

**REQUEST FOR EXPRESSION OF INTEREST(Eoi)
DSITC OF OT and ICU COMPLEX TURNKEY WORKS FOR IMSF
(ON BEHALF OF IISc),AT IISc CAMPUS, BANGALORE**



**Eoi DOCUMENT
DSITC OF OT AND ICU COMPLEX TURNKEY WORKS
No: IMSF(ON BEHALF OF IISc)/Eoi/24-25/04 – DSITC OF
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 OT and ICU complex, including CCU, CTVS ICU, pre- and post-operative areas, and other supporting facilities. The solution should encompass all construction and infrastructure work, including civil, mechanical, electrical, and plumbing (MEP) works, HVAC systems, and any architectural modifications necessary to support the department, ensuring compliance with relevant regulations and standards to ensure patient safety, infection control, and operational efficiency.

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 first-floor OT and critical areas, such as the CCU, CTVS ICU, pre- and post-operative areas, and other supporting facilities, must focus on achieving optimal functionality while ensuring compliance with relevant regulations and safety standards. Vendors are expected to integrate essential elements, including efficient workflow, proper equipment layout, and robust safety protocols, such as infection control and hazardous material handling.

As part of the workflow, vendors must ensure that essential items, such as scrub stations and laminar hoods, are provided, while ancillary items like OT lights, pendants, and OR integration should also be considered. Additionally, the design should comply with applicable national and international standards, guidelines, and accreditation requirements.

Vendors must clearly specify the standards and guidelines applied to each relevant aspect of the OT and ICU complex, including the CCU, CTVS ICU, pre- and post-operative areas, and other supporting facilities, in their submission. This demonstrates a commitment to creating a safe and functional environment.

KEY CONSIDERATIONS INCLUDE:

- Aesthetically appealing and functional OT and ICU Complex like CCU, CTVS ICU, Pre-& post Op and other supporting area 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.
- Appropriate plumbing installations and other necessary services for the proper functioning of the OT and ICU Complex like CCU, CTVS ICU, Pre-& post Op and other supporting areas.
- Comprehensive civil works, including construction of new structural elements, flooring, wall finishes, and ceilings as applicable, ensuring the OT and ICU Complex like CCU, CTVS ICU, Pre& post Op and other supporting areas are built to meet healthcare facility standards from the ground up.

SCOPE OF WORK

Sl. No	Group	Scope of Work	Responsibility (Vendor/Client)	Remarks
1	Civil	Plain Cement Concrete	Vendor scope	The turnkey vendor has to incorporate drawing and MEP requirements from the manufacturer for MRI, Cathlab and CT angio suite. 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	Floor leveling and flooring is under the scope of turnkey vendors. 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 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.
5	Wall Paneling	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 Work	Client scope	Vendor to share main Door

			dimension to Client as external works outside turnkey perimeter is under the scope of Client.
7	Outer Walls with Plastering and Painting	Client scope	
8	Toilet Walls	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.
9	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.
10	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.
11	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.

12	Electrical	Power, Lighting & Earthing	Vendor scope	<p>Client will provide the main cable line to the turnkey area distribution panel. Vendor to define load requirements and cable sizes.</p> <p>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.</p>
13	Plumbing	Water Supply, Distribution, and Drainage	Vendor scope	<p>Plumbing work must connect to the client's main drain. Vendor to detail trench requirements. Client is responsible for grade slab execution. Treated water at shaft location provided by Client; further connections under vendor scope.</p> <p>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.</p>
14	HVAC	Air Conditioning, AHU Chilled Water Lines	Client scope	<p>The vendor shall provide the design and specifications for the AHU, which must meet the following requirements:</p> <ol style="list-style-type: none"> 1. It must be a smart AHU incorporating a heat pipe. 2. Integrated pumps (IP online) should replace traditional two-way valves. 3. Detailed AHU technical

				<p>specifications must be included.</p> <ol style="list-style-type: none"> 4. The cooling coil should be designed per the project needs. 5. The total AHU capacity must be specified. 6. The GPM (gallons per minute) flow rate should be indicated. 7. The recirculation flow rate should be detailed. <p>The vendor is responsible for providing the ducting design from the AHU, offering the necessary technical input, and overseeing the execution by the client's onboard contractor</p>
15		Exhaust Points	Client scope	<p>The vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor</p>
16	MGPS	Medical Gas Work	Client scope	<p>The vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor.</p>
17	ELV	Networking and Data Boards	Client scope	<p>Turnkey vendor to specify required network port locations.</p> <p>The vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor.</p>
18		Internet Connection	Client scope	<p>Turnkey vendor to specify required port locations. Turnkey vendor has to coordinate with ELV vendor and supervise the work.</p> <p>The vendor is responsible for</p>

				providing the necessary technical input, and overseeing the execution by the client's onboard contractor.
19	Fire	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.
20		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.
21	Interior	Medical Furniture	Client scope	As applicable
22		Fixed Furniture (Cupboards, etc.)	Vendor scope	As applicable
23		Loose Furniture (Chairs)	Vendor scope	As applicable
24		Signage	Vendor scope	As applicable
25	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. Turnkey service providers must have a presence in India for over 10 years.
2. Materials 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. Turnkey service providers must demonstrate experience in providing modular OT solutions and services, supported by a proven track record in similar projects.
6. Turnkey service providers may partner with other suppliers to fulfill 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 LIST OF UNIQUE ROOM/AREA UNDER THE SCOPE OF DSITC OF TURNKEY WHICH INCLUDES, BUT NOT LIMITED TO THE FOLLOWING

SL NO	AREA/ROOM	SCOPE OF WORK INCLUDING BOQ FOR EACH AREA
1	Sterile and non-sterile corridor	
2	Intra operative MRI (Interior is not in the vendor scope)	
3	OT 1: IntraOP MRI OT (Radiation shielding required)	
4	OT 2: Hybrid OT (Radiation shielding required)	
5	OT 3:(Radiation shielding required)	
	1)Ortho	
	2)Neuro	
	3)Spine	
	4)Urology	
6	OT 4:	
	1)Urology	
	2)Gynaec	

	3)General Surgery (Radiation shielding required)	
7	OT 5:(radiation shielding required)	
	1)Neuro	
	2)Ortho	
8	OT 6:(radiation shielding required)	
	1)Surgical oncology	
9	OT 7: (radiation shielding required)	
	1)Cardiac	
	2)Thoracic	
10	OT 8:	
	1)Surgical gastroenterology	
11	OT 9:	
	Transplant	
12	OT 10:	
	Transplant	
13	OT 11:	
	1)General surgery	
	2)MIS	
14	OT 12:	
	1)General surgery	
	2)MIS	
15	OT 13:	
	1)Gynaec	
	2)Vascular surgery	
16	OT 14: Shared	
17	OT 15: Shared	
18	CU/Linen	
19	DU	
20	Pre-Action Room	
21	Toilets (Multiple Locations)	
22	WC	
23	Ch (Change Room)	
24	Wet Zone	
25	Dry Zone	
26	Ante Space (Multiple Locations)	
27	Sub-Sterile Store	
28	Technical Room (Multiple Locations)	
29	Medication Room	

30	Equipment Room	
31	OT Control	
32	Lounge/Dining	
33	MRI Console Room	
34	CT Console Room	
35	Decontamination Room	
36	Janitor Room	
37	UPS and Battery Room	
38	Sterile Store (Multiple Locations)	
39	Cath Store	
40	Cath Wash	
41	Video Counseling Room	
42	Nurse Duty Room	
43	Wheelchair Bay	
44	Stat lab	
45	Cytology Room	
46	CCU	
47	CTVS ICU	
48	Pre-Op	
49	Post-Op	
50	Pre/Post Angio	
51	Isolation Room (Multiple Locations)	
52	CathLab-Single plane (Radiation shielding required)	
53	Cathlab-Biplane (Radiation shielding required)	

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:

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