

Amendment No 2

26.04.2019

Sub: Amendment to the Tender Enquiry Document**Ref.: Tender Enquiry Document (TED) ref. HITES/PCD/IITKGP/03/18-19 dated 08.03.19 read with Amendment No 1 dated 12.04.19.**

The following changes have been authorised and are being incorporated in the above referred Bidding Document.

SECTION - I**NOTICE INVITING BIDS (NIB)**

Description	Existing	Amended as
Closing date and time of submission of online bids	04.05.2019 at 12:00 noon	17.05.2019 at 12:00 noon
Closing date and time of physical submission of EMD, Tender processing Fee, any other document specified in the TED	04.05.2019 at 2:00 pm	17.05.2019 at 2:00 pm
Date & Time of tender Opening	04.05.2019 at 2:30 pm	17.05.2019 at 2:30 pm

SECTION - VI**LIST OF REQUIREMENT**

The following amendment to the Delivery Schedule is applicable for 'CT - 128 slice; 40 mm Detector' (RFx/Event no. 3000003937) only-

Sl. No	Reference to the bidding document	Existing Clause	Amended as
1	Part II: Required Delivery Schedule- Indigenous goods. Page no: 41	60 days from date of Notification of Award to delivery at consignee site. The date of delivery will be the date of delivery at consignee site. Tenderers may quote earliest delivery period. Installation and commissioning shall be done within 15 days of receipt of the stores/ goods at site or 15 days from the date of site handover, whichever is later.	"Delivery and installation of goods at Consignee site to be completed within 120 days from date of Notification of Award. Tenderers may quote earliest delivery period. The number of days delay in installation due to non availability of site or power connection or for reasons not attributed by the supplier shall be waved off."

SECTION - VII**TECHNICAL SPECIFICATION**

Item no. 01 (RFx/Event no. 3000003935)

X ray-500mA

Sl. No	Reference to the bidding document	Existing Specification/ Clause of the bidding documents	Amended as
1	Page 43 Para 5 i	Motorized table should have motorized Bucky consisting of Bucky grid with ratio 8:1 or more, 80 lines/inch.	Table should have motorized Bucky consisting of Bucky grid with ratio 8:1 or more, 80 lines/inch.

Item no. 02 (RFx/Event no. 3000003936)

Computed Radiography Unit with Dry Imager

Sl. No	Reference to the bidding document	Existing Specification/ Clause of the bidding documents	Amended as
1	Page 45 Para 2b	CR reader / digitizer must be able to handle phosphor image plates. CR reader capable of handling latest Dual side /needle/structured/ columnar image plates will be preferred.	CR reader must be capable to handle Needle/ Rigid/ Flexible phosphor image plates.
2	Page 45 Para 2e	It should have input -output buffer/stacker that can load at least 4 cassettes at least.	It should have separate input - output buffer/ stacker

Item no. 03 (RFx/Event no. 3000003937)

CT - 128 slice; 40 mm Detector

Sl. No	Reference to the bidding document	Existing Specification/ Clause of the bidding documents	Amended as
1	Page 46	Installation of top of a line Spiral Multi-Slice CT Scanner with capabilities of acquiring 128 slices per 360 degree in body and Cardiac Scan.	Installation of top of a line Spiral Multi-Slice CT Scanner with capabilities of acquisition/ reconstruction of 128 slices per 360 degree in body and Cardiac Scan.

2	Page 46 Scan Time	The scan time for one gantry rotation of complete 360 deg. Should be 0.35 sec or better. Faster rotation time will be given weightage.	The scan time for one gantry rotation of complete 360 deg. should be 0.40 sec or faster.
3	Page 47 Detector	The detectors shall be large area detector with a Z-axis coverage of at least 40mm per rotation for all applications. Larger than 40 mm coverage will be given weightage.	The detectors shall be large area detector with a Z-axis coverage of at least 40mm per rotation for all applications.
4	Page 47 Para b	Any variable slice thickness from 0.625mm-10 mm in spiral mode and 0.625 mm-10mm in axial mode	Any variable slice thickness from 0.625mm-10 mm in spiral mode and 0.8 mm-10mm in axial mode
5	Page 47 Detector	The detector shall have at least 64 rows with each row having at least more than 800 elements.	The detector shall have at least 64 rows with each row having at least 600 elements
6	Page 47 Resolution	The high contrast resolution should be at least 19 lp/cm for 128 slice mode. (Specify phantom used scan time, mA, filter for image reconstruction scan field dose slice and MTF)	The high contrast resolution should be at least 15 lp/cm for 128 slice mode. (Specify phantom used scan time, mA, filter for image reconstruction scan field dose slice and MTF)
7	Page 47	Pitch: to be freely selectable in auto mode and also manual Helical Pitch (nominal): 0.6 to 1.5 higher pitch scanner will be given preference	Pitch: to be freely selectable in auto mode and also manual Helical Pitch (nominal): 0.6 to 1.5.
8	Page 48 X-ray Tube	Peak Heat dissipation rate of Anode should be at least 1000 Khu/min.	Peak Heat dissipation rate of Anode should be at least 750 Khu/min
9	Page 48 Operator Console	All functions including scanning image reconstruction film documentation, archiving, transferring, Direct MPR, Angiography, maximum intensity projection, volume rendering, 3D SSD, CT Angio, vessel measurement, small volume quantification, Virtual endoscopy software for visualization of vessels and air filled structures and Colonoscopy software for virtual endoscopic, and Brain & Body Perfusion, should be possible on this operating console and on the independent workstation	All functions including scanning image reconstruction film documentation, archiving, transferring, Direct MPR, Angiography, maximum intensity projection, volume rendering, 3D SSD, CT Angio, vessel measurement, small volume quantification, Virtual endoscopy software for visualization of vessels and air filled structures and Colonoscopy software for virtual endoscopic, and Brain & Body Perfusion, should be possible on this operating

		simultaneously.	console and/or on the independent workstation.
10	Page 48. Spiral/Helical Technique: a)	At least 100 sec continuous more spiral capability, higher specifications will be given preference.	At least 100 sec continuous more spiral capability.
11	Page 49 c)	The CT scanner should be able to perform kinematic joint studies, free breathing patients scan for body/ abdomen and 4D dynamic scans, 4D Perfusion assessment for both neuro and body applications, please specify the coverage in case of dynamic perfusion studies with new techniques used, higher coverage systems shall be given preference. Highest coverage on dynamic mode scanning protocol and applications will get preference.	The CT scanner should be able to perform kinematic joint studies, free breathing patients scan for body/ abdomen and 4D dynamic scans, 4D Perfusion assessment for both neuro and body applications, please specify the coverage in case of dynamic perfusion studies with new techniques used
	Page 49 d)	TAVI planning must be offered standard	Deleted

Item no. 04 (RFx/Event no. 3000003938)

Colour Doppler - 2D & 3D

Sl. No	Reference to the bidding document	Existing Specification/ Clause of the bidding documents	Amended as
1	Page 50	System should have minimum of 1000 Digital Channels for better resolution.	System should have minimum of 100,000 Digital Channels for better resolution.
2	Page 51	The system shall include at least 100 GB of dedicated hard drive for large local storage capacity, with 20000 image storage capacity or more.	The system shall include at least 500 GB of dedicated hard drive for large local storage capacity, with 20000 image storage capacity or more.
3	Page 51	The unit should have US FDA or BIS or European CE with four digit notified body number certificate and certificate to be submitted.	The unit should have US FDA certification along with BIS and/or European CE with four digit notified body number certificate. Certificates to be submitted.
4		Added Para:	The frame-rate of machine should be at least 500 frames per second.

5		Added Para:	Higher resolution Flat Panel Monitor should be provided.
6		Added Para:	System should be upgradable to Convex 4D applications with Transducer.
7		Added Para:	System should be upgradeable to Strain based elastography.
8		Added Para:	Upgradable to Cardiac Imaging and Adult TEE Transducer.

Item no. 05 (RFx/Event no. 3000003939)

ECG - 12 Channel

Sl. No	Reference to the bidding document	Existing Specification/ Clause of the bidding documents	Amended as
1	Page 52	Patient memory function 20 patients or more.	Patient memory function 200 ECG storage inbuilt patients or more.
2	Page 52	Equipment should be European CE with four digit notified body number or BIS or US FDA approved and certificate to be submitted.	Equipment should be European CE with four digit notified body number and US FDA approved and certificate to be submitted.
3	Page 53	The system should have the capability to acquire/analyse 12 lead ECG derived out of 3 or more Channel using 5 or more electrodes for 48 Hrs. With facility to display/print 12 lead ECG at any point of time.	The system should have the capability to acquire/analyse 12 lead ECG derived out of 12 or more Channel using 10 or more electrodes for 48 Hrs. with facility to display/print 12 lead ECG at any point of time.
4	Page 53	Product should have European CE with 4 digit notifying body no//BIS/US FDA Approved certificate to be provided.	Deleted

Item no. 06 (RFx/Event no. 3000003940)

Defibrillator

Sl. No	Reference to the bidding document	Existing Specification/ Clause of the bidding documents	Amended as
1	Page 52 Para 6	Monitor should display selected and delivered energy	Should have display of at least 5 inch or more. It should display selected and delivered energy

Item no. 07 (RFx/Event no. 3000003941)**Treadmill Test**

Sl. No	Reference to the bidding document	Existing Specification/ Clause of the bidding documents	Amended as
1	Page 53	System should be based on Windows platform with minimum 19" color monitor having minimum resolution 1280 x 1024.RAM 8 GB, 1 TB HDD, CD/DVD-RW, Mouse.	The System should be with minimum 19" color monitor having minimum resolution 1280 x 1024.RAM 8 GB, 1 TB HDD, CD/DVD-RW, Mouse

Item no. 08 (RFx/Event no. 3000003942)**Holter**

Sl. No	Reference to the bidding document	Existing Specification/ Clause of the bidding documents	Amended as
1	Page 53	The system should have the capability to acquire/ analyse 12 lead ECG derived out of 3 or more Channel using 5 or more electrodes for 48 Hrs. With facility to display/print 12 lead ECG at any point of time.	The system should have 12 Channel and 3 channel ECG recording facility and the capability to acquire 3 channel data from a 7 lead recorder and 12 channel data from recorder that has 10 lead patient cable. System should support both 3 channel and 12 channel recorders.
2	Page 53	3. T wave alternans	Deleted
3	Page 54	j) TWA alternans analysis	Deleted

Item no. 11 (RFx/Event no. 3000003945)**EMG**

Sl. No	Reference to the bidding document	Existing Specification/ Clause of the bidding documents	Amended as
1	Page 56	Two channel monophasic/biphasic constant current electrical stimulator, upgradable to 4 electric stimulator with artifact compensation and temperature measurement for CCV.	Two channel monophasic/biphasic constant current electrical stimulator with artifact compensation and temperature measurement for CCV.
2	Page 57	System should have at least 1 triggers input / output, upgradable to 6 Triggers	System should have at least 1 triggers input / output.

3	Page 57	User should be able to open at least 8 test protocols simultaneously.	User should be able to open at least 4 test protocols simultaneously
4	Page 57	Programmable measurement conditions up to 300 or more examination conditions of live EMG for minimum 10 minutes up to 99 sites. The system should have QEMG, Single fiber EMG, Stimulated SFEMG and Macro EMG.	Programmable measurement conditions / examination conditions of live EMG for minimum 10 minutes for multiple sites. The system should have QEMG, Single fiber EMG, Stimulated SFEMG and Macro EMG.
5	Page 57	Should have Somatosensory Evoked potentials (SEP, SSEP and ESCP) simultaneous SSEP and SEP measurement.	Should have Somatosensory Evoked potentials (SEP/SSEP/ESCP).
6	Page 57	Provision of EEG data review in the EMG system – Preferably	Deleted
7	Page 57	Should have option of directly interfacing high voltage stimulator in future without additional hardware	Deleted
	Page 57	Should have provision of setting up more than 10 user accounts for more than 50 user setting protocols.	Should have provision of setting user accounts for protocols.

Item no. 12 (RFx/Event no. 3000003946)

NCV

Sl. No	Reference to the bidding document	Existing Specification/ Clause of the bidding documents	Amended as
1	Page 59	User should be able to open at least 8 test protocols simultaneously.	User should be able to open multiple test protocols simultaneously
2	Page 59	Programmable measurement conditions up to 300 or more examination conditions of live EMG for minimum 10 minutes up to 99 sites. The system should have QEMG, Single fiber EMG, Stimulated SFEMG and Macro EMG.	Programmable measurement conditions / examination conditions of live EMG for minimum 10 minutes for multiple sites. The system should have QEMG, Single fiber EMG, Stimulated SFEMG and Macro EMG.

3	Page 59	Should have Somatosensory Evoked potentials (SEP, SSEP and ESCP) simultaneous SSEP and SEP measurement.	Should have Somatosensory Evoked potentials (SEP/SSEP/ESCP).
4	Page 59	Should have option of directly interfacing high voltage stimulator in future without additional hardware	Deleted
5	Page 59	Should have provision of setting up more than 10 user accounts for more than 50 user setting protocols.	Should have provision of setting the user accounts with user setting protocols.

All other contents of the Bidding Document including terms & conditions remain unaltered.