.

#### AN OPEN EUROPEAN EXCHANGE

The aim of the project is to implement a common standard for linking existing national electronic procurement systems to create a joint European platform. This includes documenting best practice content standards, common processes and an open exchange infrastructure across Europe. The program

# TRUSTED SERVICE ENVIRONMENTS BEFORE AND AFTER PROCUREMENT

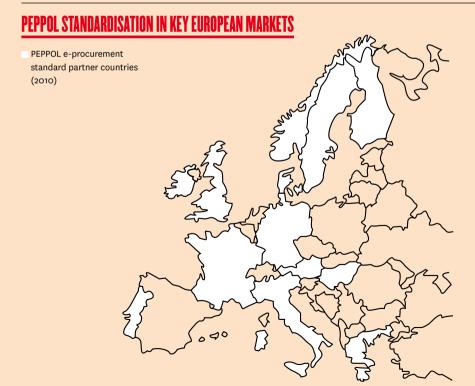
In the pre-award phase PEPPOL offers three components to support the public tender process: validation of e-Signatures issued by certificate authorities; a Virtual Company Dossier to submit standardised company information (evidence, certificates and attestations); and the use of eCatalogues to submit information about goods and services in a standardized format. For the post-award process, PEPPOL offers eCatalogues to exchange information about goods and services available under the contract, e-Ordering and eInvoicing using a defined set of processes, sharing common business information.

PEPPOL has developed a Transport Infrastructure for interconnecting e-Procurement systems using common and nationally compatible standards. Access to the PEPPOL infrastructure takes place through Access Points, currently provided by both government agencies and private companies. PEPPOL will facilitate the electronic exchange of orders, invoices, and catalogues between buyers and suppliers in various Member States, or e-procurement communities. It also includes the classification of goods and services and the submission of company attestations required for bidding. The validation of electronic signatures issued by certificate authorities throughout Europe will also be addressed.

#### **BRIDGING NATIONAL MARKET ISLANDS**

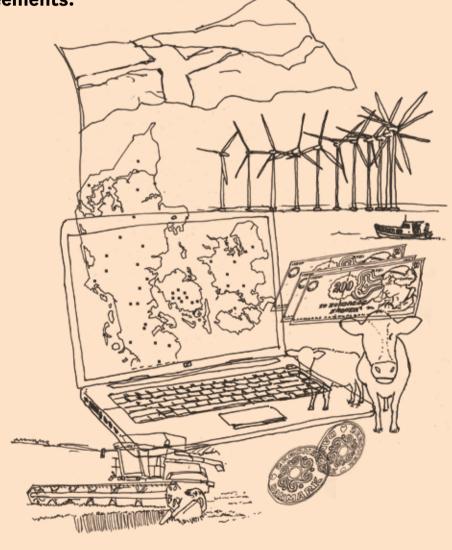
The main barriers for building an efficient market are a lack of common standards for national procurement systems and legislation that is often not aligned with European policies. National requirements for pre-registration of companies, intermediate directives, and existing technical requirements in many European countries make it difficult for companies to participate in tenders across borders. Small- and medium-sized companies in particular are prevented from participation, as they do not have the capacity to maintain affiliates or other competences in potential markets outside of their regional and national context.

The PEPPOL project was initiated in 2008 and the number of institutions active on the platform will be expanded until mid-2011. From 2012 onwards the platform should be opened up to commercial partners to secure its long-term sustainability. The vision is to make PEPPOL the backbone for e-procurement communities across Europe by mid-2012.



# SKI: THE DANISH E-PROCUREMENT PLATFORM

Denmark's e-procurement platform centralizes the tendering for suppliers to the 32,500 public organisations in Denmark. Through external contractors, tenders can be published according to EU regulations and suppliers can be approved for project contracts or multi-year framework agreements.



National Procurement Ltd – or SKI in Danish – manages the official national platform for the procurement of product and services for public organisations in Denmark. SKI was formed on the basis of a merger between the Danish state's procurement office and the corresponding organisation serving the Danish municipalities.

SKI is 55% owned by the Danish state and 45% of the local authorities in Denmark. Currently, it serves more than 32,500 public organisations and 1,200 suppliers on 850 framework agreements. In 2009, that portal served over EUR 2 billion worth of framework agreements, with energy, information technology, consultancy services and food products being the major contributors to the growth of the portal. The majority of suppliers are Danish companies or Danish affiliates of international enterprises.

SKI is expected to bring about significant reductions in purchasing prices for many public organisations. In some areas such as the police force, municipal administration and the tax authorities, savings of up to 17% have been estimated<sup>21</sup>.

#### ANY COMPANY CAN JOIN

Any company can register on the portal and bid on any tender without charge, provided they can deliver the products or services in the tenders. Tenders are published on the SKI website and through commercial services such as mercell.com (Northern Europe) and udbudsvagten.dk (Nordic) Companies that have been accepted as suppliers can market themselves directly to public institutions with the services included in the framework agreements. This allows companies to promote their services with the added benefits for the public institutions that they don't have to go through the hassle of making separate tenders. It can thus be very attractive for suppliers to be part of the framework agreements as it reduces the barriers to procurement for public clients.

#### YET, LIMITED INTERNATIONAL USE

The portal has only had limited success in attracting international suppliers and the savings could thus potentially be even greater. Even though SKI is governed under EU-law, the portal is almost exclusively in Danish. Whilst the language on the tendering portal www.ethics.dk is English, the portal is accessed through a link on a Danish language webpage<sup>22</sup>, and most of the tenders are exclusively in Danish.

The portal has also faced other challenges. SKI recently had problems with the legality of their contracts. Originally, public clients could choose freely between awarding contracts to any supplier on the list or make mini-tenders open only to the suppliers in the framework agreements. However, recently the national competition authority required SKI to eliminate the free choice between the two models and to make it clear when the different models are to be used. This resulted in SKI have to cancel a number of framework agreements.

#### THE E-PROCUREMENT PROCESS

Products are tendered through three main categories; information technology, products, and services. The tender typically contains information on the goods or services requested and selection criteria. Once a tender has been published, an information meeting is held in both Jutland and Zealand. The tender is typically open for 40 days and questions can be asked during the first 20 days. All questions and answers are published for public view after the 20 day period.

After the 40 days, SKI takes three weeks to evaluate all proposals. The proposals are scored, and the highest ranking proposals are included as SKI suppliers until the quotas listed in the tender are fulfilled. Subsequently, the companies included in the quota can deliver their products or services directly to public institutions in Denmark under framework agreements entered on the basis of the proposed price and conditions. Typically, framework agreements last two to four years and are administered through portals such as gatetrade. net<sup>23</sup>.

# RECOMMENDATIONS

# Monitor e-procurement platforms actively to spot openings

Given that tenders often have short deadlines and contracts are awarded on a two- to four-year basis, companies have to monitor online procurement platforms for publication of tenders or investigate when framework contracts are up for renewal.

## In target markets, budget for language expertise to interact with e-procurement

Since many contracts are only published in local languages, employing local bid-managers or consultants can be recommended.

# Framework contracts may be real winners, even if you don't come out first

Since many framework contracts are not winner-takes-all types, applying for a portfolio of contracts can still yield sales. Many framework contracts thus often choose several suppliers, and being second or third choice can provide a significant market.

# Until the EU becomes an open market, register your company in key markets

For some countries, it might be an advantage to create local subsidiaries or trade offices to gain access to a local tax number. Even though the practice of requiring local tax identification numbers is illegal according to European regulations, it is often used on national eProcurment platforms. International enterprise-class companies often follow this strategy, and it is surprising how few small- and medium-sized European companies follow this option.

# Be a step ahead by participating in future standard-setting pilots for e-procurement

Given the forthcoming implementation of European-wide standard, companies can already now apply for pre-award status in programs such as PEPPOL.

# Even if invoicing is electronic you may not be paid on time. Plan carefully not to be overstretched

SMEs should be careful not to become overstretched financially. Investigating national average payments times is thus recommended. One place to start is intrum.com/en/.

# Companies should prepare themselves for sales through e-procurement systems growing faster than traditional sales

Thus, SMEs need to align the operations with the coming online requirements in terms of eTendering, eCatalogues, eInvoicing and the like.

Conclusions Page 88

# CONCLU— SIONS

#### Getting the most out of new trends in public procurement

#### **GOOD NEWS: SMES GET PRIORITY**

In European and global markets smaller businesses are given priority in public procurement through measures to increase accessibility and create opportunities, such as simplifying tender requirements, financial conditions, and publishing subcontracting opportunities.

John Conway, a policy advisor at DEFRA, highlights the UK Government's converging initiatives to help the public sector benefit from the agility of smaller businesses, which is an aim reflected in many other countries.

# FROM MEASURING BENEFITS TO TRANSFORMING PUBLIC SERVICES

A growing set of tools is now available to design your business processes, products and services around sustainability criteria. Not only will this make you more attractive to buyers but may also add real business-value.

Smaller businesses often lack market intelligence although it is as an essential tool to navigate public procurement markets in transition. Your limited resources need to be efficiently allocated, and prioritising your markets as well as your investments are just two of the factors where knowledge about buyers, standards and competitors are key.

Jakob Edler, an expert on innovation in public procurement, believes that the question "Who are the intelligent public buyers that act?" is the central theme for companies that rely on early adopters to use their innovative products to transform public services.

Market intelligence is also a critical factor for your clients. Consistently, this has been reported as one of their weakness and you should consider engaging in dialogue and other marketing activities to assure that your solutions are well understood by customers before tenders are issued.

# Where are your early expansion markets that can secure references and first revenues?

Radical changes in public services may come from surprising sources, like the weight of metal coins in Tallinn that triggered a global mobile parking industry. Understanding who your first customer will be is as important as the question of what comes next.

Urbiotica used Barcelona's Urban Lab and the Living Labs Global network to accelerate the process of opening markets by opting for an early pilot stage that was unfunded but created rapid customer evaluation within 15 months. This compares favourably to the typical market creation cycle of three to seven years reported in the case studies.

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#### LEAD, FOLLOW OR LAG

Green and social considerations will grow in importance for all products and services and public procurement is likely to follow high-growth trends for sustainable products in consumer markets.

Checks, standards and certifications play a key role for compliance but require a strategy to navigate the many alternatives. Selecting the most appropriate and trusted ethical trade or ecolabel may save you investments in product adaptation to meet your customers' procurement standards. Innovation can help you to boldly redefine services and products, as the case studies of Lappset's Senior Sports equipment and Astando's e-adept solution for the blind highlighted. As a smaller company, such innovation can create high-value niche markets which you can exploit as a first mover. Indirect benefits are reflected in your corporate and employer branding.

Yet, not everyone can be a pioneer and an alternatively profitable position in the market may be to follow leaders and spot trends rapidly by being the efficient second-mover or licensee. Most customers will not be the risk-takers, but they will seek out best practice and follow the results of others. As a laggard you may bear the greatest risk, unless you are a highly efficient, low-cost provider to those public procurers that delay before embracing new standards.

#### **NAVIGATING A TRANSITION PERIOD**

Adapting to the new trends in public procurement presented in this guidebook will require you to understand and plan their relevance to your business and product portfolio.

Resourcing your market-entry adequately may turn to be out the biggest success criteria, in hindsight, and business models that rely on short-term sales may be unrealistic if past experience is any measure.

Juan Rada, senior vice president at Oracle for their public sector business, recommends smaller businesses to be highly selective about procurement projects to advance innovative solutions as pre-qualification requirements and conditions may stand in the way.

Instead, alternative funding lines, such as innovation grants or collecting sufficient capital to enter into pilot deployments may pay significant dividends, more rapidly.

E-procurement, although adopted slowly in initial years, will experience a major push. Your strategy should take into account the reality of markets which are not yet fully open and transparent. Prioritising your investments into key markets and standards may give you an edge over competitors that are late to adopt or that underestimate the prevailing market barriers.

#### **ACTING ON THE OPPORTUNITY**

New trends in public procurement offer real opportunities with growing budgets reserved for small- and medium-sized businesses and environmental and social priorities. In this transition period, with many variations in implementations of policies, you can benefit and position your business strategically for the future and launch new innovations that can transform public services.

A dedicated strategy, solid market intelligence and an ability to invest will prove essential, whilst inaction may be the riskiest choice to take. Europroc Page 90

# **EUROPROC**

## PUBLIC PROCUREMENT IS A MAJOR BUSINESS OPPORTUNITY

Public procurement represents a major market estimated at over 16% of the GDP of Europe's 27 Member States. Yet small- and medium-sized businesses (SMEs) are not taking full advantage of these opportunities.

# ELEVEN EUROPEAN REGIONS OPEN MARKETS

EuroPROC1 is an innovative project that provides access of SMEs to public procurement markets. It aims to consolidate public procurement as a key element of the business strategy by adapting and improving the services offered to their support.

EuroPROC supports companies to recognize and take advantage of the growing business opportunities existing in public procurement. Further, euroProc helps to improve European competitiveness through greater SMEs participation in international public procurement markets.

EuroPROC supports policy makers to change and adapt their policy instruments to facilitate participation by SMEs in public procurement. Further, the programme provides effective instruments of support in order to overcome the obstacles SMEs face when participating in public procurement markets.

#### **EXCHANGE OF BEST PRACTICES**

EuroPROC facilitates the exchange of practices among the participating institutions and SMEs through actions such as thematic seminars, training sessions, study visits, site visits, staff exchanges, benchmarking, good practice guides, thematic surveys and pilot actions.

An increased participation of SMEs in public procurement will allow to unlock their growth and innovation potential with a positive impact on the European economy.

1. europroc.eu



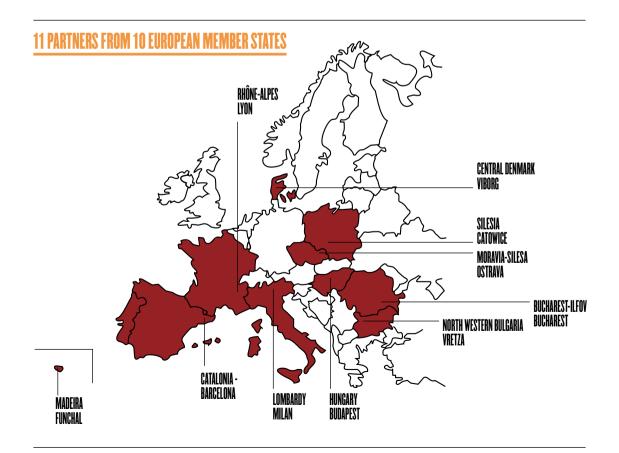
Europroc Page 91

# CO-FINANCED BY THE EUROPEAN REGIONAL DEVELOPMENT FUND

EuroPROC is made possible by the INTERREG IVC Program, which is part of the European Territorial Cooperation Objective of the Structural Fund policies for the period 2007–2013. It aims, by means of interregional cooperation, to improve the effectiveness of regional development policies and contribute to economic modernisation and increased competitiveness of Europe.

The overall objective of the INTERREG IVC Program is to improve the effectiveness of regional development policies and instruments in the areas of innovation and the knowledge economy; and environment and risk prevention, in order to contribute to the economic modernisation and increased competitiveness of Europe. This objective will be achieved through the exchange, sharing and transfer of policy experience, knowledge and good practices.

euroPROC.eu interreg4c.eu



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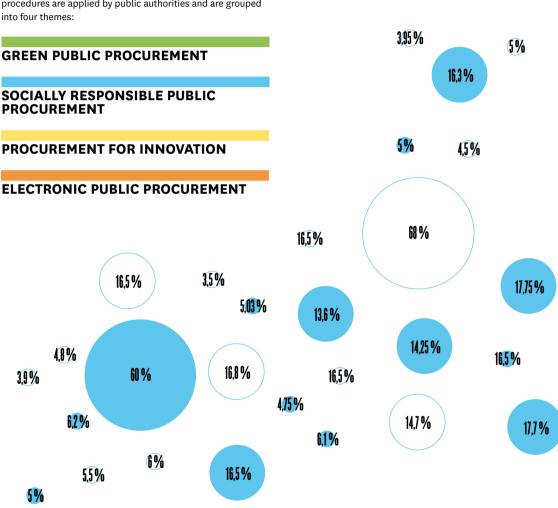
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# WHAT IS YOUR DIVIDEND FROM THE NEW TRENDS IN PUBLIC PROCUREMENT?

Public procurement constitutes around sixteen percent of world GDP. It is an immense and diverse market in which globalisation and increased transparency are changing the competitive environment. This guidebook provides guidance to business leaders in small- or medium-sized companies to understand some of the major changes taking place in international public sector markets.

Navigate Change presents new global approaches to public procurement. These have changed the way regulations and procedures are applied by public authorities and are grouped into four themes:



503%

1%



