HSCC/Medical Equipment/SJH Date: 28.7.2015

Amendment-XVII

Ref.: IFB No. HSCC/SJH/Medical Equipment/2015 Dated 10.4.2015

Sub.: Procurement of Medical Equipment for New Emergency Block & Super-Specialty Block at Safderjung Hospital, New Delhi.

The amendments for Item No. 1, 2, 3, 4 & 9 are to be read as:

S. NO. 1 Central Monitoring Stations(CMS) 8nos. with bedside Monitors 125 Nos., for ICU , Superspeciality Block

Equipment Specifications for Complete Monitoring System for ICU
1. Description of Function
1.1 Critical patients need to be monitored continuously in ICU at the bedside as well as at the central nursing station.
2. Operational Requirements
2.1 ICU should comprise of multi parameter modular monitors at the bedside and with central station.
2.2 Capability of storage of patient data and printing of patient reports through modular thermal recorder.
2.3 Demonstration of the equipment is a must.
3. Technical Specifications
3.1 19 inches multi colored TFT/LCD display touch screen.
3.2 Should have battery back-up for one hour or more.
3.3 Eight digital and waveforms/traces display
3.4 Monitor should have multi parameter modules.
3.5 Parameter modules should be freely exchangeable between all the monitors.
3.6 Multi-channel ST segment analysis.
3.7 Facility to monitor and display - ECG, Respiration, NIBP, SpO2 – Massimo technology, CO2 with capnography, two Temperatures & 2-channel IBP with thermal recorder.NMT integrated/standalone. Upgradable to monitor cardiac output.
3.8 Automatic arrhythmia detection & alarm for standard and lethal arrhythmias.
3.9 EtCO2 - side stream. Display both inspired and expired values, showing capnography.
3.10 Should provide hemodynamic, oxygenation, Ventilation calculation package.
3.11 Should have drug calculation package.
3.12 Trend of at least 24 hours.
3.13 Monitors should be HL7 compatible with upgradability to be connected to HIS and PACS.
3.14 Atleast 200 nos. event recall/snapshot facility, automatically triggered by alarm.
3.15 The monitors should have monitor-to-monitor overview facility
3.16 List of spares & accessories for multiparameter patient monitors for ICU of the Superspeciality blockBlock:-

	Area	ICUs superspeciality block
	No of Monitors + central stations	125+ 8(central station)
Modules	ECG	Total 125 – 1 per monitor
	SpO_2	Total 125– 1 per monitor
	NIBP	Total 125 – 1 per monitor
	End tidal CO_2	Total 125 – 1 per monitor
	Two Temperature	Total 125 – 1 per monitor

	Two IBP	Total 125 - 1 per monitor
	Cardiac output module with accessories	Total 25
	NMT	Total 12
	Thermal recorder	Total 12
Accessories	ECG leads	5 lead ECG sets – total 250 (2 sets per monitor)
	SpO_2 probe complete set	250 adult – 2 per monitor 24 pediatric 14 neonatal
	NIBP cuff complete set	250 adult – 2 per monitor 24 pediatric 14 neonatal
	End tidal CO_2	Adult & Pediatric accessory kit, total 125 adult and 40 pediatric kits. Disposables- 50 tubings per monitor
	IBP- Reusable Interface Cable Disposable pressure transducer kit	2 per monitor- total 250 100 per monitor-total1250
	Two Temperatures	Two Rectal/ esophageal & skin probes per monitor (Total 125 rectal/ esophageal & 125 skin probes)
	Recorder paper	10 Rolls per module, total 120.

3.17 Wall Mount for all the monitors

3.18 Central station for bedside monitors with independently controlled. 21" multi-color TFT Monitor, complete with Ethernet LAN cabling, alarm management, 48 hours trending, bed to bed viewing of waveforms and remote alarm management like silencing of alarms etc.
3.19 Central Station to have capability to display up to 16 beds.

3.20 System should be complete with Laser Printer for each Central Station.

4.0 General Specifications
4.01 User list with satisfactory performance to be provided of last three years from major hospital.
4.02 **Demonstration of Equipment is must**
4.03 Cost of individual spares and accessories to be quoted separately
4.04 Comparative compliance statement to be provided, mentioning page and para in the catalogue.
4.05 Undertaking that Local after sales Service will be provided round the clock
4.06 Undertaking from Principal that after sales service, spares & accessories will be provided for minimum 10 years after installation.
4.07 Warranty for minimum Two years and CMC as per rules.
4.08 All installation and cabling to be done on turn key basis and cost to be born by the bidder.

4.09 Bidder to inspect the site of installation before quoting, to confirm the site of wall mounts and length of cables to be installed.
4.10. Service and user manual in English
System should be US FDA approved with certification.
4.12 Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.
5. Environmental factors: No interference with use of electrocautry
5.10 The unit shall be capable of being stored continuously in ambient temperature of 0 - 50deg C and relative humidity of 15-90%
5.11The unit shall be capable of operating continuously in ambient temperature of 10 -40 deg C and relative humidity of 15-90%
Shall meet IEC-60601-1-2: 2001general Requirements of Safety for Electromagnetic Compatibility.
6. Power Supply
Power input to be 220-240VAC, 50Hz fitted with Indian plug
Shall meet the safety requirements as per IEC 60601-2-27:1994—Medical electrical equipment—Part 2: Particular requirements for the safety of electrocardiographic monitoring equipment

S. NO. 2 Central Monitoring Stations(CMS) 2nos. with bedside Monitors 12 Nos., for Heart Command Centre , Superspeciality Block

Equipment Specifications for Complete Monitoring System for ICU
1. Description of Function
1.1 Critical patients need to be monitored continuously in the heart command centre, at the bedside as well as at the central nursing station.
2. Operational Requirements
2.1 Heart command centre should comprise of multi parameter modular monitors at the bedside and with central station.
2.2 Capability of storage of patient data and printing of patient reports through modular thermal recorder.
2.3 Demonstration of the equipment is a must.
3. Technical Specifications
3.1 19 inches multi colored TFT/LCD display touch screen.
3.2 Should have battery back-up for one hour or more.
3.3 Eight digital and waveforms/traces display
3.4 Monitor should have multi parameter modules.
3.5 Parameter modules should be freely exchangeable between all the monitors.
3.6 Multi-channel ST segment analysis.
3.7 Facility to monitor and display - ECG, Respiration, NIBP, SpO2 – Massimo technology, CO2 with capnography, two Temperatures & 2-channel IBP with thermal recorder. Upgradable to monitor cardiac output.
3.8 Automatic arrhythmia detection & alarm for standard and lethal arrhythmias.
3.9 EtCO2 - side stream. Display both inspired and expired values, showing capnography.
3.10 Should provide hemodynamic, oxygenation, Ventilation calculation package.
3.11 Should have drug calculation package.
3.12 Trend of at least 24 hours.
3.13 Monitors should be HL7 compatible with upgradability to be connected to HIS and PACS.
3.14 Atleast 200 nos. event recall/snapshot facility, automatically triggered by alarm.
3.15 The monitors should have monitor-to-monitor overview facility
3.16 List of spares & accessories for multiparameter patient monitors for Heart Command Centre of the Superspeciality Block:-

	Area	Heart command centre, superspeciality block
	No of Monitors + central stations	12+ 2(central station)
Modules	ECG	Total 12 – 1 per monitor
	SpO_2	Total 12– 1 per monitor
	NIBP	Total 12 – 1 per monitor
	End tidal CO_2	Total 12 – 1 per monitor
	Two Temperature	Total 12 – 1 per monitor
	Two IBP	Total 12 - 1 per monitor
	Cardiac output module with accessories	Total 2
	Thermal recorder	Total 2
Accessories	ECG leads	5 lead ECG sets – total 24 (2 sets per monitor)
	SpO_2 probe complete set	24 adult – 2 per monitor 2 pediatric
	NIBP cuff complete set	24 adult – 2 per monitor 2 pediatric
	End tidal CO_2	Adult & Pediatric accessory kit, total 12 adult and 2 pediatric kits. Disposables- 50 tubings per monitor
	IBP- Reusable Interface Cable Disposable pressure transducer kit	2 per monitor- total 24 100 per monitor-total120
	Two Temperatures	Two Rectal/ esophageal & skin probes per monitor (Total 12 rectal/ esophageal & 12 skin probes)
	Recorder paper	10 Rolls per module, total 20.

3.17 Wall Mount for all the monitors

3.18 Central station for bedside monitors with independently controlled. 21" multi-color TFT Monitor, complete with Ethernet LAN cabling, alarm management, 48 hours trending, bed to bed viewing of waveforms and remote alarm management like silencing of alarms etc.
3.19 Central Station to have capability to display up to 16 beds.

3.20 System should be complete with Laser Printer for each Central Station.

4.0 General Specifications
4.01 User list with satisfactory performance to be provided of last three years from major hospital.
4.02 Demonstration of Equipment is must
4.03 Cost of individual spares and accessories to be quoted separately
4.04 Comparative compliance statement to be provided, mentioning page and para in the catalogue.
4.05 Undertaking that Local after sales Service will be provided round the clock

4.06 Undertaking from Principal that after sales service, spares & accessories will be provided for minimum 10 years after installation.
4.07 Warranty for minimum Two years and CMC as per rules.
4.08 All installation and cabling to be done on turn key basis and cost to be born by the bidder.
4.09 Bidder to inspect the site of installation before quoting, to confirm the site of wall mounts and length of cables to be installed.
4.10. Service and user manual in English
System should be US FDA approved with certification.
4.12 Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.
5. Environmental factors: No interference with use of electrocautry
5.10 The unit shall be capable of being stored continuously in ambient temperature of 0 - 50deg C and relative humidity of 15-90%
5.11The unit shall be capable of operating continuously in ambient temperature of 10 -40 deg C and relative humidity of 15-90%
Shall meet IEC-60601-1-2: 2001general Requirements of Safety for Electromagnetic Compatibility.
6. Power Supply
Power input to be 220-240VAC, 50Hz fitted with Indian plug
Shall meet the safety requirements as per IEC 60601-2-27:1994—Medical electrical equipment—Part 2: Particular requirements for the safety of electrocardiographic monitoring equipment

S. NO. 3 Central Monitoring Stations(CMS) 2nos. with bedside Monitors 20 Nos., for Cardiology , Superspeciality Block

Equipment Specifications for Complete Monitoring System for ICU
1. Description of Function
1.1 Critical patients need to be monitored continuously in the cardiology department, at the bedside as well as at the central nursing station.
2. Operational Requirements
2.1 Cardiology monitors should comprise of multi parameter modular monitors at the bedside and with central station.
2.2 Capability of storage of patient data and printing of patient reports through modular thermal recorder.
2.3 Demonstration of the equipment is a must.
3. Technical Specifications
3.1 19 inches multi colored TFT/LCD display touch screen.
3.2 Should have battery back-up for one hour or more.
3.3 Eight digital and waveforms/traces display
3.4 Monitor should have multi parameter modules.
3.5 Parameter modules should be freely exchangeable between all the monitors.
3.6 Multi-channel ST segment analysis.
3.7 Facility to monitor and display - ECG, Respiration, NIBP, SpO2 – Massimo technology, CO2 with capnography, two Temperatures & 2-channel IBP with thermal recorder. Upgradable to monitor cardiac output.
3.8 Automatic arrhythmia detection & alarm for standard and lethal arrhythmias.
3.9 EtCO2 - side stream. Display both inspired and expired values, showing capnography.
3.10 Should provide hemodynamic, oxygenation, Ventilation calculation package.
3.11 Should have drug calculation package.
3.12 Trend of at least 24 hours.
3.13 Monitors should be HL7 compatible with upgradability to be connected to HIS and PACS.
3.14 Atleast 200 nos. event recall/snapshot facility, automatically triggered by alarm.

3.15 The monitors should have monitor-to-monitor overview facility
3.16 List of spares & accessories for multiparameter patient monitors for Cardiology department of the Superspeciality Block:-

	Area	Cardiology department, superspeciality block
	No of Monitors + central stations	20+ 2(central station)
Modules	ECG	Total 20 – 1 per monitor
	SpO_2	Total 20– 1 per monitor
	NIBP	Total 20 – 1 per monitor
	End tidal CO_2	Total 20 – 1 per monitor
	Two Temperature	Total 20 – 1 per monitor
	Two IBP	Total 20 - 1 per monitor
	Cardiac output module with accessories	Total 2
	Thermal recorder	Total 2
Accessories	ECG leads	5 lead ECG sets – total 40 (2 sets per monitor)
	SpO_2 probe complete set	40 adult – 2 per monitor 4 pediatric
	NIBP cuff complete set	40 adult – 2 per monitor 4 pediatric
	End tidal CO_2	Adult & Pediatric accessory kit, total 20 adult and 4 pediatric kits. Disposables- 50 tubings per monitor
	IBP- Reusable Interface Cable Disposable pressure transducer kit	2 per monitor- total 40 100 per monitor-total 200
	Two Temperatures	Two Rectal/ esophageal & skin probes per monitor (Total 20 rectal/ esophageal & 20 skin probes)
	Recorder paper	10 Rolls per module, total 20.

3.17 Wall Mount for all the monitors

3.18 Central station for bedside monitors with independently controlled. 21" multi-color TFT Monitor, complete with Ethernet LAN cabling, alarm management, 48 hours trending, bed to bed viewing of waveforms and remote alarm management like silencing of alarms etc.
3.19 Central Station to have capability to display up to 16 beds.

3.20 System should be complete with Laser Printer for each Central Station.

4.0 General Specifications
4.01 User list with satisfactory performance to be provided of last three years from major hospital.
4.02 **Demonstration of Equipment is must**
4.03 Cost of individual spares and accessories to be quoted separately

4.04 Comparative compliance statement to be provided, mentioning page and para in the catalogue.
4.05 Undertaking that Local after sales Service will be provided round the clock
4.06 Undertaking from Principal that after sales service, spares & accessories will be provided for minimum 10 years after installation.
4.07 Warranty for minimum Two years and CMC as per rules.
4.08 All installation and cabling to be done on turn key basis and cost to be born by the bidder.
4.09 Bidder to inspect the site of installation before quoting, to confirm the site of wall mounts and length of cables to be installed.
4.10. Service and user manual in English
System should be US FDA approved with certification.
4.12 Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.
5. Environmental factors: No interference with use of electrocautry
5.10 The unit shall be capable of being stored continuously in ambient temperature of 0 - 50deg C and relative humidity of 15-90%
5.11The unit shall be capable of operating continuously in ambient temperature of 10 -40 deg C and relative humidity of 15-90%
Shall meet IEC-60601-1-2: 2001general Requirements of Safety for Electromagnetic Compatibility.
6. Power Supply
Power input to be 220-240VAC, 50Hz fitted with Indian plug
Shall meet the safety requirements as per IEC 60601-2-27:1994—Medical electrical equipment—Part 2: Particular requirements for the safety of electrocardiographic monitoring equipment

S. NO. 4 Central Monitoring Stations(CMS) 5nos. with bedside Monitors 68 Nos., for ICU , New Emergency Block

Equipment Specifications for Complete Monitoring System for ICU
1. Description of Function
1.1 Critical patients need to be monitored continuously in ICU at the bedside as well as at the central nursing station.
2. Operational Requirements
2.1 ICU should comprise of multi parameter modular monitors at the bedside and with central station.
2.2 Capability of storage of patient data and printing of patient reports through modular thermal recorder.
2.3 Demonstration of the equipment is a must.
3. Technical Specifications
3.1 Minimum 19 inches multi colored TFT/LCD display touch screen.
3.2 Should have battery back-up for one hour or more.
3.3 Eight digital and waveforms/traces display
3.4 Monitor should have multi parameter modules.
3.5 Parameter modules should be freely exchangeable between all the monitors.
3.6 Multi-channel ST segment analysis.
3.7 Facility to monitor and display - ECG, Respiration, NIBP, SpO2- Massimo technology, CO2 with capnography, two Temperatures & 2-channel IBP with thermal recorder.NMT integrated/standalone. Upgradable to monitor cardiac output.
3.8 Automatic arrhythmia detection & alarm for standard and lethal arrhythmias.
3.9 EtCO2 - side stream. Display both inspired and expired values, showing capnography.
3.10 Should provide hemodynamic, oxygenation, Ventilation calculation package.
3.11 Should have drug calculation package.
3.12 Trend of at least 24 hours.
3.13 Monitors should be HL7 compatible with upgradability to be connected to HIS and PACS.

3.14 Atleast 200 nos. event recall/snapshot facility, automatically triggered by alarm.
3.15 The monitors should have monitor-to-monitor overview facility
3.16 List of spares & accessories for multiparameter patient monitors for ICU of the New Emergency Block:-

	Area	ICU - Six
	No of Monitors	68+ 5(central station)
Modules	ECG	68 – 1 per monitor
	SpO_2	68– 1 per monitor
	NIBP	68– 1 per monitor
	End tidal CO_2	68– 1 per monitor
	Two Temperature	68– 1 per monitor
	Two IBP	68– 1 per monitor
	NMT	12(2 per ICU)
	Thermal recorder	12(2per ICU)
Accessories	ECG leads	2 each of 5 leads per monitor &24sets of 12 leads (four sets per ICU)
	SpO_2 probe complete set	92 adult – 2 per monitor for adult ICU 22 pediatric– 2 per monitor for PICU 22 neonatal– 2 per monitor for N ICU
	NIBP cuff complete set	92 adult – 2 per monitor for adult ICU 22 pediatric-2 per monitor for PICU 22 neonatal- 2 per monitor for PICU
	End tidal CO_2	Adult&Pediatric accessory kit 2 each with each monitor Disposables- 50 tubings per monitor
	IBP- Reusable Interface Cable Disposable pressure transducer Disposable dome for IBP	2 per monitor 100 per monitor 100 per monitor
	Two Temperatures	Two Rectal/ esophageal & skin probes per monitor (Total 136 rectal/ esophageal & 136 skin probes)
	Recorder paper	10 Rolls per module, total 120.

3.17 Wall Mount for all the monitors

3.18 Central station for bedside monitors with independently controlled. 21" multi-color TFT Monitor, complete with Ethernet LAN cabling, alarm management, 48 hours trending, bed to bed viewing of waveforms and remote alarm management like silencing of alarms etc.
3.19 Central Station to have capability to display up to 16 beds.

3.20 System should be complete with Laser Printer for each Central Station.

4.0 General Specifications
4.01 User list with satisfactory performance to be provided of last three years from major hospital.
4.02 Demonstration of Equipment is must
4.03 Cost of individual spares and accessories to be quoted separately
4.04 Comparative compliance statement to be provided, mentioning page and para in the catalogue.
4.05 Undertaking that Local after sales Service will be provided round the clock
4.06 Undertaking from Principal that after sales service, spares & accessories will be provided for minimum 10 years after installation.
4.07 Warranty for minimum Two years and CMC as per rules.
4.08 All installation and cabling to be done on turn key basis and cost to be born by the bidder.
4.09 Bidder to inspect the site of installation before quoting, to confirm the site of wall mounts and length of cables to be installed.
4.10. Service and user manual in English
System should be US FDA approved with certification.
4.12 Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.
5. Environmental factors: No interference with use of electrocautry
5.10 The unit shall be capable of being stored continuously in ambient temperature of 0 - 50deg C and relative humidity of 15-90%
5.11The unit shall be capable of operating continuously in ambient temperature of 10 -40 deg C and relative humidity of 15-90%
Shall meet IEC-60601-1-2: 2001general Requirements of Safety for Electromagnetic Compatibility.
6. Power Supply
Power input to be 220-240VAC, 50Hz fitted with Indian plug
Shall meet the safety requirements as per IEC 60601-2-27:1994—Medical electrical equipment—Part 2: Particular requirements for the safety of electrocardiographic monitoring equipment

ITEM NO. 9 : MULTIPARA MONITOR (RESP., TEMP., PULSE, SPO2) FOR EXAMINATION, RESUSCITATION & WARDS

Sr. No.	Specification Lines as per Tender	Amended changes
1	**Point 2.1** Monitor should be lightweight and should monitor vital parameters of patients.	Monitor should be lightweight and should monitor vital parameters of patients. **It should be multimodular of latest technology**.
2	**Point 2.2** Capability of storage of patient data and printing of patient reports through in-built thermal recorder.	Capability of storage of patient data and printing of patient reports through **modular/standalone** thermal recorder.
	Point 3.1 Portable and Light weight preferably <10kg	To be deleted

3	**Point 3.2** Mini 15”inch or more multi colour touch screen TFT display	Mini 15”inch or more multi colour touch screen **TFT / LCD** display.
4	**Point 3.3** Monitoring parameters: - ECG (3 and 5 lead) , respiration, NIBP, SpO2, temperature **IBPDual, CO, $ETCO_2$(side stream)should quote price separately.**	Monitoring parameters: - ECG (3 and 5 lead) , respiration, NIBP, SpO2, temperature **IBP Dual and $ETCO_2$ (side stream).**
	Point 3.6 Trends should be automatically stored for at least 120 hours	Trends should be automatically stored for at least 72 hours
	Point 3.8 Convenient handle for carrying the same	To be deleted`
5	**Point 3.10** Should be compatible for side stream $ETCO_2$ monitor (Should quote price separately with accessories).	**Point 3.10 to be deleted**
	Point 4.2 Patient cables (5 ECG lead) –01	Patient cables (5 ECG lead) –02 each
	Point 4.3 Adult, Pediatric& Neonatal Cuff –01 each	Adult, Pediatric& Neonatal Cuff –02 each
	Point 4.5 Skin Temp Probe –02	Skin Temp Probe –02 and rectal Temp Probe -02
6	**Point 4.6** **Inbuilt Dual channel** recorder –01	**Modular/standalone** recorder - 01
7	**Point 4.9** $ETCO_2$ **monitor** with accessories for 25 monitor (resus Area)	$ETCO_2$ **Module** with accessories for 25 monitor (resus Area)
8	**Point 4.10** CO monitor with accessories for only 5 monitor for 50 patient	**Point 4.10 to be deleted**

9	**Point 6.2** Resettable over current breaker/fuse shall be fitted for protection	**Point 6.2 to be deleted**
10	**Point 6.3** Suitable UPS with maintenance free batteries for minimum one hour back up should be supplied with the system.	**Point 6.3 to be deleted**
	Should be USFDA/ European CE approved	**Should be USFDA approved**

Revised QUANTITY and EMD for ITEM NO. 9 : MULTIPARA MONITOR

Revised Quantity

50 no. in Wards + 15 no. in OT/Aneas. + 10 no. for Neurology + 7 no. for Nephrology of Super-Specialty Block + 25nos. for Resuscitation Area + 50 nos. for Wards + 43no. For Exam. Area of Emergency Block + 100 no. for Single Rooms of New Paid Ward in Super-Specialty Block + 106 no. for 106 no. Double Rooms of New Paid Ward in Super-Specialty Block = 406 no.

These are the final amendments. No more queries will be entertained.

Revised EMD: Rs. 24,34,000.00

The bid submission date is 10.08.2015.

The EMD submitted in the form of Bank Guarantee should be valid as per tender conditions from the date of tender opening.

All other tender terms and conditions remain unchanged.

Amendment to be issued will be uploaded on websites www.tenderwizard.com/HSCC & www.hsccltd.com.

Medical Superintendent
Safderjung Hospital & VMMC,
New Delhi.