HSCC/SES/SJH-Emergency/CSSD/2016 Dated:17.06.2016

All Bidders

Amendment -IV

Subject: Supply, Installation, Testing & Commissioning of CSSD on Turnkey Basis for Emergency Block at Safdarjung Hospital , New Delhi.

IFB No. : HSCC/SES/SJH-Emergency/CSSD/2016 dated 09.04.2016

This has reference to above IFB No. for the Subject works.

The following Amendment may be noted which shall be treated as part of the tender document and to be submitted duly signed & stamp along with tender.

Sr. No.	Bidder's Query	Clarification/Amendment
1.	**Para no of Tech Specs** 1. **HORIZONTAL STERILIZER, 550-600 Litres (8 STU) WITH ACCESSORIES** Fully automatic PLC controlled Horizontal Autoclave (Steam Sterilizer), with pre and post-vacuum treatment and with loading equipment. (a) Door: The sterilizer door should be pneumatically (Compressed Air) operated double door with fully automatic vertical sliding movement along with door safety features. **Modification requested:-**Fully automatic PLC controlled Horizontal Autoclave (Steam Sterilizer), with pre and post-vacuum treatment and with loading equipment. (a) Door: The sterilizer door should be pneumatically / Electrically operated double door with fully automatic vertical sliding movement along with door safety features. **Remarks:-**Electrically driven motorized door system is also commonly offered by most of the reputed brands of steam sterilizer autoclaves, for the small / medium range of sterilizers. **Para no of Tech Specs** e) 01. The control system should be dual PLC based system specially designed for sterilization	(a) Door: The sterilizer door should be pneumatically / Electrically operated double door with fully automatic vertical sliding movement along with door safety features.

	application (one to control the main parameters (PLC) and the other to verify the functionality). Control system should have touch sensitive, minimum 8 colour display interface at operator loading side. Apart from main PLC based control system the sterilizer should also have additional independent monitoring & documentation system which constantly cross checks the safety systems & time. **Modification requested:-** The control system should be based on PLC system specially designed for sterilization application. Control system should have touch sensitive, minimum 7 to 10" colour display interface at operator loading side. Apart from main PLC based control system the sterilizer should also have additional independent monitoring & documentation system which constantly cross checks the safety systems & time. **Remarks:-**This is according to standard of EN285 for large steam sterilizer should have dual independent monitoring system.	Control system should have touch sensitive, minimum 7 to 10" colour display interface at operator loading side.
2.	2. **STERILIZER 100-125 Litres WITH ACCESSORIES FOR TSSU:** (a) Door: The sterilizer door should be Single door with Hinge. **Modification requested:-**Door: The sterilizer door should be Single door with automatic Vertical Sliding mechanism. **Remarks:-**Automatic sliding door need lower space and assure higher safety and convenience for the operators. It also avoid any human error.	The sterilizer door should be Single door with automatic Vertical Sliding mechanism.
3.	4.**DOUBLE DOOR WASHER DISINFECTOR 300-360 Litre (15 DIN Trays) WITH ACCESSORIES** 03. Washer Disinfector Management System: The Management of Washer Disinfector for cycle process and various other menus and functions should be done through at least a 7 inch multi coloured touch screen display with the password protection ensures control of the operator and the Programmable Logic Controller (Omron PLC). The	

	system should consists of double PLC devices, one to control the main parameters (PLC) and the other to verify the functionality and safety. The programmable electronic controller should be of a well- known company, highly reliable and fitted with a number of safety systems to ensure the Washer/Disinfector works properly. **Modification requested:-** Washer Disinfector Management System: The Management of Washer Disinfector for cycle process and various other menus and functions should be done through at least a 5 to 8" multi coloured touch screen display with the password protection ensures control of the operator and the Programmable Logic Controller(PLC). The programmable electronic controller should be of a well- known company, highly reliable and fitted with a number of safety systems to ensure the Washer/Disinfector works properly. **Remarks:-**Kindly consider that Double PLC control system may be a locking feature of one of the specific brand. Most of the reputed international brands of washer disinfector certified as per EN15883 norms, offer single PLC based control system.	The Management of Washer Disinfector for cycle process and various other menus and functions should be done through at least a 5 to 8" multi coloured touch screen display with the password protection ensures control of the operator and the Programmable Logic Controller(PLC).
4.	5. **<u>LOW TEMPERATURE STRILIZER (H2O2) (Double door)</u>** 02. Should provide simple and fast sterilization of medical devices at low temperature using Hydrogen Peroxide sterilization gas/plasma technology without any need to have additional Dryer. **Modification requested:-**Should provide simple and fast sterilization of medical devices at low temperature using Hydrogen Peroxide sterilization gas plasma technology without any need to have additional plumbing & civil work**.** **Remarks:-** Gas plasma technology does not have any match with non-plasma vaporized hydrogen peroxide based sterilizer which is neither effective nor safer for instruments due to non-conversion of remaining part of H2O2 (100%) in to water & oxygen after sterilization. 04. Usable Rectangular chamber having volume of	Should provide simple and fast sterilization of medical devices at low temperature using Hydrogen Peroxide sterilization gas plasma technology without any need to have additional plumbing & civil work**.** Usable Rectangular chamber having volume of minimum 120-150 liters.

	minimum 150 liters. **Modification requested:-** Usable Rectangular chamber having volume of minimum 120 liters **Remarks:-**It appears to be a locking specs of one of the manufacturer, as most of the plasma sterilizers are being offered with usable volume of 100-120L.	
	07. Should have minimum two / maximum three selectable pre-programmed sterilization cycles for different types/ quantity of lumen and non-lumen loads with max. sterilization time not more than 55min. ± 5 min. **Modification requested:-**Should have minimum two / maximum three selectable pre-programmed sterilization cycles for different types/ quantity of lumen and non-lumen loads with max. sterilization time not more than 65min. ± 5 min.	Should have minimum two / maximum three selectable pre programmed sterilization cycles for different types/ quantity of lumen and non-lumen loads with max. sterilization time not more than 65 min. ± 5 min.
	08. Should be environment friendly and have no toxic byproducts or harmful residues and should approval of EPA to guarantee its non-harmful feature. **Modification requested:-**Should be environment friendly and have no toxic by products or harmful residues and should approved of EPA/ equivalent agencies. **Remarks:-**As EPA is issued by US company which is not mandatory for manufacturers not marketing in US.	Should be environment friendly and have no toxic byproducts or harmful residues and should be approved of EPA/ equivalent agencies to guarantee its non-harmful feature. . Tender terms prevail
	13. Each Sterilizer should be supplied complete with accessories like One no. six Vial incubator (220V), 6 nos. instrument trays of three different sizes with Lids. **Modification requested:-** Each Sterilizer should be supplied complete with accessories like One no. six Vial incubator (220V), 2 nos. instrument trays. **Remarks:-**As 2 instrument trays are good enough for plasma sterilizer and 6 instrument trays with LID will only increase unnecessary cost which is not at all required in plasma sterilization.	
	14. Should quote same make consumables having EPA-US/ CE as mentioned below: a H2O2 Sterilant 59% - Cassette or Cup= for 100 load cycles, b Chemical Indicator Strip (for putting inside single item packs) = 2000 strips (for approx. 100 load cycles), c Biological Indicator Vials = 100 nos.	Should quote same make consumables having EPA-US/ European CE as mentioned below: a H2O2 Sterilant with concentration of 50- 59% - Cassette or Cup= for 100 load cycles, b Chemical Indicator Strip (for putting inside single item packs) = 2000 strips (for approx. 100 load cycles), c

	Modification requested:-Should quote same make consumables having EPA-US/ CE as mentioned below: a H2O2 Sterilant with concentration of 50-59% - Cassette or Cup= for 100 load cycles, b Chemical Indicator Strip (for putting inside single item packs) = 2000 strips (for approx. 100 load cycles), c Biological Indicator Vials = 100 nos. **Remarks:-**Since H2O2 is highly corrosive in nature and can damage the instrument as well as environment concern also if a higher concentration is used. So the technology which is using lower concentration of H2O2 should be encourage.	Biological Indicator Vials = 100 nos.
	<u>VOLUME-I PREQAULIFICATION DOCUMENT</u> (COMMERCIAL PART)	
5.	**2.0 PRE- QUALIFICATION CRITERIA:** 2.2(ii) Experience of having successfully completed similar work during last 7 years ending last day of month previous to the one in which tenders are invited should be either of the following: Three Similar completed works costing not less than the amount equal to 40% of the estimated cost. **Modification requested:-** Experience of having successfully completed similar work during last 3 years ending last day of month previous to the one in which tenders are invited should be either of the following: **"**Three Similar completed works of total costing of (total cost of 3 similar works) approx.. to 40% of the estimated cost**"** **Remarks:-**Since all the international bidders do not have experience of running of CSSD (Built operator) in India so asking for such a huge criteria for Indian bidder will be difficult to meet. Hence, the qualification criteria should be more flexible for Indian bidders. **Existing specification:- <u>Operation of CSSD during Defect Liability Period</u>**	Tender terms prevail <u>Operation of CSSD during Defect Liability Period.</u> The contractor should provide two experts/technicians of the CSSD equipment for 24x7 throughout Defect Liability Period.

	Modification requested:-Deleted **Remarks:-** During pre-bid meeting, all participants highlighted to remove this clause as none is having experience of running CSSD in India and all international bidder are not interested in those kind of projects especially of running of CSSD. So for a healthy competition to get the best quality equipment the operation clause should be removed so that all the reputed brand manufacturers can quote this tender.	
6.	21.0 **<u>TERMS OF PAYMENTS</u>** 21.1-1 65% of the BOQ contract rates on delivery of equipments (complete CSSD) at the site after inspection and passing. **Modification requested:-**Payment through Letter of Credit by the Buyer, to the Bank of the Foreign Seller. 80% Payment of imported items against proof of dispatch and production of documents. **Remarks:-**As during the pre-bid meeting, all bidders were agreed to open LC for imported equipment. Hence, the LC clause should be added according to prevailing practices of MOH for imported. 21.1-2 25%of the BOQ contract rates on satisfactory erection and installation, testing and commissioning of equipments. **Modification requested:-**Balance 20% payment of items will be paid on satisfactory erection and installation, testing and commissioning and of equipments. 21.1-3 10% of BOQ Contracts rates after successful completion of running tests and issue of taking over certificate. **Modification requested:-**NA.	Payment Terms: Payment through LC -80% of project cost against CIP at Safdarjung hospital along with third party inspection report and manufacturer test certificate and balance 10% in Indian rupees against installation, testing and commissioning and 10% in Indian rupees against handover and takeover by the hospital.

7.	1. Estimate of Rs.466.0 Lacs seems OK for equipment part but for 5years operations, extra budget is desired. 2. Kindly issue a CSSD-CAD drawing for study and re-check during site inspection and to note site deficiencies/ requirements to be attended by builder ……**IMPORTANT** 3. Refer to clause VOL-1:12.4,page-8:**Please also allow Joint venture for at least 'Operations'**. Sir, as no overseas firm or it's subsidiary like STERIS-India, can employ big labour force to oversee day to day operations for 5 years to10years. Any firm undertaking 'Operations' shall have to outsource semi-skilled and un-skilled personnel. 4.STERIS trained manpower shall undertake Technical Service but administrative and operational –logistic & site day to day jobs during operations, shall be through a outsourced reputed man power supplier and personnel trained by STERIS, **hence allowing Joint Venture is must. IMPORTANT** 5. Sir, HSCC has floated this tender as a CIVIL Contract and hence has mentioned most terms as applicable to construction of building. Whereas in this case, the turnkey component , which involves minor civil works , is very meager and is less than 20% of the estimated cost. Therefore, all clauses, such as Defect Liability Period, Retention of payment, 3RD party insurance, release of the payment in parts, getting quotes only in INR, are not only farce but shall lead higher cost to Govt. of India , due to payment of full duty for the imported components & consumables , which in our estimates is approx. 60% of the estimated cost. 6. Sir, all Govt. Hospitals under DGHS (Ministry of Health & FW) always goes in for minimum **05 years warranty and 5 years CMC**, whereas in this tender, we find that DLP/ warranty is only for One Year, this shall	1. Tender terms & conditions prevail. (One year operation during DLP is included into the estimates. Safdarjung Hospital will take care of remaining 4 years). 2. Drawings are attached. 3. The contractor should provide two experts/technicians of the CSSD equipment for 24x7 throughout Defect Liability Period. 4. Tender terms & conditions prevail. 5. Tender terms & conditions prevail. 6. Tender terms & conditions prevail. (In this contract, One year DLP and 4 year CMC to provided and CMC for further period is in the scope of client) 7.a), b) & c) Payment Terms: Payment through LC -80% of project cost against CIP at Safdarjung hospital along with third party inspection report and manufacturer test certificate and balance 10% in Indian rupees against installation, testing and commissioning and 10% in Indian rupees against handover and takeover by the hospital.

	be big loss to Govt. , as upkeep and regular maintenance of costly imported equipment's is essential with least 'down-time' . Only established CSSD Equipment companies with direct subsidiary, trained manpower and good stock of spares and consumables inventory can ensure minimum lead time and down time. Kindly amend suitably. **IMPORTANT** **7. Sir, we request you to amend tender suitably in 7 parts :** *a. Procurement of Imported CSSD Equipment (all from one source):In Foreign currency against Hospital issued CDEC. Payment Terms: against shipping documents 80% and balance on commissioning.* *b. Procurement of Indigenous CSSD equipment: In INR (tax paid).Payment Terms: against supply 80% and balance on commissioning.* *c. Towards Turn-key jobs in CSSD: In INR (tax paid). Payment Terms: against supply material 50%, on installation 40% and balance 10% on commissioning.* *d. Operations: Payment at end of each Quarter, maximum with15 days of following Quarter.* *e. Essential Consumables: All bidders to quote their equipment's with one year supply of all essential consumables. Bidders should also indicate unit prices in INR for purchase by Hospital in following year, i.e. second year onwards.* ***f.** Non-Essential Consumables: Bidders should indicate unit prices in INR for purchase by Hospital for Non-essential Consumables viz. CSSD-Packing material and extra containers / trays etc.* *g.CMC: for five years after 5yearswarranty,payment as per standard hospital mutually agreed terms.*	7) d) Payment at end of each Quarter e) Essential consumables for operation of CSSD shall be provided by the hospital f) Non-Essential consumables viz packing materials, extra

	8. Refer to VOL.04 NIT tech. Specs: Page 07Item:5:Thanks for allowing procurement of **‘LOW TEMPERTURE-H2O2 STERILIZER’ , WITH OR WITHOUT PLASMA PHASE**. It is now well known fact that Plasma is not playing any role in sterilization, it only detoxifies chamber after sterilization phase is over. 9. **We request kindly amend the size of chamber for Low temperature Sterilizer (H2O2) as 120- 150Litres with min. volume of chamber as 120 Liter** , this will ensure our and wider participation. **IMPORTANT**	containers/trays for operation of CSSD shall be provided by the hospital g) Tender terms prevail 8. Tender terms & conditions prevail. 9. Chamber having volume of minimum 120-150 liters.
	Vol. 04: NIT TECHNICAL SPECIFICATION	
8.	**Pageno.02, ItemNo.01** **Tech. Specification** HORIZONTAL STERILIZER 550-600 Litres(8 STU) WITH ACCESSORIES **Remark:-** Tender specifications seems to be copied from one make hence, need a generalization for established players like steris and getinge etc. To participate **REQUEST TO AMEND** as per boq , hospital Requires 4 no.’s steam sterilizers i.e. 2200 to 2400 liters capacity . Bidder can provide , minimum 02 , larger capacity Sterilizers , to ultimately provide total capacity of 2200l to 2400 l a. Door: The sterilizer door should be EITHER HINGED DOOR OR SLIDING TYPE WITH ELECTRIC MOTOR/ BY PNEUMATIC COMPRESSED AIR operated double door with fully automatic	Tender terms prevail

	HORIZONTAL/ Vertical sliding movement along with door safety features. **Remark:-** please delete all very specific tone make terms on thickness of steel, insulation etc., type of steam generator etc. as this vary from manufacturer to manufacturer and standard to standard viz- a-viz USFDA/European CE/EN285.US-ST8 etc. **REQUEST TO AMEND:-*Deleted: Rapid cycle for single open instrument, as this requirement is only for TSSU sterilizer.*** ***Add: BIDDER to ensure Liquid Cycle-for sterilization of Liquids***	Rapid cycle deleted. BIDDER to ensure Liquid Cycle-for sterilization of Liquids
9.	**Pageno. 04, ItemNo. 02** **Tech. Specification** STERILIZER 100-125 Litres WITH ACCESSORIES FOR TSSU **Remark:-** Tender specifications seems to be copied from one Make hence, need a generalization for established players like Steris and getinge etc. To Participate REQUEST TO AMEND:- AS PER BOQ , HOSPITAL REQUIRES 3 No.'s Small STEAM STERILIZERS in TSSU. **We suggest , minimum size as 200-250L (4 to 5 STU) for each TSSU.** **Remark:-** Please delete all very specific to one make terms on thickness of steel , insulation etc., type of steam generator etc. as this vary from manufacturer to manufacturer and standard to standard. **REQUEST TO AMEND:-** Delete : Two Doors Add: Should have single sliding door . Add: Should comply to US FDA/ European CE/ EN285. US-ST 8 etc.	Minimum size as 200-250L (4 to 5 STU) for each TSSU Should have single sliding door. Tender terms prevail.

10.	**Pageno. 06, Item No. 04** **Tech. Specification** DOUBLE DOOR WASHER DISINFECTOR 300-360 Litre (15 DIN Trays) WITH ACCESSORIES **Remark:-** Please note , steris washer is not requiring stainless steel above grade 304l, as **per standards under US-FDA** and steris manufacture washer with st. steel of grade 304. please amend **REQUEST TO AMEND:-** Add: The chamber should bemadeofS.S.AISI304L/ 316L quality with electro polished washed surfaces **Remark:-** Please delete all very specific tone make terms on thickness of steel, insulation etc., WASHER TRAY SETC. etc. as this vary from manufacturer to manufacturer. Tender specifications seems to be copied from one make hence, need a generalization for established players like steris and getinge to participate **REQUEST TO AMEND:-**Add: Should comply to US FDA/European CE/ Washer/disinfector should be compliant with ANSI/AAMI ST15883-2andISO15883-2 standards for thermal disinfection. **Tech. Specification** ***Kindly add , RO Plant: Two no.s(One redundant)*** **Remark:-** HIGHER SIZE OF RO PLANT WITH STORAGE TANK of HIGHER CAPACITY WILL ENSURE AVAILABILITY OF FILTERED WATER FOR MINIMUM 3 TO 4 CYCLES IN CASE OF RAW WATER FLOOR MAINTENANCE **REQUEST TO AMEND:-** Reverse Osmosis Plant : SHOULD NOT BE LESS THAN 1500LPH FOR ALL STERILIZERS AND WASHER ETC.and should be complete with two x 3000 Litres storage tanks (mounted at height) with	The chamber should be made of S.S.AISI304L/316L quality with electro polished washed surfaces Washer/disinfector should be compliant with ANSI/AAMI ST15883-2 and ISO15883-2 standards for thermal disinfection. Not given in the tendered specification

	Inter-connections and safety level alarms so that no CSSD equipment should starve of pure water supply.	
11.	**Pageno.07, Item No.05** **Tech. Specification** LOW TEMPERATURE STRILIZER (H2O2) (Double door)-150 L **Remark:-** These Sterilizers with double door are in the range of 120L to 150L **REQUEST TO AMEND:-** Delete: min. 150 Liters Add: min. 120 Liters	Chamber volume 120-150 Litres
12.	**Pageno. 08, ItemNo.06** **Tech. Specification** ULTRA SONIC CLEANER (40L) **Remark:**-ST. STEEL OF GRADE 304 IS SUFFICIENT FOR THIS TYPE OF ULTRASONIC CLEANER AS PER USA NORMS.AND WE USE BETTER HIGHER FREQUENCY SOLID STATE GENERATOR. PLEASE AMEND **REQUEST TO AMEND:**-Add:The chamber should be made of S.S. AISI 304/ 316. **Remark:-** STERIS MANUFACTURERS ULTRASONIC CLEANERS OF SIZE 20-25L ONLY **REQUEST TO AMEND:-** AS PER BOQ , HOSPITAL REQUIRES 2 NO.'S ULTRASONIC CLEANERS (40L) I.E. 2X40= 80 LITERS CAPACITY . BIDDER CAN PROVIDE , SMALL CAPACITY (20- 25L) ULTRASONIC CLEANERS, TO ULTIMATELY PROVIDE TOTAL CAPACITY OF 80 LITERS	The chamber should be made of S.S. AISI 304/ 316. Tender terms prevail
13.	**Pageno. 08, ItemNo. 08** **Tech. Specification** DRYING CABINET (275L) **Remark:-** Now a days no hospital -CSSD requires this additional equipment where already 2 no.'s washer disinfectors with dryers are being provided. **REQUEST TO AMEND:-**	Tender terms prevail

	DELETE : DRYERS, SAME MAKE ASTERILIZERS. **Tech. Specification:-** ***Kindly add* ,** DOCUMENTATION LABELLER-WITH3LINE PRINTER*: Two no.s(One redundant)* **Remark:-** THIS IS MUST IN ANY MODERN CSSD **REQUEST TO AMEND:-** ADD: The labeler should be 3–line for printing the following information a) Person responsible for sterilization) Load number) Packaging content d) Sterilizer number etc. Should be duplex adhesive per label which allows transfer to records and conform to ISO-11140-1,Class1.	Tender terms prevail
	TECHNICAL SPECIFICATION:-	
14. **.**	Page no 1 & point 1 **1.Sterilizer** **Technical Specs.-** Temperature range up to 180 degrees. **Requested:-** temperature range 105 to 135 degrees **Technical Specs.-** Discharge water @ 50 degrees **Requested:-** As per Guidelines it should not be more than 70 Degree C **Technical Specs.-** Discharge water @ 60 degrees **Requested:-** As per Guidelines it should not be more than 70 Degree C **Technical Specs.-** Sterilizer Door Hinged **Requested:-** Sliding doors much more safe and Reliable to bear pressure than hinged door. **2.Washer Disinfector** **Technical Specs.-**	Tender terms prevail Should not be more than 70 Degree C Should not be more than 70 Degree C Should have Sliding doors Sliding doors

	Two circulation pump with 1200 litre/min capacity **Requested:-** Not mandatory as per EN 15883 **Technical Specs.-** Two dryer blower pump **Requested:-** Not mandatory as per EN 15883 **Technical Specs.-** It should have built-in water recovery device. **Requested:-** water coming out of washer can not be reused **3.Operation of CSSD** **Requested:-** **Not our strength, strongly request you to remove it from the scope.** **<u>COMMERCIAL</u>** **4.Payment terms** Requested:- Request you to change the terms to (through 100% irrevocable L/c , with 80% against proof of dispatch of goods,10 % against installation & balance 10% after commissioning & hand over)	Should be as per standard Should be as per standard Water coming out of Washer cannot be reused. 3.The contractor should provide two experts/technicians of the CSSD equipment for 24x7 throughout Defect Liability Period. Payment Terms: Payment through LC -80% of project cost against CIP at Safdarjung hospital along with third party inspection report and manufacturer test certificate and balance 10% in Indian rupees against installation, testing and commissioning and 10% in Indian rupees against handover and takeover by the hospital.
15.	1. The completion time for the project given five months which is on very tight side this may kindly be made 6 months to be realistic and to avoid delays in the execution.	Tender terms prevail
16	2. **<u>Horizontal sterilizer 550-600 ltrs (85TU) with accessories.</u>** a) Point 2 under construction (b) Surface treatment: The internal surface polished to less than 0.2 micros may please be changed to 0.4 micros as 0.2 is specific to Lab use and not in hospital CSSD and	a) 0.2 micron to 0.4 micron

	is specific to a particular make who primarily work in the lab field. b) The touch screen display may please be kept as 5" or above. We use symbols in our display which are large enough to be seen even from distance which in other systems due to alphanumeric display can't be seen in 8" screen clearly as in ours with a smaller screen. c) The printer at point (i) under cycle documentation in link type which is also very specific, this may kindly be replaces with non-fading thermal printer. If our original paper is used we can guarantee non-fading of the printouts for 9-10 years in our thermal printer. d) The installed base asked for asked for should be equal to be quantity required under this tender and not higher in an arbitrary manor. This may please be changed from 5 nos. to 3 nos. at point (q).	**b)** Touch screen display should be 5" to 8" **c)** Ink type Printer/Non-fading thermal printer shall be used as another option. d) Deleted
17.	**3. <u>Horizontal Sterilizer (100-125 ltrs) with accessories for TSSU</u>** a) The touch screen display may please be kept as 5 " or above. We use symbols in our display which are large enough to be seen even from distance which in others systems due to alphanumeric display can't be seen in 8" screen as clearly as in ours with a smaller screen. b) The printer at Point (i) under cycle documentation type which is also very specific this may kindly be replaced with non-fading thermal printer. If our original paper is used we can grantee non-fading of the printouts for 9-10 years in our thermal printer. c) The installed base asked for should be equal to the quantity required under this tender and not higher in an arbitrary manor. This may please be changed to 2 nos. from 10 nos. at point (o).	Minimum size as 200-250L (4 to 5 STU) for each TSSU instead of (100-125 Ltrs) a) Touch screen display should be 5" -8" b) Ink type Printer/Non-fading thermal printer should be used c)Deleted

18	**4. <u>Rapid Sterilizer (Flash autoclave) Table Top Sterilizer with accessories for TSSU</u>** a) The chamber in table top sterilizer are normally made in SS304 and not 316 L as desired. This may please be changed accordingly for wider participation. b) The type of stream generator is also very specific to be brand which may please be asked for without specifying what type it should be. In any ways it is a less energy consuming device unlike large sterilizers.	a) SS-304/SS316 b) Tender terms prevail
19.	**5. <u>Double Door Washer Disinfector 300-360 ltrs (15 DIN Trays) with accessories</u>** a) At point 2 it is desired to have two dryer blower pumps and two water circulation pumps. In older days when strong and reliable systems were not there some companies used to put in two pumps for safety. Now a days only single system which is strong and reliable is used by most companies except a few ones who are still holding to old cheaper pumps. This may please be changed to two or one so that they are also in the race. b) The screens in washers in normally monochrom and not multicolored this may please be changed to Monochrom/Multicolored. c) Most washers work either on internal heater/boiler or steam Network for heating the water only one particular make uses both. This may also be changed to internal Heater or Hospital stream Network. Moreover in all the sterilizers only in built steam generators are asked for and accordingly hospital will not put a central stream network only for the washers.	a)Should be as per standard b)Monochrom/Multicolored should be provided c)Internal heater only for Autoclave, Washer and Drying cabinet as there is no facility of external boiler. d)Pneumatic/Electro-pneumatic valve should be provided e)Barcode tracking device/RFID system should be provided

	d) At point 5 it is desired to have pneumatic valves which is also old technology where as most systems including ours today come with electro-pneumatic valves. This may please also be changed accordingly. e) At point 5m a barcode tracking device is asked for which is normally never taken in washers we have a latest RFID system for batch identification and automatic program selection which is an option taken by less than 0.1% customers even in Europe as it is not useful. It only works in as a lock in specification at a cost not yielding any advantage. This may please be deleted ideally or RFID may please be asked for optionally. f) At point 5 (o) the self cleaning debris filters is also not solution and hence leaving aside one company everybody else has stopped using these. These filters are never able to get perfectly cleaned and much expensive as a replacement not given any advantage. This point may also please be deleted to make the specs ok for all. We give a fine filter which is inexpensive and can be changed at regular intervals under PM protocol. g) At point Ink type printer is asked for which may please be replaced with non-fading thermal printer which are more compact and trouble free. With our paper we can give guarantee for 10 years non-fading. **h)** At point 8 stop valves, anti suction device etc. are asked for which is an old technology. We use unrestricted air gaps as per EN1717 category 5 type AA standards. This from a specific make and may please be deleted.	f) Fine filter/Self cleaning debris filter should be provided g) Ink type Printer/Non-fading thermal printer shall be provided **h)** Stop valves, anti suction device etc. or unrestricted air gaps as per EN1717 category 5 type AA standards.
20.	**6. <u>Low Temperature Sterilizer (H2O2) (Double Door)</u>** a) Low temperature, sterilizer by Formaldehyde (LTSF) without high temperature steam sterilizer two doors	Low temperature sterilizer by Formaldehyde without high temperature steam sterilizer /Hydrogen peroxide (H2O2) gas with or without

	(chamber size 100 to 150l) should also be added as alternative because it is better alternate technology and does not have limitation like penetration for sterilizing small lumen and use of special packing material, it also does not require a special air conditioned room.	plasma, two doors (chamber size 120 to 150L)
21.	**7. Ultrasonic cleaner (40 L)** Most ultrasonic cleaners come in SS 304 and not 316 SS grade. To offer level playing ground to other vendors the tank of ultrasonic cleaner may please be demand in SS304.	SS-304/SS-316 material should be provided
	COMMERCIAL	
22	1. Foreign currency quote and Letter of Credit may also be allowed in this Tender. Also custom duty will be a huge amount so the it should also be born by the purchaser.	Payment through LC -80% of project cost against CIP at Safdarjung hospital along with third party inspection report and manufacturer test certificate and balance 10% in Indian rupees against installation, testing and commissioning and 10% in Indian rupees against handover and takeover by the hospital.
23	2 Considering the no. of equipment & furniture (Quantity) asked in this tender with respect to the estimated cost is very less. The quantity asked in this tender could not bring the quality equipment and other desired material in this cost. The estimated cost may please be increased not less than 30 to 40 % of current estimated budget.	Tender Terms & conditions prevails.
24	3. The Plasma sterilizer should be separated from this tender since it has a different type of handling for the costly items to be sterilized, further not all CSSD vendors are having this equipment which may restrict a healthy participation & costs.	Tender Terms & Conditions prevails
25	4. As discussed in the pre bid the operation part must be removed from this tender since the cost to be quoted now and majorly equipment suppliers maintain the equipment but not the hospital services. Training can be provided to the hospital	Operation of CSSD during Defect Liability Period. The contractor should provide two experts/technicians for operation and maintenance of the CSSD equipment

	staff or The staff hired by hospital for the Operation of such equipment being automated & user friendly equipment operation. Merging the operational requirement with the supply may get up ending No participation /Less participation or unhealthy participation conclusively No Good quality of equipment even. Being two CSSD(one for emergency one for Super specialty Block)separate tender for purely operation should be floated to enable you to purely service oriented bidders. However you may buy equipment specific consumables or spares from the supplier itself for trouble free running of equipment during & post warranty(cmc).	for 24x7 throughout Defect Liability Period.
26	5. The payment term if L/C allowed should be 90% and balance 10% against BG.	Payment Terms: Payment through LC -80% of project cost against CIP at Safdarjung hospital along with third party inspection report and manufacturer test certificate and balance 10% in Indian rupees against installation, testing and commissioning and 10% in Indian rupees against handover and takeover by the hospital.
27	6. Turnkey work must be defined and per square feet area rate of turnkey job to be asked. The details of per square feet area and job details to be disclosed in tender.	Tender Terms & Conditions prevails.
28	We suggest that Ministry of health & family welfare through HLL also floated a tender for 6 CSSD for ALL NEW SIX AIIMS . The Same specifications Modified and finalised after amendments under amendment no. 3 You may consider the same specification for this tender also .	Tender Terms & Conditions prevails.
29	Further following Changes Highlighted in Main equipment of CSSD only. Rest of the item specifications need to be changed completely.	Tender Terms & Conditions prevails.

30	**HORIZONTAL STERILIZER 550-600 Litres (8 STU) WITH ACCESSORIES** Fully automatic PLC controlled Horizontal Autoclave (Steam Sterilizer), with pre and post-vacuum treatment and with loading equipment. (a) Door: The sterilizer door should be pneumatically (Compressed Air)/Electrically operated double door with fully automatic vertical sliding movement along with door safety features. Door Safety Systems: 1. Pressure sensor system should be available in the chamber to monitor the chamber pressure. Chamber should be completely depressurized before the door seal is retracted by vacuum. 2. Door chamber should not be opened when chamber is pressurized. 3. A mechanical safety edge should stop the door if it is obstructed while closing, thus protecting operator & loading equipment. 4. A Cycle should not start if the door is open or not properly locked. 5. The door seal should be silicon gasket & on commencement of the process the door gasket should be pressed against the rear face of the door by steam to ensure the door remains closed during the process. 6. A Pressure Switch should be there to monitor the door gasket pressure whether it pressed against the door with right pressure during the entire process. 7. Double door safety should be implemented through interlocks which shall prevent both doors from being opened simultaneously. 8. Door Gasket should be resistant to sterilization temperature and sterilization pressure.(b) Construction: 1. Chamber & Doors : The chamber and doors should be made of solid, high quality AISI 316L Stainless Steel. The chamber should be resistant to corrosion. The operating thermo mechanical stress should be welded with a robotic system. The chamber should be constructed with a rectangular /quadrangular section made of stainless steel with minimum 6 mm thickness. It should be able to withstand the relative pressure (-1 to 3.5 bar) and operating temperature upto 180 deg C. The chamber should be jacketed to ensure the temperature uniformity in chamber. The chamber floor should be slightly sloped towards an internal drain to facilitate drainage. A stainless steel mesh strainer should be provided to protect the drain port from blockage by debris. The chamber	**a)** The sterilizer door should be pneumatically (Compressed Air) /Electrically operated double door with fully automatic vertical sliding movement along with door safety features. b)1.The chamber should be constructed with a rectangular /quadrangular section

	should be mounted on a stainless steel bearing structure at least 2mm thick tubular stainless steel so that to allow load to be distributed in four corners with height adjustable feet. 2. Surface Treatment: The internal surface should be electro-chemically/ machenically treated for high quality smooth finish to facilitate cleaning. The resultant surface should be polished to less than 0.2 µm to 0.8 µm fineness to protect against corrosion (certificate from OEM should be provided along with the bid). The internal corners should be rounded off to facilitate efficient cleaning. 3. Insulation: The chamber should be covered with extra thick insulating material that limits heat dissipation. The insulation should ensure the surface temperature of the sterilizer to be less than 45 Deg C. The insulation should be minimum 50 mm thick . It should have low thermal conductivity and should not release any particles. 4. Jacket: The jacket should be made of quality stainless steel with pressure gauge and it should be minimum 5 mm thickness. 5. Steam Generator: The sterilizer should have inbuilt steam generator/ integrated of adequate capacity. steam generator should be made of quality stainless steel. The steam generator should have insulation. Steam generator should be fitted with all safety & control devices as Certified Safety valve for: 1) Excess pressure, 2) Resettable Safety Thermostat for over heat protection, 3) Pressure switch to control & regulate the steam pressure in the steam generator, 4) Automatic electronic water level regulator, 5) Automatic Water feed system, 6) Low level and high level water cut off, 7) Automatic periodical self drain for the steam generator, 8) water level glass gauge / Visible on screen inspection device visible from service area, 9) The heating element should be made of Inconel /incolloy/international standard material and should be of sufficient capacity to make the sterilization process faster and it also should be differential protected, 10) It should also have the automatic blow down valve and degassing system for feeding water to steam generator. (c) Pipes, Valves and Components: 1. All the process valves should be stainless steel & should be pneumatically/Electrically operated piston valves for longer trouble free run period. All the non-	2. Surface Treatment: The internal surface should be electro-chemically/ mechanically treated for high quality smooth finish to facilitate cleaning. The resultant surface should be polished to less than 0.2 µm to 0.8 µm fineness to protect against corrosion 3. Tender terms prevail 4. Tender terms prevail 5. Tender terms prevail for the queries and for 5/8) water level glass gauge / Visible on screen inspection device visible from service area. 5/9)The heating element should be made of Inconel /incolloy/international standard material

	standard components should be non-proprietary & should be easily sourced. All the hot pipes should be properly insulated. The safety valves should be made of SS 316/ Red Brass quality. 2. Primary piping & fittings should be stainless steel/Brass /copper threaded or stainless steel triclamp fittings. 3. Primary components: SS 316/Brass/copper quality triclamps or threaded fitting components like Manual valve, non-return valve, pressure, regulator, pneumatic valves and steam trap, etc. 4. Electrical Components: the terminals & contacts should be housed in a water tight cabinet. There should be no external Electrical cabinet for control and should be housed only inside the Sterilizer. (d) Air Filter: A disposable air filter should be provided by filtering the atmospheric air before entering inside the chamber. The filter separation efficiency should be higher than 99.998% for particle size less than 0.3µm. (e) Control System: 1. The control system should be dual PLC/ microprocessor based system specially designed for sterilization application (one to control the main parameters (PLC) and the other to verify the functionality). Control system should have touch sensitive, minimum 7-8 colour display interface at operator loading side. Apart from main PLC based control system the sterilizer should also have additional independent monitoring & documentation system which constantly cross checks the safety systems & time. 2. Multiple password access levels should be provided to control access/operation of the machine preventing unauthorized access. These access levels should be user selectable. The control system should have CPU processor with battery back-up & non-volatile memories. Digital input/output controls, analog measuring inputs & COM ports for printer & PC connectivity. (f)Temperature and Pressure Sensors: 1. The sterilizer should have at least 1/2 temperature sensors for chamber or drain & one for Jacket. It should also have one/two pressure sensor in chamber and one pressure sensors for Jacket as per EN 285 standards.	C. Tender terms prevail for the queries and(c/1) All the process valves should be stainless steel & should be pneumatically/Electrically operated piston valves for longer trouble free run period. The safety valves should be made of SS 316/ Chrome plated Red Brass/Gun metal quality. 2.Primary piping & fittings should be stainless steel/ Chrome plated Brass /copper/ Gun metal threaded or stainless steel triclamp fittings 3. Primary components: SS 316/Chrome plated Brass/copper/ Gun metal quality triclamps or threaded fitting components like Manual valve, non-return valve, pressure, regulator, pneumatic valves and steam trap, etc. e)1. The control system should be dual PLC/ microprocessor based system specially designed for sterilization application(one to control the main parameters (PLC) and the other to verify the functionality). Control system should have touch sensitive, minimum 7-8 colour display interface at operator loading side. f)1. Tender terms prevail.

31	**<u>STERILIZER 150-250Litres WITH ACCESSORIES FOR TSSU:</u>** Fully automatic PLC controlled Horizontal Autoclave (Steam Sterilizer), with pre and post-vacuum treatment and with loading equipment. (a) Door: The sterilizer door should be Single door with Hinge/vertical sliding. 1. Door chamber should not be opened when chamber is pressurized. 2. A Cycle should not start if the door is open or not properly locked. 3. The door seal should be silicon gasket & on commencement of the process the door gasket is pressed against the rear face of the door by steam to ensure the door remains closed during the process. 4. Door Gasket should be resistant to sterilization temperature and sterilization pressure. It should be sealed through a inflation of the door gasket against the door and should not require any lubrication or maintenance / Long life (b) Construction: 1. Chamber & Doors : The chamber and doors should be made of solid, high quality AISI 316L Stainless Steel. The chamber should be resistant to corrosion. The operating thermo mechanical stress should be welded with a robotic system and should comply with the European Pressure Equipment directive(PED) 97/23/EC and bear the relative marking(CE). The chamber should be constructed with a quadrangular/rectangular section made of stainless steel AISI 316L with minimum 8 mm thickness. It should be able to withstand the relative pressure (-1 to 3.5 bar) and operating temperature upto 148 deg C. The chamber should be jacketed to ensure the temperature uniformity in chamber. 2. Surface Treatment: The internal surface should be electro-chemically/Mechanically treated for high quality smooth finish to facilitate cleaning. The resultant surface should be polished to less than 0.2 µm to 0.8µm fineness to protect against corrosion. The internal corners should be rounded off to	a)The sterilizer door should be Single door with automatic Vertical Sliding mechanism. 4. Door Gasket should be resistant to sterilization temperature and sterilization pressure. It should be sealed through a inflation of the door gasket against the door and should not require any lubrication or maintenance / Long life b) The chamber and doors should be made of solid, high quality AISI 316L Stainless Steel. The chamber should be resistant to corrosion. The operating thermo mechanical stress should be welded with a robotic system and should comply with the European Pressure Equipment directive(PED) 97/23/EC and bear the relative marking(CE). The chamber should be constructed with a quadrangular/rectangular section made of stainless steel AISI 316L 2. Surface Treatment: The internal surface should be electro-chemically/Mechanically treated for high quality smooth finish to facilitate cleaning.

	facilitate efficient cleaning. 5. Steam Generator: The sterilizer should have inbuilt/Integrated steam generator of adequate capacity. In built steam generator should be made of AISI 316L quality stainless steel. The steam generator should have insulation with SS 304 grade housing panels. Steam generator should be fitted with all safety & control devices as Certified Safety valve for: 1) Excess pressure, 2) Resettable Safety Thermostat for over heat protection, 3) Pressure switch to control & regulate the steam pressure in the steam generator, 4) Automatic electronic water level regulator, 5) Automatic Water feed system, 6) Low level and high level water cut off, 7) Automatic periodical self drain for the steam generator, 8) water level glass gauge inspection device visible from service area, 9) The heating element should be made of Inconel /incolloy /International standard material and should be of sufficient capacity to make the sterilization process faster and it also should be differential protected, (c) Pipes, Valves and Components: 1. The piping system should be made of S.S. AISI 316L/Brass/Copper quality. All the process valves should be stainless steel & should be pneumatically operated piston valves for longer trouble free operations. All the non-standard components should be non-proprietary & should be easily sourced. All the hot pipes should be properly insulated. The safety valves should be made of SS 316/Brass/Copper quality. 3. Primary components: SS 316/ Brass/Copper quality triclamps or threaded fitting components like Manual valve, non-return valve, pressure, regulator, pneumatic valves and steam trap, etc. (f)Temperature and Pressure Sensors: 1. The sterilizer should have at least 1/2 temperature sensors for chamber /drain & one for Jacket. It	5. The sterilizer should have inbuilt steam generator. 9)The heating element should be made of Inconel /incolloy /International standard material capacity to make the sterilization process faster and it also should be differential protected. c)1. The piping system should be made of S.S. AISI 316L/Chrome plated Brass/Copper/Gun metal quality. The safety valves should be made of SS 316/Chrome plated Gunmetal/Brass quality. All the hot pipes should be properly insulated. The safety valves should be made of SS 316/ Chrome plated Brass/Copper/Gun metal quality. 3. Primary components: SS 316/ Brass/Copper quality triclamps or threaded fitting components like Manual valve, non-return valve, pressure, regulator, pneumatic valves and steam trap, etc. f)1. Tender terms prevail.

	should also have one or two pressure sensor in chamber and one pressure sensors for Jacket as per EN 285 standards. (o) Should pass a hollow load (A) test (Batch monitoring system). Should have at least two similar sterilizers running in India for last three years.	O) Deleted
32	**<u>RAPID STERILIZER (FLASH AUTOCLAVE)TABLE TOP STERILIZER WITH ACCESSORIES FOR TSSU</u>** 1. Sterilizer Type: Table Top Sterilizer 2. Capacity: **at least 24 Liters**	2.Tender terms prevail.
33	**<u>DOUBLE DOOR WASHER DISINFECTOR 300-360 Litre (10/15 DIN Trays) WITH ACCESSORIES</u>** 2.The unit shall be suitable for electrical operation and would be complete with two water circulation pump of minimum 800/1200 litre/minute capacity, two dryer blower pump, necessary valves & fittings. 4. Chamber Capacity: Volume should be 300 to 350L. Should supply 15 Nos of standard DIN trays. The chamber should be made of S.S. AISI 316L quality with electro polished washed surfaces. The chamber edges should not have the pockets & folds so as to avoid bacterial growth. The wash chamber should also be fitted with illuminated light for visibility of the washing process. Should have at least five washer disinfectors installed in India for at least (Should be 5-7 years as per PQ Criteria) years. o) Washer should have a built in self-cleaning debris filter/ multi filtration system . l) The washer should have 3/4 dosing pump (Detergent, Neutralizer, Disinfectant, Or Lubrication) for process chemicals, instrument lubricants/ enzymatic cleaners ,It should be able to measure & display the dosing volume of each chemical in ml and there should be a dedicated compartment with door to keep the chemical canisters (at least 3-4nos). 6. The washer should	DOUBLE DOOR WASHER DISINFECTOR 300-360 Litre (10/15 DIN Trays) WITH ACCESSORIES 2.The unit shall be suitable for electrical operation and would be complete with two water circulation pump of minimum 800/1200 litre/minute capacity, two dryer blower pump, necessary valves & fittings. 4.Tender terms prevail Deleted line (Should have at least five washer disinfectors installed in India) o)Washer should have a built in self-cleaning debris filter/ multi filtration system. l) The washer should have 3/4 dosing pump (Detergent, Neutralizer, Disinfectant, Or Lubrication)

	perform: 10. Standards & Norms: 11.The device should be a medical device according to Directive 93/42 EEC concerning medical devices. Should be US FDA/European CE certified. Manufacturer should be ISO 13485:2003, EN ISO15883 and ISO9001. Bidder/ Manufacturer should also be ISO9001 and ISO13485 certified	Bidder/Manufacturer should also be ISO9001 and ISO13485 certified.
34.	**LOW TEMPERATURE PLASMA STRILIZER (H_2O_2) (Double door)-150 L (Equipment should be Deleted)** 14. Should quote same make consumables having EPA-US/ CE as mentioned below : a H2O2 Sterilant 50-59% - Cassette or Cup= for 100 load cycles, b Chemical Indicator Strip (for putting inside single item packs)= 2000 strips (for approx.. 100 load cycles), c Biological Indicator Vials = 100 no.s	Tender terms prevail
37.	**DRYING CABINET** 5 **Capacity-250-275L 6. Should be of the same manufacturer ofthe sterilizers and washer disinfector.** **<u>Further for below mentioned items we request you to kindly ask only ISO certificate because in these item no major technicality involved .</u>**	**Capacity 250-275 L**

	Page No. 5, Point No. (ii): Experience of having successfully completed similar work during last 7 years ending last day of month previous to the one in which tenders are invited should be either of the following : Three similar* completed works costing not less than the amount equal to40% of the estimated cost. Or Two similar* completed works costing not less than the amount equal to 60% of the estimated cost. Or One similar* completed work costing not less than the amount equal to 80%of the estimated cost. **REQUEST:-**Request for deletion **Remarks:-**This point may be removed as this will be difficult for all for all companies to as such big CSSD projects limiting the tender. **Or It should be written as:** Manufacturer should have supplied 40% or 60% or 80% of the estimated cost globally. **Remarks:-**Kindly consider this point for more competition. **Or It should be written as:** Bidder should have at least one order for a CSSD on turnkey basis which includes design, civil work and electrical works as is the requirement of the tender or kindly delete this and only consider similar items. **Remarks:-**Kindly consider this point for more competition.	Tender Terms & conditions prevails.
	Page No. 6: Similar nature of works means supply, installation, testing & commissioning of CSSD Equipments. **Request for deletion and only consider similar items.** **Remarks:-**For more competition. You may kindly remove this point. In such a big project, this clause limiting the tender competition as this type of contract has not happened in India yet.	Tender Terms & conditions prevails.

	Page No. PQ-6 Clause 2.2 iii)Solvency A solvency certificate from Applicant's bank (Nationalised / Scheduled) that applicant is solvent for the sum of 40% of the estimated cost. The certificate should not be more than one year old**.** A solvency certificate from Applicant's bank (Nationalised / Scheduled) that applicant is solvent for the sum of 100% of the estimated cost. The certificate should not be more than one year old.	Tender Terms & conditions prevails.
	Page no. SCC-38 Clause No. 21.0 Terms of Payment 1) 65% of the BOQ contract rates on delivery of equipments (complete CSSD) at site after inspection and passing. 2) 25% of BOQ contract rates on satisfactory erection and installation, testing and commissioning of equipments (complete CSSD) 3) 10% OF BOQ contract rates after successful completion of running tests and issue of taking over certificate **REQUEST:-Request for change with** 1) 80% of the BOQ contract rates on delivery of equipments (complete CSSD) at site after inspection and passing. 2) 20% of BOQ contract rates on satisfactory erection and installation, testing and commissioning of equipments (complete CSSD) With opening of Letter of Credit (LC)	Payment Terms: Payment through LC -80% of project cost against CIP at Safdarjung hospital along with third party inspection report and manufacturer test certificate and balance 10% in Indian rupees against installation, testing and commissioning and 10% in Indian rupees against handover and takeover by the hospital.
	Volume V- Bill of Quantities (BOQ) Price to be quoted in Rupees **REQUEST:-**Please Allow to quote imported itemin foreign currency or CIF New Delhi basis and Safdarjung will provide CDEL (Custom Duty Exemption Certificate) to the contractor. **Remarks:-** As Safdarjung is exempted from Import Duty so imported items should be quoted in foreign currency otherwise it is a loss for Govt of India as it increases the budget of entire project.	Tender Terms & conditions prevails.

	Inclusion of Operation **REQUEST:-**We do not want to remove operation. We are ok for that but kindly exclude consumables from our scope of work.	Consumables for operation of CSSD shall be provided by the hospital

The bid submission date is extended from 22.06.2016 to 30.06.2016 and bid security should be valid for 180 days from the date of bid submission ie. from 30.06.2016.

All other terms & conditions remain unchanged.

Chief General Manager, HSCC (I) Ltd.

For and behalf of Medical Superintendent, Safdarjung Hospital, New Delhi