Mississippi State University
Notice of Proposed Sole Source Purchase
245-109

Mississippi State University anticipates purchasing the item(s) listed below as a sole source purchase. Anyone objecting to this purchase shall follow the procedures outlined below.

1. Commodity or commodities to be purchased (make, model, description):

Make: OpenBCI

Model: Ultracortex

Description: Modifiable electroencephalography (EEG) system for brain-computer interfaces.

2. Explanation of the need to be fulfilled by this item(s), how is it unique from all other options, and why it is the only one that can meet the specific needs of the department:

The OpenBCI EEG system is the only system of its kind that allows full access and modification of the hardware, firmware, and software. We are conducting research on new brain-computer interfaces and this level of flexibility is requisite.

3. Name of company/individual selling the item and why that source is the only possible source that can provide the required item(s):

OpenBCI provides this item. It has complete open-source hardware and software with full-stack modifiability (firmware, hardware, and software). Other similar systems offer software APIs but do not allow hardware-level modifications. This is particularly necessary for conducting research and teaching with regard to the hardware, firmware, and software associated with brain-computer interfaces. Other commercial options prevent access to the hardware and firmware, thus limiting your ability to study and improve the system.

4. Estimated cost of item(s) and an explanation why the amount to be expended is considered reasonable:

OpenBCI Ultracortex (fully assembled) - $3699

OpenBCI Utlracortex (3D print parts and assemble yourself) - $2599

This pricing is considered reasonable as comparable research-grade EEG systems, such as those, typically costing several multiples of $10,000. OpenBCI offers a cost-effective alternative while

providing essential open-source hardware, firmware, and software customization that commercial alternatives lack. Its modularity allows for future upgrades without purchasing an entirely new system, and the self-assembly option further reduces costs. Additionally, OpenBCI eliminates the need for proprietary software by making all software open-source and accessible. There are no other systems that provide these features, moreover at this cost.

5. **Explanation of the efforts taken by the department to determine this is the only source and the efforts used to obtain the best possible price:**

We have taken the following efforts:

Extensively searched for comparable options on the internet.

Discussed options with other EEG users.

Compared specifications and ability to modify across other potential options

Any person or entity that objects and proposes that the commodity listed is not sole source and can be provided by another person or entity shall submit a written notice to:

Jennifer Mayfield, CPPO
Director and CPO, Procurement & Contracts
jmayfield@procurement.msstate.edu
Subject Line must read "Sole Source Objection"

The notice shall contain a detailed explanation of why the commodity is not a sole source procurement. Appropriate documentation shall also be submitted if applicable.

If after a review of the submitted notice and documents, MSU determines that the commodity in the proposed sole source request can be provided by another person or entity, then MSU will withdraw the sole source request publication from the procurement portal website and submit the procurement of the commodity to an advertised competitive bid or selection process.

If MSU determines after review that there is only one (1) source for the required commodity, then MSU will appeal to the Public Procurement Review Board. MSU will have the burden of proving that the commodity is only provided by one (1) source.

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