

Expression of Interest (EoI) for an Integrated Software Solution (EOI from Indian **OEM and their authorised Distributors**)

Organization: Indian Institute of Science EOI No.: IISC/OLSEH/EOI/SOFT/2025-26/01. Issue Date: July 18, 2025 Response Due Date: August 13, 2025 Contact Persons: Masoodur Rahman and Roopa Lakshmi Email: <u>safety.olseh@iisc.ac.in</u> Phone: 080 2293 3199

1. Introduction and Purpose

- **1.1. Background:** The Office of Laboratory and Environmental Health (OLSEH), Indian Institute of Science is looking to procure an integrated software solution for managing safety at Indian Institute of Science. The proposed software should support fire safety, lab safety, chemical inventory, regulatory compliance, incident reporting, emergency response coordination, and audit tracking.
- **1.2. Purpose of EOI:** The purpose of this EoI is to gather information from qualified software vendors on available software solutions that can support OLSEH, IISc in managing and monitoring safety on campus. Based on the information obtained in this EOI, OLSEH will formulate detailed specifications for the eventual procurement. The EoI is exploratory and informational, meant to inform future procurement. The EOI is **not** a contractual commitment to purchasing any products or services.
- **1.3. Confidentiality:** All information submitted in response to this EOI will be treated as confidential and used solely for evaluation by designated representatives.
- 1.4. Disclaimer: This EOI is not an offer to contract. IISc reserves the right to accept or reject any and all responses, to modify the scope of this EOI, or to cancel this EOI at any time without prior notice. All costs incurred in preparing a response to this EOI are the sole responsibility of the vendor. Thank you for your interest in partnering with Indian Institute of Science Bangalore We look forward to reviewing your response.

2. Vendor Information:

- 2.1. Company Name: The bids must be made by a registered legal entity in India
- 2.2.
- 2.3. Address:
- 2.4. Website:
- **2.5. Core Business and Specialization:** The vendor must have experience in implementing safety management systems, preferably in universities or research institutions.



2.6. Primary Contact Person for this EOI: Whom shall we contact for this purchase?

- 2.6.1. Name:
- 2.6.2. Email:
- 2.6.3. Phone:
- 2.7. Number of Years in Business: Vendor must be in operation for at least 3 years.
- **2.8. Annual Turnover:** The vendor must have a minimum annual turnover of ₹50 lakh in the past three financial years.
- **2.9. References:** Please provide references from at least two prior clients in the education/research sector.

3. General Software Solution Capabilities

3.1. Architecture and Technology:

- Describe the core architecture of your proposed solution (e.g., cloud-native, on-premises, hybrid).
- What programming languages, databases, and frameworks are primarily used?
- Is the solution modular, allowing for phased implementation of different functionalities?
- Does the solution support multi-tenancy?
- How does the solution scale to accommodate extensions line new labs, new data volumes and users?

3.2. Security:

- Describe your security architecture, including data encryption (in transit and at rest).
- What authentication methods are supported.
- How do you manage user roles and permissions?
- Describe your data backup and disaster recovery procedures.

3.3. Reporting and Analytics:

- What standard reporting capabilities are available?
- Does the solution include a customizable report builder?
- Are there dashboards and analytics tools for data visualization?
- Can reports be exported in various formats (e.g., PDF, Excel, CSV)?

3.4. Customization and Configuration:

- To what extent can the solution be configured to meet specific organizational requirements without custom coding?
- Describe your approach to custom development if required.

3.5. Support and Maintenance:

- Describe your customer support model (e.g., 24/7, tiered support).
- What are your typical response times for critical issues?
- How are software updates and upgrades handled?
- What training options are available for users and administrators?

4. Module-Specific Requirements

4.1. Safety and audit Management

4.1.1. Incident Reporting:

• Describe the process for reporting incidents, near misses, and hazards.



- Can different types of incidents (e.g., injury, property damage, environmental) be tracked?
- Does it support configurable incident reporting forms with mandatory fields?

4.1.2. Investigation Management:

- How does the system facilitate incident investigations (e.g., root cause analysis, corrective actions)?
- Can supporting documents (photos, videos, witness statements) be attached?

4.1.3. Corrective and Preventive Actions (CAPA):

- How are CAPAs assigned, tracked, and verified for completion?
- Does it provide alerts or reminders for overdue actions?

4.1.4. Safety Inspections and Audits:

- Does the system support scheduling and conducting safety inspections/audits?
- Can checklists be customized, and deficiencies tracked?

4.1.5. Training Management:

- Can safety training records (e.g., completion dates, certifications) be managed?
- Does it provide reminders for recurring training?

4.2. Fire Extinguisher Management

4.2.1. Asset Register:

- How does the system maintain a comprehensive register of all fire extinguishers, including location, type, serial number, and last inspection date?
- Can QR codes or barcodes be used for physically tracking?

4.2.2. Inspection and Maintenance Scheduling:

- How does the system facilitate the scheduling of routine fire extinguisher inspections and maintenance?
- Does it generate automated reminders for upcoming inspections?

4.2.3. Inspection Checklists and Reporting:

- Can customizable checklists be used for inspections (e.g., pressure gauge, pin, hose, nozzle)?
- How are deficiencies recorded, and corrective actions initiated?
- Can inspection reports be generated with photos and notes?

4.2.4. Compliance Tracking:

- Does the system help ensure compliance with relevant fire safety regulations and standards?
- Can historical inspection data be easily accessed for audits?

4.3. Fire Hydrant Management

We are interested in software solutions that provide comprehensive capabilities for managing the entire lifecycle of fire hydrants, including but not limited to:

- 4.3.1. Asset Management: Centralized database for all fire hydrant assets.
- 4.3.2. **Inspection Management:** Streamlined processes for conducting regular inspections (NFPA compliant).
- 4.3.3. Maintenance Management: Scheduling, tracking, and reporting of maintenance activities.
- 4.3.4. Reporting & Analytics: Generating actionable insights from collected data.
- 4.3.5. Mapping & GIS Integration: Visual representation of hydrant locations.



- 4.3.6. Mobile Capabilities: Field data collection and access.
- **4.4. Fire alarm system management:** Our institute is a large educational institution with multiple buildings, including academic blocks, laboratories, residential halls, and administrative offices. We currently have a diverse range of fire alarm systems from various manufacturers installed across these facilities
 - 4.4.1. **Diverse System Compatibility:** Ability to integrate with and manage different types and brands of fire alarm control panels (e.g., Notifier, Siemens, Edwards, Ravels], addressable, conventional, wireless systems).
 - 4.4.2. Asset Management: Comprehensive inventory of all fire alarm system components (panels, detectors, manual call points, sounders, strobes, modules, etc.).
 - 4.4.3. **Event Logging and Alerting:** Real-time logging of all fire alarm events (alarms, troubles, supervisory signals, disarms), with configurable alerts and notifications (email, SMS, push notifications).
 - 4.4.4. **Maintenance and Inspection Tracking:** Scheduling, tracking, and logging of routine inspections, tests, and maintenance activities as per [as per NFPA 72, Karnataka fire codes].
 - 4.4.5. **Deficiency Management:** Ability to log, track, and manage deficiencies found during inspections and maintenance, including severity levels, responsible parties, and resolution status.
 - 4.4.6. **Reporting and Analytics:** Generation of customizable reports on system status, event history, maintenance compliance, deficiency trends, and asset performance.
 - 4.4.7. User Management and Permissions: Role-based access control for different user types (e.g., fire safety officers, maintenance personnel, administrators).
 - 4.4.8. **Mapping/Floor Plan Integration:** Visual representation of fire alarm device locations on floor plans/maps.

4.5. MOU (Memorandum of Understanding) Management for Regulatory compliance

4.5.1. Document Repository:

- How does the system store and organize MOUs, including various versions?
- Can supporting documents (e.g., amendments, annexures) be linked?

4.5.2. Workflow and Approval:

- Describe the workflow for drafting, reviewing, and approving MOUs.
- Does it support digital signatures and version control?

4.5.3. Key Clause/Term Extraction:

• Can key clauses, terms, and conditions (e.g., dates, parties involved, financial obligations, expiry dates) be extracted and tracked?

4.5.4. Alerts and Reminders:

• Does the system provide automated alerts for upcoming expiry dates, renewal periods, or other critical milestones?

4.5.5. Search and Retrieval:

• What search capabilities are available for quickly locating MOUs based on various criteria?



4.5.6. Reporting:

• Can reports be generated on MOU status, upcoming renewals, or financial commitments?

4.6. Hazardous Waste Management

4.6.1. Waste Stream Classification:

- How does the system support the classification and categorization of different hazardous waste streams?
- Does it allow tracking waste characteristics (e.g., UN number, hazard class)?

4.6.2. Manifest Generation and Tracking:

- Can the system generate hazardous waste manifests (e.g., e-manifest integration, paper manifests)?
- How are manifests tracked from generation to final disposal?

4.6.3. Reporting:

• What reporting capabilities are available for hazardous waste generation, storage, and disposal (e.g., annual reports, waste minimization reports)?

5. Response Format

- **5.1. Submission Method:** Please submit your response electronically to safety.olseh@iisc.ac.in by the due date.
- **5.2. File Format:** Responses should be submitted in PDF format.
- **5.3. Structure:** Please follow the numbering and section headings provided in this EOI when preparing your response.
- **5.4.** Clarity: Provide clear, concise, and complete answers to all questions. If a question is not applicable, please state "N/A" and briefly explain why.
- **5.5. Additional Information:** Feel free to include any additional information, brochures, or white papers that you believe are relevant to your proposed solution.

6. Next Steps:

- **6.1.** EOI will be followed by an evaluation. We may schedule an online discussion.
- **6.2.** This EOI will be followed up by an RFQ. The specifications and scope if the RFQ will be decided based on information shared in the EOI and online discussion.
- 6.3. Only vendors who participate in the EOI will be allowed to bid in the RFQ.
- 6.4. The purchase process will follow the terms of GFR 2017 and IISc's standard purchasing process.
- 6.5. Important Dates
 - 6.5.1. EoI Release Date 18/07/2025
 - 6.5.2. Last Date for Submission 13/08/2025
 - 6.5.3. Tentative date of shortlisting & Intimation 19/08/2025