



Bihar Medical Services & Infrastructure Corporation Limited 4th floor State Building Construction Corporation Limited. Hospital Road, Shastri Nagar, Patna 800023, Phone/Fax: +91612 2283287,+ 91612 2283288

Corrigendum-II

Bihar Medical Services and Infrastructure Corporation Limited (BMSICL) had invited E-Bids from the interested parties for the procurement, rate contract and the supply of medical equipment for different Govt. Medical Colleges and Hospitals of Bihar vide Notice Inviting Tender No.-BMSICL/2017-18/ME-096. A Pre-bid meeting was held on 24.09.2018 during and after which various suggestions were received from prospective bidders for amendment in technical specification and accordingly some amendment have been made as per the Annexure-I of this corrigendum. In order to facilitate maximum participation of bidders the tender schedule is being revised as follows:-

Tender Reference No.	BMSICL/2017-18/ME-096
Date and time for downloading of bid document	Up to 26th October 2018 till 15:00 Hrs.
Last date and time of submission of online bids	29th October 2018 till 17:00 Hrs.
Last date and time of submission of original documents of EMD, Tender Fee and Document.	31st October 2018 till 14:00 Hrs.
Date, Time and Place of opening of Technical Bid	31st October 2018 (at 15:00 Hrs.) on the website of www.eproc.bihar.gov.in in the office of BMSICL
Date and time of opening of financial Bids	To be announced later on www.eproc.bihar.gov.in

Note:-Please refer to the **Annexure-I (pages-05)** of this corrigendum before submission of bid.

Sd/

GM (Procurement)

BMSICL

Annexure-I

Name of Equipment -Pulse Oximeter		
Sl no.	Technical Specification before amendments	Technical Specification after amendments
1	Should have plethysmograph wave form with numeric display for SPO2 and Heart rate on LCD/TFT display screen.	No Change
2	Should have a SPO2 range of 0 to 100%.	No Change
3	Should have SPO2 accuracy of $\pm 2\%$.	3. Should have SPO2 accuracy of $\pm 2\%$ for range 70%-99%.
4	Should provide bar graph for pulse strength.	No Change

5	Audio and visual alarm for both upper and lower SPO2, Heart rate.	No Change
6	Beep sound and alarm sound should have separate volume control.	No Change
7	Should have a minimum of 2 hours' back-up time.	No Change
8	Should be a portable, light weight and desktop model.	No Change
9	Should work with input 200 to 240Vac 50 Hz supply.	No Change
10	Should have trend data of at least 24 hrs.	Should have trend data of at least 72 hrs.

Name of Equipment - VENTILATOR (NEONATAL)		
Sl no.	Technical Specification before amendments	Technical Specification after amendments
	Technical Specification:	
1	Advanced technology ventilator for use in NICU, suitable for ventilating Premature Neonates patients.	No Change
2	Should have facility for Invasive and Non-Invasive ventilation	No Change

3	Microprocessor controlled system with individual selection of various ventilation parameters & PEEP.	No Change
4	Display screen of minimum 8-10" Color-TFT.	No Change
5	Machine should be Compressed air (medical oil free air compressor of the same brand as ventilator)or Turbine Base.	No Change
6	Should have battery backup at least 30min.	No Change

7	It should allow the user to deliver conventional ventilation as well as HFOV.	No Change
8	Should have the following modes of ventilation:	No Change
	a. Assist/ Control	No Change
	b. Volume control	No Change
	c. Pressure control	No Change
	d. Pressure support	No Change
	e. SIMV with pressure support (Pressure and volume control)	No Change
	f. PEEP	No Change
	g. Inverse ratio Ventilation	No Change

	h. Noninvasive ventilation-BIPAP, CPAP	No Change
	i. Apnea ventilation, user selectable, volume & pressure control	No Change
9	HFOV	No Change
10	Should have facility to measure and display of the following parameters:	No Change
	a. Airway Pressure (Peak & Mean)	No Change
	b. Tidal volume (Inspired & Expired)	No Change
	c. Minute volume (Inspired & Expired)	No Change

	d. Respiratory mechanics	No Change
	e. Spontaneous Minute Volume	No Change
	f.Total Frequency	No Change
	g. PEEP	No Change
	i. Plateau Pressure	No Change
	j.Use selector Alarms for all measured & monitored parameters	No Change
	k. Occlusion Pressure	No Change
	l. Pressure Flow & Volume curves	No Change
11	Automatic compliance and leakage compensation for circuit and ET tube.	No Change

12	Conventional ventilation& HFO Ventilation Mode Parameters:	No Change
	a. BPM: 1to150	No Change
	b. Inspiratory Time: 0.1 to 3.0 sec	No Change
	c. CPAP Pressure: 0 to 35 mbar	No Change
	d. Inspiratory Pressure: 0 to 65 mbar	No Change
	e. FIO2: 21% to 100%	No Change
	f. Tidal Volume 2-300 ml with Volume Guarantee	No Change
	g. HFO Mode Parameters:	No Change

	h. HFO Frequency should be wide range with 3 to 20 Hz	No Change
	i. I: E Ratio: 1:1, 1:2, 1:3	No Change
13	1. Alarm	No Change
	a. Adjustable Alarm. - Low/high minute volume, low/high pressure, low/high tidal volume, low/high rate, apnea time, low/high oxygen, low/high SpO2	Adjustable Alarm. - Low/high minute volume, low/high pressure, low/high tidal volume, low/high rate, apnea time, low/high oxygen, low/high Fio2

	b. Special alarm - O2 cell Failure, flow sensor, battery, power supply, gas supply, oxygen concentration,	No Change
14	1. Should have inbuild Nebulization assembly facility.	No Change
15	2. Ventilator, Compressor & Humidifier should be Same Trolley/cart mounting for easy transportation.	No Change
16	Humidifier	No Change
	a. Servo controlled heated Respiratory Humidifier.	No Change

	b. Display Should be of LED /LCD.	No Change
	c. Temperature control settings & Temperature range: 28-40 deg.	No Change
	d. Temperature should be adjustable.	No Change
	e. Jar should be autoclavable	No Change
	1. Standard Accessories/spare & Consumable.	
	a. Silicon breathing circuit circuit (Neonatal reusable) - 5 complete set.	No Change

	b. Nebulization assembly compatible circuit 5 complete set.	No Change
	c. Humidifier - 1 No.	Autoclavable Humidifier Jar-02 (extra)
	d. Hose for O2 connection with connector - 5 mts.	No Change
	e. Hose for compressed air with connector - 5 mts.	No Change
	f. Test lung - 1 No.	No Change
	g. HME filter – 10 no	Delete
	h. Inbuilt / integrated nebulizer-1 NO	No Change

	<p>i. All sensors and other non-consumable items (other than reusable silicon ventilator circuits) should be free of cost during warranty and CMC.</p>	<p>No Change</p>
	<p>1. Ventilator, Humidifier & Compressor Power Supply input to be 200-240VAC, 50 Hz fitted with Indian conditions plug .</p>	<p>No Change</p>

	<p>2. Suitable online UPS with commensurate capacity for all ventilators including compressor & Humidifier with maintenance free batteries for minimum Two hours back-up should be supplied.</p>	<p>2. Suitable online UPS with commensurate capacity for all ventilators & Humidifier with maintenance free batteries for minimum Thirty (30) minutes back-up should be supplied.</p>
	<p>3. Ventilator, Humidifier & Compressor Should be US FDA and / European CE. approved Model should be offered.</p>	<p>3. Ventilator, Humidifier & Compressor Should be US FDA and / European CE by notified body approved Model should be offered.</p>
	<p>NOTE:</p>	

	<p>1) Reusable consumables (other than reusable silicon ventilator circuits) should last during the warranty period.</p>	<p>No Change</p>
	<p>2) Ventilator & Humidifier any additional reusable consumables are required during the warranty period those will be supplied free of charge by the supplier.</p>	<p>No Change</p>

	<p>3) The life expectancy of the reusable consumable is expected to be of at least one year from the date of installation of the same. The reusable consumables will be procured at the prices accepted as per the contract.</p>	<p>No Change</p>
	<p>4. The bidders should submit All reusable consumable items price & their authorized local office/ distributor name in the financial bid.</p>	<p>No Change</p>
<p>Name of Equipment - Ventilator (Turbine Based)</p>		

SI no.	Technical Specification before amendments	Technical Specification after amendments
	1.Should have facility for Invasive and Non-Invasive ventilation.	No Change
	2.Microprocessor Control suitable for adult ventilation.	No Change
	3.Electromagnetic Compatible Hinged arm holder for holding the circuit.	Hinged arm holder for holding the circuit.

	<p>4.Should be able to record and analyse various parameters. Breath to breath/pulmonaryfunctions, loops to be stored in the memory with feasibility of trend analysis on a TFT touch screen.Screen size should be more than 10 to 15” so that be easily seen from distance.Compiled trend analysis at Minimum 48 hoursfor all measured parameters. Monitoring during mechanical ventilation includes measurement of peak and plateau pressures, intrinsic positive end expiratory pressure, and work of breathing.</p>	<p>No Change</p>
	<p>5.Machine should be turbine driven.</p>	<p>No Change</p>
	<p>6.Should have Nebulization assembly facility.</p>	<p>No Change</p>

	7.Ventilator, Compressor & Humidifier should be Same Trolley/cart mounting for easy transportation.	No Change
	8.Should have Internal rechargeable battery at least 05Hrs. backup.	No Change
	9.Automatic Self-test compliance and leakage compensation for circuit and ET Tube.	No Change
	10.Should have the following modes:	No Change

	<p>a. Volume Controlled, CMV, PCV or IRV, SIMV (volume cycled & pressure limited), SIMV+PS(volume cycled & pressure limited), CPAP, Bilevel, APRV. IMPRV, PRVC,</p>	<p>No Change</p>
	<p>AUTOMODE, Minimum minute ventilation, Mandatory rate ventilation, Proportional assist, Mandatory minute ventilation.</p>	<p>No Change</p>
	<p>11. Should have the following setting.</p>	<p>No Change</p>

	a.Tidal Volume: minimum 200 ml maximum of 2000 ml in Volume control is essential.	No Change
	b. PEEP 0 to 30 cmH20 or more	No Change
	c.Oxygen Concentration 21–100 %	No Change
	d. Inspiratory Pressure 1-80 cmH20).	Inspiratory Pressure 5-80 cmH20).
	e. Respiratory rate 1 to 80 bpm.	No Change
	12. Alarm	No Change
	a.Adjustable Alarm.-Low/high minute volume, low/high pressure, low/high tidal	No Change

	<p>volume, low/high rate, apnea time, low/high oxygen, low/high SpO2.</p>	<p>No Change</p>
	<p>b.Special alarm - O2 cell Failure , flow sensor, battery, power supply, gas supply,</p>	<p>No Change</p>
	<p>oxygen concentration.</p>	<p>No Change</p>
	<p>13.Compressor</p>	<p>Deleted</p>
	<p>a.Should be supplied with External Compressor.</p>	<p>Deleted</p>
	<p>b.The compressor has been designed to supply the ventilator with dry, filtered compressed air.</p>	<p>Deleted</p>

	c. Compressor should be oil-free.	Deleted
	d. Portable & fitted with ventilator cart.	Deleted
	e. Air filtration 5 microns.	Deleted
	f. Noise level dB 40–50.	Deleted
	g. Peak flow of 200lpm.	Deleted
14	.Humidifier	No Change
	a. Servo controlled heated Respiratory Humidifier.	No Change
	b. Display Should be of LED /LCD.	No Change
	c. Temperature control settings & Temperature range: 28-40 deg.	No Change

	d.Temperature should be adjustable.	No Change
	e.Jar should be autoclavable	No Change
15	Standard Accessories/spare & Consumable.	
	a.Silicon breathing circuit (Adult reusable)-5 complete set.	No Change
	b.Nebulization assembly compatible circuit 5complete set.	No Change
	c.Humidifier-1 No.	No Change
	d.O2 Pressure Regulator with hose-1 No.	No Change
	e.Hose for O2 connection with connector-5 mts.	No Change

	f.Hose for compressed air withconnector-5 mts.	Deleted
	g.Test lung-1 No.	No Change
	h.Non-invasive ventilator mask reusable for adult (3sizes)-each size 5 No.	h.Non-invasive ventilator mask reusable for adult (3sizes)-each size 5 No.(total 15 no.)
	i.ET tube cuff pressure monitor and HME filter-10 no.	No Change
	j.Inbuilt / integrated nebulizer-1 no.	No Change

	<p>k.All sensors and other non-consumable items (other than reusable silicon ventilator circuits)should be free of cost during warranty and CMC.</p>	<p>No Change</p>
<p>16</p>	<p>Ventilator, Humidifier & Compressor Power Supply input to be 200-240VAC, 50 Hz fittedwith Indian conditions plug .</p>	<p>Ventilator, Humidifier & Power Supply input to be 200-240VAC, 50 Hz fittedwith Indian conditions plug .</p>

17	<p>Suitable online UPS with commensurate capacity for all ventilators including compressor & Humidifier with maintenance free batteries for minimum one-hour back-up should be supplied.</p>	<p>Suitable online UPS with commensurate capacity for all ventilators including Humidifier with maintenance free batteries for minimum one-hour back-up should be supplied.</p>
18	<p>Ventilator, Humidifier & Compressor Should be US FDA and / European CE Approved Model should be offered.</p>	<p>Ventilator, Humidifier Should be US FDA and / European CE Approved Model should be offered.</p>
	NOTE:	

	<p>1) Reusable consumables (other than reusable silicon ventilator circuits) should last during the warranty period.</p>	<p>No Change</p>
	<p>2) Ventilator & Humidifier any additional reusable consumables are required during the warranty period those will be supplied free of charge by the supplier.</p>	<p>No Change</p>

	<p>3) The life expectancy of the reusable consumable is expected to be of at least one year from the date of installation of the same. The reusable consumables will be procured at the prices accepted as per the contract.</p>	No Change
	<p>4. The bidders should submit all reusable consumable items price & their authorised local office/ distributor name in the financial bid.</p>	No Change