

**A report on the functioning of public procurement markets in the EU:
benefits from the application of EU directives and challenges for the
future**

03/02/2004

EXECUTIVE SUMMARY

Economic reforms pay off. This working document presents evidence of the positive impact of Internal Market rules on the performance of public procurement markets over the past ten years. Indicators show positive developments in market transparency, increased cross border competition and price savings derived from the implementation of public procurement directives.

Public procurement directives have effectively increased transparency. The number of invitations to tender and contract award notices published both doubled between 1995 and 2002. However, only 16% of the estimated public procurement is published. Transparency rates vary between Member States and for different government levels and sectors.

New data suggest that previous studies may have underestimated the actual dimension of cross-border procurement. In a sample of firms involved in procurement activities, 46% carried out some type of cross-border procurement. However, direct cross-border procurement remains low, accounting for just 3% of the total number of bids submitted by the sample firms. The rate of indirect cross-border public procurement is higher, with 30% of the bids in the sample being made by foreign firms using local subsidiaries.

It is important to note that domestic firms and foreign subsidiaries have similar rates of success when bidding for contracts in the country where they are located (30 and 35% respectively). This confirms the importance in Europe of bidding for contracts through subsidiaries.

The new evidence also suggests that public procurement prices paid by public authorities are lower when the directives are applied. Although price dispersion for homogenous products remains quite large, the application of procurement rules appears to reduce prices by around 30%. Case studies of "typical" public procurement goods show that in general, the directives helped to increase intra EU competition. Import and export prices of these goods converged over time. For instance, in the case of small iron and steel rails export price dispersion dropped from around 21% in 1988-92 to 7% in 1998-2002. However further savings are still possible (for the six case studies considered, the equivalent of almost 12% of the value of intra-EU trade in these goods could still have been saved in 1998-2002).

Given the economic importance of public procurement markets the importance of these improvements is clear. In 2002 the total EU procurement market was worth €1.5 trillion or over 16% of EU GDP. Further improvements would contribute to increase efficiency in public spending and budget deficit control.

In conclusion, there is overwhelming evidence that the current directives have actively contributed to reform in the public procurement markets. Remaining concerns about the significant costs of complying with procurement rules are addressed by the new legislative package and e-procurement offers new possibilities for cost reductions. Further performance improvements will be possible if these measures are effectively implemented.

INTRODUCTION

Public authorities are significant market players as buyers of goods and services. Before the creation of the Internal Market, national, regional and local authorities favoured domestic suppliers. This was not only incompatible with the Treaty provisions requiring the creation of a single Internal Market but also had negative macro and microeconomic implications for the European economy.

- As recently recalled in the report on the quality of public finances¹, competitive public procurement practices are essential for efficiency in public spending. Competitive, transparent procurement markets help public authorities acquire cheaper, better quality goods and services at lower costs. As a result both the value of taxpayers' money and the allocation of resources are improved.
- Open, non-discriminatory and transparent procedures can also help boost the competitiveness of firms operating in public procurement markets. Only firms confronted by foreign competitors at home will be able to perform efficiently and compete successfully in foreign markets and withstand foreign competition at home.

Over the years public procurement directives have been progressively implemented² but the monitoring of public procurement markets presents multiple difficulties. Nevertheless, "ad hoc" studies conducted in 1996 and 1999 together with the Cardiff reports on economic reform between 1999 and 2002 presented regularly updated indicators³.

In this working document an account of the performance of public procurement markets is given using new indicators. This new evidence suggests that legislative changes introduced in public procurement markets over the last ten years have had their intended effect in increasing transparency and competition. In particular, quantitative information is presented on areas where it has been particularly scarce in the past such as price levels and cross-border procurement activities. The purpose of this document is to analyse and investigate the impact that existing economic reforms have had on the Internal Market. The document does not put forward any political initiatives, but concentrates instead on presenting results which, as will be seen, clearly show that economic reforms work, providing significant savings for the public purse.⁴

This new information is particularly useful on the occasion of the adoption of the new legislative package up-dating, streamlining and improving the existing directives. Prompt

¹ COM(2003) 283 final Communication from the Commission to the Council and the European Parliament - Public finances in EMU - 2003 (21.05.2003).

² Directives 92/50, 93/36, 93/37, 93/38 as amended by 97/52 and 98/4.

³ Euro-Strategy consultants Application of Measurements for the Effective Functioning of the Single Market in the area of public procurement, 1999 and The Single Market Review, Sub-series III: Dismantling of Barriers, Volume II: Public Procurement, 1997 and http://europa.eu.int/comm/internal_market/en/update/economicreform/index.htm.

⁴ For general policy considerations see the Internal Market strategy 2003-2006 COM(2003) 238 final and the Integrated Competitiveness strategy COM(2003) 704 final.

and appropriate implementation by Member States of the new legislative package will simplify procedures and cut administrative costs, building on the existing improvements and in turn further increasing transparency and competition and reducing costs and remaining inefficiencies in the public sector.

The document examines the expected impact of measures aimed at increasing competition in public procurement markets in their logical sequence. After a short section on the quantitative importance of public procurement in the EU, section three presents indicators showing the evolution of transparency in European procurement markets. Section four presents evidence suggesting that increased transparency has been followed by increased cross-border competition. Indirect cross-border procurement through subsidiaries appears more extensive and important than previously thought, suggesting that earlier figures on the importance of the EU's overall cross-border procurement activities were underestimated. However, more direct cross-border procurement is still possible. Section five presents evidence suggesting that, thanks to the directives on transparency and cross-border competition, public authorities are actually paying lower prices. The final section before the conclusion discusses additional dimensions of market performance including specific impacts on Small and Medium Enterprises (SMEs), environmental and social issues and transaction costs.

THE IMPORTANCE OF PUBLIC PROCUREMENT

According to Commission estimates, total public procurement amounted to €1500 billion in 2002 accounting for 16.3 % of the Union's GDP. For the last eight years this share has remained stable. The importance of total public procurement by Member State varies significantly: from 11.9% of GDP in Italy to 21.5% in the Netherlands⁵.

Not all public procurement is subject to the obligations established by EU directives. Some activities (e.g. the purchase of warlike material for the defence sector) are excluded and purchases below thresholds only need to meet the general rules of the Treaty, not the publication requirements included in the directives. Estimating the percentage of total public procurement subject to publication procedures is very difficult. However, only 16% of public procurement is published (see Table 2 on page 8). Thus, transparency still needs to increase in the future in order to improve market performance in public procurement markets.

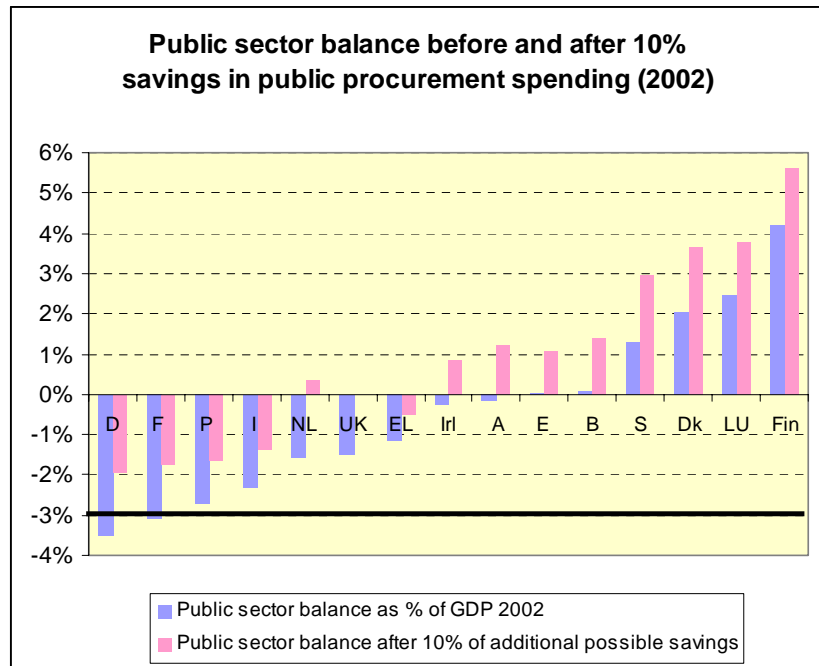
⁵ Estimates of the total importance of public procurement for OECD economies and for the EU vary depending on the methodology used for their calculation and on the definition of public procurement used. A survey published by the OECD in 2001 (OECD, *Government procurement: A synthesis Report*, 2001) estimated government procurement for central, local and social entities at 9.24 % of GDP for the EU and 9.17% for OECD countries. If defence expenditure is deducted, the percentage is 8.03% for the EU and 7.57% for OECD countries.

Table 1	Total Procurement as a Percentage of GDP							
	1995	1996	1997	1998	1999	2000	2001	2002
Belgium	14,38	14,61	14,35	14,37	14,69	14,75	14,91	15,22
Denmark	16,27	16,26	16,51	16,94	17,26	17,39	18,40	18,76
Germany	17,98	17,99	17,45	17,19	17,15	16,99	17,01	17,03
Greece	13,62	12,92	12,69	13,00	12,71	13,55	12,98	12,62
Spain	13,84	12,81	12,76	12,97	12,94	12,73	12,75	13,02
France	17,26	17,32	17,26	16,49	16,35	16,52	16,35	16,62
Ireland	13,54	12,87	12,11	11,95	12,05	12,23	13,25	13,30
Italy	12,58	12,17	12,00	12,12	12,25	12,37	12,69	11,88
Luxembourg	15,49	16,01	14,89	14,43	14,38	13,11	14,25	15,48
Netherlands	20,84	20,51	20,27	20,12	20,21	20,12	20,68	21,46
Austria	18,36	18,15	17,70	17,69	17,77	17,05	16,22	16,46
Portugal	14,14	14,56	14,57	13,85	14,29	13,98	13,91	13,26
Finland	16,25	16,70	16,57	15,96	16,06	15,37	15,72	16,45
Sweden	22,14	20,97	19,99	20,48	20,27	19,40	20,01	20,49
UK	21,68	20,58	18,24	17,79	17,84	17,46	17,89	18,42
EU 15	17,26	16,89	16,33	16,10	16,13	16,02	16,18	16,30

Source: Internal Market Directorate General

Figure 1

It is important to have an idea of the magnitude of the potential savings that may result from improvements to the public procurement market. For example, if we assume that Member States could save 10% of their public procurement expenditure and look at the impact of these savings on the magnitude of government budget balances, we can see that these hypothetical savings would have a non-negligible impact, as shown in Figure 1⁶.



Source: Internal Market Directorate General

⁶ These figures are given to show the importance of public procurement in terms of size as compared to public deficits. The 10% figure, as will be shown later in the paper, is conservative, being well below the potential savings that recent studies suggest are possible. This figure has been applied on a country by country basis to the estimated public procurement expenditure which is currently not fully transparent. The purpose of this example is purely illustrative and is not meant to have any implications for public finance or budget policy issues.

The results are quite remarkable: three countries would turn their budget deficits into surpluses and no euro zone Member State would run a public sector deficit that breaks the 3% limit.

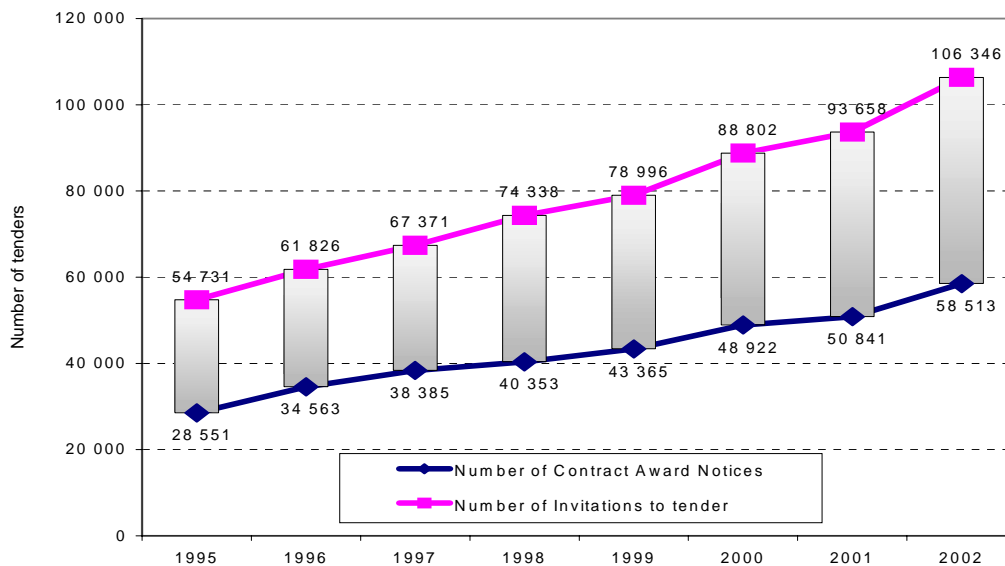
INCREASING TRANSPARENCY IN PUBLIC PROCUREMENT MARKETS TO FOSTER COMPETITION

Transparent and predictable procurement procedures improve economic efficiency by promoting competition amongst domestic and foreign suppliers. They can also contribute to fostering private investment by lowering risk because transparency and predictability of market mechanisms are crucial factors influencing business decisions on how and where to invest and generate value added.

Transparency also enhances the competitiveness of local producers by establishing a market-launch base which is especially good for SMEs. Stronger competition brings down costs, improves quality and delivery terms and fosters the introduction of innovations. Conversely, in procurement environments closed to competition and dominated by vested interests, economic incentives disappear, "dominant" local players are relaxed about minimising costs and prices rise above competitive market clearing levels. Such local producers have no incentive to strive for a competitive edge and compete for contracts abroad.

Figure 2

Public Procurement in the EU



Source: Internal Market Directorate General MAPP Database

EU public procurement directives give a prominent role to transparency, considering it fundamental to the elimination of distortions and discrimination in these markets. They require that invitations to tender with an expected contract value above established thresholds are published in the Official Journal.

Figure 2 clearly demonstrates the relationship between the introduction of EU directives and increased transparency in EU procurement markets. Between 1995 and 2002, the number of invitations to tender published in the Official Journal as required by the directives has almost doubled, while the estimated size of procurement markets has increased around 30%. The number of notices published has been growing at an annual rate close to 10%. In 2002, the number of invitations to tender published was 15% higher than the previous year.

Another important element of transparency is the publication of the final outcome of public procurement procedures. In a competitive environment, free of collusive practices, competitors can monitor the results of tendering processes and improve their future bids. This too puts downward pressure on prices over time. The number of contract award notices published in the Official Journal has been growing steadily in recent years. Although the number of contract award notices is around half the number of invitations to tender, it more than doubled between 1995 and 2002.

In 2002, 38% of contract award notices published in the Official Journal corresponded to supplies contracts, 37% were for services and public works accounted for only 19%. Local authorities published over 36,000 of the total 58,513 contract award notices. Central governments and utilities published over eight and six thousand respectively.

There is great variation in transparency rates⁷ across countries, government levels and sectors. Transparency rates are significantly affected by differences in public institutions' and governments' administrative and organisational characteristics. For instance, increasing administrative decentralisation tends to produce more frequent and disaggregated tendering, which, in principle would tend to reduce the average value of each purchase. This might increase the share of public procurement falling below the thresholds and therefore not needing publication. However other factors linked to administrative practices and/or habits also play a part, and they could offset or reinforce this trend. Therefore a higher degree of administrative decentralisation is not necessarily more or less compatible with high levels of transparency – other government and administrative practices should also be taken into consideration.

As can be seen from Table 2, Greece, Spain and the UK have the highest transparency rates with 46, 24 and 21% of their public procurement published as a percentage of the estimated total procurement value (2002 figures). At the other end of the scale are Germany, the Netherlands and Luxembourg. Whilst some Member States appear to have more transparent markets than others, a high rate of transparency does not necessarily indicate that a Member State is consistently publishing at a high level. For example, this

⁷ Transparency is defined here as the value of procurement published in the Official Journal as a percentage of estimated total public procurement.

measure is highly influenced by large fluctuations in a country's government spending – large public works projects (e. g. bridges, motorways, airports) can significantly increase the transparency rate for the years affected.

The average estimated share of the total procurement value actually published is 16.2%, equivalent to 2.6% of EU GDP. Although this rate has increased over the last ten years, further improvements are necessary.

	1995	1996	1997	1998	1999	2000	2001	2002
Belgium	6,9	7,6	10,9	13,8	15,6	15,6	18,6	15,8
Denmark	16,4	13,4	13,4	13,5	14,3	20,9	15,8	14,5
Germany	5,1	5,6	6,3	6,5	5,2	5,6	5,7	7,5
Greece	34,1	37,7	42,9	45,1	39,9	31,9	35,3	45,7
Spain	8,5	11,0	11,5	11,5	16,8	25,4	23,4	23,6
France	5,5	6,8	8,4	11,0	11,7	14,6	16,8	17,7
Ireland	11,4	16,3	19,3	16,1	16,8	21,4	19,3	18,0
Italy	9,8	9,9	11,3	10,7	13,2	17,5	15,3	20,3
Luxembourg	5,2	7,0	9,2	14,3	12,9	12,3	10,7	13,3
Netherlands	4,8	5,1	5,5	5,2	5,9	10,8	12,5	8,9
Austria	4,5	7,5	7,5	8,3	7,0	13,5	14,6	15,5
Portugal	15,5	17,7	15,1	15,5	14,6	15,0	17,7	19,4
Finland	8,0	9,2	8,2	9,2	9,8	13,2	15,1	13,9
Sweden	10,5	10,6	11,5	11,6	12,5	17,9	23,4	19,3
UK	15,0	15,6	17,9	16,9	15,1	21,5	21,5	21,1
EU 15	8,4	9,2	10,7	11,1	11,2	14,9	15,4	16,2

Source: Internal Market Directorate General

CROSS-BORDER PROCUREMENT: A MORE DETAILED PICTURE

Fostering cross-border activity in public procurement markets is a major challenge for Internal Market rules. Increased transparency would be pointless if it failed to make procurement markets more contestable especially by increasing the number of foreign bidders. Eliminating any kind of domestic bias and discrimination in favour of domestic producers and opening up markets to foreign firms is essential to foster more cross-border procurement activities. Ensuring similar chances of success to foreign and domestic bidders is the ultimate test of a level playing field.

Cross-border procurement can take place in different ways. Direct cross-border procurement occurs when firms operating from their home market bid and win contracts for invitations to tender launched in another Member State. Indirect cross-border activities arise when firms bid for contracts through subsidiaries, i.e. when their foreign affiliates bid for tenders launched by authorities of a country different from the home country where the firm has its headquarters or where the parent company is located.

Until now, procurement indicators to measure cross-border activity have been inadequate. Information collected from the Multidimensional public procurement data base (MAPP), built up using data from the Tenders Electronic Daily database (TED)⁸, indicated very weak direct cross-border procurement activity (around 1,5%). A survey conducted in 1999 indicated that in approximately 10% of total procurement there was some form of indirect cross-border procurement.

Sources	Direct cross-border procurement	Indirect cross-border procurement	Methodology – measurement
Eurostrategy Consultants 1999.	1.8%	8.5%	Survey of 2000 firms. Estimated import penetration in public sector consumption (data for 1998)
Single Market Review 1997	3%	7%	Survey – Estimated import penetration (data for 1994)

In a recent study⁹, over 1500 firms actively involved in procurement were asked about the domestic or cross-border nature of their activities. These firms were asked if they only submitted proposals to public institutions in the country where they were located or if they also put in bids abroad. In the latter case, they were asked to say if they made bids abroad directly (without any sort of intermediary) or only through a subsidiary¹⁰ or via both (i.e. with a subsidiary and directly)¹¹.

This gives the categories defined in Table 4. Cross-border activity occurs in the following cases:

⁸ All public tenders exceeding specific contract values must be published in the Supplement to the Official Journal of the European Union. Since July 1998, the printed edition of the Official Journal S is no longer available. It is now available exclusively in electronic format and is accessible on the internet by accessing the 'TED' tender database ('TED internet application', 'TED' = Tenders Electronic Daily).

⁹ COWI. "Monitoring Public Procurement in the European Union using Firm Panel Data". Lot 1. Final report July 2003. This study is based on questionnaires addressed to a sample of firms from Austria (60 firms), Belgium (60 firms), Denmark (60 firms), France (360 firms), Germany (450 firms), Ireland (40 firms), Spain (120 firms) and the UK (360 firms). The targeted sample of firms was drawn from nine economic areas corresponding to Common Procurement Vocabulary sectors 24 (chemicals), 29 (machinery), 30 (office equipment), 33 (medical products), 34 (motor vehicles), 50 (motor repair), 45 (construction), 74 (business services) and 90 (sewage). These sectors account for 66% of all published tenders.

¹⁰ Firms were asked to identify themselves as "**domestic**" or "**subsidiary**" firms. Firms are identified as "**domestic**" if they are located in the country where their headquarters is based. "**Subsidiaries**" are firms located in a country different from where their headquarters or parent companies are based.

¹¹ A few firms answered saying that they only bid abroad.

- first, whenever a subsidiary bids or is awarded a contract. This may occur in the country where the subsidiary is located, or in any other Member State. All such activities are considered indirect cross-border procurement;
- secondly, a procurement activity is considered to be cross-border if a firm that is not a subsidiary bids or is awarded a contract in a country other than the one in which it is based. In this case, cross border procurement may occur either directly - the firm bids from its home base - or indirectly - through a subsidiary located abroad.¹²

This allows the measurement of cross-border activity in terms of the number of firms bidding at home or abroad; the number of proposals made by domestic or by foreign firms; and the success rate of firms bidding in their own country of origin or abroad.

Table 4 Cross-border Public Procurement Activities of Firms Included in Study Sample				
	Number of answers to this question from firms in the sample ¹³	Number of proposals	Average number of proposals per firm	Share of total proposals
Firms submitting proposals to public institutions in the country where they are located only				
Proposals to home country by domestic firms	416	49 498	119	40%
Proposals to home country by foreign owned subsidiaries	98	13 984	143	11%
Firms submitting proposals to public institutions in the country where they are located AND/OR in other EU Member States DIRECTLY AND/OR through a SUBSIDIARY				
Proposals to home country by domestic firms	213	32 438	152	26%
Proposals to home country by foreign owned subsidiary firms	67	15 762	235	13%
Proposals to other EU Member States directly	207	4 155	20	3%
Proposals to other EU Member States through subsidiary	162	7 345	45	6%
Total		123 182		

Source: Internal Market Directorate General using COWI data

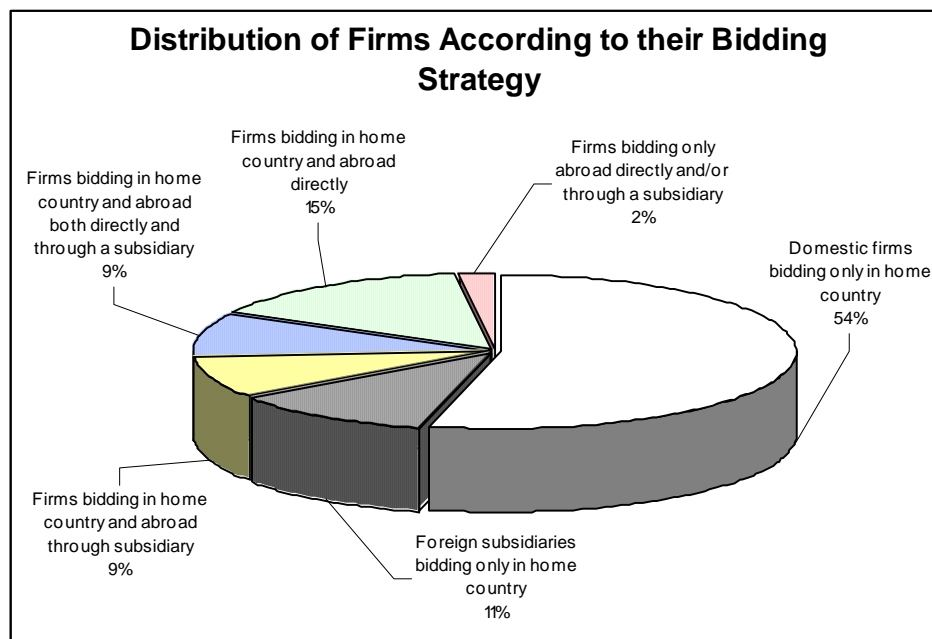
¹² Notice that we call home country the country where a firm is located, be it a subsidiary or not. This should be distinguished from the home base of the firm that is the country where the headquarters of the firm is located.

¹³ The figures in this column relate to the number of times that a firm has submitted a proposal within a given category. So, if a firm has submitted more than one proposal it appears the corresponding number of times, making the total of this column greater than the number of firms who answered this question.

i. There are a considerable number of firms involved in cross-border procurement

Approximately 54% of all the firms in the sample are domestic firms bidding exclusively for contracts in their home country. This means that 46% of all firms in the sample carry out some sort of cross-border procurement activity, generally involving the use of a subsidiary. Only 15% of firms bid both at home and abroad directly. The relative extent of cross-border procurement, as reflected by the number of firms included in this sample, seems greater than suggested by the few previous surveys available until now. However, the number of firms involved exclusively in cross-border procurement is relatively low.

Figure 3



Source: Internal Market Directorate General using COWI data

Bidding abroad through subsidiaries is clearly a dominant strategy. Having a physical presence in the target market or access to some local expertise or inputs may be a necessity or an advantage if a firm wants access to public procurement markets. This would partially explain the high occurrence of this strategy. However, in so far as this is not the case, these figures would indicate that there is still considerable scope for the development of direct cross-border procurement.

The intensity of cross-border procurement is similar across sectors except for medical products and motor vehicles. International procurement activities in medical products are much more frequent than in other sectors and much less frequent in motor vehicles: 67% of firms in this sector bid for contracts in their base market only.

Across countries there are also some differences too, but they should be interpreted with caution. Table 5 shows that Spanish firms are more reluctant to bid abroad than the sample average. The share of foreign subsidiaries operating in the UK (19%) and France (16%) only is higher than average (11%), whilst in Germany it is relatively low (6%).

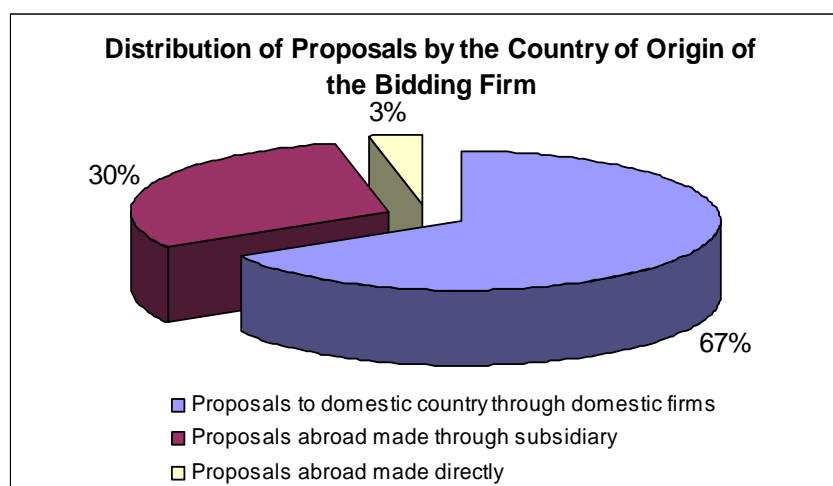
	In the Home Country		In other EU Member States
	Domestic firms	Foreign owned subsidiary firms	Both domestic and foreign owned firms bidding both at home and abroad directly and/or through a subsidiary
Austria	54%	2%	44%
Belgium	19%	12%	70%
Denmark	58%	6%	36%
France	56%	16%	29%
Germany	51%	6%	43%
Ireland	-	-	-
Spain	75%	11%	14%
UK	51%	19%	30%
Total	54%	11%	35%

Source: COWI Report

ii. Most proposals are still coming from domestic firms, but indirect bidding is significant

Most (67%) of the total number of bids submitted by firms in the sample are proposals submitted by "national" firms in their own home countries, 30% are proposals from subsidiaries in other countries and only 3% are direct cross-border procurement. Compared to the previous figures, these show greater "home bias", but they still reflect higher levels of cross-border procurement than previously recorded. This confirms the real importance in Europe of bidding for contracts through subsidiaries.

Figure 4



Source: Internal Market Directorate General using COWI data

Further confirmation of this phenomenon is provided by the high bidding frequency of subsidiaries compared to domestic firms. On average, subsidiaries presented one and a

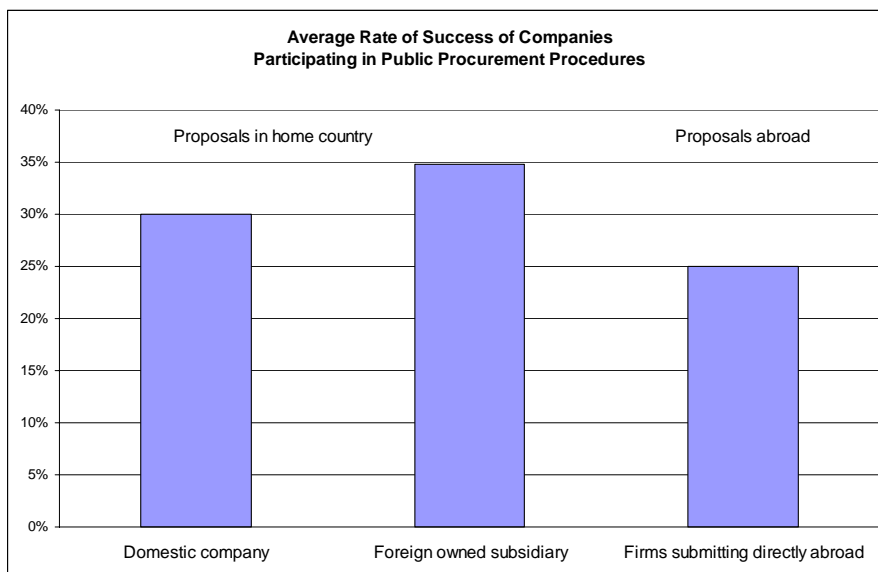
half times as many proposals as domestic firms. However, when direct cross-border procurement is included, the bidding average of firms operating across borders drops significantly to around one third of the number of proposals submitted by domestic firms.

iii. There are minor differences in the success rates of domestic and foreign firms

A main objective of public procurement policy makers is to ensure a level playing field where bids from domestic and foreign firms have similar chances of success. Firms were asked to report the number of cases when they were awarded contracts after bidding. Dividing that number by the number of proposals submitted by each firm allows the calculation of the "average rate of success" for a given firm.¹⁴

The "average" rate of success in each category shows clearly that cross-border public procurement operations are not necessarily confronted with lower chances of success. Foreign subsidiaries bidding in the country where they are located tend to have a slightly higher rate of success than domestic firms bidding for contracts in their own home country. However, the rate of success is clearly lower for proposals submitted in a country different to the home base of the bidder. Once again, direct cross-border procurement seems to be at a disadvantage.

Figure 5



Source: Internal Market Directorate General using COWI data

All in all, these figures seem to suggest that public procurement markets are relatively open to foreign competition, especially from subsidiary firms located in countries launching invitations to tender. However, direct cross-border procurement from the home base of foreign companies is far less frequent.

¹⁴ We then calculate the mean of those averages for each category of firms.

THE IMPACT OF PUBLIC PROCUREMENT RULES ON PRICES

The ultimate test of the effectiveness of public procurement legislation is the impact on prices actually paid for goods and services by public procurement authorities. If transparency and competition in the bidding process are increased but this does not result in lower prices and more value for money, discrimination may have been eliminated but the social benefits from more and fairer competition are insignificant.

Measuring the impact on prices of procurement rules is difficult¹⁵. Results from two exercises looking at the issue¹⁶ are presented here. In both cases, the results seem to suggest that application of the procurement directives effectively reduces prices.

i. The application of procurement directives effectively reduced the prices of goods and services purchased by a sample of 1000 public authorities

In an exercise commissioned by the Internal Market Directorate General, 1000 contract awarding authorities were asked about the prices actually paid in 2002 for a list of carefully defined goods, services and works¹⁷. In practice, it was difficult to collect information about cases when EU procurement rules were effectively applied¹⁸. Therefore, it was decided that procurement directives would be considered to have been applied in those cases where an invitation to tender was published and at least one bidder replied. Equally, it was decided that they were not applied when there was a direct allocation of the contract without any tendering process.

A first look shows significant variation in the prices paid for the same products in different purchases by different authorities. For instance, in Figure 6, for the office supplies group of goods, 95% of prices vary from 0.5 to 5 times the EU average price. For services such as cleaning, the variation is also quite significant. Even for highly homogeneous products like fuel, the range of variation is quite large¹⁹. To what extent can the application of procurement directives explain these differences? And are prices effectively lower when the directives are applied?

¹⁵ It requires collecting information on similar prices of goods actually paid by authorities (i.e. not simple catalogue prices) for comparable goods and services.

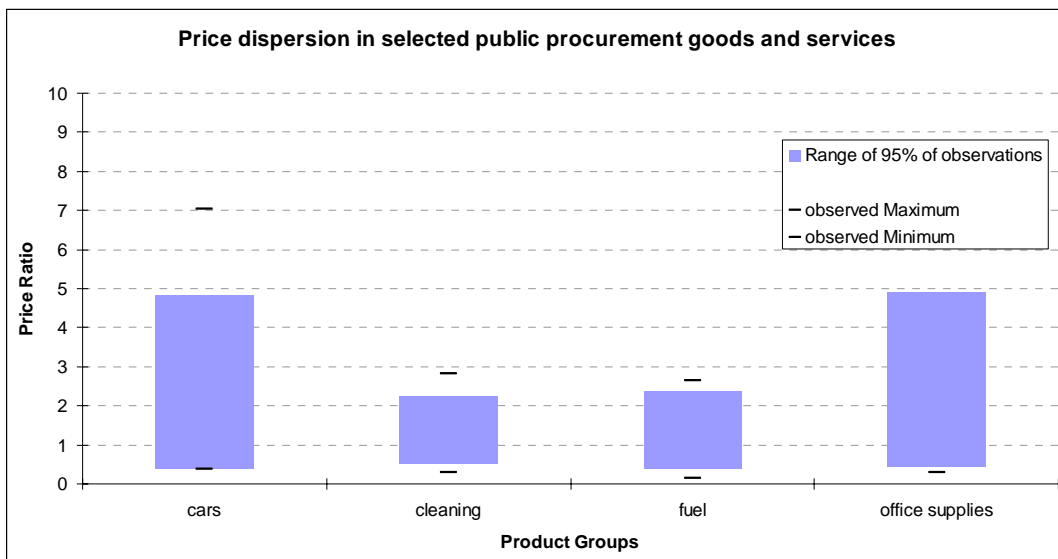
¹⁶ The first one is based on a survey of approximately 1000 procurement authorities who were asked about the prices actually paid excluding VAT for a list of goods and services. The second one is based on intra EU trade in relatively homogeneous "typical" public procurement goods.

¹⁷ COWI. "Monitoring Public Procurement in the European Union using Public Authorities Panel Data" Lot 2, Final report July 2003. The goods were carefully selected to avoid distortions in the measurement for prices due to qualitative differences. In addition, a quality variable was introduced to double check for quality differences.

¹⁸ In order to isolate the impact of the application of Internal Market procurement rules, authorities were asked to indicate when EU procurement rules were applied and when national rules or no rules were applied. Respondents had difficulties in identifying exactly which rules were applied in each case. In practice, invitations to tender are always subject to compliance with national rules, whether the coordinating provisions of the Directives apply or not.

¹⁹ It should be noted that price variation is observed not just across but also within countries.

Figure 6



Source: Internal Market Directorate General using COWI data

A first simple comparison of the means of price observations collected in this survey shows that the prices effectively paid in purchases where procurement rules were not applied were approximately 34% higher than prices when the rules are applied. This difference is statistically significant.

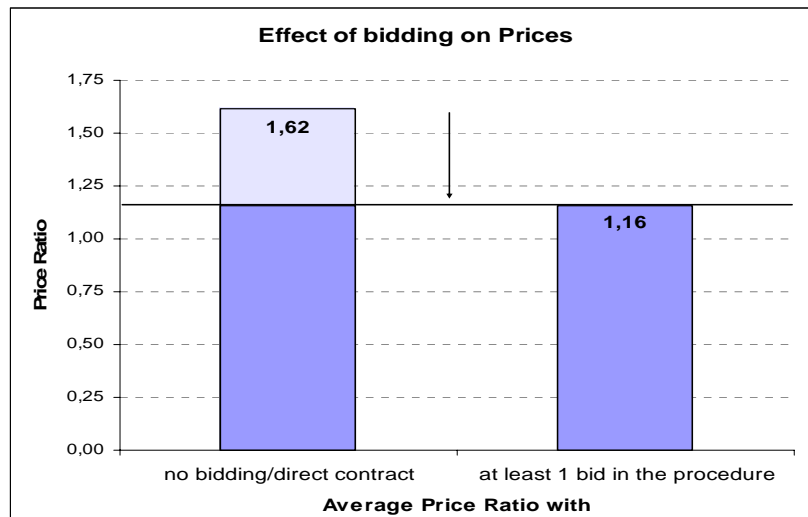
However this first evidence is not sufficient to conclude the positive impact of the procurement rules on prices. Other characteristics of the purchase have to be taken into account because they may have an influence on the price. For example, it is logical to assume that purchases of large quantities of goods lead to discounts or scale effects which may reduce the price paid per unit. Since the application of directives is compulsory for purchases above a given threshold, the lower price may be due to the larger average size of purchases when the directives are applied and not necessarily to more competition resulting from the application of the directives. Thus, a simple comparison of average unit prices may not be enough to conclude that the directives have had a positive impact on prices.

Econometric techniques have been used to control for possible interference from other factors. Several exercises conducted to isolate the impact of the application of public procurement directives suggest that the application of these rules by authorities in the sample has effectively reduced the price they paid. In addition, these exercises suggest that the price paid when the directives are not applied is around 40%²⁰ higher than when they are (see Figure 7). This result is statistically significant and controls for the impact of the quantity ordered and other factors. This means that even taking into account

²⁰ Depending on the calculation the prices paid without the directives are 40% higher than when the directives are applied (1.62/1.16); alternatively it can be said that the reduction due to the application of the directives is almost 30% (subtract 1.62 from 1.16 and divide the result by 1.62).

differences in the order of magnitude of the purchase, open competitive bidding for public procurement as required by the directives is, as expected, an effective cost-cutting measure.²¹ Quantity also has the positive impact expected: public institutions which ordered an amount 25% larger than the average paid on average approximately 7% less per unit.

Figure 7



Source: Internal Market Directorate General using COWI data

The COWI study also includes an econometric exercise to identify the explanatory factors behind the differences in prices paid in procurement purchases within the same country²². The study concludes that:

- once again, prices are lower in those cases where there are one or more tenders than in those cases where there is a direct purchase;
- there seems to be a U-shape relationship between the prices paid and the level of government: local and national institutions pay relatively higher prices than regional authorities;
- the level of professionalism and the organisation of the purchases have an important influence on the prices that public institutions pay for goods and services. Public institutions with a purchasing department that centrally organises the public procurement for the institution pay on average slightly lower prices;

²¹ The impact of having more than one bid on price reductions appears particularly significant in the acquisition of goods. Some country differences also appear to be significant in some econometric specifications, but this may be due to country specific factors not linked to differences in the application of procurement rules.

²² The results reported above correlate number of bids, quantity and other possible explanatory variables with the dispersion in procurement prices with respect to the EU average price for each good and service. The COWI price dispersion is measured with respect to the national average price.

- firm size and the domestic or foreign nationality of the firm to which the contract is awarded do not seem to have any significant effect on the price actually paid.

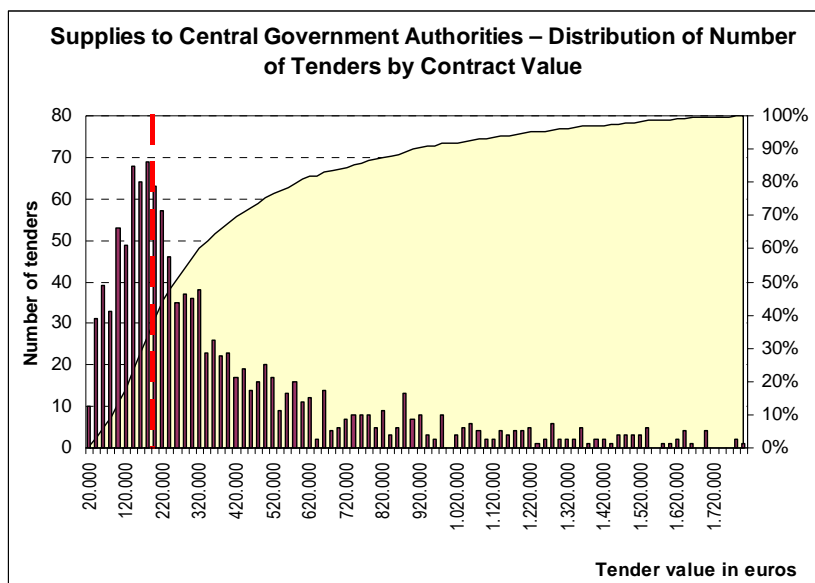
A corollary: changing the thresholds

One of the features of the public procurement directives is that their application is compulsory when public authorities launch invitations to tender for contracts with an expected value above pre-established thresholds. Since 2004, these thresholds range between approximately €150.000 for public supplies and service contracts and roughly €6.000.000 for works. There are various justifications for the thresholds:

- first, procurement procedures entail compliance and administrative costs for the public institutions and tendering costs for the bidding firms. If the value of the contract is relatively low for the type of purchase in question, it is assumed that the potential benefits from greater competition do not compensate for those costs;
- in addition, increased transparency in procurement markets may not result in greater cross-border competition if the value of the contract does not make it worthwhile for foreign firms to tender and cover the additional costs that cross-border provision necessarily implies.

It has been argued that the current thresholds should be raised. Evidence presented above suggests that this will result in higher procurement prices especially if their mere existence has a significant effect on the procurement behaviour of public institutions launching invitations to tender. If public authorities do tend to organise tendering in ways that avoid the application of EU procurement rules, it seems unwise to increase thresholds as the 40% price mark-up could be applied to a large number of purchases.

Figure 8



Source: Internal Market Directorate General

Figure 8 shows that the threshold has an influence on the distribution of invitations to tender by value or size. Administrations and institutions tend to comply with the directives by concentrating a large number of purchases just below the threshold for each kind of operation and thereby avoiding procedural costs and publication. This suggests that if thresholds are raised less invitations to tender would be published and the prices paid by authorities for goods and services may be higher than necessary.

In addition the new legislative package and other Community initiatives in this area for the introduction of electronic procurement are intended to reduce compliance costs. In this context, claims to raise thresholds are hard to justify.

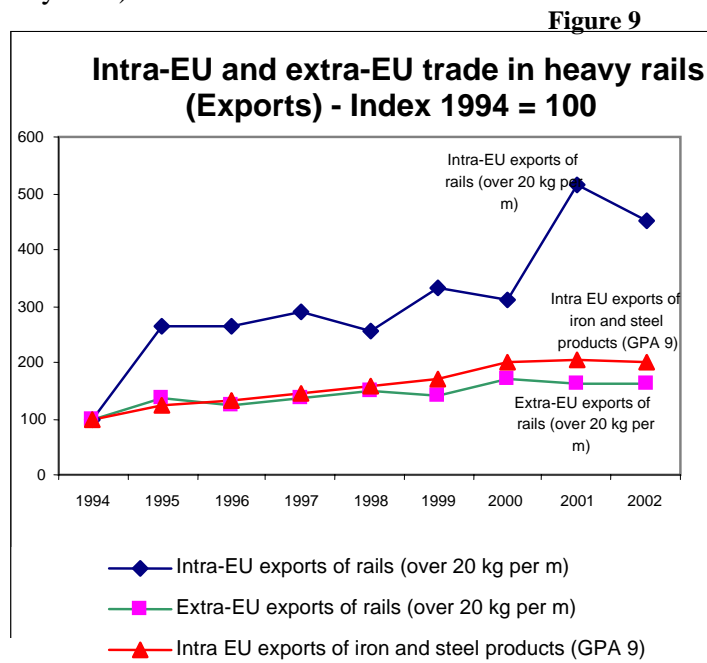
ii. Evidence shows that the export price of comparable procurement goods converged after the introduction of procurement directives

Analysis has also been undertaken of intra EU trade flows for seven goods that can be considered as "typical" public procurement goods, i.e. goods that are mainly purchased by public authorities. Relatively homogeneous goods were selected in order to facilitate price comparisons. These goods are preparations for X-ray examinations, iron or steel railway rails, smaller rails for trams, iron and steel seamless pipes of a kind used for oil or gas pipelines, fire fighting vehicles, railway tank wagons and syringes for medical usage.²³

Apart from one case (syringes), the progressive introduction of directives since the mid 1990s seems to have had a similar effect on these goods. The graphs below illustrate the results for iron or steel railway rails (heavy rails).

- Although trade has varied depending on the evolution of sector specific factors, in general, intra-EU trade for these goods seems to have expanded relatively faster than extra-EU trade for the same product category and trade for related goods that are largely traded between private parties only. This would seem to suggest that the introduction of the procurement directives has contributed to foster trade in these products among Member States. effectively

Source: Internal Market Directorate General



²³ The analysis has been carried out using EUROSTAT COMEXT data for eight digit product categories CN 30063000, CN 73021031, CN 73021039, CN 73041090, CN 87053000, CN 86061000 and CN 90183110.

opening those markets to competition within the EU.

- Export and import prices²⁴ for these goods have converged over time eliminating price differences. In the case of heavy rails, this convergence has been fairly steady – from over 15% in 1988-92 to 12% in 1998-2002.²⁵ For small rails the price convergence was more pronounced – from 21% in 1988-92 to 7% in 1998-2002. This suggests that, at least for these products, the introduction of the directives has been followed by progressive cross-border market integration in these mainly public procurement markets.

Figure 10

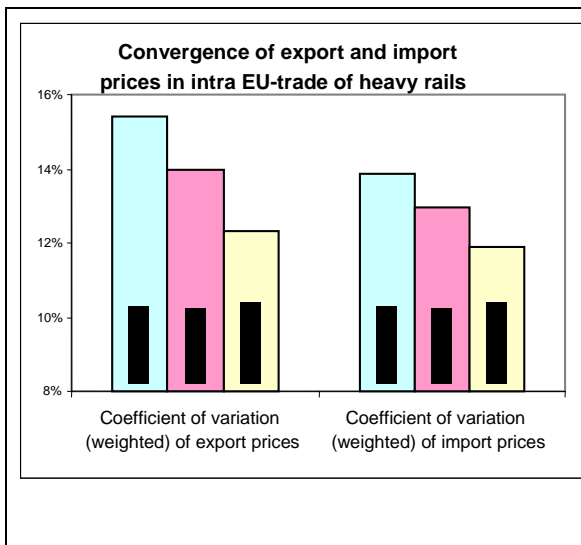
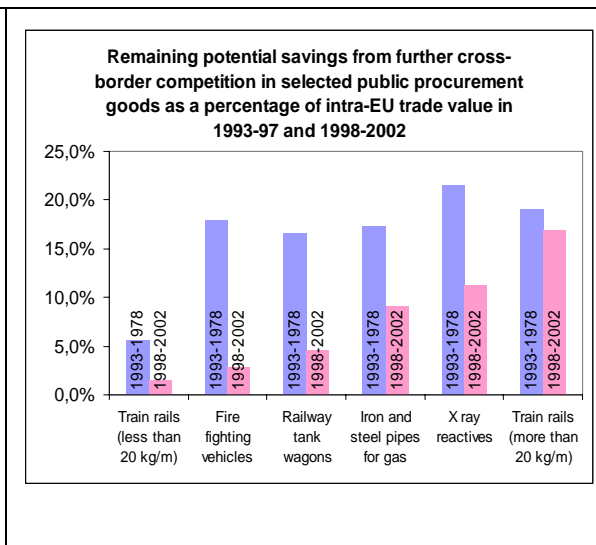


Figure 11



Source: Internal Market Directorate General

- In spite of this price convergence, the analysis of trade flows suggests that there are still further possibilities for savings in these markets. Figure 11 shows the potential savings as a percentage of the actual value of imports that could have been achieved if trade had occurred at the second lowest export price instead of the actual export price. For just these six goods, this could have accounted for almost 12% of the total value of intra-EU trade in these goods in 1998-2002 (over 400 million euros).
- Potential savings are much lower now than before the introduction of the directives and this is further evidence of their positive impact on the performance

²⁴ Actually, these are export and import unit values.

²⁵ Both weighted and unweighted coefficients of variation have been calculated to take into account the relative importance of exports to different EU destination from each Member State. The results hold with very minor variations in both cases. Bilateral differences in export and import unit prices have been calculated and they suggest that the possibilities for cross-country price discrimination have been reduced. Given that these are relatively homogenous goods, these results can hardly be explained by increased homogeneity in the composition of exports and imports.

of these markets. Nevertheless, the remaining potential savings are still quite important.

OTHER DIMENSIONS OF MARKET PERFORMANCE

The Commission also considers other dimensions of the performance of public procurement markets. These include access to these markets by SMEs; the consideration of environmental and social issues; and transaction costs.

i. Public procurement and SMEs

Most public procurement contracts are awarded to SMEs. Two recent Commission studies with different objectives and methodologies show similar results in this regard. A study conducted for the Enterprise Directorate General using TED-MAPP data shows that approximated 78% of the successful enterprises awarded contracts in 2001 were SMEs²⁶. A study for the Internal Market Directorate General shows that the SMEs have a significantly higher success rate than large enterprises.

However, it is difficult to assess market performance in this area. Some may argue that although SMEs win a higher share of all public procurement contracts awarded, these firms represent a still higher share of the total number of firms in the market. Others may argue that although SMES represent 99.8% of the total number of firms in the Union, by the nature of their activities, they tend to be less active in procurement activities than in the economy as a whole.

For these reasons, it is more useful to present additional factual information on the situation of SMEs in public procurement markets here rather than to try and issue an overall assessment.

- Although the overall success rate of SMEs is higher, their chances of success in cross-border procurement are much lower. SMEs acting as subsidiaries of foreign firms still have a high rate of success but the difference with respect to large enterprises is not very significant in statistical terms. In the case of direct cross-border procurement it is not significant.
- Sectoral differences have an important influence on the access of SMEs to procurement contracts. They are particularly well represented in the construction sector and less so in the business services sector.
- As one would have expected, SMEs have relatively easier access to contracts with local authorities.

²⁶ European Commission "SMEs access to public procurement", Brussels 2003, published on the website <http://europa.eu.int/comm/enterprise/entrepreneurship/craft/index.htm>

ii. Environmental²⁷ and social issues

Environmental and social issues have been the subject of increasing attention in the context of public procurement rules. In 2002, two Communications provided detailed information on the views held by the Commission on the consideration that should be given to these important issues.

The recent studies commissioned by the Internal Market Directorate General²⁸ on the performance of public procurement markets shed additional light on these matters.

- First, firms included in the sample report that they find environmental clauses in the public tenders to which they submit proposals approximately 40% of the time. There are no perceptible differences across countries and this frequency does not seem to be affected by the application of EU directives.
- In addition, the analysis of prices reported by public authorities seems to suggest that introducing environmental clauses does not increase the prices actually paid for the supplies, services or works.
- Firms report that social clauses are less frequently found in tenders (around 20%). However, they are more frequently found in Denmark, especially when EU directives are applied.
- There is some evidence suggesting that the introduction of social clauses results in slightly higher prices actually paid by authorities.

iii. Transaction costs in public procurement markets remain significant

The above discusses the different sources of benefits found in public procurement markets as a result of the directives. However, any evaluation of market performance must also take into account the costs of operating in these markets for firms and authorities. There are costs associated with making procurement markets more transparent and competitive. Transaction cost minimisation is essential to ensure good market performance.

The two studies²⁸ recently carried out for the Internal Market Directorate General of the European Commission include comments from firms and authorities. These comments reflect concern for the relatively significant costs incurred by both firms and authorities in complying with procurement rules.

Although some firms reported an improvement in transparency in public procurement, many considered that their chances were still not equal when bidding from abroad. All firms emphasised that formal procurement procedures were costly due to the paperwork

²⁷ For additional information see the study commissioned by the Environment Directorate General to ICLEI "State of Play of Green Public Procurement in the European Union", Final report, Freiburg, July 2003, published on the website www.iclei.org/ecoprocura/network.

²⁸ See footnotes 9 and 17.

required when submitting a tender. In particular, they complained about the amount of non-bid related information required by the authorities.

There are some nuances on the comments depending on their nationality. German and Austrian firms were particularly negative. They complained about excessively strict specifications that effectively excluded some competitors from the process. They also argued that the importance given to price may be disproportionate and that in the long run, the cheapest bid could be more expensive for the purchasing institution, especially with regard to technical products.

British, Austrian and German firms were more aware of EU directives regulating procurement markets. British firms usually commented positively on environmental clauses, while firms from other countries had mixed views. Only Spanish firms complained about payment delays.

Comments varied significantly across firms of different size. Firms with 50 or more workers felt that electronic media and e-procurement were the solution to the heavy procedural costs involved in bidding. Very small firms did not mention electronic solutions as a way out of the problems they faced in these markets.

Authorities also found procurement procedures too complicated and relatively inflexible, particularly as regards price negotiations. Spanish authorities were relatively more positive towards EU procurement rules. Although some firms openly acknowledged that rules were "necessary in order to prevent manipulation and corruption", many considered that excessive procedural requirements resulted in "competitive formalism".

Some firms mentioned that the existence of different directives for different types of procurement activities (works, supplies, services) complicated tendering processes. They welcomed proposed changes in the new procurement legislation package.

Authorities in several member states also pointed out that the new legislative package was likely to contribute to solving many of the problems raised by firms and authorities in the surveys. The significant procedural simplifications that it will bring about and the important effort to consolidate rules should result in lower costs and cuts in red-tape.

In addition, Community efforts to improve the use of e-procurement in line with Internal Market rules should result in further cost reductions to firms and authorities. E-procurement can increase transparency and procedural efficiency without prejudice to competition. This should allow for easier cost comparisons and examination of tenders.

However, the costs associated with the introduction of e-procurement should not be underestimated either for firms or authorities. In particular, the up-front costs of shifting to an electronic procurement system may become an obstacle for smaller firms. Moreover, it is necessary to ensure that national uncoordinated e-procurement solutions do not "fragment" the market.

For these reasons, in 2004 the Commission will present an Action plan for the introduction of coordinated e-procurement in the EU aimed at reducing procurement costs and contributing to further integration in procurement markets.

Sector-specific measures: the case of the Healthcare sector

Sector-specific measures can contribute to improvements in the performance of some procurement markets. A recent paper by the CEN presents an analysis of the potential for savings and improved productivity in the use of resources in public tendering in the field of EU healthcare expenditure. This is the result of a workshop on hospital procurement and e-commerce for the Healthcare sector in January 2002.

EU Member States spend between 5% and 10% of GDP on healthcare. In absolute terms, this spending has been increasing for many years and all Member States are experiencing growing pressure on their health services. This trend is likely to continue in the future due to: demographic developments; the population's growing expectations of the quality of healthcare; and the complexity of new medical technology.

Although standardisation for purchasing and logistics systems across Europe could contribute to better control pricing and quality in all aspects of the purchasing cycle, it is only realistic to focus on a few processes within the cycle. Public tendering processes across Europe have much in common, as illustrated by the experiences of the European Generic Article Register project (EGAR) over the last year and a half. Tendering utilises significant resources and the project found the lack of standards to be universal²⁹.

The potential for savings and improved productivity in the use of resources for public tendering is great. The EGAR project found that in Norway, the use of a generic register improved the tendering process and communications between purchasers and suppliers significantly. Lack of standards such as correct article descriptions and information, created a significant and often unnecessary workload for trading partners. Within the tendering processes significant benefits were obtained through the use of more automated tender solutions based on generic standards. Based on experience from Norway EGAR benefits should include:

- *workload reduction of more than 50% in creating and evaluating tenders;*
- *quicker responses to suppliers and shorter contract negotiations;*
- *price reductions between 10 and 25 % depending on product areas;*
- *more accurate basis for ordering systems;*
- *one generic number and article description relating to one or more actual articles from one or more suppliers;*
- *improved statistics based on the generic article level;*
- *significantly reduced transaction costs;*
- *greater compliance with EU rules by public purchasers; and*
- *a more open environment and improved interaction between hospital buying departments and suppliers due to the standardisation at generic level.*

²⁹ In a sense but on a different scale, the common procurement vocabulary (CPV) has the same purpose of reducing costs by standardising the nomenclature.

CONCLUSIONS

There is overwhelming evidence showing that the procurement directives have contributed to increased transparency in public procurement markets. The new evidence, based on a sample of firms and public authorities, suggests that increased transparency has effectively resulted in more cross-border competition, price convergence and lower prices for goods and services purchased by public authorities.

Therefore, it seems reasonable to conclude that when effectively implemented the current legislative public procurement package actually contributed to reform the public procurement environment.

Most importantly, this evidence shows that economic reforms work and pay off. It is important to show this in a clear and thorough manner at a time when new economic reform proposals are being discussed.

Of course, problems remain and the new legislative package should reduce transaction costs. E-procurement offers new possibilities for cost reductions. If promptly adopted and effectively implemented by Member States, these measures will contribute to improve still further the performance of our public procurement markets.