

**Invitation for Expression of Interest (EOI) from Eligible
Architectural, Engineering and Project Management Firms**

For

**Building Design, Engineering & Project
Management Consultant**

National 2D Innovation Hub and R&D Fab Building

Ref No. IISc/EOI/2026-MS/1

02-09-2026

INDIAN INSTITUTE OF SCIENCE

Bengaluru 560012, India

1. Background

The Indian Institute of Science (IISc) is a premier institution with a vision to achieve excellence in research and education in science and engineering. IISc currently operates advanced academic cleanroom and characterisation facilities that are extensively utilised by researchers and external users.

2D Material Research Fab and Innovation Hub, funded by The Anusandhan National Research Foundation (ANRF), Ministry of Electronics and Information Technology (MeitY), Government of Karnataka and Several other Industry partners will create a national 200-mm/8-inch R&D Fab and technology-translation platform dedicated initially to 2D-material-based next-generation semiconductor technologies, spanning wafer-scale materials growth, atomic-scale processing, integrated devices, PDK/MPW enablement, metrology, reliability, prototypes, technology transfer, start-up support and controlled shared access.

The programme is being developed as a national Hub-and-SPOKE ecosystem rather than a standalone institutional cleanroom. Its initial network brings together a multidisciplinary IISc team of more than 15 faculty and research leaders, 17 SPOKE partner institutions across India, and more than 15 industry and technology organisations engaged across equipment, process, materials, design, metrology, test, applications and translation. It is intended to support researchers, national laboratories, strategic users, semiconductor companies, start-ups and trainees from across India, while enabling appropriate international research and technology collaboration.

The proposed approximately 100,000 sq. ft. G+5 2D Innovation Hub and R&D Fab building will be the physical and institutional home of this national programme. It will support high-yield process development, pilot fabrication, product and prototype development, engineering, characterisation, training, start-up and industry collaboration, and controlled shared use. A major component will be an advanced semiconductor/microelectronics cleanroom and process-utility suite, supported by precision laboratories, electrical and reliability test areas, offices, training/collaboration spaces, plant rooms, logistics and other infrastructure.

Because the project will operate as a national facility, the building must support sustained engagement with Government, industry, academia, strategic organisations and international collaborators through secure visitor, briefing, training, collaboration and technology-demonstration interfaces, without exposing confidential process areas or disrupting Fab operations. Its architectural identity should communicate a contemporary and enduring national technology mission while remaining technically disciplined, maintainable and cost-controlled.

This is not a routine building consultancy. It is an opportunity to shape a high-visibility reference facility at the intersection of advanced research, semiconductor engineering and national technology capability. Applicants are expected to commit senior leadership, their strongest multidisciplinary team and a partnership mindset suited to a fast-track, high-accountability programme. Subject to applicable confidentiality and IISc public-communication policies, the completed facility is expected to constitute a significant professional reference for the design and delivery teams involved.

The building shall not be treated as a generic shell around a cleanroom. Its site planning, foundations, structural dynamics, floor loading, environmental stability, power quality, utility distribution, hazardous-material logistics, fire/life safety, equipment move-in strategy, data systems, maintenance access and expansion provisions directly affect process stability, safety, yield and ramp speed.

The Building Design, Engineering and Project Management Consultant appointed under this EOI shall provide comprehensive architectural, master-planning, structural, civil, base-building MEPF, statutory-approval, tendering, construction-management, commissioning and handover services for the complete building. A separate specialist Cleanroom, Process Utilities, Fab Integration and Project Management Consultant is proposed under EOI Ref. No. IISc/EOI/2026-MS/2. Both consultants shall operate as one integrated design and execution team within a common requirements, BIM, interface, schedule and commissioning framework.

This EOI is intended to shortlist eligible firms or consortia. IISc may issue a detailed Design Brief/RFP to the shortlisted applicants and select one firm or consortium through a subsequent technical and financial evaluation or limited design competition.

2. Eligibility Criteria

- a. **Registration and Legal Status:** The applicant shall be a legally registered architectural, engineering or multidisciplinary consultancy firm/company/LLP/partnership or consortium/JV eligible to work in India. The proposed Lead Architect shall hold valid Council of Architecture registration. A consortium/JV shall nominate one Indian lead entity with single-point accountability.
- b. **Experience:** The applicant shall have at least 12 years of experience in architecture, structural/civil engineering, MEPF engineering, project management and construction administration for complex high-technology, research, precision or cleanroom-hosting buildings.
- c. **Comparable Assignment:** The applicant shall have completed at least one high-technology R&D, semiconductor/microelectronics, precision-instrumentation, controlled-environment or comparable facility project of approximately Rs. 75 Crores or higher during the last ten years.
- d. **End-to-End Delivery:** At least one cited project shall demonstrate services from site/master planning and detailed design through statutory approvals, tendering, contractor evaluation, construction supervision, commissioning and handover.
- e. **Professional Fees:** The applicant should have collected professional consultancy fees of at least Rs. 5 Crores during the last five financial years.
- f. **Team and Local Support:** The applicant shall propose a multidisciplinary team and demonstrate an office in Bengaluru or a binding arrangement to establish a fully staffed project office in Bengaluru for the duration of the assignment.
- g. **Consortium and Subconsultants:** Specialist structural-dynamics, vibration, high-tech MEP, fire/life-safety, sustainability, BIM, cost, statutory and project-management subconsultants may be proposed, but the lead consultant shall remain fully accountable for integration and delivery.
- h. **Declaration for Transparency:** The applicant shall not be under any declaration of ineligibility for corrupt or fraudulent practices and shall disclose material litigation, professional sanctions and conflicts of interest.
- i. **Site Visit:** All interested applicants should visit the identified site before submission of the EOI.

3. Project Details

3.1. Overall Building and Functional Brief

- **National programme and user ecosystem:** The building shall support the IISc Hub team, 17 external SPOKE partner institutions, industry and technology collaborators, start-ups, strategic users, trainees and visiting national/international researchers. Planning shall distinguish secure process and project zones from controlled collaboration, training and visitor interfaces.

- **Technology mission:** The initial programme spans wafer-scale 2D materials, transistors and CMOS, memories, sensors, neuromorphic systems, optoelectronics, heterogeneous integration and selected quantum-device technologies, with transfer of research and SPOKE outputs into repeatable 200-mm process development and pilot fabrication.
- **Scale and configuration:** Approximately 100,000 sq. ft., G+5, subject to site, development-control, fire, structural, functional and future-expansion validation.
- **Core programme:** Advanced cleanroom/process suite; sub-fab/service-chase and plant interfaces; precision R&D and characterisation laboratories; electrical/reliability and low-temperature test areas; engineering offices; user/training/collaboration spaces; stores; receiving and staging; facility operations; security; waste and building services.
- **Identity and visibility:** Create a coherent, contemporary and technically credible institutional identity, with controlled stakeholder briefing and technology-demonstration spaces, while preserving prime technical area, confidentiality, security and uninterrupted operations.
- **Cleanroom hosting envelope:** Approximately 14,500 sq. ft. immediate envelope, comprising approximately 10,000 sq. ft. classified space and approximately 4,500 sq. ft. service/chase space, with additional utility plant and unclassified technical laboratories elsewhere in the building. While the overall envelope remains the same, the relative sizes may vary slightly.
- **Equipment and precision context:** A 200-mm-compatible multi-tool process-development and pilot line, presently anticipated to include approximately 60-70 systems, including advanced lithography, growth/deposition, etch, wet/CMP/interconnect, thermal, metrology and wafer test. The building shall accommodate a 193-nm ArF step-and-scan lithography system and other vibration/environment-sensitive equipment.
- **Placement and vertical stack:** The cleanroom/process suite is expected on the lowest practical building level, but the consultant shall validate the optimum arrangement of foundation, cleanroom, raised floor/return plenum, service chases/sub-fab, ceiling plenum/interstitial, utility racks, plant levels and upper-floor functions.
- **Future state:** The initial 2D Hub shall be treated as the first stage of an enduring national R&D platform. The design shall preserve practical expansion land, structural bays, shafts, headers, breakers, plant capacity, equipment move-in routes and clean tie-in strategies for future emerging-semiconductor and quantum technology bays, additional pilot lines, industry co-development, start-up/translation facilities and shared-user programmes.

3.2. Cleanroom Hosting and Interface Parameters

Area / Zone	Approx. Area	Building Interface Requirement
ISO 5 / Class 100 cleanroom	2,000 sq ft	Precision structure/environment; lithography and critical process zones; local ISO 4 option to be evaluated
ISO 6 / Class 1,000 process bays	4,000 sq ft	Process bays with distributed rear service chases/sub-fab and robust utility/maintenance access
ISO 7 / Class 10,000 support	4,000 sq ft	Controlled circulation, gowning, clean support, staging and selected inline metrology
Unclassified service/chase area	4,500 sq ft	Service chases, sub-fab/utility spaces and maintenance routes; not merely a peripheral corridor
Immediate cleanroom + service chase	Approx. 14,500 sq ft	Preliminary combined envelope to be validated against all tools, flows, egress and service requirements

The working cleanroom concept is a hybrid wide-bay-and-chase arrangement with distributed service chases/sub-fab, a centrally accessible lithography island, adjacent wet/strip support, process-family segregation and local mini-environments where justified. The Building Consultant shall not freeze the structural grid, floor heights, shafts, openings or plant spaces until the Cleanroom Consultant has validated the equipment layout and vertical stack.

3.3. Key Technical and Building Considerations

- **Site and ground conditions:** Topographic, utility, access, flood/drainage, geotechnical, settlement, seismic and ambient vibration/EMI investigations shall precede structural and campus planning.
- **Structural grid and dynamics:** The structure shall support actual equipment footprints, point loads, service openings, rigging and maintenance envelopes. Tool-specific vibration criteria, potentially up to VC-E or more stringent locally where required, shall be achieved through appropriate foundations, slab systems, inertia blocks, floating slabs or local isolation supported by analysis and field verification.
- **Vertical section before plan freeze:** Cleanroom, raised floor/return plenum, ceiling plenum/interstitial, sub-fab/service chases, structure, utility racks, shafts, plant rooms, equipment access and egress shall be coordinated as one three-dimensional system.
- **Base-building utilities and reliability:** Incoming electrical supply, substation, DG/UPS interfaces, chilled-water/heat-rejection plant, primary water, drainage, fire water, general HVAC, BMS and utility plant/shaft provisions shall be sized from installed, firm and usable capacities, diversity, degraded operation, common-mode risk and future reserve.
- **Precision and environmental protection:** Control settlement, vibration, acoustics, EMI, magnetic fields, dust/smoke ingress, corrosion, temperature effects, water quality and power quality from the site and base building upward.
- **Hazardous-material logistics:** Provide segregated receiving, external gas/chemical storage interfaces, secure delivery paths, waste staging, emergency access, containment and separation from public/administrative routes.
- **Security, confidentiality and stakeholder access:** Provide tiered access control, secure project zones, confidential meeting/data areas, visitor routes and controlled demonstration/observation interfaces compatible with multi-user, industry and strategic projects.
- **Equipment logistics:** Provide loading dock, laydown, rigging paths, removable panels, doors, lifts/hoists, turning radii, floor protection, temporary works and future replacement routes without disrupting operating zones.
- **Clean-build and phased execution:** Evaluate structural steel, modular/off-site fabrication and other fast-track methods while controlling dust, vibration, water ingress, debris, campus disruption and contamination during cleanroom fit-out.
- **Sustainability and lifecycle:** Optimise envelope, plant, heat recovery, energy, water recovery/reuse, maintainability, metering and future expansion without compromising process stability or safety.

3.4. Mandatory Interface with the Specialist Cleanroom Consultant

The Building Consultant shall lead site, architecture, civil/structural and base-building MEPF design and shall integrate the Cleanroom Consultant's process, equipment, utility-quality, hazardous-material and commissioning requirements. A jointly approved demarcation matrix shall define,

connection by connection, who designs, supplies, installs, connects, tests, accepts, operates and maintains each interface.

Interface	Building Consultant Lead	Cleanroom / Utility Consultant Input
Space and vertical stack	Site/floor plates, structure, floor heights, shafts, plant decks, egress and envelope	Process bays, chases, sub-fab, equipment layout, maintenance and flow requirements
Structure and vibration	Geotechnical/structural analysis, foundations, slabs, local isolation, openings and rigging	Tool loads, point loads, service envelopes and OEM vibration/EMI/environment criteria
Utilities	Incoming services, primary plant, building distribution, plant rooms, shafts and fire/general systems	Utility quality/demand/redundancy, POCs, process distribution, exhaust/abatement, controls and qualification
Logistics and hazardous materials	Roads, dock, lifts, doors, security, fire access, building routes and containment	Tool move-in, clean materials, gases/chemicals, waste, gowning, maintenance and emergency scenarios
BIM, tender and commissioning	Federated model/CDE, building packages, construction PMC and whole-building tests	Cleanroom/utility models, package interfaces, tool-ready criteria and integrated performance tests

3.5. Indicative Programme and Cost-Control Basis

- [1] Requirement validation, surveys, site/master planning and concept options: approximately 2-4 weeks.
- [2] Schematic design, Basis of Design, coordinated detailed design, BIM and tender documentation: approximately 6-8 weeks, with approved overlaps.
- [3] Statutory approvals, contractor prequalification, tendering and order placement: approximately 8-10 weeks, overlapping where feasible.
- [4] Building, envelope and base-building services construction: approximately 12 months, coordinated with cleanroom and long-lead systems.
- [5] Integrated testing, commissioning, occupancy/handover and defects closeout: approximately 1-2 months.

Overall integrated duration: approximately 18-20 months from consultant appointment, subject to site readiness, statutory approvals, funding, design freezes, contractor procurement and cleanroom/equipment interfaces.

The preliminary base-building cost is approximately Rs. 30-40 Crores, excluding the specialist cleanroom/process-utility fit-out, and is subject to validation. The consultant shall prepare order-of-magnitude, concept, pre-tender and updated cost plans; lifecycle cost and value-engineering studies; package-wise cash-flow forecasts; and a controlled risk/contingency register.

4. Scope of Work

4.1. Requirement Validation, Site Due Diligence and Master Planning

- a. **Owner Requirements and Design Basis:** Participate in Client workshops and prepare the building Owner Project Requirements, Basis of Design and Design Requirements Matrix, incorporating approved cleanroom/equipment inputs and measurable acceptance criteria.
- b. **Surveys and Due Diligence:** Coordinate topographic, utility, geotechnical, hydrological/flood, traffic/logistics, environmental, ambient vibration/EMI and existing-infrastructure investigations; identify site risks, easements, approvals and expansion constraints.

- c. **Campus/Site Master Plan:** Develop site access, security, roads, fire tender movement, loading/rigging, personnel and visitor entry, hazardous-material delivery, waste removal, parking, landscape, storm-water, utility yards and future expansion.
- d. **Functional Programme and Adjacencies:** Validate the 100,000 sq. ft. programme, departmental adjacencies, cleanroom/technical-lab location, plant rooms, offices, collaboration, training, stores and facility operations.
- e. **Control Registers:** Maintain assumptions, decisions, requirements, interfaces, deviations, design risks, statutory approvals and change registers.

4.2. Architectural, Civil and Structural Engineering

- a. **Architecture and Space Planning:** Prepare concept, schematic and detailed architectural design, floor plans, sections, elevations, façade, interiors, finishes, accessibility, wayfinding, security zoning and campus integration.
- b. **Vertical-Stack Coordination:** Resolve cleanroom, raised floor/return plenum, sub-fab/service chase, ceiling plenum/interstitial, plant decks, utility shafts and upper-floor systems before plan freeze.
- c. **Structural System:** Design foundations and superstructure for actual and future loads, vibration, settlement, service openings, heavy equipment, plant, utility racks, pits, inertia blocks, suspended services and future modifications.
- d. **Precision Structural Design:** Perform structural-dynamics and vibration studies using site measurements and OEM/process criteria; propose local/global isolation and validate performance through measurement.
- e. **Fast-Track and Constructability:** Evaluate structural steel, composite, precast, PEB/modular and off-site fabrication options; prepare a constructability and campus-impact mitigation strategy based on cost, schedule, vibration, dust, water ingress, fire, maintenance and lifecycle.
- f. **Equipment Movement:** Design loading docks, temporary and permanent rigging provisions, lifts/hoists, door sizes, removable façade/roof panels, laydown, corridor/turning clearances and replacement routes.

4.3. Complete Base-Building MEPF, Safety and Digital Infrastructure

- a. **Electrical:** Utility intake, substations, transformers, HT/LT distribution, DG, UPS interfaces, power quality, redundancy, earthing/grounding, lightning protection, metering, technical power and future reserve.
- b. **Mechanical and Central Plant:** General building HVAC, primary chilled-water and heat-rejection plant, plant decks, ventilation, smoke control, noise/vibration isolation, service access, controls and future capacity, coordinated with the cleanroom plant.
- c. **Water, Plumbing and Drainage:** Raw/domestic water, storage, pumping, sanitary systems, storm-water/flood management, general drainage, process-waste/ETP interfaces and water-reuse provisions.
- d. **Fire and Life Safety:** Occupancy/hazard classification, fire compartmentation, detection, alarm, suppression, fire water, smoke control, egress, emergency access, fire command and interfaces to hazardous/process systems.
- e. **Gas/Chemical and Waste Enabling Infrastructure:** External storage/bunker areas, access, containment, slabs, ventilation, separation distances, utility connections and waste-storage interfaces, based on the Cleanroom Consultant's inventory and hazard requirements.

- f. **BMS, Security, ICT and Cyber:** Building management, energy metering, access control, CCTV, communications, data rooms, network backbone, alarm interfaces and cyber requirements compatible with future FMCS/MES/LIMS systems.
- g. **Vertical Transportation:** Passenger, service and freight lifts, stair cores, accessibility and equipment logistics, with redundancy and dimensions appropriate to the building programme.

4.4. Cleanroom, Equipment and Process-Utility Interface Management

- a. **Shared BIM/Common Data Environment:** Establish the BIM Execution Plan, coordinate common origin/levels, model federation, LOD/LOI, clash detection, issue tracking, document control and approved design releases for both consultant teams and contractors.
- b. **Interface/Demarcation Matrix:** Define every base-build-to-cleanroom/process connection, including design, supply, installation, hook-up, testing, controls, alarms, drainage, fire stopping, structural supports and maintenance ownership.
- c. **Tool and Utility Accommodation:** Incorporate the current Equipment/Utility Master into structural grids, floor loading, vibration, openings, plant, shafts, risers, POCs, move-in and maintenance clearances; preserve controlled assumptions for equipment data not yet frozen.
- d. **Room and Zone Data:** Integrate approved room/zone requirements for occupancy, environment, hazards, finishes, utilities, access, fire/life safety and verification into the building design.
- e. **Scenario Reviews:** Conduct model-based walk-throughs for a wafer/material route, operator, maintenance task, chemical delivery, gas alarm, power/cooling failure, emergency response, tool move-in and future expansion.
- f. **No-Gap Principle:** No disputed interface shall proceed to construction until a responsible designer, supplier, installer, tester, operator and acceptance authority are recorded.

4.5. Statutory Approvals, Tendering and Contractor Selection

- a. **Statutory Roadmap and Approvals:** Identify, prepare, submit, coordinate, pursue and obtain all applicable planning, building, fire, environmental, electrical, water/sewer, accessibility, airport/height if applicable, occupancy and campus/local authority approvals on behalf of IISc to the extent permissible.
- b. **Tender and Package Strategy:** Recommend EPC, design-build, PMC/multi-package or hybrid delivery for building/civil/MEPF packages, with clear interface to cleanroom, utility and equipment packages.
- c. **Tender Documents:** Prepare issue-for-tender drawings, technical specifications, BOQs, cost estimates, schedules, quality/EHS/clean-build requirements, performance criteria, commissioning, documentation, warranty and defects-liability provisions.
- d. **Bid Evaluation and Award Support:** Prequalify contractors, conduct pre-bid/site meetings, answer clarifications, normalise scope, perform technical/commercial evaluation, reference checks, negotiations and recommendation.

4.6. Project Management, Construction Administration and Clean-Build Oversight

- a. **Integrated Project Plan:** Prepare and manage the master design/procurement/construction/cleanroom/tool-interface/commissioning schedule, decision calendar, budget, cash flow, risks, issues, interfaces and recovery plans.
- b. **Resident Construction Management:** Provide appropriate resident project-management and discipline supervision; coordinate contractors, site logistics, permits, temporary works and handoffs.

- c. **Design and Submittal Administration:** Review shop drawings, calculations, material submittals, samples, mock-ups, method statements, inspection/test plans, RFIs and change requests.
- d. **Quality and Clean Construction:** Implement QA/QC, field inspections, testing, non-conformance control, dust/vibration/noise/water controls, progressive cleanliness, protected storage, system flushing/cleaning and coordinated handover to cleanroom fit-out.
- e. **Cost, Contract and Change Control:** Certify measurements and bills as authorised, monitor variations/claims, assess change impact, preserve contingency and provide forecasts and management reports.
- f. **Coordination with Cleanroom Execution:** Sequence building readiness, cleanroom fit-out, long-lead plant, tool move-in, shared utilities, energisation and restricted-access zones to avoid rework and contamination.

4.7. Testing, Integrated Commissioning, Handover and Defects Support

- a. **Commissioning Planning:** Develop the building commissioning and turnover plan during design, coordinated with the Cleanroom Consultant's process-system commissioning plan.
- b. **Building-System Testing:** Witness and document electrical, HVAC, water, drainage, fire/life-safety, BMS, security, lift, structural and other system tests, including capacity, control, alarms, redundancy and failure response.
- c. **Integrated Interface Testing:** Demonstrate cross-system cause-and-effect with the cleanroom/process systems, including emergency power, fire alarm, smoke control, utility loss, shutdown, drainage/containment, security and communication.
- d. **Occupancy and Tool-Move Readiness:** Verify statutory clearances, safe access, loading/rigging, temporary works, cleanliness, protection, utilities, documentation and emergency readiness for cleanroom fit-out and equipment move-in.
- e. **Handover:** Deliver approved as-built BIM/CAD, drawings, calculations, asset/CMMS data, test records, O&M manuals, training, warranties, spares, maintenance plans, statutory certificates, snag closure and final completion documentation.
- f. **Defects-Liability Support:** Provide inspection, issue resolution, contractor coordination and final closeout through the defects-liability period.

4.8. Minimum Stage Deliverables

- Site due-diligence, survey and requirement-validation report.
- Approved campus/site master plan and alternative building/structural concepts.
- Building OPR, Basis of Design, Design Requirements Matrix, room/zone data integration and code/standards register.
- Concept, schematic and detailed architectural/structural/MEPF design with calculations and cost plan.
- Federated BIM model, interface/demarcation matrix and documented clash resolution with the Cleanroom Consultant.
- Tool move-in, rigging, logistics, maintenance, hazardous-material and future-expansion plans.
- Statutory approval submissions and approval tracker.
- Tender drawings, specifications, BOQs, estimates and contractor-evaluation reports.
- Construction-management plan, clean-build plan, QA/QC dossiers and monthly cost/schedule/risk reports.
- Building commissioning plan, functional/integrated test scripts and acceptance reports.

- Occupancy/tool-move readiness and integrated handover dossier.
- As-built BIM, O&M, asset/CMMS and defects-liability closeout package.
- Architectural renders and 3D walk-through illustrating institutional identity, function, flows, utilities, service access, controlled stakeholder interfaces and campus integration.

5. Criteria for Shortlisting

The shortlisting will be conducted by a committee constituted by the Competent Authority, IISc. Shortlisted firms may subsequently be invited to submit a detailed technical and financial proposal or participate in a limited design competition. The following criteria will guide the EOI evaluation:

SL. NO	Criteria	Maximum Marks
1	Organizational Strength of the Applicant	20
a	Period of professional practice: 12 years = 3 marks; additional experience up to a maximum of 5 marks.	5
b	Scale of operations and local support: Bengaluru office/project office and multiple operating locations with relevant professional staff.	5
c	In-house/committed team: Project Director, Lead Architect, master planner, structural/vibration lead, civil/site engineer, base-building MEPF leads, fire/life-safety specialist, environmental/sustainability specialist, BIM manager, quantity surveyor, statutory-approval lead, construction manager, commissioning lead and Building-to-Cleanroom Interface Coordinator.	10
2	Experience of Work	25
a	Comparable high-technology R&D, semiconductor/microelectronics, precision or cleanroom-hosting buildings completed during the last 15 years. Marks based on cost, complexity and applicant scope.	15
b	Experience integrating complex base-building MEPF, plant, hazardous-material logistics, equipment movement and specialist cleanroom/process-utility packages.	5
c	Experience in end-to-end project management, statutory approvals, tendering, construction supervision and integrated commissioning/handover.	5
3	Technical Aspects	55
a	High-technology building and cleanroom-interface design capability: functional planning, vertical stack, structural/MEPF integration, service routes, expansion and maintainability. Up to two projects, 10 marks each.	20
b	Structural dynamics, precision environment and heavy-equipment accommodation: ground/site vibration studies, foundations, VC performance, inertia/floating systems, point loads, floor openings, rigging and validation. Up to two projects, 10 marks each.	20
c	Integrated BIM, fast-track/clean construction and PMC capability: federated models, package interfaces, statutory/tender management, schedule/cost/change control, clean-build and commissioning. Up to two projects, 7.5 marks each.	15

6. Documents Required for Validating Eligibility Criteria

- Legal and Professional Registration:** Certified incorporation/partnership/JV documents, Council of Architecture registration of the Lead Architect, and relevant professional registrations.
- Financial Capability:** Audited financial statements and certificate substantiating professional fees for the last five financial years.
- Comparable Assignments:** Completion/commissioning certificates, client references, scope, built-up area, project value, structural/vibration approach, MEPF integration, delivery model and status.
- Team Evidence:** Organisation chart, CVs, qualifications, employment/commitment status and availability of all key personnel and specialist subconsultants.
- Litigation and Integrity:** Self-declaration, details of material disputes/litigation, debarment status, professional sanctions and conflicts of interest.

- f. **Site Visit:** Evidence of site visit by the authorised applicant representative.

7. Submission Requirements

Applicants shall submit the EOI in the following structured form:

- **Covering Letter:** Expression of interest, confirmation of eligibility and availability for the full project period.
- **Project Understanding and Commitment Note:** A concise statement of the applicant's understanding of the national mission, proposed senior-leadership involvement, distinctive design/engineering value-add and approach to maintaining responsiveness throughout the fast-track programme.
- **Firm/Consortium Profile:** Ownership, office locations, relevant practice areas, lead entity, specialist partners and Bengaluru project-office arrangement.
- **Comparable Project Sheets - Minimum 3:** Built-up area, function, cleanroom/controlled environment hosted, structural grid/floor loads, vibration performance, base-building MEPF, project value, scope, delivery model, commissioning and client contact.
- **Proposed Team and CVs:** Project Director, Lead Architect, Structural/Vibration Lead, MEPF leads, BIM Manager, Cost/Tender Lead, Construction Manager, Commissioning Lead and Building-to-Cleanroom Interface Coordinator.
- **Technical Approach and Methodology:** Site/master planning, vertical stack, structural dynamics, equipment logistics, base-building systems, BIM/interface control, statutory approvals, package/tender strategy, fast-track/clean construction, PMC and commissioning.
- **Preliminary Execution Schedule:** Stage gates, surveys, design freezes, approvals, tendering, construction, cleanroom interfaces, commissioning and handover.
- **Scope Exclusions and Client Dependencies:** Explicit assumptions, required surveys, owner decisions, cleanroom-consultant data and other dependencies.
- **Statutory and Compliance Enclosures:** All eligibility documents, declarations and legal disclosures.

8. Key Evaluation and Interface Guidelines

- Demonstrated design and delivery of complex high-reliability buildings that host cleanrooms, precision tools or controlled environments.
- Ability to treat the building, cleanroom, sub-fab/service chases, utilities, equipment and operations as one coordinated system.
- Proven structural-dynamics and vibration-control capability based on measured site inputs and tool-specific criteria rather than generic claims.
- Strength of the proposed Building-to-Cleanroom interface, common BIM, demarcation, design-freeze and change-control methodology.
- Ability to deliver statutory approvals, tender packages, contractor evaluation, resident project management, QA/QC, clean-build, commissioning and as-built handover.
- Clarity of fast-track construction strategy, senior-leadership involvement, lifecycle cost, future expansion, sustainability, local support and risk management.

9. Client Information and Baseline Assumptions

- The stated building area, floor configuration, cleanroom envelope, equipment count and cost are preliminary planning inputs and shall be validated during programming and concept design.
- The specialist Cleanroom, Process Utilities, Fab Integration and Project Management Consultant will be appointed separately under EOI Ref. No. IISc/EOI/2026-MS/2. Internal cleanroom and process-utility design are excluded from the Building Consultant package except for the mandatory interfaces, integration, base-build provisions and whole-project coordination described herein.
- The equipment list, loads, vendor environmental limits, chemical/gas inventory and cleanroom design will be frozen progressively. The Building Consultant shall maintain a controlled assumptions and change register and shall not freeze irreversible structural or service decisions without the required interface data.
- The preliminary cleanroom topology is a hybrid wide-bay-and-chase arrangement with distributed service chases/sub-fab. The final topology shall be jointly validated by the two consultants and approved by IISc.
- All applicable national and local codes, including National Building Code/BIS requirements and applicable fire, electrical, environmental, accessibility, occupational-safety and authority requirements, shall be identified and applied. Relevant international cleanroom/semiconductor guidance shall be used where appropriate and accepted by the authority having jurisdiction.
- IISc reserves the right to modify the scope, area, phasing, selection process or schedule, and to reject any or all EOIs without assigning reasons.
- Site visit should be completed before 5:00 p.m. on 15 September 2026. The EOI with all enclosures should be emailed to Prof. Mayank Shrivastava at mayank@iisc.ac.in (Lead PI, 2D Innovation Hub and R&D Fab) with cc to Jully Yadav (Program Manager) at jullyyadav@iisc.ac.in and also post to Jully Yadav, Department of Electronic Systems Engineering, Indian Institute of Science, Bengaluru 560012, on or before 5:00 p.m. on 23.09.2026.

IISc reserves the right to reject any or all EOIs without assigning any reason whatsoever.

Annexure A

Self-Declaration Format

Ref. No.:

Date:

To:

The Registrar

Indian Institute of Science

With reference to my/our Expression of Interest submitted to IISc, it is hereby declared that I/(name of firm) was not declared ineligible for corrupt and fraudulent practices, either indefinitely or for a particular period, by any Government or other agency.

I/(name of firm) further declare that there are no contractual restrictions, legal disqualifications, conflicts of interest or other obligations that would prohibit me/us from entering this selection process, and that each statement and particular contained in the submission is correct to the best of my/our knowledge.

Signature of the Applicant

Date:

Place:

Seal: