

27.10.2021

Amendment No. 2**Sub: Technical Amendment to the referred tender enquiry****Ref.: HITES/PCD/AIIMS-IV/44/Neuro/21-22 dated 14.09.2021 read with Amendment no 1 dated 22.10.2021**

The following changes are being incorporated in the above referred Tender Enquiry Document.

**SECTION VII
TECHNICAL SPECIFICATIONS**

<u>TECHNICAL AMENDMENTS</u>		
Tender No:-HITES/PCD/AIIMS-IV/44/Neuro/21-22: Dated:Dated: 14.09.2021		
<u>Item Name: Video Polysomnography Tender ID: 2021 HLL 88130 1</u>		
(Clause No & Page No)	Tender Specification	Amended as
page 43 , Point 2	Must have minimum 20 referential EEG Channels, 6 or more differential/bipolar channels and 2 or more DC Channels	Must have minimum 20 referential EEG Channels, 6 or more differential/bipolar channels and 1 or more DC Channels
Page 43,point 3c)	Noise < 1.5 micro volt Peak to peak	Noise < 2 micro volt Peak to peak
Page 43,point 3e)	Common mode rejection ratio: above 105 dB	Common mode rejection ratio: above 95 dB
Page 43,point 7	Amplifier and patient electrode connection box must be two separate devices so that least damage happens to the amplifier when mishandling of the electrode connection box happens. Also the patient can carry electrode connection box while moving to washrooms.	Amplifier and patient electrode connection box must be two separate devices or compact device so that least damage happens to the amplifier when mishandling of the electrode connection box happens. Both amplifier and electrode connection box should be light weight, so that the patient can carry both amplifier and electrode connection box while moving to washrooms.
Page 43 , Point 8	"Should be supplied with an LED photic stimulator so that photic artefacts doesn't interfere EEG signals".	Should be supplied with an LED or Xenon photic stimulator so that photic artefacts doesn't interfere EEG signals
Page 43 , Point 10	Should have facility to record patient video using high resolution (HD min 720p) camera for day and night recording (IR camera), auto tracking with fully synchronized Video – 1Nos (Price should be quoted saperatly) and machine should be up-gradable to	Should have facility to record patient video using high resolution (HD min 720p) camera for day and night recording (IR camera), with fully synchronized Video – 1Nos (Price should be quoted saperatly) and machine should be up-gradable to 2 camera without any extra cost

	2 camera without any	
Page 43 Point No. 10 b)	PAL format	PAL or equivalent format
Page 43, point 10 d)	Optical Zoom of 12 x or more and 10x digital zoom	Optical Zoom of 10 x or more and 10x digital zoom
Page 43 Point No. 10 j)	Should be supplied with remote for easy operations and settings".	Should be supplied with remote / remote access for easy operations and settings
Page 44 ,point 11	The system should be European CE with four digit notified body number/US FDA approved/BIS certified.	The system should be European CE with four digit notified body number/US FDA approved/BIS certified. OR Should comply with IEC 60601-1, IEC 60601-2, IEC 80601-2-26 and valid test report for the quoted model to be submitted from any NABL accredited lab or labs in their country origin (in case of foreign manufacturers)
Page 44 ,point 16	Sleep Electrode Starter Kit to consist of : 2sets(As per AASM) like - Sleep Transducers complete for Air flow-2, Snoring Sensor-2, Chest/Respiration sensors-2, Abdomen sensor-2, Body Position-2, Periodic Limb Movement-4, SPO2-2, EtCO2- 2 etc.	Sleep Electrode Starter Kit to consist of : 2sets(As per AASM) like - Sleep Transducers complete for Air flow-2, Snoring Sensor-2, Chest/Respiration sensors-2, Abdomen sensor-2, Body Position-2, Periodic Limb Movement-4, SPO2-2, integrated / compatible EtCO2 monitor (including transducer with cable)- 1 and the EtCO2 tracing should be visible and synchronised in the PSG trace
Page 44 ,point 17	Should be supplied with review PC with networking between acquisition PC and necessary sleep/PSG software for review & reporting with minimum Core i5 Processor, minimum 4 GB RAM, 1 TB Hard Disk, DVD Writer, minimum 21" color LED Monitor, Mouse, Keyboard, Set of Speakers, mic, Laser Printer, UPS -1kva, Dedicated Trolley	Added Para : The PC should have original Operating System and Compatible Original antivirus software with free upgrades. The offered PC should have bluetooth connection facility.
	NA	Added Para : The Polysomnography software should be provided as per the latest AASM sleep scoring with compulsory facility for free updates. Data aquired should be portable for teaching purposes in any department computer without the need of purchase of any additional software.
	NA	Added Para : Water resistant cover should also be provided for the machine
<u>Item Name:-Portable EEG-EMG-NCV Machine :- Tender ID: 2021 HLL 88130_2</u>		
Page &	Tender Specification	Amended as

Point No		
page 44	A General Single compact portable device that can perform EEG, NCS, needle EMG, Evoked potentials, and neurophysiological ICU monitoring."	A General Compact portable device that can perform EEG, NCS, needle EMG, Evoked potentials, and neurophysiological ICU monitoring, preferably in a single unit
page 44	A General The equipment shall confirm to international standards with certification authorities (ISO 13485 and European CE with four digit notified body number/USFDA/BIS approved).	The equipment shall confirm to international standards with certification authorities (ISO 13485 and European CE with four digit notified body number/USFDA/BIS approved). OR Should comply with IEC 60601-1, IEC 60601-2, IEC 80601-2-26, IEC 60601-2-40 and valid test report for the quoted model to be submitted from any NABL accredited lab or labs in their country origin (in case of foreign manufacturers)
page 44	A General The control panel should provide remote control start and stop recordings of EMG/NCS/EEG.	A General The control panel should have provision to start and stop recordings of EMG/NCS/EEG
Page 45 , Point 1	B Hardware Number of channels, should be minimum 20 referencial + minimum 2 polygraphic /Bipolar channels with minimum 1 DC channel	Number of channels, should be minimum 20 referencial + minimum 2 polygraphic /Bipolar channels
Page 45	D. Laptop Specification Latest Intel i5 processor with 4 GB RAM, 500 GB HDD, DVD Writer ,optical mouse , 14-16' TFT monitor, LAN with suitable protable/trolley bag which hold EEG-EMG machine along with Laptop.	Added Para : The Laptop should have original Operating System and Compatible Original antivirus software with free upgrades. The offered Laptop should have bluetooth connection facility.
	NA	Added Para : The software for EEG-NCV-EMG should be provided as per the latest international guidelines with compulsary facility for free updates. Data aquired should be portable for teaching purposes in any department computer without the need of purchase of any additional software.
	NA	Added Para : Water resistant cover should also be provided for the machine
Item Name 3:-Basic Repetitive Transcranial Magnetic Stimulator (RTMS):- Tender ID: 2021 HLL 88130 3		
Page & Point No	Tender Specification	Amended as
Page 46 & point 1	The machine should deliver rapid rate biphasic magnetic stimulation from 1–	The machine should deliver rapid rate magnetic stimulation from 1–30 Hz for non invasive cortical or

	30 Hz for non invasive cortical or peripheral nerve stimulation.	peripheral nerve stimulation.
Page 46 & point 5	The system should have train duration of 0.5 – 100 sec, intertrain interval 0.5 – 300 sec & session duration of 0.5 – 30 min	The system should have train duration of 0.5 – 100 sec, intertrain interval 0.5 – 120 sec or more & session duration of 0.5 – 30 min
Page 46 & point 6	The system should have various stimulus types like, Biphasic, Monophasic, Paired pulses etc.	The system should have various stimulus types like, Biphasic, Monophasic, Paired pulses
Page 46 & point 7	The system should be supplied with a computer with touch screen display for controlling the operation of magnetic stimulator, 2 Ch EMG to record Motor Evoked Potential and acquisition software with patient database.	The system should be supplied with a computer with touch screen / TFT display for controlling the operation of magnetic stimulator, 2 Ch EMG to record Motor Evoked Potential and acquisition software with patient database. Added Para : The computer should have original Operating System and Compatible Original antivirus software with free upgrades. The offered computer should have bluetooth connection facility.
Page 46 & point 11	The machine should be supplied with a Cooled angulated figure of eight coil (01 No), cooled big ring coil (01 No) and one sham/placebo coil (01 No).	Added Para : Should have air cooling / Dynamic liquid cooling
	NA	Added Para : Water resistant cover should also be provided for the machine
Page 47 & point 22	The rTMS system must be USFDA/European CE with four digit notified body number/BIS certified	The rTMS system must be USFDA/European CE with four digit notified body number/BIS certified OR Should meet IEC 60601-1, IEC 60601-1-2 standards and should submit valid test report for the quoted model from any NABL accredited lab or labs in their country origin (in case of foreign manufacturers)
<u>Item no 4. Transcranial Doppler System (TCD Machine):- 2021 HLL 88130 4</u>		
Page & Point No	Tender Specification	Amended as
Page No 47 Point No. 3 a)	4 MHz -CW & PW (1 no. each) (Price should be quoted separately)	Extra cranial probe 4 MHz -CW & PW - 1 No (1 no. each in case of separate CW and PW probe) (Price should be quoted separately)
Page No 47 Point No. 3 b)	8 MHz -CW & PW (1 no. each) (Price should be quoted separately)	Extra cranial probe 8 MHz -CW & PW - 1 No (1 no. each in case of separate CW and PW probe) (Price should be quoted separately)
Page No 47 Point No. 3(C)	Add on Imaging Probe 5-10MHz- Optional	Add on Imaging Probe 5-10MHz- (from same manufacturer or compatible) Optional
Page 47 &	Should have FFT size adjustable from	Should have FFT size adjustable from 64 points to

point 13	64 points to 512 points	atleast 256 points
Page 47 & point 20	Should be supplied with inbuilt PC of Pentium processor, 2 GB RAM,15" inbuilt LCD touch panel monitor, 1TB GB Hard disk drive, Latest operating system , MS office, Keyboard. Computer / PC should not be separate. It should be one unit and portable to move around.	Should be supplied with inbuilt PC of Pentium processor, 2 GB RAM,15" inbuilt LCD touch panel monitor, 1TB GB Hard disk drive, Latest operating system , MS office, Keyboard. Computer / PC should not be separate. It should be one unit and portable to move around. Added Para : The PC should have original Operating System and Compatible Original antivirus software with free upgrades. The offered PC should have bluetooth connection facility.
Page 48 & point 26	System should be US FDA/European CE with four digit notified body number/BIS approved product	System should be US FDA/European CE with four digit notified body number/BIS approved product OR Should meet IEC 60601-1, IEC 60601-1-2 & IEC 80601-2-37 standards and should submit valid test report for the quoted model from any NABL accredited lab or labs in their country origin (in case of foreign manufacturers)
Page 48 ,point No 27	Should be HL7 complaint system	Should be HL7 / DICOM complaint system.
	NA	Added Para : Should have VMR and PFO study.
	NA	Added Para : Should have dedicated protocol for VMR and PFO study.
	NA	Added Para : Should have option for dedicated reporting format for PFO study
BOQ Para 3	Extra cranial probe 4 MHz -CW & PW (1 no. each)	Extra cranial probe 4 MHz -CW & PW - 1 No (1 no. each in case of separate CW and PW probe)
BOQ Para 4	Extra cranial probe 8 MHz -CW & PW (1 no. each)	Extra cranial probe 8 MHz -CW & PW - 1 No (1 no. each in case of separate CW and PW probe)
	NA	Added Para: Should provide head frame to hold the probes
	NA	Added Para: The original upgradable software should be provided and recording should be portable to view in another computer for teaching purposes without the need of any additional software.
	NA	Added Para : Water resistant cover should also be provided for the machine
<u>Item Name 5:-Repetitive Transcranial Magnetic Stimulator (RTMS):- Tender ID: 2021_HLL_88130_5</u>		
Page &	Tender Specification	Amended as

Point No		
Page 48 & Point No 1	It should be a highly effective non-invasive biphasic magnetic stimulator for bilateral cortical or peripheral and central nerve pathways stimulation. The maximum output power should be 100% at 41-42Hz, 50% output at 96-100 Hz and 40% output at 100Hz	It should be a highly effective non-invasive biphasic magnetic stimulator for bilateral cortical or peripheral and central nerve pathways stimulation. The maximum output power should be 100% at 30 Hz or more , 50% output at 80 Hz or more and 40% output at 100Hz
Page 48 & Point No 1a)	Integrated color touch screen display	Integrated color touch / TFT screen display
Page 48 & Point No 2	The pulse train interval should be user selectable with 0.1s increment and pulse width of 400 µS with maximum upper frequency of 100Hz.	The pulse train interval should be user selectable with 0.1s increment and pulse width of minimum 200 µS with maximum upper frequency of 100Hz.
Page 48 & Point No 3	The system should be supplied with following USFDA/European CE with 4 digit notified body/BIS approved coils	The system should be supplied with following coils
Page 48 & Point No 3a)	Minimum 70mm Air Film/hydrothermal technology Coil which delivers up to 3000 pulses at 120% motor threshold at 10Hz stimulation (Biphasic waveform) over a 30 minute period and remains within allowed temperature limits. – 1 no	Minimum 70mm Air Film / dynamic liquid technology Coil which delivers up to 3000 pulses at 120% motor threshold at 10Hz stimulation (Biphasic waveform) over a 30 minute period and remains within allowed temperature limits. – 1 no Added Para : Price should be inclusive of coolant also. Dynamic liquid cooling of coil should be provided (in case of Liquid Cooling)
Page 48 & Point No 3b)	70mm air cooled/ hydrothermal coil – 1 no	Minimum 70mm air cooled / dynamic liquid Coil
Page 48 & Point No 3f)	EMG Interface Module to integrate system with existing EMG machine	EMG Interface Module with software should be provided
Page 48 & Point No 3g)	The system should be supplied with desktop PC with the following specs : Intel i7 processor 4 GB RAM, 1TB Sata Hard Disk, 21" TFT monitor, compatible Latest OS, DVD Burner, suitable UPS	The system should be supplied with desktop PC with the following specs : Intel i7 processor 4 GB RAM, 1TB Sata Hard Disk, 21" TFT monitor, compatible Latest OS, DVD Burner, 1 KVA UPS for computer Added Para : The PC should have original Operating System and Compatible Original antivirus software with free upgrades. The offered PC should have bluetooth connection facility.
Page 48 & Point No 6	The system and the coils should be USFDA/European CE with four digit notified body/BIS certified	The system and the coils should be USFDA/European CE with four digit notified body/BIS certified OR Should meet IEC 60601-1, IEC 60601-1-2 standards and should submit valid test report for the quoted model from any NABL accredited lab or labs in their country origin (in case of foreign manufacturers)
Page 49	Should also have provision to attach	Should also have provision to attach other coil such as

,point 7	other coil such as 90mm high power circular coil, 110mm double cone coil with rTMS system and the rates of these coils should be quoted separately.	minimum 90mm high power circular coil, 110mm double cone coil with rTMS system and the rates of these coils should be quoted separately.
Page 49, point 9a)	The bidder must quote price of following Options: (optional) Infrared camera based 3D Neuro Navigation System	The bidder must quote price of following Options: (optional) Infrared camera / Electromagnetic based 3D Neuro Navigation System.
	NA	Added Para : Water resistant cover should also be provided for the machine

All other contents of the Tender enquiry including terms & conditions remain unaltered.
Note:

- I. Prospective Bidders are also advised to check the website regularly prior to the closing date and time of online submission of bids**