Procurement of energy and resource efficient desktop computers
Federal Procurement Agency (Austria)

Background

Austria’s Federal Procurement Agency (BBG) was founded in 2001 by the Austrian Federal Procurement Agency Act, and is responsible for providing central procurement services to Austrian contracting authorities (e.g. ministries, regional and local governments). BBG’s primary tasks are to bundle requirements in order to obtain better prices and conditions from suppliers, whilst also standardising public purchasing in order to reduce processing costs and legal risks, and provide support to national agencies on public procurement. BBG achieves this by negotiating framework contracts and making these available to the public sector.

BBG has been hosting the Service Point for Innovation Procurement since 2013. The service supports public institutions when it comes to the implementation of innovation procurement projects, for instance, through the publication of unmet needs on the platform www.innovationspartnerschaft.at. Thus, suppliers have the possibility to offer innovative solutions in order to solve those unmet needs.

Procurement objectives

This procurement involved the publication of an open call for tenders (in March 2016) to set up a framework contract for three years (2016 to 2019), with a possible one year extension, for use by Austrian public procurers (e.g. ministries, cities, hospitals). Specifically, 55,400 new desktop computers (PCs) could be purchased - worth a total of approximately 36 million euro.

This contract replaced the previous 2013 contract, which already included energy efficiency requirements, and provided a benchmark against which improvements could be made.

While the Austrian Action Plan for Sustainable Public Procurement already includes environmental requirements for the procurement of IT appliances, BBG went beyond these in this tender by requiring energy efficient power supplies (in computers), and including low thermal design power as part of the award criteria – as just a couple of examples.

Criteria used

Technical specifications: The tender required the following:

- Fulfilment of the Energy Star (Energy Star v6.0) requirements.
- Power supplies fulfil the requirements of the certification 80 PLUS Bronze (which requires power supplies in computers and servers to be 80% or greater energy efficient at 10, 20, 50 and 100% of rated load).
- The physical input devices fulfil the requirements of the ergonomics standards ISO 9241-410 and ISO 9241-110.
- Conflict-free minerals in the central processing unit (minerals can be identified as not originating from regions in conflict). Self-declarations were requested from bidders for verification.
As PCs available on the market are modular in design (that is, facilitate the efficient exchange of components) further requirements regarding modularity were not included as technical specifications.

**Award criteria:**

Energy efficiency was addressed by the inclusion of an award criterion related to ‘thermal design power/point’ (the amount of power a processor is expected to dissipate to prevent overheating, which can be used to evaluate the electricity consumption of the device).

The tender also addressed resource efficiency by including ‘volume of the desktop case’ as an award criterion (as the smaller the case, the smaller the material requirements). Desktops which were smaller in volume were awarded a greater number of points.

**Contract performance clauses:**

The procurement requested different warranty models, for example, in terms of duration.

**Results**

One to one discussions took place prior to launching the call for tender with potential suppliers. There was quite some discussion regarding the certified power supply technical specifications. Most suppliers said that they would have difficulties delivering 80 PLUS Silver certification, so this was lowered to 80 PLUS Bronze upon publication of the tender documents.

Bids were received from five suppliers, with several suppliers bidding for the various lots. Mini-tenders (where the market is essentially the suppliers for the framework contract) need to be made for purchases over 100,000 euro from the framework agreement. Direct orders can be placed for purchases under this amount.

**Environmental impacts**

Savings of greenhouse gas (GHG) emissions and energy were calculated by comparing the emissions and energy consumption of the tender issued in 2016 with the emissions and energy consumption of the previous contract (from 2013).

Over four years, the total savings from the procurement are estimated to come to 999 tonnes of carbon dioxide equivalents (CO$_2$e), which equates to 306.8 tonnes of oil equivalents (toe). The PCs purchased are expected to save an estimated 249.7 tonnes of GHG emissions (CO$_2$e) and 76.7 toe annually.

For more information about how the previous figures were calculated, please visit the GPP 2020 project website at this [link](#).
Lessons learned

The following issues should be considered when conducting a similar procurement project:

* Prior consultation with the market before publishing a call for tender is extremely useful for ensuring that all requirements can actually be met, which is what occurred in this case in defining the power supply specifications.

* Requesting different periods of warranty was considered good for raising awareness that also longer periods of use (for example, five years) rather than the standard three years are possible. This can inspire public procurers to develop a more sustainable mindset.

* Each year a new generation of central processing units (CPUs) is released on the market. If those CPUs would be purchased, it is important to consider that it takes about four weeks for suppliers to be able to provide them, following the date of their release. So this should be included in the planning time of the procurement schedule.

* The framework agreement allows for competition to be re-opened (mini-tenders). However, for smaller procurement volumes, it is too time-consuming and cost-intensive to re-open competition, even in a restricted market. Thus, the framework agreement should contain at least two or three different quality classes for standard products that can be purchased without having to do another (mini) tender. Furthermore, a detailed manual should be provided for preparing a mini-tender should be made available, which clearly explains what the public procurer is allowed to change compared to what has been included in the framework agreement.

Further actions

In addition to the framework contract for purchasing new IT equipment (detailed above), a service for re-selling old IT appliances is also offered by BBG via their “Platform for Direct Awards” (DVP). Products from suppliers with whom BBG has signed terms of use with are made available through the Platform. IT appliances (such as PCs, notebooks, printers or display equipment) which are to be disposed of by public authorities are collected and checked by the three selected suppliers who then re-sell them, often to schools or non-profit organisations. Usually suppliers offer the recovered devices for sale with a two-year warranty. The environmental relief results from the fact that the organizations buy a re-used device instead of a new one.

The terms of use ensures a service covering: the collection of appliances, certified data deletion, destruction of the data carrier, processing of appliances, management of empty toner cartridges, remarketing, environmentally responsible disassembly or disposal, coaching and consulting on remarketing. Environmental and social criteria were used as selection criteria for suppliers signing the terms of use for the DVP (for example, the supplier company should employ a large share of workers with disabilities, availability of an extended lifetime of the IT appliances). In terms of contract clauses, suppliers selling their products through the DVP are to develop customer specific individual recycling concepts that are subject to a bilateral agreement.

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For related information, please see:

- European GPP criteria for Imaging Equipment and the Technical Background Report.
- BBG tender on the framework agreement for Energy Efficient Laptops and BBGs approach to Re-Use of IT Appliances.