

Computer and Monitors

Definition:

The criteria encompass computers and display devices. These include stationary computers, desktop computers, small-scale servers, workstations, computer monitors, notebook computers, two in one notebook, tablet computers, portable all in one computer, mobile thin client.

List of product items:		Pages:
1	Computer and Monitors	1

Computer and Monitors		
1.1	Subject Matter (suggestion on how to draft the tender title)	
	Purchase of energy efficient [PCs/notebooks/monitors/tablets/workstations].	
1.2	Technical Specification (to be included in the terms of reference / technical specifications)	
	Minimum Energy performance for computers The energy efficiency performance of computers shall meet the energy efficiency requirements of the latest version of the Energy Star standard. The version in force at the time of publication is 6.1	
	Verification:	The tenderer shall provide test reports carried out according to the test methods laid down in the latest version of the Energy Star. These shall be provided upon award of the contract or prior to that upon request. Models that have qualified for EU Energy Star and are registered on the programme's database shall be deemed to comply. Energy Star registrations under the latest version in the USA shall also be accepted provided that testing according to European input power requirements has been carried out. Products holding the EU Ecolabel for personal, notebook and tablet computers or another relevant Type I Eco-label fulfilling the specified requirements will be deemed to comply.
	Warranty and service agreements The tenderer shall provide a minimum two-year warranty effective from delivery of the product. This warranty shall cover repair or replacement and include a service agreement with options for pick-up and return or on-site repairs. The warranty shall guarantee that the products are in conformity with the contract specifications at no additional cost. This shall cover battery defects.	
	Verification:	The tenderer shall provide a written declaration that the products supplied will be warrantied in conformity with the contract specifications and service requirements.
	Reparability and replacement of components and parts a) Continued availability of spare parts The tenderer shall guarantee the availability of spare parts, including as a minimum those identified in criterion relating to the Design for reparability, for at least three years from the date of purchase.	
	Verification:	The tenderer shall provide a declaration that compatible spare parts, including rechargeable batteries (if applicable), will be made available to the contracting authority or through a service provider. Equipment holding the EU Ecolabel or another relevant Type I Eco-label fulfilling the specified requirements will be deemed to comply.

	<p>b) Design for reparability</p> <p>The following parts, if applicable, shall be easily accessible and replaceable by the use of universally available tools (i.e. screwdriver, spatula, plier or tweezers):</p> <p>Computers</p> <ul style="list-style-type: none"> (i) HDD/SSD, (ii) Memory, (iii) Rechargeable battery, <p>Displays</p> <ul style="list-style-type: none"> (i) Screen assembly and LCD backlight (ii) Power and control circuit boards (iii) Stands (excluding those integrated with the enclosure) <p>The tenderer shall provide clear disassembly and repair instructions (e.g. hard or electronic copy, video) to enable a non-destructive disassembly of products for the purpose of replacing key components or parts for upgrades or repairs. This shall be made available in hard copy or via the manufacturer's webpage.</p>		
	<table border="1"> <tr> <td data-bbox="306 913 529 1066">Verification:</td><td data-bbox="529 913 1571 1066"> <p>A manual shall be provided by the tenderer, which shall include an exploded diagram of the device illustrating the parts that can be accessed and replaced, and the tools required. It shall also be confirmed which parts are covered by service agreements under the warranty.</p> <p>Equipment holding the EU Ecolabel or another relevant Type I Eco-label fulfilling the specified requirements will be deemed to comply.</p> </td></tr> </table>	Verification:	<p>A manual shall be provided by the tenderer, which shall include an exploded diagram of the device illustrating the parts that can be accessed and replaced, and the tools required. It shall also be confirmed which parts are covered by service agreements under the warranty.</p> <p>Equipment holding the EU Ecolabel or another relevant Type I Eco-label fulfilling the specified requirements will be deemed to comply.</p>
Verification:	<p>A manual shall be provided by the tenderer, which shall include an exploded diagram of the device illustrating the parts that can be accessed and replaced, and the tools required. It shall also be confirmed which parts are covered by service agreements under the warranty.</p> <p>Equipment holding the EU Ecolabel or another relevant Type I Eco-label fulfilling the specified requirements will be deemed to comply.</p>		
	<p>Ease of replacement for rechargeable batteries</p> <p>Rechargeable batteries shall not be glued or soldered into portable products. It shall be possible for a professional user or repair service provider to replace the rechargeable battery. Instructions on how the rechargeable battery packs are to be removed shall be provided in the user instructions or via the manufacturer's webpage.</p>		
	<table border="1"> <tr> <td data-bbox="306 1310 529 1468">Verification:</td><td data-bbox="529 1310 1571 1468"> <p>The tenderer shall illustrate how the battery is installed in the product, the steps required to remove and cover markings. A copy of relevant user instructions shall also be provided.</p> <p>The Contracting Authority reserves the right to request a visual inspection of a random selection of the supplied products. Equipment holding the EU Ecolabel or another relevant Type I Eco-label fulfilling the specified requirements will be deemed to comply.</p> </td></tr> </table>	Verification:	<p>The tenderer shall illustrate how the battery is installed in the product, the steps required to remove and cover markings. A copy of relevant user instructions shall also be provided.</p> <p>The Contracting Authority reserves the right to request a visual inspection of a random selection of the supplied products. Equipment holding the EU Ecolabel or another relevant Type I Eco-label fulfilling the specified requirements will be deemed to comply.</p>
Verification:	<p>The tenderer shall illustrate how the battery is installed in the product, the steps required to remove and cover markings. A copy of relevant user instructions shall also be provided.</p> <p>The Contracting Authority reserves the right to request a visual inspection of a random selection of the supplied products. Equipment holding the EU Ecolabel or another relevant Type I Eco-label fulfilling the specified requirements will be deemed to comply.</p>		
1.3	Award Criteria (to be considered when BPQR is utilised)		
	<p>Improvement in the energy consumption upon the specified Energy Star standard</p> <p>It is recommended to use this criterion in conjunction with TS1 for desktop computers if the products specified are for graphics intensive uses.</p> <p>Points will be awarded If the product is more energy efficient than the ETEC_MAX value 6 for computers and the PON_MAX value for monitors 7. These shall be calculated in comparison with the minimum performance required under Energy Star.</p> <p>A maximum of x points [to be specified] may be awarded. Points shall be awarded in proportion to the improvement in energy efficiency in comparison to the ETEC_MAX or PON_MAX value:</p> <ul style="list-style-type: none"> -79% lower: 0.8x points -59% lower: 0.6x points -39% lower: 0.4x points -19% lower: 0.2x points <p>Alternatively, instead of using the ETEC_MAX value for computers or the PON_MAX value for monitors a Life Cycle Costing calculation could be requested, whereby the offered improvement potential would lead to a relative decrease in the overall running costs of a product compared to a less energy efficient model.</p>		

	Verification:	The tenderer shall provide test reports carried out according to the test methods laid down in the latest version of the Energy Star. The ETEC value or the PON value from a test report or for qualified models as entered on the EU Energy Star database shall be accepted. These shall be provided upon award of the contract or prior to that upon request.
	Cost competitiveness of spare parts. The tenderer shall provide a price list for, as a minimum, the following component parts: For the component parts listed above indicative labour costs for replacements carried out by the tenderer's authorised service providers shall be provided. Points shall be awarded according to the most costcompetitive offers. Additional component parts, if considered important to the price comparison, should be added to the list provided.	
	Verification:	The tenderer shall provide a price list for original or compatible spare parts and indicative labour costs for their replacement, including rechargeable batteries (if applicable).
	Longer warranties and services agreements Additional points shall be awarded to each additional year of warranty and service agreement offered that is more than the minimum technical specification. This shall be awarded A maximum of x points [to be specified] may be awarded. <input type="checkbox"/> +4 years or more: x points <input type="checkbox"/> +3 years : 0.75x points <input type="checkbox"/> +2 years : 0.5x points <input type="checkbox"/> +1 years : 0.25x points	
	Verification:	A copy of the warranty and service agreement shall be provided by the tenderer. They shall provide a declaration that they cover the conformity of the goods with the contract specifications.
	Rechargeable battery life and endurance. Points shall be awarded for improved endurance greater than 300 cycles (with 80% capacity retention) respectively. A maximum of x points [to be specified] may be awarded. <input type="checkbox"/> 1000 cycles or more: x points <input type="checkbox"/> 800 cycles or more : 0.75x points <input type="checkbox"/> 500 cycles or more : 0.5x points <input type="checkbox"/> Up to 499 cycles : 0.25x points The minimum battery life in hours shall be set according to the Contracting Authority's requirements.	
	Verification:	The tenderer shall provide a test report for the battery cells or packs showing compliance according to the IEC EN 61960 'endurance in cycles' test carried out at 25oC and at a rate of either 0.2 It A or 0.5 It A (accelerated test procedure). Partial charging may be used to comply as long as the software is factory-installed as the default setting and the tender requirements on battery life are met at the partial changing level complying with the cycle requirement. Equipment holding the EU Ecolabel or another relevant Type I Eco-label fulfilling the specified requirements will be deemed to comply.