AIIMS/R/CS/Neuro/ 102/18/OT /corrigendum/   **दिनांक:-** 06.10.2018

Corrigendum-2

Tender ID No.: 2018_IMSRP_367432_1

With Reference to above tender ID No., the following amendment is being issued for the tender "Supply of Advanced Navigation system for Cranial & Spinal Navigation" for the Department of Neurosurgery at AIIMS Raipur:-

Sr No	Specification as per Tender	Amendments
General Specification and Terms :		
Page No. 17 Point 6	Should have supplied navigation system and instruments to AIIMS, PGI and NIMHANS; and should submit satisfactory performance certificate from the institute	Should have supplied navigation system and instruments to department of Neurosurgery at AIIMS/ PGI/ NIMHANS or reputed government institute of similar status and should submit satisfactory performance certificate from the institute
System Specification :		
Page No. 17 Sr. no. 1.01	The system should be easy to set up, user friendly, intuitive and should work under Windows/ Linux/ Unix operating system environment.	The system should be easy to set up, user friendly, intuitive and should work under Windows/Linux/ Unix operating system environment.
	The vendor should quote their latest model and high end model keeping in mind AIIMS as a teaching institute for future upgrades	The vendor should quote their latest model and high end model keeping in mind AIIMS as a teaching institute for future upgrades
	The system should have dual cart assembly with facility of keeping optical camera and viewing system together or separately to allow optimal use of O.T space with two integrated and operational monitors to ensure Optimized placement of the carts in OT and Better OT workspace management	The system should be available in dual cart /Single cart where the camera cart and monitor can be kept separate or in single cart where both the camera cart and monitor can be kept together.
		The system should also ensure Optimized placement of the carts in OT and Better OT workspace management
1.02	It should have Optical guided and advanced wireless passive marker tracking. It should also be capable of Pinless Electromagnetic navigation.	It should have optical guided and advance wireless active/passive marker tracking. Electromagnetic navigation can be added feature available for future upgrade if required.
	1. The system should be enabled with option of Optical and EM both technology together active and readily available with same system	1. The system should be capable of Pinless navigation using either optical /EM navigation technology.
	2. The system should have capabilities for head frame less neuro navigation surgery such as tumor resection suitable for adults as well as pediatrics without any compromise on sterility using electromagnetic tracking technology	2. The system should have capabilities for head frame less neuro navigation surgery such as tumor resection suitable for adults as well as pediatrics without any compromise on sterility.
	3. The system should provide Electromagnetic based dynamic referencing so that registration is not lost even if magnet emitter and patient move.	3. The system should provide dynamic referencing so that registration is not lost even if magnet emitter and patient move.

	4. The Electromagnetic Navigation module should be able to support cranial, skull base and Neurology surgeries.	4. The Navigation module should be able to support cranial, skull base and Neurology surgeries.
	5. The Electromagnetic factory calibrated navigable instruments should include flexible tip tracking	5. The factory calibrated navigable instruments should include flexible tip tracking.
1.03	The display should be full HD resolution (1920x1200) with minimum 26" widescreen both monitors. The system should also have the feature of navigation control from sterile field. The system should have integrated monitor/screen with high resolution (at least 1920 * 1200, 60 Hz) with a viewable size of at least 26" to 30" from the same company. Both the monitors should be touch screen with capacitive touch. The navigation workflow should be controlled from any of the two monitors.	The display should be full HD resolution (1920x1200) with minimum 21.5" widescreen one monitors. The second surgeon viewing monitor should be size of at least 26" to 30" Monitor/screen with high resolution (at least 1920 * 1200, 60 Hz) The system should also have the feature of navigation control from sterile with a viewable from the same company. Both the monitors should be touch screen with capacitive touch. The navigation workflow should be controlled from any of the two monitors.
Page No. 18 Sr. no. 1.06	The system should identify new instruments for tracking using the passive universal tracking system	The system should identify new instruments for tracking using the passive/active universal tracking system
Page No. 18 Sr. no. 2.06	The system should display of a trajectory pathway, inline and probe eye view along with Guidance views, virtual endoscopy, virtual craniotomy and safety margin Look ahead view capability to show the images at 1mm to 20mm with customized increments of 1mm for the 2D images in front of the probe.	The system should display of a trajectory pathway, inline and probe eye view along with Guidance views, planned (virtual) endoscopy or craniotomy and safety margin. Look ahead view capability to show the images at 1mm to 20mm with customized increments of 1mm for the 2D images in front of the probe
Page No. 18 Sr. no. 2.09	Screenshot and live navigation video recording feature for documentation purpose with recording facility inbuilt in the system from 30mins -45mins System should have the ability to record the screen activity during software operation or during navigation for minimum 30mins	Screenshot and live navigation video recording feature for documentation purpose with recording facility inbuilt or should be provided separate in the system from 30mins -45mins for recording of videos for presentation .
Page No. 18 Sr. no. 2.10	It should have universal instrument adapters with passive markers to allow tracking of any existing rigid hospital instruments like drills, bipolar, knife, Awl, Probe, endoscopes. Should calibrate both length and diameter.	It should have universal instrument adapters with active/passive markers to allow tracking of any existing rigid hospital instruments like drills, bipolar, knife, Awl, Probe, endoscopes. Should calibrate both length and diameter.

Page No. 18 Sr. no. 2.11	Calibration of existing rigid hospital instruments should be done automatically. System should have automatic Verification of the instruments for better accuracy. The system should support factory calibrated navigable shunt stylet with max. diameter of 1.2mm and it should give live feedback on the tip position of the shunt stylet	Calibration of existing rigid hospital instruments should be done automatically. System should have automatic Verification of the instruments for better accuracy. The system should support factory calibrated navigable shunt stylet or should be supplied with navigable shunt probe with max diameter of 1.2 mm and it should give live feedback on the tip position of the shunt stylet.
Page No. 19 Sr. no. 2.18	The system should have inbuilt UPS system for power back up in both the carts.	The system should have inbuilt UPS system for power back up in both/Single carts or separate UPS should be provided for a back of at least 15mins.
Page No. 19 Sr. no. 3.4	The Probe should have capability to show images at 0mm-300mm in front of it (tool tip extension) . The virtual tip should be differentiated from the real tip by color WEDGE should come as virtual extension for deformity procedure planning especially for PSO and PCO . System software should also have ability to demonstrate reverse virtual extension to simulate guidewires	The Probe should have capability to show images at 0mm-300mm in front of it (tool tip extension). The virtual tip should be differentiated from the real tip by color wedge or similar layout should come as virtual extension for deformity procedure planning especially for PSO and PCO. System software should also have ability to demonstrate reverse virtual extension to simulate guide wires. The system should have exhaustive set of spine instruments, dedicated trackers and navigable AWL.
Page No. 19 Sr. no. 3.5	The system should have exhaustive set of spine instruments, dedicated trackers and navigable AWL, Probe and Taps, Navigated Screwdrivers. The system should have separate reference frame for Cervical procedures with separate Cervical taps and drill guides. The system should come with Universal Drill Guide. Along with regular Spine instruments, system should Navigated tactile instruments also for better access and ease of use for doctors. The system should have dedicated navigated MIS instruments along with Navigated PAK needles and Nerve monitoring and Navigated enabled PAK needles. The system should also additional navigated instruments for performing Revision surgeries under navigation. The system should at least have factory calibrated image guided jamshedi needle, factory calibrated nerve Integrated jamshedi needle and image guided factory calibrated first dilator designed specifically for image guided surgery.	The system should have exhaustive set of spine instruments, dedicated trackers and navigable AWL, Probe and Taps, Navigated Screwdrivers. The system should have separate reference frame for Cervical procedures with separate Cervical taps and drill guides. The system should come with Universal Drill Guide and also have provision for navigating other third party navigable instruments Along with regular Spine instruments, system should navigated tactile instruments also for better access and ease of use for doctors.

		The system should have dedicated navigated MIS instruments along with Navigated PAK or equivalent needles and Nerve monitoring and Navigated enabled PAK or equivalent needles. The system should also additional navigated instruments for performing Revision surgeries under navigation. The system should at least have factory calibrated image guided jamshedi needle.
Page No. 19 Sr. no. 3.6	Navigation instruments should also have Radiolucent Spine Reference Clamp to reduce artifacts in Intraoperative navigated surgeries	Navigation instruments should also have Radiolucent Spine Reference Clamp/spine reference frame designed to use intraoperatively to reduce artifacts in Intraoperative navigated surgeries
Page No. 19 Sr. no. 6	The system should have 8GB RAM for faster processing of Images with 1TB internal memory	The system should have 8GB RAM for faster processing of Images with 1TB internal memory or external device to be provided of equivalent space (At least 250 GB internal memory)
Added		
		The system should have rescue points to recover navigation registered intraoperatively during surgery in case of registration accuracy lost intraoperatively

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