Public e-procurement via E-market places

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Introduction
eProcurement is on the political agenda throughout Europe. Denmark is among the forerunners with respect to establishing a public procurement portal. So far, the overall success of the public eProcurement portal has been limited.

Background
There are many different forms of public e-procurement. However, in this report we have chosen to focus on public e-procurement via e-market places.

At present eGovernment is on the agenda both in research and in practice with several European initiatives related to eGovernment in existence. Some initiatives have focused on optimising administrative tasks related to the interaction with citizens through electronic means e.g. on-line general public service delivery and also eHealthcare. Other initiatives have focused on providing ways to conduct political processes online, such as e-voting. Thus far, the delivery of public services online has received the most attention.

Given the fact that eGovernment solutions must serve everybody regardless of IT-capabilities and social or economic resources, government initiatives face several challenges. These challenges go beyond mere rationalization of routines and efficiency with respect to electronic interaction with citizens. It has been emphasized that an important part of eGovernment is to focus on the delivery of faster and cheaper services and information to citizens, business partners, employees, other agencies, and government entities. The importance of this approach to eGovernment is not questioned in this paper. Instead focus is shifted towards the organizational management in the public sector, which focuses on how the public sector manages its internal operations.

Our focus is on an aspect related to eGovernment, which has so far received little research attention: eProcurement. That is the public sector’s potential improvement of operations through means in the form of electronic purchase of goods and services. “An effective public procurement policy is fundamental to the success of the single market in achieving its objectives: To generate sustainable, longterm growth and create jobs, to foster the development.” This quote is taken from a Green Paper on public procurement issued by the European Union in 1996. Unlike today, the Internet was still in its infancy and was not an obvious means for optimising public procurement processes. At the Lisbon summit in 2000 it was decided that EU should pay special attention to eProcurement. It was emphasized that “The emergence of the new Information and Communication Technologies (ICTs) offers promising opportunities as regards the efficiency, transparency and opening-up of public procurement”. However, European governments appear to have hesitated in adopting eProcurement. One reason for this could be the burst of the dot.com bubble in the spring of 2000 and the reluctance to establish the underlying structures of
electronic marketplaces. Another, and maybe more likely explanation, may be rooted in structural conditions of the public sector itself.

The structure of the public sector in Denmark
In 2000 Denmark's population totalled 5.4 million. From 2001 the size of the total workforce in Denmark was 2.5 million people. Of these about 900,000 people were employed in the public sector. In 2001 the total expenditure was 337 billion DKK in the national annual budget. Compared to other countries in the EU, Danish counties and municipalities have relatively more independent competencies. Minimum standards are generally outlined at state level but in order to cater for regional standards – even in a relatively small country – there is political consensus, which accepts regional differences.

The concept of public procurement
Procurement processes in the public sector require a bureaucratic procedure. The majority of items are bought on requisition meaning that an enormous amount of effort is spent on sending ‘paper-work’ back and forth in the system. The internal coordination costs are high, especially for contracting procedures relating to commodities. It is generally assumed that the procurement of commodities represents the greatest potential for savings with respect to electronic purchases brought about by a reduction in paper-based work procedures that can be automated. This is the case both for ordering processes and the handling of invoices and payments. Unlike private procurement, public procurement is highly regulated. For Denmark most of the regulation is based on European Union law. In the EU it is illegal to favour domestic over foreign companies.

What is eProcurement?
eProcurement can be defined as the use of web-based technologies and electronic communications networks for transactional purchasing. The purchasing process ranges from identification/authentication requirements through to payment, and contract management.

Electronic enablement of the purchasing process can be more specifically identified as:

- Sourcing for contractual processes. Tools include eTendering, eRFQs (Request for Quotations/evaluations) and eAuctions.
- EProcurement for transactional processes. Tools include marketplaces using techniques such as eCatalogues and punch-out.
- EPayment. Tools include virtual or embedded GPC (Government Procurement Card), eInvoicing and self-billing.

The benefits of eProcurement include:

- Modernisation
- Efficiency improvements (the way people work)
- Improved commercial relationships with suppliers
- Lower costs for suppliers dealing with government
- Utilisation of the government marketplace
- Departments able to manage their supply chain more efficiently
Commodities suitable for eProcurement
As stated previously, in the EU it is illegal to favour domestic firms over foreign firms. For purchases exceeding EUR 160,000 and 248,000 for state institution contracts and county/municipality contracts respectively (cf. Directive 93/96 of June 14th, 1993) a publicly advertised tender in the supplement to the Official Journal of the European Communities is mandatory.¹

In a report prepared by KPMG Consulting for the Ministry of Science, Technology and Innovation (note 24) different groups of commodities have been identified as being suitable for public e-procurement in Denmark.

Table 1.0

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<th>State Institutions</th>
<th>Counties</th>
<th>Municipalities</th>
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<td>Travel and Hotels</td>
<td>Medicine</td>
<td>Office supplies</td>
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<td>Office supplies</td>
<td>Hospital supplies</td>
<td>Provision</td>
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<td>Books</td>
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<td>Office equipment</td>
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<td>Material for education</td>
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Table 1.0 was developed for the Danish Public eProcurement sector, but illustrates product categories suitable for public eProcurement.

All of these products are characterized by the fact that they are easy to catalogue and therefore suitable for electronic channels and most of the product categories are already represented on-line. Books are one of the most cited examples of on-line products but sellers of office supplies, travel, hotels and IT have also demonstrated that these categories can be sold via electronic means.

Pros and cons in relation to public e-procurement (barriers)
According to Timmers, P, the concept of eProcurement has been defined as "electronic tendering and procurement of goods and services". Benefits such as a wider choice of suppliers, lower cost, better quality, improved delivery, and reduced cost of procurement are some of the advantages from trading via e-marketplaces. The reduced costs are particularly substantial for the public sector. Public sector departments are often centralised bureaucracies while procurement has been decentralised to the county or municipal level of government. Therefore, e-procurement enhances efficiency through two main avenues: Transaction costs savings and procurement costs savings.

The challenge of implementing electronic commerce in the public goes beyond technical functionality. Support from top management, organizational adaptation, training of employees etc. are all factors critical to the success of public e-procurement. Furthermore, considerations such as financial risks, risks of building an eMarket portal and legislative issues all have an impact on the process.

Electronic marketplaces for Public e-procurement portals
Currently, there are 49 e-marketplaces focusing on selling to local governments and the public sector. Here are some examples from different countries.

Fellesmarked – www.fellesmarked.com
- Buyers must be members of Innkjøpsalliansen. Purchase agreements are negotiated with suppliers based on the members’ needs.
- Products sold on site are both strategic and non-strategic goods and services
- Both public and private companies, 145 members, 15 local communities and 34 suppliers

¹ Public eProcurement adoptions: Economic and political rationality, Henriksen, Mahnke og Hansen, 2004, side 3
Based in Norway

**e-Vergade – www.e-vergabe.bund.de**
- Buyers are the German federal authorities.
- Products sold on site are all kinds of products and services except services for construction and re-construction
- In 2003 there were 20 public tenders
- Based in Germany

**UKprocure – www.ukprocure.com**
- Buyers are public sector organisations such as councils and hospitals. Sellers are Equipment manufacturers.
- Products and professional services related to public healthcare are sold on site
- 150,000 products are listed on the site
- Based in United Kingdom

**Local buy – www.localbuy.net.au**
- Buyers are local Government Councils in the state of Queensland and other government entities in Australia. Sellers are providers of goods and services to Governments in Australia
- A wide variety of goods and services are sold to the government councils
- 125 City, Town and Shire Councils are members of the Local Government Association of Queensland.
- Based in Australia

**www.ecataleg.cat365.net**
Public administration purchases portal **www.ecataleg.cat365.net** (project launched in 2001), which is run by the Catalonian Government. This portal started its activities in January 2004. Nowadays, the platform comprises nearly 200 suppliers and 122 buyers, which are the Regional Government itself and another associated entities. The portal claims to have about 5000 articles currently posted in the site. Forecasts for the next three years foresee transactions estimated at €300 millions. This e-marketplace displays electronic catalogues as well as electronic bidding for public administrations. It provides several security measures such as a digital signature and a strongbox.

**www.ej-gv.net**
The local government of the Basque Country has set up another project via its services portal **www.ej-gv.net** (2002). Currently, the access to this platform is restricted to officially approved suppliers and providers. The autonomous community of Andalusia has developed another tool for electronic procurement, a platform focused on health services where a company and product directory is available. Similarly, the regional Governments of Galicia and Valencia are currently promoting electronic public procurement and contracting, but these plans are not operational yet.

**Case**
In Denmark the government has managed to initiate public e-procurement via **www.doip.dk** (the public e-procurement portal). So far, the level of public e-procurement is minimal, but the public sector works as a generator and will in the future demand that suppliers contact them via e-Marketplaces. This represents a huge change of behaviour among suppliers to the public sector and will not happen ‘overnight’, but the software has been developed and suppliers will be forced to integrate and adapt.

**Conclusion**
The Danish experience indicates that the public sector works as a generator for e-business. A public sector focussed on e-government, will in turn consider wider e-business applications, and ultimately enjoy the economic advantages of such.

Companies trading with the public sector are forced to trade electronically and develop an ebusiness capability. As companies move along the ebusiness learning curve their knowledge and application of ebusiness has a flow on effect for other companies. In this
way, the public sector works as a motivator for conducting business online via eMarketplaces.

Sources
We have used the following sources for this report:

www.doip.dk
Department of Informatics, Copenhagen Business School, Helle Zinner Henriksen and Professor Niels Bjørn Andersen (text Public eProcurement adoption)

• www.ogc.gov.uk
• europa.eu.int/ISPO/ida