

**SAI**  
**SPORTS AUTHORITY OF INDIA**  
**National Center for Sports Science and Research,**  
**IGSC, New Delhi – 110002**

**Corrigendum 0323.08.2023**

Subject- Amendment to RFP for procuring 16 EMG Channel in NCSSR, SAI.

Tender Id - 71-01001/2/2023-NCSSR Division

1. The specification for the procurement stands modified as per the following details.

Technical Specifications as per Tender Document	Specifications after amendments
<ul style="list-style-type: none"> <li>• The system should be supplied with minimum 16 high speed Wireless EMG Channel with built in IMU sensor.</li> <li>• Should Have Analog + Digital base station</li> <li>• Should have analog output option to facilitate integration with third party hardware and software</li> <li>• Sensor should have fixed inter sensor delay of 0.5 milliseconds or less</li> <li>• Sensors should have fixed spacing between electrodes preferably less than 15 mm to avoid motion artifacts and cross-talk</li> <li>• Sensor contacts should be made up of a metal for better contact and better-quality signal</li> <li>• Should be supplied with a charging/transmitting station that communicates with sensors to get information on their charging, recording and signal strength</li> <li>• Sensors, Sensor skin interface, cable, power adapter and accessories</li> <li>•</li> <li>• Sensors facilitate EMG and IMU measurements</li> <li>• EMG data analysis Software for standalone usage with live recording of atleast 32 channels and analysis for both online and offline modes</li> <li>•</li> <li>• Trigger module package</li> <li>• Analog adapter with cable for dynamometer integration</li> <li>• Should have option for real time data streaming to computational softwares such as MATLAB</li> <li>• Mobile EMG suite for outdoor applications</li> <li>•</li> <li>• Technical support for the lifetime (at least for a period of 05 years, if not lifetime)</li> <li>• The system should be supplied with sensor docking unit and charging system</li> </ul>	<ul style="list-style-type: none"> <li>• The system should be supplied with minimum 16 high speed Wireless EMG Channel with built in IMU sensor.</li> <li>• <b>Should Have Analog or Digital base station</b></li> <li>• Should have analog output option to facilitate integration with third party hardware and software</li> <li>• Sensor should have fixed inter sensor delay of 0.5 milliseconds or less</li> <li>• Sensors should have fixed spacing between electrodes preferably less than 15 mm to avoid motion artifacts and cross-talk</li> <li>• Sensor contacts should be made up of a metal for better contact and better-quality signal</li> <li>• Should be supplied with a charging/transmitting station that communicates with sensors to get information on their charging, recording and signal strength</li> <li>• <b>Sensors, Sensor skin interface such as electrodes and/or double sided adhesives, Cable, Power Adapter and accessories.</b></li> <li>• Sensors facilitate EMG and IMU measurements</li> <li>• <b>EMG data analysis Software for standalone usage with live recording of at least 16 channels and analysis for both online and offline modes.</b></li> <li>• <b>Trigger module package</b></li> <li>• <b>Analog adapter with cable for Isokinetic dynamometer integration</b></li> <li>• Should have option for real time data streaming to computational softwares such as MATLAB</li> <li>• <b>Mobile EMG suite/device for outdoor applications</b></li> <li>• Technical support for the lifetime (at least for a period of 05 years, if not lifetime)</li> <li>• <b>The system should be supplied with sensors docking unit or charging unit. System should</b></li> </ul>

*Spencer*

- The system should be supplied with double sided adhesive stickers (atleast 5000) and double-sided adhesive tape rolls (atleast 20).
- The system should be supplied with atleast 2000 Hz of sampling rate or more per sensor.
- The system should have a baseline noise  $<1\mu\text{V}$  or better.
- The EMG System should have + 20,000  $\mu\text{V}$  EMG input range or better
- The system should have Software controlled digital filtering
- The system should have Shielded cables for minimal artifact
- The software should allow video recording during EMG data recording
- Should have at least 8 hours of battery backup
- Should have wireless working range of at least 40m or more to capture data during various sport specific movements
- The EMG system should be integrated with 3D motion analysis, Force plate, Isokinetic dynamometer, Instrumented treadmill, IMU, eye tracking, video analysis etc
- The necessary third-party hardware / software should be supplied by the seller for integration of EMG with other systems
- Laptop i7 (latest generation) with 16 GB ram, 2 TB SSD, at least 15.6-inch screen and Laser Printer with copy/scan/print to generate and view report and additionally a 32 inch Monitor for dual display
- US FDA, ISO & EU IEC certificates or equivalent
- Installation at the Institute and training to the users by experts

- **allow charging of all 16 sensors at one time.**
- **The system should be supplied with double sided adhesive stickers (atleast 5000) and double-sided adhesive tape rolls (atleast 20).**
- The system should be supplied with atleast 2000 Hz of sampling rate or more per sensor.
- The system should have a baseline noise  $<1\mu\text{V}$  or better.
- The EMG System should have + 20,000  $\mu\text{V}$  EMG input range or better
- The system should have Software controlled digital filtering
- **The System should be suitable for movement studies with minimal artifact**
- The software should allow video recording during EMG data recording
- Should have at least 8 hours of battery backup
- **Should have wireless working range of 30m or more to capture data during various sport specific movements**
- The EMG system should be integrated with 3D motion analysis, Force plate, Isokinetic dynamometer, Instrumented treadmill, IMU, eye tracking, video analysis etc
- The necessary third-party hardware / software should be supplied by the seller for integration of EMG with other systems
- Laptop i7 (latest generation) with 16 GB ram, 2 TB SSD, at least 15.6-inch screen and Laser Printer with copy/scan/print to generate and view report and additionally a 32 inch Monitor for dual display
- US FDA, ISO & EU IEC certificates or equivalent
- Installation at the Institute and training to the users by experts

2. Other Terms and Conditions remained unchanged.



Aakash Pundir  
Asstt. Director (NCSSR)

To,

1. All Concerned.

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1. Office File