

ESTONIAN CENTRE OF REGISTERS AND INFORMATION SYSTEMS

## Background

The Centre of Registers and Information Systems (RIK) is an agency in the jurisdiction of Estonia's Ministry of Justice. RIK serves to provide an innovative environment by supplying integrated e-services for a more efficient implementation of the national administration, legal and criminal policies. It develops and administers registries and information systems of high importance for the state and its citizens, for example the e-Business Register, the e-Notary system, the e-Land Register, the information system of courts, etc.

RIK has also taken a leading position in doing joint public procurement of information and communication technologies (ICT) with other buyers.

Using GPP criteria as described below is common in RIK's procurement. GPP criteria are used to obtain the best quality products as well as to reduce the environmental impacts of purchasing.

## Criteria used

**Subject matter of the contract:** Purchase or lease at least 1,000 PCs (with software licences) and 1,000 monitors, additional equipment and components, together with transportation and take-back of the leased products.

**Technical specifications:** A selection of the green requirements included in the tender are presented below:

- All PCs are required to meet the [Energy Star 5.0](#) requirements, or equivalent;
- All monitors are required to meet the [TCO' 5.0](#) requirements, or equivalent;
- Power supply efficiency must be at least 85% (regardless of load) and power cord must be included in the set;
- Sound power level (sound pressure level) at operating mode (CPU load of 90%) should not exceed 33.3 dB (measured in accordance with ISO 9296);
- Monitors must be LED-backlit LCD (liquid crystal display);
- PCs must have the possibility to extend RAM size.

**Award criteria:** The award criteria were based on the most economically advantageous tender. The various criteria were weighted as follows:

- 80% for price;
- 10% for energy consumption in operating mode. Bids with PCs and monitors with the lowest energy consumption receive the most points.
- 4% if the device included an integrated smart card reader in the keyboard;
- 6% of the points for other criteria related to monitors only.

GPP criteria have been used by RIK since 2009 (beginning with setting demands meeting the [TCO' 3](#) requirements) and the approach has now become a matter of course. At first RIK's intentions were to prevent leased and old computers ending up as waste in the natural environment and to rather promote their recycle and re-use.

Most of the GPP criteria have been developed by RIK. Various GPP manuals have also been used to select the most appropriate criteria.

## Procurement objectives

This particular procurement process was for a joint framework agreement for the purchase of personal computers (PCs) and computer monitors by several Estonian entities, and was carried out by RIK in March/April 2012. Nine entities took part: the Ministry of Economic Affairs and Communications, Centre of Registers and Information Systems, University of Tallinn, Tallinn University of Technology, AS Hoolekandeteenus (a provider of social services), Tallinn Polytechnic School, the Ministry of Finance Information Centre, the Ministry of Agriculture, and the Ministry of Social Affairs.

A market consultation exercise was established to facilitate dialogue between manufacturers' representatives and joint procurers. Technical specifications were prepared based on the results of the market research.

From 2014, all ICT equipment for all national ministries and government agencies will be procured under a framework contract run by RIK.

### Results

Five offers were received following publication of the call for tender. The framework agreement was signed in June 2012, will operate for two years and its value is estimated at €500,000.

PCs bought under this contract are estimated to generate energy savings of 20-30% compared to non-green product alternatives.

RIK's experiences with using these sustainability criteria have been positive. No major problems have been experienced, because most of the larger producers' products seem to comply with the criteria and carry the above-mentioned labels. Furthermore, the technical market dialogue in the pre-procurement phase has proved to be a good approach for avoiding any future problems in the tendering and award phases.

### Environmental impacts

For many office IT products the most significant environmental impact relates to the energy consumption during their lifetime. This is particularly the case for office PCs, notebook computers and monitors. According to the [Energy Star website](#), most studies report that for an office PC primary energy consumption during use is more than three to four times higher than the primary energy needed for manufacturing and materials production, whilst the energy costs/credits of waste disposal and recycling are comparatively small (<15% of production energy). This is the result for a typical office PC, used eight hours per day (including standby) over 260 days.

Whilst substantial improvements have been made in the energy saving modes of IT equipment, the same cannot be said for 'active/idle' mode requirements, that is, when the machine is in active use. Large variations in active energy use exist between different models on the market (some devices consume twice as much energy as others), and the active mode is in most cases responsible for the majority of total energy consumption. Whilst energy consumption in the 'active' mode is principally determined by the functionality of the machine (powerful, high-specification models will consume more energy), differences exist between models offering the same level of functionality.

### Lessons learned

Problems encountered during the execution of the contract will be recorded and taken into consideration when preparing the next contract.

Market dialogue provides an opportunity to take into account the specificities of different tenders, and also provides the procurer/contractor with feedback on the current market situation.

The ICT market is sufficiently developed to respond to procurer requirements for energy efficiency and other environmental criteria.