

## **Amendment No.1**

**Date: 06.01.2015**

**Subject: Amendment no. 1 to the Tender Enquiry Document**

**Ref: (i) Tender Enquiry No.: HLL/PCD/PMSSY/AIIMS-II/23/14-15 dated 06.01.2015**

### **Section VII** **Technical Specifications**

**(1) For:-**

Schedule No.3  
Operating Microscope for neurosurgery

**Read As:**

#### **Schedule No.3** **INTRA OPERATIVE NEURO-MONITORING SYSTEM**

1. Portable 16 channel amplifier with minimum 40 available inputs system capable of:
  - a. VEP
  - b. ABER
  - c. SSEP
  - d. Facial nerve stimulator
  - e. Transcranial motor strip stimulator (MEP)
  - f. EEG
2. Any channel can be freely configured as differential and referential, through software to meet any IOM requirements
3. 4 independently controlled high level stimulators driving 12 stimulator sites and 1 dedicated low level stimulator.
4. Sample rate/ channel should be 12,000 Hz or better.
5. Must allow simultaneous acquisition i.e. able to record SSEP and AEP with EEG, CSA, EMG simultaneously.
6. Facility for stimulation and monitoring of Facial Nerve and other cranial nerves, both bipolar and monopolar (1 piece each should be supplied).
7. Peripheral nerve stimulator should be provided.
8. Facility to arrange data waveform stacks simultaneously.
9. Amplifier sensitivity 10  $\mu$  v to 100mV.
10. Electrode impedance digital display on screen
11. The system should be upgradable to 32 channel. (Price to be quoted separately)
12. The system must be supplied complete with:
  - a. Auditory stimulator (Tubal insert Head phone)
  - b. LED goggles 2 to be supplied
  - c. Isolated Electrical Stimulator for cranial and peripheral nerves
  - d. Laser Printer for records to be supplied
  - e. Appropriate capacity UPS to be supplied
  - f. Should be supplied with dedicated trolley.

13. Neuro monitoring start up kit must include all requisite accessories, cables, electrodes etc. namely but not limited to:
- |  |     |         |
|--|-----|---------|
| a. Extension Cables                                    | 06  | Nos.    |
| b. Reusable Cup Electrodes (Gold or Silver)            | 30  | Nos.    |
| c. Disposable Subdermal Needles                        | 200 | Nos.    |
| d. Reusable Ground Plate Electrodes                    | 04  | Nos.    |
| e. Disposable Ground Plate Electrodes                  | 24  | Nos.    |
| f. Electrode Linkers                                   | 04  | Nos.    |
| g. Reusable Bar Electrode                              | 02  | Nos.    |
| h. Ten 20 Paste  | 10  | Nos     |
| i. Nu Prep Gel   | 05  | Nos     |
| j. Strip electrodes for electrocorticography(4channel) | 05  | Nos     |
| k. Grid electrode (4channel)                           | 05  | Nos     |
| l. Depth Electrode(4channel)                           | 05  | Nos     |
| m. Monopolar Stimulator                                | 03  | Nos.    |
| n. Concentric Stimulators                              |     | 03 Nos. |
| o. Forceps type probes                                 |     | 02 nos. |
14. Laptop with latest Intel Core i7, 8 GB RAM, 1 TB or better Hard drive, DVD writer, Window based system must be provided.
15. Manufactures/Supplier should have ISO certificate to Quality Standard.
16. Should be compliant with IEC 61010-1:(or any international equivalent eg EN/UL 61010) covering safety requirements for electrical equipment for measurement control and laboratory use
17. Should be US FDA or European CE approved product.

**All other terms and conditions of the tender enquiry remain unaltered.**