

ANNEXURE

Sl. No	Tender Requirement	Requested Amendment
1	RESOLUTION WITH CONNECTIVITY TO 2ND NAVIGATION SYSTEM AND DSA	RESOLUTION WITH CONNECTIVITY TO 3D NAVIGATION SYSTEM AND DSA
2	(1)X-ray Generator It should have dual focus :0.3 / 0.6mm	(1)X-ray Generator It should have dual focus :0.3 / 0.6mm OR Better
3	(3) TUBE HOUSING HEAT CAPACITY It should be powered by integrated heat exchanger systems, so that the system has the heat withstanding capacity of 8 MHU or more	(3) TUBE HOUSING HEAT CAPACITY It should be powered by integrated heat exchanger systems, so that the system has the heat withstanding capacity of 5 MHU or more
4	(4) OPERATING VALUES Pulsed Fluoroscopy: <input type="checkbox"/> mA range: 1.5 to 250mA Digital Radiography <input type="checkbox"/> mAs range: up to 250mA	(4) OPERATING VALUES Pulsed Fluoroscopy: <input type="checkbox"/> mA range: 3 to 250mA or better Digital Radiography <input type="checkbox"/> mA range: up to 250mA or better
5	(5) Filtering: It should have Total filtering: ≥ 4.3 mm Al, including 0.1mm cu	(5) Filtering: It should have Total Inherent filtration (IEC 60601) 3 mm Al with 75 kVp/0.1 mm Cu or better
6	(6) Collimator system: <input type="checkbox"/> Iris Collimator: 50 to 289mm diameter <input type="checkbox"/> Slot Collimator: 50 to 289mm diameter	(6) Collimator system: Collimator System should be specified
7	(7) Flat Panel Detector system <input type="checkbox"/> Anti-scatter grid: 70 lines / cm / grid ratio 8:1 <input type="checkbox"/> Flat panel should be integrated with the distant control as a safety measure for the patient and collision prevention.	(7) Flat Panel Detector system with <u>CMOS detector Technology</u> <input type="checkbox"/> Anti-scatter grid: Pb 15: 1, 80 lines/cm, f0 = 115 cm OR Better Any Collision prevention technique needs to be specified
8	Monitors: <input type="checkbox"/> Tilt Range: $\pm 10^\circ$ <input type="checkbox"/> Contrast Ratio: 600:1 <input type="checkbox"/> Dimensions: 41cm X 34 cm X 7 cm	Monitors: <input type="checkbox"/> Removed <input type="checkbox"/> Contrast Ratio: 900:1 <input type="checkbox"/> Specify the Dimensions
9	The following real-time and post processing digital processing functions should be possible <input type="checkbox"/> Recursive filter at 4 levels <input type="checkbox"/> Digital measurement functions (post processing)	The following real-time and post processing digital processing functions should be possible <input type="checkbox"/> Recursive filter at 4 levels or equivalent <input type="checkbox"/> Digital measurement functions in both 2D and 3D should be possible

10	<p>System should be capable of doing 3D imaging and therefore should be available with 3D IMAGE ACQUISITION SOFTWARE FOR 3D VISUALIZATION</p> <ul style="list-style-type: none"> <input type="checkbox"/> 3D motor driven C-arm orbital rotation should be possible. <input type="checkbox"/> Power technology of the system should be such a way that will avoid the need to replace the battery package <input type="checkbox"/> Digital memory with storage capacity of at least 100,000 images or more and Digital Image processing upto 32 bit should be possible <input type="checkbox"/> Measurement functions <input type="checkbox"/> All standard software should be included. 	<p>System should be capable of doing 3D imaging and therefore should be available with 3D IMAGE ACQUISITION SOFTWARE FOR 3D VISUALIZATION</p> <ul style="list-style-type: none"> <input type="checkbox"/> 3D motor driven Iso Centric C-arm orbital rotation should be possible or equivalent <input type="checkbox"/> Removed <input type="checkbox"/> Digital memory with storage capacity of at least 100,000 images or more and Digital Image processing upto 64 bit should be possible <input type="checkbox"/> Measurement functions in both 2D and 3D should be possible. <input type="checkbox"/> All standard software should be included. Any additional software should be quoted as optional.
11	<p>User Interface:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Resolution: 640X 480 pixels <input type="checkbox"/> Multilingual user interface <input type="checkbox"/> 4 axes movement control <input type="checkbox"/> Should have joystick control for four axes motorized movement. <input type="checkbox"/> Additional remote center to mount on the side rail of the operating table. 	<p>User Interface:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Resolution: Please Specify <input type="checkbox"/> Removed <input type="checkbox"/> 3 or more axes movement control <input type="checkbox"/> Should have joystick / touch screen control for three or more axes motorized movement. <input type="checkbox"/> Additional remote control to mount on the side rail of the operating table.
12	<p>Dimensions & mechanics:</p> <ul style="list-style-type: none"> <input type="checkbox"/> C-arm should have the following motorized movements <input type="checkbox"/> Horizontal travel: > 25 cm <input type="checkbox"/> System should have anti-collision protection system for 'C' movements. <input type="checkbox"/> Brakes: Steering and breaking lever with parallel movement of the mobile stand in all directions should be possible <input type="checkbox"/> Should have installed at least 2 systems of same offered model 	<p>Dimensions & mechanics:</p> <ul style="list-style-type: none"> <input type="checkbox"/> C-arm should have the following movements <input type="checkbox"/> Horizontal travel: >= 20 cm <input type="checkbox"/> System should have anti-collision protection system for 'C' movements or any alternate solution for collision protection technology should be available <input type="checkbox"/> Brakes: Steering and breaking lever with parallel movement of the mobile stand in all directions should be possible OR color-coded brakes should be available <input type="checkbox"/> Removed

13	NIL	There has to be a product demonstration at NIMHANS for a minimum period of 14 days. NOC from AERB will be arranged.
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Date: 16/12/2019
Place: Bengaluru

Dr.Dwarakanath Srinivas

Professor & HOD

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