# REQUEST FOR EXPRESSION OF INTEREST (EoI) DSITC OF CSSD TURNKEY WORKS FOR IMSF(ON BEHALF OF IISC) AT IISc CAMPUS, BANGALORE



EoI DOCUMENT

DSITC OF CSSD

No: IMSF(ON BEHALF OF IISC)/EoI/24-25/01 – DSITC OF CSSD

TURNKEY WORKS

Director,

IISc Medical School Foundation (on behalf of IISc)/, Bangalore – 560012.

#### **EoI: OVERVIEW**

This Expression of Interest (EoI) invites proposals for a complete turnkey solution for the establishment of a modern Central Sterile Supply Department (CSSD). The solution should encompass all essential components, including equipment and systems necessary for efficient sterilization, decontamination, and distribution of sterile supplies. Proposals must include all major equipment and supplies required for the effective operation of the CSSD, ensuring compliance with relevant regulations and standards for patient safety and operational efficiency. Additionally, the turnkey solution must cover all construction and infrastructure work, including civil, mechanical, electrical, and plumbing (MEP) works, HVAC systems, and any architectural modifications needed to support the department's operations.

## **PROJECT BRIEF:**

The Proposed IMSF (on behalf of IISc) project is being constructed at Indian Institute of Science Campus, Bangalore - 560 012. The said Project is a combination of RCC and Steel Structure Building and it is 02 Basements + Ground + 9 Storeys + Helipad. Both basements are in RCC - Concrete Structure, but columns and roof framing works are in Structural Steel. The DSITC of ELV works are to be executed in co-ordination with all other services. The project details are listed below.

- Total number of Beds: 832 Nos.
- Type of Structure: RCC + Structural Steel.
- Total site area: 14.35 Acres.
- Total built up area: 14,67,478.62 Square feet.
- Total number of basements(B): 02
- Building overall length (outer to outer): Length 239.58mtrs x Breadth 90.41 Mtrs.
- Total height of the building: 49.85 Mtrs. (Including Helipad)
- Total number of Block: 05 along with Core and Atrium areas etc., (A, B, C, D and E)
- Block A and Core areas (2B + GF + 03 upper floors + terrace) @ Height of 17.55 Mtrs
- Block B and Core areas (2B + GF + 09 upper floors + terrace) @ Height of 41.85 Mtrs
- Block C and Core areas (2B + GF + 09 upper floors + terrace) @ Height of 41.85 Mtrs.
- Block D (2B + GF + 07 upper floors + terrace) @ Height of 33.75 Mtrs
- Block E (GF + 05 upper floors + terrace) @ Height of 25.65 Mtrs.
- Atrium and Core areas.
- Basement 2 and 1 Parking Area Partial areas.

At IISc, the planned infrastructure is designed to support a wide range of advanced clinical capabilities essential for patient care, teaching, and research. This comprehensive setup will facilitate the integration of cutting-edge technologies and services across various clinical areas, ensuring optimal outcomes and fostering innovation in healthcare practices. Further details about IISc and its requirements can be accessed from:

https://medicine.IISc.ac.in/

#### **DESIGN AND PLANNING CONSIDERATIONS:**

The design and commissioning of the Central Sterile Supply Department (CSSD) must focus on achieving optimal functionality while ensuring compliance with relevant regulations and safety standards. Vendors are expected to integrate essential elements such as efficient workflow, proper equipment layout, and robust safety protocols, including infection control and hazardous material handling. Additionally, the design should adhere to applicable national and international standards, guidelines, and accreditation requirements. Vendors must clearly specify the standards and guidelines applied to each relevant aspect of the CSSD design in their submission, demonstrating a commitment to creating a safe and functional environment.

#### **KEY CONSIDERATIONS INCLUDE:**

- Aesthetically appealing and functional CSSD layouts.
- Optimized workflows to enhance operational efficiency.
- Adequate electrical infrastructure to support current electrical load and accommodate future expansion.
- Proper ventilation systems to maintain air quality.
- Integration and compatibility to hospital EMR systems.
- Medical gas pipeline systems as necessary.
- A dedicated Reverse Osmosis (RO) plant to fulfil the critical water quality requirements for CSSD operations.
- Appropriate plumbing installations and other necessary services for the proper functioning of the CSSD.
- Comprehensive civil works, including construction of new structural elements, flooring, wall finishes, and ceilings as applicable, ensuring the CSSD is built to meet healthcare facility standards from the ground up.

## **SCOPE OF WORK**

SN	GROUP	SCOPE OF WORK	RESPONSIBILITY (VENDOR/CLIENT)	REMARKS
1	Civil	Plain Cement Concrete	Vendor Scope	If required the turnkey vendor can take support of the contractor who is onboarded by the client for execution of work. But the turnkey vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor.
2		Floor & Wall Tiles	Vendor Scope	If required the turnkey vendor can take support of the contractor who is onboarded by the client for execution of work. But the turnkey vendor is responsible for providing the necessary technical input, and overseeing the execution by

			the client's onboard contractor.
3	Glass Partition	Vendor Scope	If required the turnkey vendor can take support of the contractor who is onboarded by the client for execution of work. But the turnkey vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor.
4	Gypsum Partitio	on Vendor Scope	If required the turnkey vendor can take support of the contractor who is onboarded by the client for execution of work. But the turnkey vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor.
5	Wall Panelling	Vendor Scope	If required the turnkey vendor can take support of the contractor who is onboarded by the client for execution of work. But the turnkey vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor.
6	Outer Glazing V	Work Client Scope	
7	Outer Walls wit Plastering and Painting	•	
8	All CSSD Doors External Corrido Area		Vendor to share main Door dimension to Client as external works outside turnkey perimeter is under the scope of Client.
9	Toilet Walls	Vendor Scope	Includes flooring material and walls; fittings in scope.  If required the turnkey vendor can take support of the contractor who is onboarded

				by the client for execution of work. But the turnkey vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor.
10		Painting	Vendor Scope	If required the turnkey vendor can take support of the contractor who is onboarded by the client for execution of work. But the turnkey vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor.
11		Windows	Vendor Scope	If required the turnkey vendor can take support of the contractor who is onboarded by the client for execution of work. But the turnkey vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor.
12		Doors	Vendor Scope	If required the turnkey vendor can take support of the contractor who is onboarded by the client for execution of work. But the turnkey vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor.
13	Electrical	Power, Lighting & Earthing	Vendor Scope	Client will provide the main cable line to the CSSD distribution panel. Vendor to define load requirements and cable sizes.  If required the turnkey vendor can take support of the contractor who is onboarded by the client for execution of work. But the turnkey vendor

				is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor.
14	Plumbing	Water Supply, Distribution, and Drainage	Vendor Scope	Plumbing work must connect to the client's main drain. Vendor to detail trench requirements. Client responsible for grade slab execution. Treated water at shaft location provided by Client; further connections under vendor scope.  If required the turnkey vendor can take support of the contractor who is onboarded by the client for execution of work. But the turnkey vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor.
15	HVAC	Air Conditioning, AHU, Chilled Water Lines	Vendor Scope	Includes heat load calculation, AHU specs, cooling coil design, and recirculation flow. Dedicated chilled water lines for sterilizer cooling loops will be provided by the client.
16		Exhaust Points	Vendor Scope	Placement as required; Vendor is to connect CSSD exhaust duct to common duct of client.
17	MGPS	Medical Gas Work	Client Scope	Client to provide MGPS termination with isolation valves. Connecting to equipment will be under the scope of the vendor.  The vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor.

18	- ELV	Networking and Data Boards	Client Scope	Vendor to specify required network ports and locations. The vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor.
19		Internet Connection	Client Scope	Vendor to provide port and location details. The vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor.
20		Fire Detection System	Client Scope	Vendor to recommend layout; Client to execute based on approved designs. Necessary openings in false ceiling to be provided by the vendor.  The vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor.
21		Fire Suppression System	Client Scope	Includes pipe routing and placement of sprinklers/detectors. Client to execute per approved vendor design.  The vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor.
22	Interior	Medical Furniture	Vendor Scope	Loose medical furniture (workflow) under vendor scope.
23		Fixed Furniture (Cupboards, etc.)	Vendor Scope	
24		Loose Furniture (Chairs)	Vendor Scope	

25		Signage	Vendor Scope	
26	Others	Pneumatic Chute Work	Client Scope	

**Note:** All approved makes will be shared by the Client for relevant items as defined in the scope.

#### **PROPOSAL REQUIREMENTS:**

Interested vendors must account for all aspects of the project, including packing, transportation, handling (loading, unloading, lifting, storing), scaffolding, and coordination with other contractors. Furthermore, the contractor shall provide a defects liability period of two years post-commissioning to guarantee service reliability.

#### **SUPPLIER ELIGIBILITY:**

- 1. The equipment manufacturer must have a proven track record of installing CSSD (Central Sterile Services Department) equipment in India, such as washer-disinfectors & sterilizers for over 10 years.
- 2. Equipment sourced from countries sharing land borders with India will be excluded from this Expression of Interest (EoI).
- 3. Vendors must provide a complete turnkey solution as a package, ensuring all systems are integrated and operational. The organization will determine the specific requirements for a comprehensive turnkey solution, which the vendor must provide as a fully integrated and operational package.
- 4. Suppliers should have a registered office in Bangalore with trained engineers, spare parts availability, calibration equipment, and installation references.
- 5. Equipment manufacturers must demonstrate experience in providing CSSD solutions and services, supported by a proven track record in similar projects.
- 6. Turnkey service providers may partner with other suppliers to fulfil the requirements, and it is not necessary for all items to be supplied directly by the primary vendor. However, the complete responsibility of the completion of all the tasks will be that of the primary vendor.
- 7. Any eligible company as per Make in India-PPP (domestic bidder) may submit the EoI.

# THE REQUIREMENTS & SCOPE OF DSITC OF CSSD EQUIPMENT ARE AS MENTIONED BELOW:

SN	EQUIPMENT NAME	DETAILS OF EQUIPMENT
1	CART / LARGE VOLUME WASHER DISINFECTOR	Cart / Large Volume Washer Disinfector
2	STEAM STERILIZER	Sterilizer with an inbuilt steam generator and vertical sliding door. The sterilizer should include a system for water saving to limit water usage.
3	FO / STEAM STERILIZER	FO / Steam Sterilizer.
4	WASHER DISINFECTOR	Washer Disinfector with Dryer.

5	ENDOSCOPE WASHER DISINFECTOR	Endoscope Washer Disinfector for washing 3 flexible endoscopes and instruments.
6	ULTRASONIC CLEANER	Ultrasonic device suitable for robotic scopes and instruments.
7	ULTRASONIC CLEANER	Ultrasonic device (Normal).
8	TABLE TOP STERILIZER	Table top sterilizer including automatic water filling.
9	SEALING MACHINE	Automatic sealing device with process validation.
10	DATA MANAGEMENT SOFTWARE	Cycle documentation.
11	INSTRUMENT TRACKING SOFTWARE	Instrument Tracking Software for various modalities with laser etching machines.
12	LOW TEMPERATURE HIGH SPEED H2O2 GAS PLASMA STERILIZER	Sterilizer Should comply with CDC guidelines for prion destruction.
13	PROVISION FOR E.O. STERILIZER	Fully Automatic Machine
14	DRYER	Equipment for drying sterilized items, ensuring proper handling and readiness for use as applicable.
15	WORKFLOW ITEMS	All necessary workflow items and furniture.

All the equipment should be certified with European CE issued by a notified body and comply with EN 285 standards, as well as the Medical Device Directive MDR 2017/745 (as amended in 2017), or possess US FDA certification.

## **CSSD WORKFLOW REQUIREMENTS:**

The Central Sterile Services Department (CSSD) workflow shall include the provision and installation of equipment and utilities designed to enhance efficiency, safety, and hygiene while fully complying with relevant standards. The scope will include, but is not limited to, the following:

- Worktables
- Fluid disposal units
- Manual washing sinks
- Air guns and rinsing tools
- Accurate chemical dosing systems
- Emergency eye wash stations
- Handwashing facilities

In the clean packing area, the following items will be installed to support the efficient handling and packaging of sterilized items:

- Workstations
- Tape dispensers
- Inspection lights

- Trolleys
- Storage units

Furthermore, the plan shall incorporate appropriate storage solutions for sterile items and linen, ensuring proper management of sterilized materials. The scope also includes the supply of a Vertical lift system with compatible trolley to facilitate the efficient vertical transportation of CSSD supplies between floors.

The Conditions of EoI are the terms under which IMSF(On behalf of IISc) will receive and assess Expressions of Interest (EoI). Non-compliance with these conditions may result in the EoI being disqualified without further review.

The EoI must include all relevant details and information requested in this document. Following the submission of the Expression of Interest (EoI), vendors who meet the initial requirements will be invited to deliver a presentation. This presentation serves as an opportunity for vendors to showcase their proposed solutions, including technical capabilities, product features, and how their offering aligns with the project's objectives. Vendors are required to bring all their Original Equipment Manufacturer (OEM) partners to the presentation and fully demonstrate their complete potential, including all components relevant to the EoI. During the presentation, vendors should also address any questions from IMSF (On behalf of IISc), clarify details of their solution, and demonstrate the suitability of their approach. If necessary, IMSF (on behalf of IISc) will communicate any additional specifications or OEM requirements that need to be incorporated into the solution.

After the presentation phase, Selected vendors will be required to submit detailed technical bid, including comprehensive information on the technology, equipment, systems, and services they plan to provide. The technical bid must also demonstrate compliance with the relevant global and national industry standards. If any updates or modifications are required based on discussions during the presentation, the technical bid may have to be revised as per the points raised in the discussion. Once all the technical criteria are evaluated. The vendors whose technical bid matches with the requirements of IMSF (On behalf of IISc) will be asked to submit the financial bid.

These financial bids should outline the financial aspects of their proposals, including costs for equipment, installation, support, and any other related services. The final selection will be based on a combination of technical merit and cost-effectiveness to ensure the best overall solution for IMSF (On behalf of IISc).

# The due date for submission of EoI is 20th Jan 2025.

Enquires, and requests for further information about this RFQ, should be directed to the Contact Officer as follows:

Contact Officer: Mrs. Dhanyasree S., Admin Executive IISc Medical School Foundation / Office of Admin, Deans Main Building

IISc, Bangalore – 560 012 Contact No: 08022933584

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