



EU 'green' public procurement - acoustic noise - a key requirement for IT products

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Abstract

The objective is to explain the importance of the EU Public Procurement Directive and the integration of product environmental attributes like acoustic noise in public tender specifications. The IT Industry has responded to this demand by creating an International standard environmental declaration, ECMA-370. This declaration delivers objective information, allowing customers to make informed purchase decisions. Early recognition and understanding of EU regulation is vital for successful business.

Keywords: EU public procurement - acoustic noise - IT products.

Introduction

The EU Public Procurement Directives allows the European countries to ask for 'green' products that go beyond legal compliance. Since the late 90s the most active countries in 'greening' their public procurement are: Austria, Denmark, Finland, Germany, the Netherlands, Sweden and the UK which in 2005 were called the 'green 7' in an EU financed report [1]

Current market situation

At present, some 20 Member States as well as Norway and Switzerland have issued national action plans to 'green' their public purchasing. 2010 is believed to be the year where 'green' Public Procurement (GPP) really will take off in Europe and will affect an increasing part of the business in the public sector.

The purpose of EU Public Procurement

The main purpose of this Directive is to increase competition, allowing the public sector to get more value for its money.

EU public procurement principles

According to the EU Public Procurement Directive, all of the following principles must be met, the principle of: non-discrimination, equal treatment, transparency, proportionality and mutual recognition of test reports.

It is clear from both the Directive as well from settled case law, that asking for eco label certified products is not allowed. According to article 23 of 2004/18/EC [2], European eco-label criteria can be used as technical specifications, provided that:

- the specifications are appropriate and covered by the contract
- these are based on scientific information
- the eco-labels are adopted with participation of all stakeholders
- they are accessible to all interested parties.

To be able to assess, compare and control the various environmental aspects, these must refer to technical standards, preferably International, if not available European and sometimes also National standards are appropriate.

The most frequently asked environmental attributes

For IT products, several years of experience of public tender specifications show, that for personal computers and Imaging Equipment, the following are the most frequently requested environmental criteria in public tenders:

1. Energy efficiency, with reference to ENERGY STAR® test protocols and limits
2. Acoustic noise with reference to applicable ISO standards and European eco label limits
3. Chemical substances and materials: minimized or eliminated use of PVC, mercury, brominated flame retardants.



Industry response: The IT Eco Declaration – International ECMA-370 standard

As stated above, it is clear that asking for Eco label certified products is not allowed. When a certain environmental attribute is covered by an European eco label, the eco-label certificate may serve as compliance verification in a public tender. The Directive also states that other means of verifications like manufacturer’s self declaration must be accepted. The industry for many years has satisfied this requirement by delivering The Eco Declaration, which in 2006 became an International standard, ECMA-370 [3].

Eco label criteria that can be used are those that are officially recognized within the European Union. Many years experience show that such criteria in more than 90% of all cases come from the following four European systems: EU eco label (the Flower), German Blue Angel, Nordic Swan and TCO. Therefore, active industry engagement with these eco label organizations is vital to ensure that criteria refer to correct technical standards and that reasonable limits are set that are possible to achieve with maintained functionality.

Acoustic noise requirements in European public tenders

A multitude of different purchase specifications for the same product categories exist in Europe. Summer 2008, EU DG Environment published minimum purchase requirements for 10 product categories. The goal is that these should be used in at least 50% of all public tenders from 2010 in all Member States. The 1st set of GPP criteria include office IT Products (PCs, monitors and Imaging Equipment). Another 10 product groups are under preparation and can be expected to be released later this year.

Table 1 shows the various acoustic noise requirements that are regularly seen in European ‘green’ public tenders for personal computers.

Table 1

Personal Computers Purchase requirements	Desktop Computers Sound Power, Bel		Notebook Computers Sound Power, Bel	
	Idle	Operation	Idle	Operation
EU ‘green’ purchasing criteria (2)	4.0	4.5 (1)	3.5	4.0 (1)
EU eco label, the Flower	4.0	4.5	3.5	4.0
German Blue Angel	4.0	4.4 (6)	4.0	4.4 (6)
Nordic Swan	4.2	3.8	3.5	4.0
TCO	3.9	4.4 (4,5)	3.5	3.9 (3)

To be measured in accordance with ISO7779 [4] and declared per ISO 9296 [5]

- (1) All products carrying the EU Ecolabel will be deemed to comply. Other type I eco labels fulfilling the above criteria can also be accepted. Other appropriate means of proof will also be accepted.
- (2) The 'Declared A-weighted Sound Power Level' (re 1 pW) of PCs or notebooks, according to paragraph 3.2.5 of ISO 9296, measured in accordance with ISO7779, shall not exceed the Sound Power levels as listed above.
- (3) If the product does not emit prominent discrete tones according to procedures specified in ECMA 74 Annex D a higher declared A-weighted sound power level (LWAd) is accepted but shall not exceed: *Operating mode: 4.2B, Idling mode: 3.8B.*
- (4) If the product does not emit prominent discrete tones according to procedures specified in ECMA 74 Annex D a higher declared A-weighted sound power level (LWAd) is accepted but shall not exceed:
Operating mode: 4.7B, Idling mode: 4.2B
- (5) Applies to desktop as well as All-In-One computers.
- (6) 4.8 B at high load with a CPU utilization of at least 90% and 5.2 B for the operation of the optical drives.

More advanced acoustic noise requirements

Several public tenders have even more advanced requirements. Tender examples exist where the maximum levels shown in the above table are used as qualifiers, i.e. if not met, the bid is rejected. In addition, award criteria have been added with even tighter limits. If met, the bidding company receives additional points in the final bid evaluation. In a very large Swedish public tender for desktop and Notebook computers in 2008, the above listed Blue Angel criteria were mandatory to meet. Additional points were given to 'extra quiet' PCs where the sound power levels were a maximum 3.2 B in both idle and operating mode. A very large number of PCs met the qualification limits. None of the desktops and about 30% of the Notebooks computers met the tighter limits for 'extra quite' computers.

Conclusions

Understanding the basic principles of the EU Public Procurement Directive and it's related 'green' criteria is essential for being successful when making business with the public sector in Europe.

References

- [1] http://ec.europa.eu/environment/gpp/pdf/take_5.pdf
- [2] http://ec.europa.eu/internal_market/publicprocurement/legislation_en.htm
- [3] ECMA-370 standard: www.ecma-international.org/publications/standards/Ecma-370.htm
- [4] ISO7779 'Acoustics -- Measurement of airborne noise emitted by information technology and telecommunications equipment.'
- [5] ISO9296 'Acoustics -- Declared noise emission values of computer and business equipment.'