## REQUEST FOR EXPRESSION OF INTEREST (EoI) DSITC OF IN VITRO FERTILIZATION (IVF) FOR IMSF (ON BEHALF OF IISc) AT IISc CAMPUS, BANGALORE



## EOI DOCUMENT DSITC OF IN VITRO FERTILIZATION No: IMSF (ON BEHALF OF IISc)/EoI/24-25/06 – DSITC OF IN VITRO FERTILIZATION (IVF)

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 and advanced In vitro fertilization (IVF) Laboratory. The solution must include the design, supply, installation, and commissioning of all major equipment, systems, and accessories required to ensure the efficient and effective operation of the IVF lab, meeting all relevant regulations and standards for patient safety and operational excellence. Additionally, the turnkey solution should encompass all construction and infrastructure requirements including civil, mechanical, electrical, and plumbing (MEP) works, HVAC systems, and architectural modifications essential to supporting the seamless functioning of the IVF laboratory

#### **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 must prioritize optimal functionality while ensuring full compliance with relevant regulations and safety standards. Vendors are expected to integrate key elements such as efficient workflow, proper equipment layout, and robust safety protocols, including infection control and hazardous material handling. The design must also adhere to applicable national and international standards, guidelines, and accreditation requirements. Vendors should clearly specify the standards and guidelines applied to each relevant aspect of the design in their submission.

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

- Aesthetically appealing and functional department 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.
- Medical gas pipeline systems (Dedicated Gas manifold for IVF facility as applicable).
- Appropriate plumbing installations and other necessary services for the proper functioning of the department.
- Comprehensive civil works, including construction of new structural elements, flooring, wall finishes, and ceilings as applicable, ensuring the department is built to meet healthcare facility standards from the ground up.
- Vendors are expected to address these considerations in their proposals to ensure a highly functional and safe laboratory environment.

SN	Group	Scope of work	Scope	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.

#### SCOPE OF WORK

2	Civil	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	Civil	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	Civil	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	Civil	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	Civil	Outer Glazing work	Client scope	
7	Civil	Outer Walls with Plastering and outside painting	Client scope	Vendor to share main Door dimension to Client as external works outside turnkey perimeter is under the scope of Client.
8	Civil	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	Civil	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	Civil	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	Civil	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.
				Client will provide the main cable line to the turnkey area distribution panel. Vendor to define load requirements and cable sizes.
12	Electrical	Electrical Work (Power & Lighting, earthing etc)	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	Plumbin g	Plumbing work (Supply, Distribution & drain)	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.
14	HVAC	Air Conditioning Work (Supply, Return & AHU)	Client scope	<ul> <li>The vendor shall provide the design and specifications for the AHU, which must meet the following requirements:</li> <li>1. It must be a smart AHU incorporating a heat pipe.</li> <li>2. Integrated pumps (IP online) should replace traditional two-way valves.</li> <li>3. Detailed AHU technical specifications must be included.</li> <li>4. The cooling coil should be designed per the project needs.</li> <li>5. The total AHU capacity must be specified.</li> <li>6. The GPM (gallons per minute) flow rate should be indicated.</li> <li>7. The recirculation flow rate should be detailed.</li> <li>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</li> </ul>

15	HVAC	Exhaust point at the required places.	Client scope	The vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor
16	MGPS Medical Gas Work (Supply, Distribution)			The client shall provide an MGPS connection, as applicable, from the dedicated gas manifold to the equipment.
		Client scope	The vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor.	
	ELV Networking and Data Client Boards scope			Turnkey vendor to specify required network port and locations.
17		The vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor		
				Turnkey vendor to specify required port locations.
18	ELV	Internet connection	Client scope The vendor is responsible for providing the necessary technica input, and overseeing the execution by the client's onboar contractor	
			Client to execute based on approved Client scope designs. Necessary openings	Vendor to recommend layout; Client to execute based on approved
19	Fire	Fire Detection		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
	Fire	Fire suppression systems	Client scope	Includes pipe routing and placement of sprinklers/detectors. Client to execute per approved vendor design.
20				The vendor is responsible for providing the necessary technical input, and overseeing the execution by the client's onboard contractor.
21	Interior	Medical Furniture	Vendor scope	As applicable
22	Interior	Fixed Furniture (Cupboard etc)	Vendor scope	As applicable
23	Interior	terior Loose Furniture (Chair)		As applicable
24	Interior	Signage	Vendor scope	As applicable
25	Interior	Workflow items	Vendor scope	As applicable
26		Others like 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. Vendors must demonstrate experience in providing IVF solutions and services, with a proven track record in similar projects.
- 2. Materials sourced from countries sharing land borders with India will be excluded from this Expression of Interest (EoI).
- 3. Vendors 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.
- 4. The vendor must provide a complete turnkey solution as a package, ensuring all systems are integrated and operational. Additionally, vendors must have a minimum of turnkey projects.
- 5. Supplier should have registered office and trained engineers/Spare parts/Calibration equipment/installation reference available in Bangalore
- 6. Any eligible company as per Make in India-PPP (domestic bidder) may submit the EoI.

## THE REQUIREMENTS & SCOPE OF DSITC IN VITRO FERTILIZATION (IVF) EQUIPMENT WHICH INCLUDES, BUT NOT LIMITED TO THE FOLLOWING:

SI. No	Dept.	Equipment Name		
1		Centrifuge (spermfuge)		
2		CO2 incubator		
3	Andrology Lab	Digital Heating Block		
4		Incubator		
5		Laminar air flow workstation		
6		Microscope		
7		Sperm Counting Chamber		
8	Cryo preservation room	Cryocan		
9		Air purification system		
10		Aspiration pump		
11		Electric suction machine		
12		Hatching laser for ICSCI Microscope		
13	Embryology Lab	Heating block		
14		Micro manipulator		
15		Microscope (ICSCI)		
16		Non-vibration table (S.S)		
17		Time lapse imaging IVF incubator		
18		Bp apparatus		
19	IUI Room	Examination light		
20		Patient Bed (ward)		
21		Pulse Oximeter		

22	IVF OT	Surgical Instruments
23		Anaesthesia cart
24		Anaesthesia pendant (arm complete)
25		Anaesthesia Machine
26		Aspiration pump with anti-vibration table
27		Cautery Machine
28		Crash cart
29	Transfer OT	Defibrillator
30	Transfer OT	Dressing trolley
31		Instrument trolley (Big)
32		Instrument trolley (small)
33		O.T Light (1 dome)
34		OT table (basic for procedure room)
35		Patient stretcher
36		Slave Monitor
37		Wheel chair

# 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
Email Id: office@iiscmedicalschoolfoundation.org