# Food Safety and Standard Authority of India

(A Statutory Authority established under the Food Safety and Standard Act, 2006)
(Information Technology Division)
**FDA Bhawan, Kotla Road, New Delhi- 110002**

**REQUEST FOR INFORMATION (RFI)**

**Date: -19/08/2026**

**Price Discovery and Validation of Requirements for Selection of an Agency for Implementation of a COTS-Based AI-Enabled Data Platform for FSSAI**

## 1. Introduction

The Food Safety and Standards Authority of India (FSSAI), Ministry of Health and Family Welfare, Government of India, intends to undertake a market assessment for a COTS-Based AI-Enabled Data Platform for FSSAI. The proposed platform is envisaged as a next-generation, scalable and governed data foundation to support data integration, data management, data quality, analytics, AI/ML, risk-based surveillance, conversational analytics and evidence-driven regulatory decision-making.

This Request for Information (RFI) is being issued on the Central Public Procurement Portal (CPP Portal) to obtain information from **leading Gartner Magic Quadrant-recognized OEMs and their authorized partners and other capable** market participants regarding availability of suitable solutions, technical feasibility, implementation approach, commercial/licensing models, indicative prices, manpower requirements, infrastructure sizing, support arrangements and other matters that may assist FSSAI in finalising its procurement strategy and subsequent tender document.

## 2. Reference to the Proposed SOW

This RFI has been prepared with reference to the SOW/RFP titled "Selection of an Agency for Implementation of a COTS-Based AI-Enabled Data Platform for FSSAI, and is intended to seek market feedback on the requirements contained therein. The RFI does not itself constitute the final technical specification or final procurement conditions.

## 3. Objectives of the RFI

- To assess availability of an integrated COTS AI-enabled data platform meeting the broad functional and technical requirements envisaged by FSSAI.
- To discover prevailing market prices and obtain indicative budgetary estimates for the complete solution and its major cost components.

- To validate the proposed perpetual licensing model, deployment options and scalability assumptions.
- To assess realistic implementation timelines, manpower requirements, infrastructure requirements and operating/support costs.
- To obtain industry views on the feasibility of the proposed AI/ML, Agentic AI, conversational analytics, data governance and data integration requirements.
- To identify third-party dependencies, customisation requirements and potential vendor lock-in considerations.
- To identify provisions that may be technically impractical, unnecessarily restrictive or require modification to promote adequate competition.
- To obtain recommendations for finalising the technical, commercial, SLA, payment and evaluation structure of the subsequent procurement.

**4. Broad Scope Envisaged in the SOW**

| S. No. | Component | Broad Scope |
|---|---|---|
| 1 | Enterprise Data Integration | Integration of FSSAI application databases, APIs, files and other data sources; ETL/ELT; batch and streaming/near-real-time ingestion; orchestration, transformation, reconciliation and monitoring. |
| 2 | Data Management / Data Lake-Lakehouse | Central governed data environment for structured, semi-structured and unstructured data, including historical and future data. |
| 3 | Data Governance | Metadata, data catalogue, business glossary, lineage, data ownership, classification, data quality, stewardship, audit trails and access control. |
| 4 | Master Data Management | Entity matching, deduplication, golden records, survivorship, hierarchy and reference-data management. |
| 5 | BI & Analytics | Dashboards, KPIs, analytical workspaces, drill-down/drill-through, reports, alerts and self-service analytics. |
| 6 | AI/ML | Model development, training, validation, deployment, versioning, monitoring, explainability, predictive analytics and anomaly detection. |
| 7 | Agentic AI | AI-assisted monitoring, analytical workflows, anomaly/risk identification and recommendations with appropriate human-in-the-loop controls. |
| 8 | Conversational Analytics/Copilot | Natural-language querying and AI-assisted insights subject to role-based access, governance and auditability. |
| 9 | Text Analytics/OCR | Document ingestion, OCR, extraction and text analytics, including envisaged contract/document intelligence use cases. |

| | | |
|---|---|---|
| 10 | Risk & Surveillance Analytics | Predictive risk scoring, inspection/surveillance prioritisation, geo-spatial and seasonal/festival risk analytics and related decision support. |
| 11 | Security & Continuity | SSO/MFA, RBAC, encryption, masking/anonymisation, audit logs, monitoring, backup, DR and applicable Government security controls. |
| 12 | Implementation, Training & O&M | Requirement study, configuration, integration, migration, testing, UAT, deployment, training, handholding, knowledge transfer and post-implementation O&M/ATS. |

**5. Key Requirements for Market Validation**

- The proposed solution should be an integrated COTS platform covering the broad capabilities identified in the SOW.
- The proposed solution should support on-premise, cloud and hybrid deployment and be cloud-vendor agnostic for deployment on MeitY-approved cloud infrastructure.
- The SOW presently envisages perpetual licensing with no limits on number of cores or data size and horizontal scalability without additional software cost. Respondents shall specifically confirm feasibility and provide alternative licensing models, if any.
- The solution is expected to operate on FSSAI-controlled/designated infrastructure, including Government/Private Cloud or other infrastructure approved by FSSAI.
- The SOW envisages retention of FSSAI ownership/IPR over custom-developed artefacts, configurations, FSSAI-specific data models, trained AI/ML algorithms and custom pipelines developed during the engagement. Respondents shall identify any exceptions.
- The initial contract concept is three years including development/implementation and O&M, with possible extension by two years.
- FSSAI seeks industry validation of performance, scalability, storage, concurrency, AI response, availability, DR and other technical assumptions contained in the SOW.

**6. Information Sought from Respondents**

**6.1 Respondent / Organisation Profile**

- Legal name, address and contact details.
- Whether the respondent is OEM, System Integrator, authorised reseller/partner or other category.
- Years of operation in India and relevant certifications.
- Indian technical support, R&D and training capabilities.
- Relevant Central/State Government, PSU and ULB implementations.

### 6.2 OEM and Product Details

- OEM name and proposed product/platform name and version.
- Details of product architecture and modules.
- GeM listing/category details, where applicable.
- List of capabilities available natively within the COTS product.
- Third-party software/dependency details, if any.
- Product roadmap, support lifecycle and upgrade policy.

### 6.3 Requirement-wise Compliance

- Provide compliance against the broad requirements using F = Fully available, P = Partially available, C = Configurable, CD = Custom development, TP = Third-party component, and N = Not available.
- For every P/C/CD/TP response, provide explanation, estimated effort, dependency and indicative additional cost.
- Identify any SOW requirement that the respondent considers technically impractical, commercially restrictive or requiring clarification.

### 6.4 Implementation & Migration

- Recommended implementation methodology and phases.
- Indicative project duration and milestones.
- Approach for source-system assessment, data migration, cleansing, reconciliation and validation.
- Integration approach for databases, APIs, files and streaming sources.
- Testing, UAT, go-live and stabilisation approach.
- Training and knowledge-transfer approach.

### 6.5 Infrastructure & Sizing

- Recommended compute, memory, storage, network, database and GPU/AI accelerator requirements, wherever applicable.
- Sizing assumptions for users, data volume, ingestion rate and AI workloads.
- High-availability and DR architecture.
- Whether infrastructure is included in the quoted price or needs separate procurement.

### 6.6 Security, Privacy & Governance

- Security architecture and identity integration.
- SSO/MFA/RBAC and privileged access controls.
- Encryption, masking, anonymisation and audit logging.
- Data governance, lineage and access-control approach.
- Backup, DR, monitoring, vulnerability management and patching.
- Applicable Government/CERT-In/MeitY-aligned security controls supported by the product.

### 6.7 AI/ML, Generative AI and Agentic AI

- Native AI/ML and MLOps capabilities.
- Predictive analytics and anomaly detection.
- Explainability, model monitoring and drift management.
- Generative AI/Copilot capabilities and deployment options.
- Agentic AI capabilities, autonomy boundaries and human-in-the-loop controls.
- Approach to grounding, hallucination mitigation, prompt/model governance, auditability and security.
- Recommended measurable acceptance criteria for AI outputs.

### 6.8 Licensing & Support

- Availability of perpetual licensing and exact licensing metric.
- Whether licence is limited by cores, users, data size, nodes, modules, compute, API calls, models, agents or any other parameter.
- Treatment of development, test, UAT, DR and production environments.
- Cost of scaling users, storage, compute or data volume.
- ATS/O&M charges and escalation mechanism.
- Availability of Years 4 and 5 support and commercial conditions.

### 6.9 Exit Management & Portability

- Data export and portability mechanism.
- Export of metadata, lineage, workflows, pipelines, dashboards, reports, configurations and AI/ML artefacts.
- Knowledge-transfer and transition support.
- Any proprietary components or licensing restrictions affecting transfer to another agency.

## 7. Price Discovery / Indicative Commercial Proposal

Respondents are requested to provide indicative, non-binding budgetary prices in Indian Rupees (INR), exclusive and inclusive of applicable taxes as separately indicated. The price information will be used only for market assessment, price discovery and estimation of the likely procurement value. Respondents shall clearly identify assumptions, exclusions, quantities and pricing metrics.

| Sl. | Description | Rate / Cost (₹) | No. of Years | GST (₹) | Total incl. GST (₹) | Remarks / Pricing Basis |
|---|---|---|---|---|---|---|
| 1 | Perpetual Licence for AI-enabled Data Platform-Based System with no limits on numbers of cores or data size | | One-time upfront | | | Include all proposed COTS capabilities/modules |
| 2 | Implementation and Customization of AI-enabled Data Platform-Based System as per FSSAI | | One-time | | | Configuration, integration, migration, testing, UAT, deployment etc. |
| 3 | Technical Support & Maintenance – Year 1 | | 1 | | | Annual O&M/ATS |
| 4 | Technical Support & Maintenance – Year 2 | | 1 | | | Annual O&M/ATS |
| 5 | Technical Support & Maintenance – Year 3 | | 1 | | | Annual O&M/ATS |
| | TOTAL 3-YEAR BASE COST | | | | | |

**8. Additional Price Discovery Questions**

- State the price impact of doubling the number of users.
- State the price impact of doubling and multiplying by five the data volume/storage/ingestion requirement.
- State the price impact of adding additional AI models, agents, dashboards and data sources.
- Identify any minimum annual commitment, consumption commitment or minimum licence quantity.
- Identify all OEM/third-party payments that may be payable separately.
- Provide indicative manpower cost separately for implementation and O&M.
- State the recommended payment/milestone structure and percentage allocation.

**9. Market Feedback on Existing SOW/RFP Conditions**

Respondents are specifically requested to comment on the following existing/proposed conditions:

- Integrated single-OEM COTS platform requirement and whether all listed capabilities can be delivered without special development.
- Perpetual licence with no limits on cores or data size and horizontal scalability without additional software cost.
- On-premise/cloud/hybrid and MeitY-approved cloud deployment requirement.
- OEM Government/PSU/ULB experience and minimum contract-value criteria.
- OEM turnover and India presence requirements.
- R&D centre, technical support centre and self-owned training centre requirements.
- Requirement concerning Leader status in any two of the specified Gartner/Forrester/IDC reports.
- Bidder certifications including ISO 9001, ISO 27001, ISO 20000 and CMMI.
- Proposed technical qualification threshold and technical/financial evaluation methodology.
- Performance, SLA, availability and DR requirements.
- Proposed 3-year contract plus optional 2-year extension.
- Perpetual licence, post-contract continuity and ATS/O&M provisions.
- Exit management and transferability requirements.
- Any requirement that may restrict competition or favour a particular product/OEM.
- Any missing technical, commercial, security, AI governance or contractual requirement.

**10. Demonstration / Consultation**

FSSAI may, at its discretion, invite respondents for a product demonstration, technical presentation, clarification meeting or limited proof-of-concept using sample/anonymised data. Participation in any such activity shall not create any right or preference in any subsequent procurement.

**11. Submission of RFI Response**

- Responses shall be submitted through the CPP Portal in the manner and within the timeline specified in the RFI notice.
- Respondents shall submit the completed technical questionnaire, price-discovery format and supporting documents in the prescribed format.
- Responses should be complete, concise and supported by documentary evidence wherever requested.
- FSSAI may seek clarifications from respondents during the RFI process.
- FSSAI may publish a summary of RFI findings/clarifications without disclosing commercially sensitive information, as considered appropriate.

**12. Disclaimer / Non-Binding Nature**

- This RFI is issued solely for market survey, information gathering, price discovery and procurement planning.
- This RFI shall not be construed as a Notice Inviting Tender, Request for Proposal, purchase order, contract or commitment to procure.
- FSSAI does not guarantee that a procurement will follow this RFI or that any respondent will be invited to participate in a subsequent tender.
- Information/prices submitted shall not confer any right, preference or claim on the respondent.
- FSSAI reserves the right to modify, cancel, withdraw or extend this RFI and/or use or not use any information received, without assigning reasons.
- Respondents shall bear their own costs and expenses for preparation and submission of the RFI response.

**13. Respondent Declaration**

We certify that the information furnished in this RFI response is true and correct to the best of our knowledge. We understand that the indicative prices are non-binding and are being furnished solely for market survey and price discovery. We understand that participation in this RFI does not create any entitlement to award of work.

Name of Organisation: _____

Name of Authorised Signatory: _____

Designation: _____

Email / Telephone: _____

Date: _____

Signature & Seal: _____

**14. Contact Details**

Food Safety and Standards Authority of India (FSSAI)
IT Division
FDA Bhawan, Kotla Road
New Delhi – 110002
Email: cito@fssai.gov.in
Website: www.fssai.gov.in

**15. Important Dates: -**

| Important Date | | |
|---|---|---|
| **S.No.** | **Event** | **Date** |
| **1** | Issuing Date of RFI | **21/08/2026** |
| **2** | Last Date of Submission of RFI | **04/09/2026** |
| **3** | Opening Date of RFI | **07/09/2026** |
| **Note: -**FSSAI reserves the right to change the above dates at its discretion. | | |

FOOD SAFETY AND STANDARDS AUTHORITY OF INDIA

*Inspiring Trust, Assuring Safe & Nutritious Food*

Ministry of Health and Family Welfare, Government of India

**FOOD SAFETY AND STANDARDS AUTHORITY OF INDIA**

**MINISTRY OF HEALTH AND FAMILY WELFARE**

**4th FLOOR, FDA BHAWAN, KOTLA ROAD, NEW DELHI-110002**

NOTICE INVITING ONLINE BID FOR

**"*SELECTION OF AN AGENCY FOR IMPLEMENTATION OF A COTS-BASED AI-ENABLED DATA PLATFORM FOR FSSAI*"**

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## 1. Introduction

The Food Safety and Standards Authority of India (FSSAI), formed under the Food Safety and Standards Act of 2006, operates with the objective of laying down scientifically backed standards for articles of food and to regulate their manufacture, storage, distribution and import. The provisions of the Act can be broadly distributed into licensing and registration of food businesses, manufacturing and distribution, packaging and labelling, prevention of contaminants, residue and other toxic substances in food, lab and sample testing, unfair trade practices with regards to supply and consumption of food, import of articles of food, and food safety and hygiene.

For and on behalf of the Food Safety and Standards Authority of India, online bids are invited from interested and eligible bidders for **"SELECTION OF AN AGENCY FOR IMPLEMENTATION OF A COTS-BASED AI-ENABLED DATA PLATFORM FOR FSSAI"**. The assignment will be initially for a period of three (3) years including development and implementation period and extendable further for a period of two (2) years, on the same rates, terms and conditions, subject to satisfactory performance of the successful agency and this shall be at the sole discretion of FSSAI.

The Bid Document and other detailed terms & conditions will be made available on the Food Safety and Standards Authority of India website i.e.www.fssai.gov.in (for reference only) as well as on GeM Portal. All the related information will be available in the bid document floated through GeM portal.

### 1.1. Strategic Vision

FSSAI envisions the platform as a next-generation **AI-Enabled Data Platform** aligned to globally recognized data and analytics maturity frameworks, including architectural principles and capability constructs comparable to those evaluated in leading industry benchmarks such as Gartner Magic Quadrant-aligned Data & Analytics platforms.

The objective is not only system integration, but the establishment of a **future-ready, intelligent, and scalable data foundation** enabling autonomous insights, risk-based surveillance, and evidence-driven regulatory decision-making.

## 2. Instruction to Bidders

**i.** Bidders are advised to follow the instructions as provided under the 'Instructions to the Bidders' page for submission of the bids through GeM portal. All the critical information related to bid publishing date, participation duration, pre bid details, technical clarifications, documents to be submitted and evaluation details will be made available in the bid document.

**ii.** The high-level business objectives are:

- Establishment of a unified Data Estate that consolidates structured and unstructured data from multiple FSSAI systems (FoSCoS, FICS, INFoLNET, etc.) into a secure and governed environment.
- Implementation of a metadata-driven Data Management Framework to enable data lineage, cataloging, quality monitoring, and traceability across the data lifecycle.
- Development of Automated Dashboards and Analytical Workspaces that provide real-time insights for operational, tactical, and strategic decision-making.
- Enablement of Role-Based Access Control (RBAC), audit trails, and secure authentication mechanisms for data access across departments.
- Incorporation of AI/ML-driven Analytics for predictive insights, anomaly detection, and risk assessment.
- Deployment of Conversational Analytics and Copilot Interfaces to allow natural language querying and AI-assisted insights generation.
- Provision of Low-Code / No-Code capabilities for business users to build and customize dashboards without deep technical dependency.
- Engagement of Dedicated Technical Manpower Resources to gather requirements, configure solutions, manage data integration, and support continuous usage and adoption of the platform.

**iii.** FSSAI reserves the right to cancel the Bid enquiry at any stage without assigning any reason and FSSAI shall not be responsible for any consequence thereof to any bidders. The bidders are requested to watch bid for any further corrigendum's, if published, in the bid.

**iv.** Bidders are requested to study all requirements, instructions, scope of work and other information in the documents carefully. Submission of the bid shall be deemed to have been done after careful study and examination of the bid document with full understanding of its implications. The response to this bid should be full and complete in all respects. Failure to furnish all information required by the bid documents or submission of a proposal not substantially responsive to this document will be at the Bidder's risk and may result in rejection of its Proposal.

**v.** Pre-Bid Meeting

- A pre-bid meeting will be held at the specified time as per the GeM portal in the office of Food Safety and Standards Authority of India, FDA Bhawan, Kotla Road, New Delhi 110 002, to clarify issues and to answer queries on any matter pertaining to the bid that may be raised. The bidders willing to attend the pre-bid conference are requested to inform the FSSAI beforehand in writing or through email at cito@fssai.gov.in.
- Minutes of pre-bid conference/meeting, including the text of the queries raised and the responses/suggestions given, together with any responses prepared after the meeting, will be uploaded on GeM portal and/or published on FSSAI`s official website. Any changes which may become necessary as a result of pre-bid meeting may be made by the FSSAI exclusively through the issue of an addendum and/or through the minutes of the pre-bid meeting.

**vi.** During evaluation and comparison of bids, the FSSAI may, at its discretion, ask the bidder for a clarification on his bid. No post-bid clarification on the initiative of the bidder will been entertained.

**vii.** Validity of Bids: The Life Cycle Validity of Bid will remain valid for a period of 90 days while the bid offer validity will be for 80 days from the date of submission of the Bids as per GeM

Portal. The opening date for the bid published will be as per policy of GeM portal if the end date falls on Sunday.

**viii.** The bid shall also be regulated by the “Public Procurement Policy for Micro & Small Enterprises (MSEs) Order 2012” as amended from time to time to the extent of its applicability to this bid process.

**ix.** Rejection of Bids: Canvassing by the Bidder in any form, unsolicited letter and post-tender correction may invoke summarily rejection. Conditional tenders will be rejected. Bids not submitted as per prescribed format will also be rejected.

**x.** Effectiveness of Contract: This Contract shall come into effect from the start date as mentioned in the Contract Document. Any change in the date will be informed to the bidder through email.

**xi.** Performance Standard: The selected Agency shall perform the Services under the contract with the highest standards of professional and ethical competence, integrity and transparency. The agency shall promptly replace any official assigned under this Contract that FSSAI considers unsatisfactory.

## 3. Scope of Work

FSSAI intends to modernize its data and analytics capabilities through establishment of a Converged Data Management Platform (CDMP). This platform will serve as a unified data estate to enable secure, governed, and intelligent decision-making across its divisions—including FoSCoS, FICS, INFoLNET, and other digital programs. The objective is to unlock value from existing data assets, enable AI-driven insights, and create a scalable architecture for predictive and prescriptive analytics.

### i. Industry Alignment

The proposed Converged Data Management Platform (CDMP) shall reflect architectural and functional characteristics consistent with globally recognized enterprise data platform paradigms (e.g., Lakehouse, Data Fabric, and Metadata-Driven architectures) commonly represented in Gartner-evaluated solutions.

The implementation must demonstrate:

- Unified data integration and governance fabric
- Embedded AI/ML enablement layer
- Metadata-led automation
- Augmented analytics and decision intelligence
- Composable and extensible architecture

The selected bidder shall be responsible for the design, development, and implementation of a **Converged Data Management Platform (CDMP)**, including but not limited to:

- Creation of a secure, scalable, and metadata-driven data estate.
- Integration of data from multiple FSSAI systems using automated ingestion and transformation pipelines by leveraging a meta data architecture and optimized code generation approach.
- Implementation of data quality, lineage, and cataloging frameworks.
- Deployment of analytics, AI/ML models, and dashboards for operational and strategic insights.
- Establishment of a governance and access control framework compliant with FSSAI's data policies.
- Deployment on a government-approved cloud environment with complete data residency within India.
- Development of dashboards, reports, and portals for different stakeholders (HQ, regional offices, labs).
- Provision of ongoing support, maintenance, and enhancements.

### ii. Key Features of the Solution shall be as follows:

The proposed Converged Data Management Platform shall be designed to deliver a secure, scalable, and metadata-driven environment that enables end-to-end data management, analytics, and AI adoption within FSSAI. The key features expected are outlined below:

- **Data Estate and Integration Layer**

    - The platform shall provide a **centralized, governed data estate** that consolidates data from existing systems including FoSCoS, FICS, INFoLNET, ERI, and other digital initiatives.
    - Support **seamless ingestion of structured, semi-structured, and unstructured data** from databases, APIs, files, and third-party systems.
    - Enable **automated ETL/ELT pipelines** with scheduling, workflow monitoring, and transformation capabilities.
    - Support both **batch and streaming ingestion** for near real-time analytics.
    - Ensure **data residency and sovereignty** within Government-approved cloud environments.

- **Integration with Risk Management Systems (RMS)**

    The platform shall integrate with existing and future Risk Management Systems to enable:

    - Risk scoring of food business operators
    - Predictive identification of high-risk entities
    - Inspection prioritization models
    - Data-driven surveillance planning
    - Cross-system intelligence sharing

- **Metadata Management and Governance**

    - Include an enterprise metadata repository capturing business glossary, lineage, and data ownership.
    - Provide end-to-end data lineage visualization, from source to report, with version control and impact analysis.
    - Enable data quality profiling and rule-based cleansing, with auditability and exception tracking.
    - Support role-based access control (RBAC), approval workflows, and governance policy enforcement.
    - Ensure compliance with MeitY and NIC security guidelines for data handling, encryption, and logging.

- **Master Data Management (MDM)**

    - Provide an integrated MDM framework to manage and harmonize core entities such as Product, Location, Supplier, and Licensee.
    - Enable hierarchy management, survivorship rules, and golden record creation.
    - Facilitate taxonomy and reference data alignment across departments and systems.
    - Support versioning and stewardship workflows for data validation and approval.

- **Analytics and Visualization Layer**

    - Deliver an interactive analytics workspace accessible via web and mobile interfaces.
    - Support data integration through REST API for flexibility of visualization.
    - Enable self-service dashboard creation using low-code/no-code design interfaces.
    - Provide global filters, drill-down, and slicing/dicing capabilities for ad-hoc and guided analytics.
    - Facilitate KPI-based scorecards, operational dashboards, and executive reports.

- Support multi-level drill-through (HQ → Regional → Division → Laboratory → Port).

- **AI/ML Enablement**

  - Include an AI/ML workbench to support use cases like risk prediction, fraud detection, and pattern recognition.
  - Allow integration with R/Python environments for model training and execution.
  - Provide ML Ops capabilities such as model lifecycle management, retraining, and performance monitoring.
  - Enable predictive and prescriptive analytics embedded within dashboards and workflows.

- **Agentic AI and Decision Intelligence**

  - The platform shall incorporate Agentic AI capabilities enabling autonomous, goal-driven analytical agents that can:
  - Continuously monitor datasets for anomalies, risks, and trends
  - Generate proactive alerts and recommended regulatory actions
  - Assist officers in surveillance prioritization
  - Automate insight discovery across inspection, licensing, and compliance datasets
  - Provide explainable, traceable AI-generated recommendations
  - Agents must operate under governance controls ensuring transparency, auditability, and human-in-the-loop validation.

- **Intelligent Agent Framework and Insights Portal**

  - The solution should include an Intelligent Agent Framework to automate repetitive analytical and data preparation tasks.
  - Each agent should represent a distinct capability (e.g., data quality agent, forecasting agent, compliance-risk agent, or data catalog agent) and operate independently or in coordination with others.
  - The platform should support agent orchestration, allowing multiple agents to work together to execute complex analytical workflows or decision scenarios.
  - The Insights Portal shall serve as a unified interface for users to view AI-generated insights, alerts, narratives, and recommendations in a structured and consumable format.
  - Agents must leverage underlying metadata, data lineage, and governance rules to ensure transparency and auditability of insights.
  - The system should provide an auto-insights engine capable of detecting anomalies, correlations, and patterns in near real-time, and pushing contextual recommendations to the Insights Portal.

- **Conversational and Assisted Intelligence**

  - Include a natural language query interface (NLQ) that enables users to ask questions in simple English and receive visual or tabular responses.
  - Support context-aware recommendations, anomaly explanations, and AI-generated insights.
  - Allow embedding of conversational widgets within dashboards and portals.

- **Priority Analytical Use Cases**

The system shall support advanced analytics including but not limited to:

a) **Social Media Intelligence**
   - Monitoring consumer complaints, sentiment, and emerging food safety signals
   - Early detection of reputational or public health risks

b) **Predictive Surveillance Planning**
   - AI-driven inspection scheduling based on risk signals
   - Geo-spatial and seasonal pattern analysis

c) **Festival / Event-Based Risk Monitoring**
   - Configurable surge-monitoring models for events such as:
   - Durga Puja
   - Ganesh Chaturthi
   - Other high-consumption periods
   - Dynamic sampling strategies

d) **OCR-Based Document Digitization**
   - Extraction from scanned structured documents
   - Handwritten recognition explicitly out of scope

e) **Contract Intelligence**
   - AI-assisted contract lifecycle monitoring
   - Auto-alerts for renewal, expiry, and compliance triggers
   - Automated metadata extraction from agreements

- **Platform Architecture and Extensibility**

  - Follow a modular, composable architecture allowing independent scalability of ingestion, storage, and analytics layers.
  - Support API-first design and microservices-based deployment for future interoperability.
  - Ensure no vendor lock-in by adhering to open standards (e.g., JSON, OData, JDBC, REST).
  - Enable “build once, deploy anywhere” philosophy — accessible across desktop, tablet, and mobile devices.
  - Provide multi-environment support (Development, QA, Production) with CI/CD integration.

- **Automation and Workflow**

  - Provide automated report scheduling, alerting, and distribution capabilities.
  - Allow users to set threshold-based alerts and receive notifications via email, SMS, or in-app alerts.
  - Include workflow automation for approvals, escalations, and data validation activities.
  - Ensure logging and monitoring dashboards for data flow, system health, and user activities.

- **Security and Compliance**

  - Enforce multi-factor authentication, SSO, and granular access policies at dataset, table, and field levels.
  - Ensure data encryption at rest and in transit using Government-approved ciphers.

- Maintain comprehensive audit trails of all user and system activities.
- Align with ISO 27001, CERT-In, NIC security standards and DPDP Act compliance.
- Support data masking, tokenization, and role-based anonymization.

- **Knowledge Transfer and Capacity Building**

  - Conduct structured training sessions and workshops for FSSAI's technical and functional users.
  - Deliver comprehensive user manuals, data dictionaries, and process documentation.
  - Provide post-implementation handholding for effective adoption and sustainability.

- **Data Volume and Infrastructure Sizing Assumptions**

  - The solution must be sized to handle:
    - 5 Years of Historical Data Migration
    - 3 Years of Projected Data Growth
  - Structured + unstructured regulatory datasets
  - Scalable compute to accommodate AI workloads

- **Environment Requirements:**

  - The platform must support isolated environments for:
    - Development (DEV)
    - Testing / UAT (TEST)
    - Production (PROD)
    - With CI/CD-driven promotion across environments.

### iii. AI-Enabled Product-Based Solutioning

The bidder shall adopt a product-led implementation model leveraging pre-built accelerators, reusable components, and configurable frameworks instead of traditional custom development-heavy approaches.

The approach should:

- Reduce manual coding effort by up to **70-80% through metadata-driven configuration and automated pipeline generation**
- Enable faster onboarding of new data sources
- Provide reusable analytics templates and AI models
- Ensure long-term maintainability and scalability

The bidder shall clearly identify:

- Product components vs. custom build components
- Reusable accelerators being deployed
- Configuration-driven modules enabling self-service extensibility

### iv. Technical Specifications

The Integrated Data and Analytics Platform shall be architected to provide enterprise-grade scalability, governance, interoperability, and AI-readiness in alignment with FSSAI's digital modernization roadmap.

The following minimum technical specifications shall apply to all proposed components and modules.

## A. Architectural Principles

- **Modular and Composable Design**
  The solution shall follow a microservices-based, loosely coupled architecture allowing independent scalability of ingestion, storage, governance, and analytics components
- **Open Standards and Interoperability:**
  All data interfaces, APIs, and connectors must comply with open protocols (REST, JDBC/ODBC, JSON, XML) to avoid vendor lock-in.
- **Metadata-Driven Operations:**
  Every object (dataset, dashboard, model, or agent) must be registered and governed through a unified metadata layer to ensure traceability and consistency.
- **Government-Approved Cloud Deployment:**
  Hosting must be within India on MeitY-empanelled cloud infrastructure, ensuring data residency, redundancy, and disaster recovery.
- The proposed solution shall be capable of being deployed entirely within the Government's own IT infrastructure or FSSAI's private cloud environment. It should not rely on any SaaS-hosted or multi-tenant model operated by the vendor.
- All application components, databases, agents, and AI models must be installable, configurable, and maintainable within Government-controlled infrastructure ensuring full data ownership and sovereignty
- **Separation of Compute and Storage:**
  Architecture should permit elastic scaling of compute independent of storage for cost optimization and performance management.

## B. Core Platform Components

| Layer | Component | Technical Requirement |
|---|---|---|
| **Data Ingestion Layer** | Ingestion Framework | Support real-time and batch ingestion from databases, APIs, flat files; include scheduling, monitoring, and error handling dashboards. |
| **Data Storage Layer** | Data Lakehouse / Repository | Support structured, semi-structured, and unstructured data |
| **Data Processing & Transformation Layer** | ETL/ELT Engine | Provide drag-and-drop based code generator for transformation pipelines; enable version control, reusable templates, and parameterized workflows. |
| **Metadata & Governance Layer** | Metadata Repository, Lineage, Catalog | Capture technical and business metadata, lineage visualization, data classification, quality scoring, and role-based access. |
| **Master Data Management Layer** | MDM Hub | Centralized management of core entities (Product, Supplier, Location, Licensee); support survivorship, deduplication, and stewardship workflow. |

| Layer | Component | Technical Requirement |
|---|---|---|
| **Analytics & Visualization Layer** | BI / Insights Engine | Provide multi-tenant dashboarding, ad-hoc analytics, embedded KPIs, and story-boards; Data transmission through REST API. |
| **AI/ML Layer** | Model Workbench | Support Python/R integration, model training, versioning, explainability, and MLOps (deployment, monitoring, retraining). |
| **Agent Orchestration Layer** | Intelligent Agents & Automation | Enable creation and orchestration of autonomous agents for data quality, forecasting, compliance, and alerting; agents to be metadata-aware and event-driven. |
| **Conversational Layer** | Copilot / Chatbot | Natural-language interface with voice/text I/O; connect to data catalog and insights portal; enforce RBAC and audit logs. |
| **Security & Compliance Layer** | IAM, Encryption, Audit | Implement MFA, SSO, OAuth 2.0, data masking, tokenization, and audit trail with retention as per NIC/MeitY norms. |
| **Hosting & Deployment** | On-Premise / Private Cloud Installation | The entire solution, including data lake, AI engine, and agents, shall be deployable within FSSAI or Government-controlled infrastructure. No SaaS or shared-hosting deployment models are permitted. All configurations, updates, and monitoring must remain under FSSAI's control. |

## C. Performance & Scalability Requirements

- Support a **minimum of 1,000 concurrent users** within 30 seconds dashboard load time.
- Ingestion throughput shall handle **high-volume data (≥ 1 TB/day)** with horizontal scalability.
- Ensure **99.9 % availability** through multi-node or cluster deployment.
- Maintain **end-to-end latency under 10 seconds** for real-time dashboards.
- Provide **auto-scaling** for compute clusters based on workload.
- <15 seconds AI response at 25% load
- <40 seconds AI response at 100% load
- <2 seconds response for cached queries

## D. Data Security and Privacy

- Encryption of data **in transit (TLS 1.3+)** and **at rest (AES-256)** mandatory.
- Zero trust security model.

- Mandatory **audit logging** of all user activities, configuration changes, and data access events.
- Role-based anonymization and masking for sensitive data fields.
- Disaster Recovery with **RPO ≤ 30 minutes** and **RTO ≤ 2 hours**.

### E. Integration & Extensibility

- Support for **single sign-on (SSO)**
- Extensible plugin architecture for adding new data sources or AI models without core code change.

### F. Monitoring, Logging & Automation

- Unified **monitoring console** for job performance, data freshness, agent health, and error alerts.
- Automated alerting via email notification for job failures or data anomalies.
- Support for **CI/CD pipelines** for automated deployment across Dev/UAT/Prod.

### G. Training, Documentation & Support

- Detailed **technical documentation**, data dictionaries, and API catalogs to be delivered.
- Comprehensive **administrator and end-user training** (on-site and virtual).
- Minimum **3-year support** with patching, upgrades, and knowledge transfer.
- SLA-based helpdesk with issue classification and escalation matrix.

## 4. Techno-Functional Requirements

### A. SECTION A - Platform Architecture & Design Compliance

| Sr. No. | Requirement Description | Compliance (Y/N) | Remarks |
|---|---|---|---|
| 1 | The solution must provide a unified AI-enabled Data and Analytics Platform integrating ingestion, governance, analytics, and AI layers within a single cohesive architecture. | | |
| 2 | The platform shall adopt a modular, composable architecture allowing independent scalability of ingestion, storage, processing, AI, and visualization components. | | |
| 3 | The solution must be deployable entirely within Government-controlled infrastructure (on-premise or MeitY-approved cloud) without reliance on vendor-managed SaaS models. | | |
| 4 | The architecture shall enforce separation of compute and storage layers to enable elastic scaling and cost optimization. | | |
| 5 | The platform must support isolated DEV, TEST/UAT, and PROD environments with controlled CI/CD-driven promotion. | | |

| Sr. No. | Requirement Description | Compliance (Y/N) | Remarks |
|---|---|---|---|
| 6 | The solution shall support metadata-driven configuration of datasets, pipelines, dashboards, models, and agents. | | |
| 7 | The platform must avoid vendor lock-in through adherence to open standards such as REST, JSON, JDBC/ODBC, XML, and OData. | | |
| 8 | The solution shall provide centralized administrative control for configuration, monitoring, and governance. | | |
| 9 | The architecture must support horizontal scalability to accommodate 5 years historical data and projected 3 years growth. | | |
| 10 | The platform shall ensure full data residency within India in compliance with Government policies. | | |
| 11 | The system must support multi-role user access with configurable RBAC policies. | | |
| 12 | The solution shall enable rapid onboarding of new use cases without architectural redesign. | | |
| 13 | The platform must provide automated deployment scripts for repeatable infrastructure setup. | | |
| 14 | The architecture shall support high availability deployment with ≥ 99.9% uptime. | | |
| 15 | The system must maintain auditability of configuration changes and version control across environments. | | |

## B. SECTION B - Data Estate & Integration Compliance

| Sr. No. | Requirement Description | Compliance (Y/N) | Remarks |
|---|---|---|---|
| 16 | The solution must consolidate structured, semi-structured, and unstructured datasets from FoSCoS, FICS, INFoLNET, ERI, and other FSSAI systems into a centralized, governed data estate. | | |
| 17 | The platform shall support API-based, database-based, flat-file, and event-driven ingestion mechanisms with secure connectors. | | |

| Sr. No. | Requirement Description | Compliance (Y/N) | Remarks |
|---|---|---|---|
| 18 | The solution must support both scheduled batch ingestion and near real-time streaming ingestion for time-sensitive analytics. | | |
| 19 | The platform shall provide configurable ETL/ELT pipelines with workflow scheduling, orchestration, retry mechanisms, and failure monitoring dashboards. | | |
| 20 | The solution must support high-volume ingestion throughput (≥1 TB per day) with horizontal scalability. | | |
| 21 | The platform shall enable metadata-driven transformation logic using reusable, parameterized pipeline templates. | | |
| 22 | The solution must support integration of third-party datasets including regulatory feeds and approved external intelligence sources. | | |
| 23 | The system shall support automated schema handling and adaptable transformation mapping without manual recoding. | | |
| 24 | The solution must support ingestion of OCR-extracted structured document data (excluding handwritten recognition). | | |
| 25 | The platform shall provide ingestion monitoring dashboards including job status, performance metrics, and data freshness indicators. | | |
| 26 | The solution must support event-triggered ingestion workflows for surge-based or festival-driven monitoring scenarios. | | |
| 27 | The platform shall enable automated historical data migration for a minimum of five years of legacy datasets. | | |
| 28 | The solution must ensure encrypted data transfer for all ingestion pipelines. | | |
| 29 | The platform shall allow onboarding of additional datasets without requiring system downtime. | | |
| 30 | The solution must maintain lineage traceability from source ingestion through transformation to analytical consumption. | | |

## C. SECTION C - Metadata, Governance & Data Quality Compliance

| Sr. No. | Requirement Description | Compliance (Y/N) | Remarks |
|---|---|---|---|
| 31 | The platform must provide an enterprise-grade metadata repository capturing both technical and business metadata attributes. | | |
| 32 | The solution shall maintain end-to-end lineage visualization from source system to dashboard/report layer. | | |
| 33 | The platform must provide automated impact analysis for changes in schemas, transformations, dashboards, or models. | | |
| 34 | The solution shall support automated data profiling and quality scoring during ingestion and processing. | | |
| 35 | The platform must enable rule-based validation, cleansing, and standardization of incoming datasets. | | |
| 36 | The solution shall provide configurable exception handling workflows and data stewardship mechanisms. | | |
| 37 | The platform must support entity harmonization and deduplication across regulatory datasets. | | |
| 38 | The solution shall enable approval workflows for master data creation, modification, and validation. | | |
| 39 | The platform must log all data modifications and user access activities for audit compliance. | | |
| 40 | The solution shall generate automated alerts for data quality threshold breaches. | | |
| 41 | The platform must support classification and tagging of datasets based on sensitivity and regulatory categorization. | | |
| 42 | The solution shall enforce governance policies at dataset, table, column, and row levels. | | |
| 43 | The platform must provide masking, anonymization, and role-based data access controls for sensitive attributes. | | |
| 44 | The solution shall support version control for metadata definitions, pipelines, and datasets. | | |
| 45 | The platform must ensure full audit-readiness aligned with NIC/MeitY security and logging standards. | | |

## D. SECTION D - Master Data Management Compliance

| Sr. No. | Requirement Description | Compliance (Y/N) | Remarks |
|---|---|---|---|
| 46 | The solution must provide centralized master data management for core entities such as Licensee, Product, Location, Laboratory, and Supplier. | | |
| 47 | The platform shall support survivorship rules and golden record generation across conflicting source records. | | |
| 48 | The solution must enable hierarchy management across organizational levels (HQ, Regional Office, Laboratory, Port). | | |
| 49 | The platform shall support configurable taxonomy and reference data alignment across departments. | | |
| 50 | The solution must support controlled versioning and audit tracking of master data updates. | | |
| 51 | The platform shall enable rule-based entity matching across multiple data sources. | | |
| 52 | The solution must provide stewardship dashboards to monitor data consistency and quality KPIs. | | |

## E. SECTION E - Analytics & Visualization Compliance

| Sr. No. | Requirement Description | Compliance (Y/N) | Remarks |
|---|---|---|---|
| 53 | The solution must provide an interactive, web-based analytics workspace accessible via secure browser interfaces. | | |
| 54 | The platform shall support integration with leading BI tools through Rest API. | | |
| 55 | The solution must enable low-code/no-code dashboard creation by authorized business users. | | |
| 56 | The platform shall support drill-down, drill-through, slicing, and dicing capabilities for guided analysis. | | |
| 57 | The solution must support hierarchical drill capabilities from HQ to field-level units. | | |

| Sr. No. | Requirement Description | Compliance (Y/N) | Remarks |
|---|---|---|---|
| 58 | The platform shall enable KPI-based scorecards and executive-level reporting dashboards. | | |
| 59 | The solution must support threshold-based alerts visualized within dashboards. | | |
| 60 | The platform shall enable automated scheduling and distribution of reports. | | |
| 61 | The solution must support export in standard formats including PDF, Excel, and CSV. | | |
| 62 | The platform shall provide geo-spatial visualization capabilities for inspection and surveillance planning. | | |
| 63 | The solution must support near real-time dashboard refresh with end-to-end latency under defined thresholds. | | |
| 64 | The platform shall allow embedding of conversational analytics widgets within dashboards and portals. | | |

## F. SECTION F - AI / ML Enablement Compliance

| Sr. No. | Requirement Description | Compliance (Y/N) | Remarks |
|---|---|---|---|
| 65 | The solution must provide an AI/ML workbench supporting integration with Python and R environments. | | |
| 66 | The platform shall support complete model lifecycle management including training, validation, deployment, and monitoring. | | |
| 67 | The solution must provide version control and audit logging of models and scoring logic. | | |
| 68 | The platform shall support automated retraining workflows and scheduled model refresh. | | |
| 69 | The solution must enable performance tracking and drift detection for deployed models. | | |
| 70 | The platform shall provide explainable AI outputs with transparent scoring logic. | | |

| Sr. No. | Requirement Description | Compliance (Y/N) | Remarks |
|---|---|---|---|
| 71 | The solution must enable predictive risk scoring of regulated entities. | | |
| 72 | The platform shall support anomaly detection across licensing, inspection, and compliance datasets. | | |
| 73 | The solution must embed predictive and prescriptive insights within operational dashboards. | | |
| 74 | The platform shall allow concurrent execution of multiple analytical models. | | |
| 75 | The solution must integrate AI-driven scoring logic with Risk Management Systems (RMS). | | |

## G. SECTION G - Agentic AI & Decision Intelligence Compliance

| Sr. No. | Requirement Description | Compliance (Y/N) | Remarks |
|---|---|---|---|
| 76 | The solution must support configurable AI-driven agents capable of autonomously monitoring datasets, identifying patterns, and triggering analytical workflows. | | |
| 77 | The platform shall enable deployment of goal-oriented agents for continuous evaluation of compliance, surveillance, and operational datasets. | | |
| 78 | The solution must allow agents to generate proactive alerts, recommendations, and contextual insights based on defined thresholds and models. | | |
| 79 | The platform shall provide traceability and explainability for all AI-generated recommendations to ensure transparency and auditability. | | |
| 80 | The solution must support human-in-the-loop validation mechanisms before execution of critical AI-driven actions. | | |
| 81 | The platform shall enable orchestration of multiple agents across ingestion, quality validation, analytics, and monitoring workflows. | | |

| Sr. No. | Requirement Description | Compliance (Y/N) | Remarks |
|---|---|---|---|
| 82 | The solution must allow configuration of agent logic using metadata-driven or low-code interfaces without extensive programming. | | |
| 83 | The platform shall support agents for automated data quality monitoring, anomaly detection, forecasting, and risk scoring. | | |
| 84 | The solution must maintain logs of all agent actions, decisions, and workflow triggers for governance and audit review. | | |
| 85 | The platform shall enable automated generation and publishing of insights to designated dashboards or insight portals. | | |

## H. SECTION H - Conversational & Assisted Intelligence Compliance

| Sr. No. | Requirement Description | Compliance (Y/N) | Remarks |
|---|---|---|---|
| 86 | The solution must provide a secure natural-language query interface allowing users to interact with datasets conversationally. | | |
| 87 | The platform shall translate user queries into governed analytical outputs without bypassing access control policies. | | |
| 88 | The solution must enforce role-based access controls within conversational analytics environments. | | |
| 89 | The platform shall generate contextual narratives, summaries, and explanations alongside analytical outputs. | | |
| 90 | The solution must support guided analytics for non-technical users to explore insights without requiring coding skills. | | |
| 91 | The platform shall maintain audit logs of conversational queries and generated outputs for traceability. | | |

## I. SECTION I - Use Case Enablement & Advanced Analytics Compliance

| Sr. No. | Requirement Description | Compliance (Y/N) | Remarks |
|---|---|---|---|
| 92 | The solution must support ingestion and analysis of external signals such as social media or public-domain datasets where legally permissible. | | |
| 93 | The platform shall enable predictive surveillance models for inspection prioritization and risk-based targeting. | | |
| 94 | The solution must support configurable surge-monitoring analytics for festival- or event-driven scenarios (e.g., seasonal demand spikes). | | |
| 95 | The platform shall enable geo-spatial and temporal pattern analysis for regulatory planning. | | |
| 96 | The solution must support structured OCR-based document data extraction for analytics integration (excluding handwritten interpretation). | | |
| 97 | The platform shall enable AI-assisted monitoring of contractual or operational lifecycle events for automated alerts and renewals. | | |
| 98 | The solution must allow configuration of dynamic sampling or inspection strategies driven by analytics outputs. | | |

## J. SECTION J - Security, Performance & Compliance Requirements

| Sr. No. | Requirement Description | Compliance (Y/N) | Remarks |
|---|---|---|---|
| 99 | The solution must support secure authentication mechanisms including SSO, MFA, and standards-based identity federation. | | |
| 100 | The platform shall ensure encryption of data at rest and in transit using industry-standard cryptographic protocols. | | |
| 101 | The solution must maintain comprehensive audit trails of user activities, system actions, and configuration changes. | | |

| Sr. No. | Requirement Description | Compliance (Y/N) | Remarks |
|---|---|---|---|
| 102 | The platform shall support role-based masking, anonymization, and controlled exposure of sensitive information. | | |
| 103 | The solution must include disaster recovery and backup mechanisms aligned with Government continuity requirements. | | |
| 104 | The platform shall support concurrent multi-user workloads without degradation of analytical performance. | | |
| 105 | The solution must maintain defined response-time thresholds for dashboards, analytics execution, and data access. | | |
| 106 | The platform shall provide monitoring tools for system health, performance utilization, and operational alerts. | | |

## K. SECTION K - Implementation, Extensibility & Support Compliance

| Sr. No. | Requirement Description | Compliance (Y/N) | Remarks |
|---|---|---|---|
| 107 | The bidder must adopt a product-led implementation methodology leveraging configurable platform capabilities rather than extensive custom development. | | |
| 108 | The solution must minimize manual coding dependency through metadata-driven pipeline and model configuration. | | |
| 109 | The bidder shall clearly distinguish between configured features and any custom-developed components. | | |
| 110 | The platform must support rapid onboarding of additional datasets, users, and analytical use cases through configuration. | | |
| 111 | The solution shall include structured training programs for administrators, analysts, and business users. | | |
| 112 | The bidder must provide complete technical documentation including architecture, data flows, metadata definitions, and APIs. | | |

| Sr. No. | Requirement Description | Compliance (Y/N) | Remarks |
|---|---|---|---|
| 113 | The solution shall include post-implementation support with defined SLAs and upgrade mechanisms. | | |
| 114 | The bidder must provide knowledge transfer to designated FSSAI personnel for long-term sustainability. | | |
| 115 | The platform shall support extensibility to incorporate future AI, analytics, or regulatory capabilities without major redesign. | | |

## 5. Pre – Qualification for OEM of AI-ENABLED DATA PLATFORM Solution

| Sr. No. | Eligibility Criteria | Supporting documents |
|---|---|---|
| 1 | The proposed AI-ENABLED DATA PLATFORM solution must be an Integrated COTS* platform comprising of Data Management, Data Quality, Advanced Analytics, Machine Learning, Forecasting, Streaming Analytics, Mathematical Optimization, Text Analytics, Visualization from a single OEM and no special development shall be required to meet the specifications.<br><br>*COTS (Commercial off-The Shelf) product means<br><br>a. A solution that already exists for sales and is listed on GeM in the Business Intelligence & Data Analytics software category,<br><br>AND<br><br>b. Delivers a common set of functions with the ability to be customized or configured.<br><br>AND<br><br>c. The product should be self-sufficient and must not require a third-party application/software (except Database and Operating System) or open-source Components, to meet the requirement of the RFP. | a. MAF (Manufacturer Authorization Form) with proposed product listing from OEM to be provided.<br><br>b. Self-certification, from authorized signatory of the OEM, which includes list of individual components that comprise AI-ENABLED DATA PLATFORM solution along with the name of the OEM of each of these components. |
| 2 | The OEM for the proposed COTS AI-ENABLED DATA PLATFORM solution should have received, minimum 03 (three) orders, for AI/ML enabled Data platform solution, in last 5 (five) years from Government of India or State Government Organizations or urban local Body or PSU with contract value more than INR 3 (three) Crores. | Purchase Order Copy OR<br>Work Order OR<br>Contract Copy OR<br>Agreement Copy<br>All above issued by the Government of India or State Government Organizations or urban local Body or PSU or an authorized reseller of the OEM.<br><br>The submitted document should clearly indicate date, name of client, product name and scope of work. |

| Sr. No. | Eligibility Criteria | Supporting documents |
|---|---|---|
| 3 | The OEM for the proposed COTS AI-ENABLED DATA PLATFORM solution should be a company registered under Indian Companies Act 1956.<br>AND<br><br>Operating in India for at least last 10 years as on date of submission of this RFP<br><br>AND<br><br>Having minimum revenue of INR 100 crores per year for the last three financial years. (2022-23; 2023-24; and 2024-25)<br><br>If the audited balance sheet of FY 2024- 25 is not available, then the net worth of the last 3 Audited Financial Years (2021- 22, 2022-23, 2023-24) will be considered. | Certificate of Incorporation issued by the Registrar of Companies, India.<br><br>Self-declaration from the authorized Signatory of the OEM for minimum revenue of INR 100 Crores per year for the last three financial years. (2022-23; 2023-24; and 2024-25)<br><br>If the audited balance sheet of FY 2024- 25 is not available, then self-declaration from the authorized Signatory of the OEM required. |
| 4 | The technology platform for the proposed AI-ENABLED DATA PLATFORM solution, offered by the COTS OEM, should be a Leader in any two of the latest:<br>• Gartner Magic Quadrant for Data Science and Machine Learning (2024 or later)<br>• Forrester Wave report for AI Decisioning Platforms (2024 or later)<br>• IDC MarketSpace report for Worldwide Machine Learning Operations Platforms (2024 or later) | Self-certified copy from authorized signatory of the OEM:<br><br>Gartner's Magic Quadrant report for Data Science and Machine Learning Platforms (2024 or later)<br><br>The Forrester Wave™: AI Decisioning Platforms (2024 or later)<br><br>IDC MarketScape: Worldwide Machine Learning Operations Platforms (2024 or later) |
| 5 | The OEM for AI-ENABLED DATA PLATFORM solution should have at least one R&D center in India and the R&D center should have been in existence for at least last 10 years as on the date of submission of the RFP.<br>AND<br>Should have a technical support center in India,<br>AND<br>Should have a Self-owned & self-operated training center in India and this training center should have | a. Certificate of Incorporation issued by the Registrar of Companies, India for the R&D center.<br><br>b. Self-Declaration from the authorized signatory of the OEM for the technical support center.<br><br>c. Self-Declaration from the authorized signatory of the OEM for |

| Sr. No. | Eligibility Criteria | Supporting documents |
|---|---|---|
| | been in existence for at least last 10 years as on the date of submission of the RFP.<br>AND<br>The OEM should provide Globally recognized certificates for the Trainings. | the training center.<br><br>d. Copy of Globally recognized certificate with self-declaration from the authorized signatory of the OEM |
| 6 | The proposed COTS AI-ENABLED DATA PLATFORM solution, should provide deployment options: - on-premise, cloud and hybrid deployment (both on-premises and cloud)<br><br>AND<br><br>be cloud vendor agnostic to deploy on MeitY approved cloud infrastructure | Self-declaration from the authorized signatory of the OEM. |
| 7 | The bidder should provide perpetual license of the proposed COTS AI-ENABLED DATA PLATFORM solution, with no limits on number of cores or data size. The proposed solution should have a scalable architecture allowing the solution to grow horizontally without incurring any additional cost of software. | Self-declaration from the authorized signatory of the OEM. |
| 8 | Bidder should have the following certifications, as on the date of bid submission<br><br>i) ISO 9001 (Quality Management System)<br>ii) ISO 27001 (Information Security Management System)<br>iii) ISO 20000 (Information Technology Service Management)<br>iv) CMMI Level 5/ CMMI Level 4/ CMMI Level 3 | Original digital certificate copies |

## 6. Evaluation Criteria & Evaluation Process

# A) Bid Evaluation Criteria

Technical evaluation criteria will include the following parameters:-

| # | Criteria | Max Marks | Documents |
|---|---|---|---|
| Bidder (25 Marks) | | | |
| 1 | The bidder must have a minimum annual turnover of Rs. 100 Crores of last three audited Financial Years (2022-23; 2023-24; and 2024-25).<br>If the audited balance sheet of FY 2024-25 is not available, then the minimum average Annual Turnover of last 3<br>Audited Financial Years (2021-22, 2022-23, 2023-24) will be considered. | 10 Marks | Copy of the Audited Annual financial statements, Balance Sheet and P&L Account for the respective financial years. |
| | >=100 Cr and <150 Cr | 6 Marks | |
| | >150 Cr and <=200 Cr | 8 Marks | |
| | >=200 Cr | 10 Marks | |
| 2 | Bidder should have experience of implementation of any AI/ML based data platform technology in India with Central or state Government / PSUs /Urban Local Body in past five (5) years with minimum value of at least INR 15 Cr.<br><br>Note:<br>a. For the above experience, completed projects and ongoing projects whose go-live declared before date of publishing this tender shall be considered.<br>b. Projects done for in-house use of parent company; associate companies (with common stakeholders) would not be considered. However, projects done for external customer(s) by parent company or fully owned subsidiaries would be considered. | 10 Marks | Documentary evidence such as LOA/PO/WO or work completion certificates from clients preferably with contact details of clients.<br><br>The references should indicate client name, scope of work, project start date and date of completion in all respect. |

| # | Criteria | Max Marks | Documents |
|---|---|---|---|
| | | | |
| | i. =>15 Cr and <20 Cr | 2 Marks | |
| | ii. >=20 Cr and <25 Cr | 3 Marks | |
| | iii. > 25 Cr | 5 Marks | |
| | | | |
| 3 | Bidder should have the following certifications, as on the date of bid submission<br>i) ISO 9001 (Quality Management System)<br>ii) ISO 27001 (Information Security Management System)<br>iii) ISO 20000 (Information Technology Service Management)<br>iv) CMMI Level 5/ CMMI Level 4/ CMMI Level 3 | 5 Marks | Copy of certification from<br>authorized certification body valid as on date |
| | Any two Certificates | 2 Mark | |
| | Any three Certificates | 3 Marks | |
| | All four certificates | 5 Marks | |
| OEM of the proposed COTS AI-ENABLED DATA PLATFORM Solution (45 Marks) | | | |
| 4 | The OEM for the proposed COTS AI-ENABLED DATA PLATFORM solution should have received, minimum 03 (three) orders, for AI/ML enabled Data platform solution, in last 5 (five) years from Indian Central Government or State Government Organizations or urban local Body or PSU with contract value more than INR 3 (three) Crores. | 15 Marks | Purchase Order Copy OR Work Order OR Contract Copy OR Agreement Copy<br>All above issued by the Indian Central Government or State Government Organizations or urban local Body or PSU, or SI or |

| # | Criteria | Max Marks | Documents |
|---|---|---|---|
| | Equal to 3 orders from Central Government or State Government Organizations or urban local Body or PSU | 6 Marks | an authorized reseller of the OEM.<br>The submitted document should clearly indicate date, name of client, product name and scope of work. |
| | 4 to 6 orders from Indian Central Government or State Government Organizations or urban local Body or PSU | 10 Marks | |
| | More than 6 orders from Indian Central Government or State Government Organizations or urban local Body or PSU | 15 Marks | |
| 5 | The proposed COTS AI-ENABLED DATA PLATFORM solution shall fulfill Technical Requirement Specifications provided in the RFP. | 20 Marks | Response Technical Requirement Specifications provided in this RFP.<br>NOTE:<br>1. Each 'Technical Requirement Specification' shall be responded with 'F, 'P', 'C' or 'N' labels.<br>2. Scoring for each 'Technical Specification' shall be as follows: a. F: 1 mark<br>b. P: 0.5 c. C: 0.25 marks<br>c. N: 0 marks<br>3. The total score shall be normalized to 10 marks and be considered for further evaluation. 4. Any of the requirements which has been answered in affirmative can be asked to be demonstrated during the technical presentation. |
| 6 | The technology platform for the proposed AI-ENABLED DATA PLATFORM solution, offered by the COTS OEM, should be a Leader in any two of the latest:<br>• Gartner Magic Quadrant for Data Science and Machine Learning (2024 or later)<br>• Forrester Wave report for AI Decisioning | 5 Marks | Self-certified copy from authorized signatory of the OEM<br><br>Gartner's Magic Quadrant report for Data Science and |

| # | Criteria | Max Marks | Documents |
|---|---|---|---|
| | Platforms (2024 or later)<br>• IDC MarketSpace report for Worldwide Machine Learning Operations Platforms (2024 or later) | | Machine Learning Platforms<br><br>The Forrester Wave™: AI Decisioning Platforms<br><br>IDC MarketScape: Worldwide Machine Learning Operations Platforms |
| | In any two reports | 2 Marks | |
| | In all three reports | 3 Marks | |
| 7 | The OEM of the AI-ENABLED DATA PLATFORM solution must have a minimum revenue of INR 100 crores per year for the last three financial years. (2022-23; 2023-24; and 2024-25)<br>If the audited balance sheet of FY 2024- 25 is not available, then the net worth of the last 3 Audited Financial Years (2021- 22, 2022-23, 2023-24) will be considered. | 5 Marks | Self-declaration from the authorized Signatory of the OEM for revenue per year for the last three financial years. (2022-23; 2023-24; and 2024-25) |
| | >=100 Cr and <150 Cr | 2 Marks | |
| | >=150 Cr and <200 Cr | 3 Marks | |
| | >=200 Cr | 5 Marks | |
| Presentation and Demonstration of the Proposed Solution (30 Marks) | | | |
| 8 | Technical Presentation & Demonstration<br>• Understanding of requirements<br>• Proposed Technology Solution<br>• Overall Approach and Methodology<br>• Project Plan<br>• Resource Deployment Plan<br>• Implementation Proposal<br>• Handholding, Training and Capacity Building<br>• Proposed Architecture<br>• Case studies in AI & ML based data platform | 30 Marks | Technical Presentation & Demonstration<br><br>The bidder may be required to demonstrate any of the capabilities which are mentioned in Annexure 1 of the RFP |

## B) Bid Evaluation Process

A two-stage procedure shall be adopted in evaluating the proposals. Technical evaluation shall be carried out first, followed by the Price Bid evaluation.

### a. Evaluation Committee

i. The Bid Evaluation Committee constituted by the FSSAI shall evaluate the bids.

ii. The decision of the Technical Evaluation Committee in the evaluation of the Technical and Financial bids shall be final. Technical Bid evaluation is to ensure that the proposed solution by the bidders meets the requirements as outlined in the BID Document.

### b. Technical Evaluation

The evaluation will be two stage process in which the technical submission will be evaluated and then selected SP will be eligible for FE. The FE will decide the L1 vendor based on weightage in TE and FE. Eligibility of bidder will be based on proof of documents submitted as per criteria, past experience, financial capability, resource availability, which should form the technical offer by fulfilling the requisite qualifying requirement as mentioned above. Sub-contracting by the service provider will be considered as breach of contract.

The technical evaluation of bids will be carried out to ensure compliance with requirements mentioned in the BID. A minimum of **70 marks** should be scored in the technical proposal for the bid to be declared technically qualified.

**i.** The process of technical evaluation as specified in GeM will be applicable to ensure compliance with requirements mentioned in the BID.

ii. TEC will carry out a detailed evaluation of the Technical Bids received by it in order to determine whether they are substantially responsive to the requirements set forth in the BID, TEC will examine the information supplied by the bidders, and shall evaluate the same as per the evaluation criteria specified in this BID

iii. During the Scrutiny of the Technical bid by the TEC approved by the competent authority, necessary clarification, if any, required by the FSSAI shall be furnished by the bidder within time given by the FSSAI for the same. FSSAI is at liberty to verify any or all the documents submitted by the bidders even by referring to third parties. After the technical evaluation is completed, opening of the Price bids will be done. Date and time of opening of the Price Bids will be intimated to the technically qualified bidders.

iv. Proposal Presentation: TEC may invite each bidder to make a presentation. The purpose of such presentation would be to allow the bidders to present their proposed approach to the TEC and the key point in their proposal. All the Service Providers will have to present the approach and methodology as per the schedule to be intimated through email. The purpose of such presentation would be to allow the bidders to present their proposed approach to the TEC and the key point in their proposal.

v. Proposals submitted by Service provider will be evaluated based on Quality and Cost Based Selection. The criteria for selection will be based on the evaluation

criteria and the document submitted as part of technical offering. No financial elements should be mentioned in the bid.

## c. Financial Evaluation

The cost indicated in the Financial Proposal on GeM shall be considered as final price and the service provider declared as deemed as final and reflecting the total cost of services ("Bid Price"). Omission, if any, in costing any item shall not entitle the agency to be compensated and the liability to fulfill its obligations as per the Scope of Work within the total quoted price shall be that of the bidder.

(a) Any conditionality included in the financial bid will lead to disqualification of the entire bid.

(b) **Quality and Cost Based Selection (QCBS)** method will be used among technically qualified Bidders, combining the score of bids, giving a weightage of Seventy–Thirty (70:30) for technical and financial scores. The Bidder with the Highest Combined Score (H1) will be selected from the technically qualified Bidders.

(c) The successful bidders will have to enter into an agreement with FSSAI comprising of various clauses agreed upon amicably between both parties. Suitable and mandatory changes will also be added in the agreement for smooth execution of the contract.

**(d) Combined Technical–Financial Evaluation Process**

In respect of all technically qualified Solution Providers, in whose case the financial bid has been opened, a combined techno-financial evaluation will be done as per the following procedure:

**Technical Evaluation:** Bidders are evaluated on technical criteria, out of 100 marks. A minimum qualifying score 70 is required to proceed to the financial evaluation.

**Financial Normalization:** Financial bids are normalized, with the lowest bidder ($C_{low}$) getting 100 points, and others getting points relative to the lowest price:

- Normalized Financial Score = (Lowest Bid / Bidder's Quote) × 100

**Final Score Calculation:** The technical and financial marks are multiplied by their respective weightages (e.g., 70% technical, 30% financial) to get the final composite score.

**H-1 Selection: The bidder with the highest combined score (H-1) is awarded the contract.**

v. In the event of a tie in the Combined Score between two or more technically qualified bidders, the bidder with the higher Technical Score will be given preference and declared the bidder. Should a tie persist after applying the technical score preference (or if the technical scores are also identical), the bidder who submitted the lowest original financial quote will be selected as the bidder.

vi. The financial bid shall be applicable at the total solution level, and not on a per-component or category-wise basis.

## 1. Award of Contract:

i. **Award Criteria**- FSSAI will make the contract with the selected bidder.

ii. **Right to Accept Any Proposal and to Reject Any or All Proposal(s)**- FSSAI reserves the right to accept or reject any proposal, and to annul the procurement process and reject all proposals at any time prior to award of Work Order / contract , without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for FSSAI action.

iii. **Notification of Award**-Prior to the expiration of the validity period of this tender, FSSAI will notify the successful bidder in writing or by fax or by email, that its proposal has been accepted. In case the tendering process has not been completed within the stipulated period, FSSAI, may like to request the bidders to extend the validity period of the bid.

iv. **Acceptance Letter** - FSSAI will require the selected bidder to provide an acceptance letter, a PBG for a value equivalent to **3%** of the Project Cost within **30 days** from the issue of Work Order. The Performance Guarantee should be valid for 62 days beyond all contractual obligations. In case the selected bidder fails to submit the acceptance letter and PBG within the time stipulated, FSSAI at its discretion may decide to cancel the order without giving any reason. The PBG shall contain a claim period of six months from the last date of validity. FSSAI shall invoke the performance Bank guarantee in case the selected bidder fails to discharge their obligations as per the terms & conditions of the work order/contract.

v. The service provider shall execute project delivery and development tasks using resources operating from their own premises or FSSAI premises as agreed, but all deployment environments (Dev, UAT, Prod) shall be provisioned strictly on the FSSAI-designated Cloud/Infrastructure.

vi. In case the service provider breaches the contract condition or does not provide satisfactory services, FSSAI reserves the right to terminate the contract with one-month notice period. Service provider should ensure that all knowledge is handed over along with code and repositories / document.

vii. The prospective bidders should note that before acceptance of most responsive bid, FSSAI may establish the reasonableness of the rates on the basis of estimated rates and the prevailing market rates consistent with the quality required. In case the rates quoted by the successful agency are found to be Abnormally High Rated (AHR) or Abnormally Low Rated (ALR), the bid shall be rejected and the decision of FSSAI shall be final in this regard.

viii. Subcontracting of the bid is not allowed and if the service provider is found to be following this practice, FSSAI reserves the right to terminate the contract under breach of contract.

ix. **Fraud and Corrupt Practices-** FSSAI requires that Bidders participating under this tender Document must observe the highest standards of ethics during the procurement process. In pursuance of this policy, FSSAI:

a) Defines, for the purposes of this provision, the terms set forth as follows:

i. “Corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of FSSAI or any personnel of Bidders participating in this tender.

ii. “Fraudulent practice” means erroneous presentation of facts, in order to influence a procurement process or the execution of a contract, to FSSAI, and includes collusive

practice among Respondents (prior to or after Proposal submission) designed to establish Proposal prices at artificially high or non-competitive levels and to deprive FSSAI of the benefits of free and open competition;

iii. "Coercive practices" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the tender and/ or execution of the contract.

b) Will reject a proposal for award, if it determines that the Bidder recommended for award, has been determined by FSSAI to have been engaged in corrupt, fraudulent or coercive practices.

c) Will declare a firm or any of its partner organizations ineligible, either indefinitely or for a stated period of time, for participating in future tenders and/or awarding the contract, if it at any time determines that the firm has engaged in corrupt or fraudulent practice in competing for the tender.

## 7. Contract Period

Unless otherwise stipulated, the contract Period for which the Service shall be contracted shall be three (3) years, unless terminated earlier as per the contract. In addition, at the option of FSSAI, the contract period may be extended another two (2) years at the same terms and conditions. Notice of renewal shall be provided by digital means to the Service Provider no later than thirty (30) days before the contract end.

## 8. Service Level Agreements and Penalty:

a. The Selected Bidder/Service Provider shall at all times maintain the stipulated service quality and system performance throughout the entire engagement, encompassing both the implementation phase and the post-deployment operational and maintenance phases.

b. This SLA establishes a shared understanding between the System Integrator (SI) and FSSAI regarding the performance expectations during the engagement period.

c. A Service Level violation will occur if the SI fails to meet Milestone or Minimum Service Levels (whichever is applicable) for a particular Service Level.

d. The primary intent of Penalties is to ensure that the system performs in accordance with the defined service levels. Penalties are not meant to be punitive or, conversely, a vehicle for cutting fees

e. In case the delay is not attributable to the Vendor, the purchaser may waive off the penalty. However purchaser's decisions in this regard shall be final.

## f. Service Level Agreements for Project Implementation

| Phase | Milestone | Expected Timeline | Penalty for Delay |
|---|---|---|---|
| **Phase 1: Inception** | Approval of SRS & FRS per FSSAI | Within 30 working days of award | 0.5% of the Total Contract Value (TCV) per week of delay (capped at 10% of TCV)<br><br>If the cumulative penalty exceeds 10% of the TCV it shall be considered a material breach, resulting in contract termination |
| **Phase 2: Development / Customisation** | Completion of module development and internal testing | Within 60 working days of SRS/FRS approval | 0.5% of the Total Contract Value (TCV) per week of delay (capped at 10% of TCV)<br><br>If the cumulative penalty exceeds 10% of the TCV, it shall be considered a material breach, resulting in contract termination |
| **Phase 3: Deployment** | Go-live for each selected solution per FSSAI | Within 20 working days post UAT | 0.5% of the Total Contract Value (TCV) per week of delay (capped at 10% of TCV)<br>If the cumulative penalty exceeds 10% of the TCV, it shall be considered a material breach, resulting in contract termination |
| **Phase 4: Capacity Building** | Completion of 2 training sessions per FSSAI team | Within 15 days post deployment | 0.25% of the total contract value per missed or inadequate session |
| **Phase 5: O&M** | Support for the deployed tool as per ministry-specific needs | Defined below, to be expanded as per specific ministry requirements | 0.25% of the quarterly O&M payment per unresolved issue beyond agreed SLA timelines |

g. Service Level Agreements for Operations & Maintenance Phase

| S.No. | SLA Parameter | Target Performance | Description | Penalty |
|---|---|---|---|---|
| 1 | **Quarterly Security Report Submission** | Report to be submitted within 7 calendar days of each quarter-end | The report shall include:<br>• Security incidents and resolution<br>• Access control logs<br>• Threat detection metrics<br>• Vulnerability assessments<br>• Audit log summaries<br>• Compliance with defined KPIs | • 1–7 days late: 0.5% of quarterly O&M fee<br>• 8–14 days late: 1%•<br>More than 14 days late: 3% |
| 2 | **Resolution of Severity 1 Issues** | 100% of Severity 1 incidents resolved within 6 hours of occurrence or ticket logging (whichever is earlier) | Severity 1: Critical issues with major impact, including:<br>• System unavailability<br>• Major data loss or corruption<br>• Security breach or attack<br>• Denial of service | Up to 6 Hours Nil<br>>6 to 8 Hours 1.5% of Quarterly O&M Fee<br>>8 to 10 Hours 3% of Quarterly O&M Fee<br>• Beyond 10 Hours 5% of Quarterly O&M Fee + 1% per additional hour |
| 3 | **Resolution of Severity 2 Issues** | 100% resolution within 8 hours of occurrence or ticket logging (whichever is earlier) | Severity 2: High-impact issues such as:<br>• System functioning in degraded mode<br>• Frequent timeouts or slowness<br>• Major user complaints | • Up to 8 Hours Nil<br>• >8 to 10 Hours 0.25%<br>• >10 to 14 Hours 0.5%<br>• Beyond 14 Hours 1% + 0.25% per additional hour |
| 4 | **Resolution of Severity 3 Issues** | 100% resolution within 24 hours of occurrence or ticket logging | Severity 3: Low-impact issues such as:<br>• Cosmetic bugs<br>• UI issues<br>• Minor functionality gaps | • Up to 24 Hours Nil<br>• >24 to 32 Hours 0.1%<br>• >32 to 40 Hours 0.25%<br>• Beyond 40 Hours 0.5% + |

| | | | | |
|---|---|---|---|---|
| | | | | 0.1% per additional hour |
| 5 | **Application Uptime (Excluding Scheduled Maintenance )** | >= 99.9 % | Per occurrence, this will be calculated monthly after the implementation and go-live period. | • For every 0.1% reduction below the committed monthly uptime of 99.9%, a penalty of 0.5% of the applicable quarterly O&M payment shall be imposed, subject to a maximum penalty of 10% of the quarterly O&M payment. |

## 9. Payment Terms:

Payments to the selected Service Provider shall be made in accordance with the milestones and terms specified below. All payments shall be subject to satisfactory performance and certification by the competent authority/designated officer of FSSAI.

| Sl. No. | Description | Rate | No of Years | GST | Total Cost |
|---|---|---|---|---|---|
| 1. | Perpetual License for AI-enabled Data Platform-Based System | To be quoted (One-time upfront fee) | 3 | Extra | To be quoted |
| 2. | Implementation and customization of AI-enabled Data Platform-Based System as per FSSAI | One time cost | – | Extra | To be quoted |
| 3 | Technical Support & Maintenance for three years (Years 1, 2, and 3) for<br>Advanced Analytics and Machine Learning Based System | To be quoted (Per Year) | 3 | | To be quoted |

| S. No. | Milestone | % Payment |
|---|---|---|
| 1 | Award of Contract | Nil |
| 2 | Submission and Approval of SRS & FRS | 10% |
| 3 | Completion of Development & Configuration | 25% |
| 4 | Successful UAT Sign-off | 20% |
| 5 | Integration, Go-Live & Environment Configuration | 15% |
| 6 | Training, Documentation & Knowledge Transfer | 10% |
| 7 | Final Acceptance by FSSAI | 20% |
| 8 | O&M Services | Quarterly based on actuals |

## 10. Milestones and Timelines

a. **Phase 1: Inception:**

I. Finalised System Requirement Specification (SRS) and Functional Requirement Specification (FRS) for each selected tool, in alignment with ministry-specific requirements.

II. Inception report with proposed delivery timeline, team deployment plan, and engagement approach.

b. **Phase 2: Development / Customisation:**

I. Developed or configured AI-based tools as per approved FRS.

II. Technical documentation including tool architecture, data flow, and access protocols.

III. Internal test results, QA checklists, and error logs.

IV. Environment setup artefacts (cloud/on-premise configuration notes, where applicable).

c. **Phase 3: Deployment**

I. Deployment-ready versions of AI solutions tailored to ministry requirements.

II. Logs of deployment actions and integration notes with external systems (e.g., MIS or dashboards), if required.

III. Tool configuration manuals and basic administrator guides.

d. **Phase 4: Capacity Building**

I. User training manuals and guides contextualized to each solution.

II. Training session decks, attendance logs, and feedback summaries.

III. Video walkthroughs (if required by the ministry).

e. **Phase 5: Operations & Maintenance (O&M)**

I. Monthly performance and ticket-resolution reports.

II. Change logs and enhancement records.

III. Reports on usage analytics and tool feedback (if such analytics are built in).

Initially, the Phase 5 (O&M) will span over 36 months from the actual date of completion of Phase 4. Thereafter, this phase may be extended for a further 24 months in slots of 12 months each, at the discretion of the ministries adopting the relevant solutions.

Note: The scope and detail of certain deliverables (e.g., integration requirements, O&M formats) will be finalised post stakeholder consultation with the respective Ministries/Departments and codified in binding work orders or amendments.

The overall project duration shall be Forty-Two (42) months, comprising six (6) months for inception, development, deployment, and capacity building, followed by thirty (36) months of Operations & Maintenance (O&M). The O&M phase may be extended further at the discretion of the Purchaser.

| Phase | Key Activities | Expected Timeline |
|---|---|---|
| **Phase 1: Inception** | Finalise SRS/FRS per FSSAI; submit inception report with delivery plan and engagement strategy. | Within 30 working days of award |
| **Phase 2: Development / Customisation** | Develop and test AI tools as per FRS; provide environment setup, internal QA reports, and documentation. | Within 60 working days post SRS/FRS approval |
| **Phase 3: Deployment** | Deploy tools per FSSAI infra; conduct UAT and integration; provide tool manuals and Go-Live support. | Within 60 working days of completion of Phase 2. |
| **Phase 4: Capacity Building** | Deliver user training sessions and documentation; conduct feedback loops and update guidance as needed. | Within 15 working days post deployment |

| | | |
|---|---|---|
| **Phase 5: Operations & Maintenance** | Provide ongoing support, track tickets, monitor tool performance, and submit monthly service reports. | Defined based on ministry requirement, timeline of the O&M phase to be 36 months |

## 11. Purchase Preference Policies of the Government

Unless otherwise stipulated in TIS/ AITB, FSSAI reserves its right to grant preferences to the following categories of eligible Bidders under various Government Policies/ Directives:

- Class I Local Suppliers under Public Procurement (Preference to Make in India) Order 2017" (MII) of Department for Promotion of Industry and Internal Trade, (DPIIT - Public Procurement Section) as revised from time to time.
- Bidders from Micro and/ or Small Enterprises (MSEs) under Public Procurement Policy for the Micro and Small Enterprises (MSEs) Order, 2012 as amended from time to time.
- Start-ups Bidders under Ministry of Finance, Department of Expenditure, Public Procurement Division OM No F.20\212014-PPD dated 25.07.2016 and subsequent clarifications; and/ or
- Any other category of Bidders, as per any Government Policies, announced from time to time, if so provided in the TIS/ AITB

## 12. Make in India Order

Orders issued by the Government of India regarding eligibility to participate and for purchase preference to "Local Suppliers" to encourage 'Make in India' and promote manufacturing and production of goods and services in India shall apply to this procurement

## 13. Right to Vary Quantities at the Time of Award:

At the time of contract award, FSSAI reserves the right to increase or decrease without any change in the unit prices or other terms and conditions of the bid provided this increase/ decrease does not exceed 50 (fifty) percent of tendered quantity.

## 14. Termination of Contract

FSSAI may, terminate this contract by giving notice period of 30 days with prior and written notice indicating its intention to terminate the Contract under the following circumstances:

- FSSAI is of the opinion that there has been such event of default on the part of the Agency which would make it proper and necessary to terminate this Contract and may include failure on the part of the Agency to respect any of its commitments with regard to any part of its obligations under this Contract.
- The Agency has failed to commence the provision of Services or has without any lawful excuse under these conditions suspended the work for 30 consecutive days.
- The Agency has neglected or failed to observe and perform all or any of the term's acts, matters or things under this Contract to be observed and performed by it.
- The Agency has acted in any manner to the detrimental interest, reputation, dignity, name or prestige of FSSAI.
- The Agency has been declared insolvent/bankrupt.

## 15. Conflict of Interest

Any bidder having a conflict of interest, which substantially affects fair competition, shall not be eligible to bid in this tender. Bids found to have a conflict of interest shall be rejected as nonresponsive.

## 16. DISCLAIMER

The issue of the Tender Document does not imply that FSSAI is bound to select bid(s), and it reserves the right without assigning any reason to:

a) reject any or all of the Bids, or
b) cancel the tender process; or
c) abandon the procurement of the Services; or
d) issue another tender for identical or similar Services

The information submitted in response to this BID may be subject to public release (as per RTI norms). Therefore, it is advisable not to include proprietary or confidential business information in the response. Vendors responding to this notice assume the risk of public disclosure if confidential information is included.

This notice is not to be construed as a commitment by the FSSAI to contract for services. Please be advised that the FSSAI will not pay for any information provided as a result of this notice and would neither recognize nor reimburse any cost associated with any BID submission.

## 17. Force Majeure

On the occurrence of any unforeseen event, beyond the control of either Party, directly interfering with the delivery of Services arising during the currency of the contract, such as war, hostilities, acts of the public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts, or acts of God, the Service Provider shall, within a week from the commencement thereof, notify the same in writing to the other Party with reasonable evidence thereof. Unless otherwise directed by FSSAI in writing, the Service Provider shall continue to perform its obligations under the contract as far as reasonably practicable and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. If the force majeure condition(s) mentioned above be in force for 90 days or more at any time, either party shall have the option to terminate the contract on expiry of 90 days of commencement of such force majeure by giving 14 days' notice to the other party in writing. In case of such termination, no damages shall be claimed by either party against the other, save and except those which had occurred under any other clause of this Contract before such termination.

## 18. Confidentiality, Copyrights and Intellectual Property Rights (IPRs)

i) "Confidential Information" shall mean (i) intellectual property information; (ii) technical or business information (iii) proprietary or internal information related to the current, future and proposed products or services of the Parties including samples, apparatuses, equipment, financial information, process/flow charts, business models, information related to procurement requirements, purchasing, manufacturing, customers, investors, management,

employees, business and contractual relationships, business forecasts, sales and merchandising, marketing plans, information the Parties provide regarding third parties; (iv) information disclosed pursuant to this Agreement and (v) all such other information which by its nature or the circumstances of its disclosure is confidential.

ii) The Parties agree that they shall hold in trust any Confidential Information received by either Party, under this Agreement, and the strictest of confidence shall be maintained in respect of such Confidential Information. The Parties also agree:
(a) to maintain and use the Confidential Information only for the purposes of this Agreement and only as permitted herein;
(b) to only make copies as specifically authorized by the prior written consent of the other party and with the same confidential or proprietary notices as may be printed or displayed on the original;
(c) to restrict access and disclosure of Confidential Information to such of their employees, agents, vendors, and contractors strictly on a "need to know" basis and in accordance with clause 4 of this Agreement;
(d) to return the confidential information contained in tangible form of the other party when demanded by it.

iii) Confidential Information in oral form must be identified as confidential at the time of disclosure and confirmed as such in writing within 30 (thirty) days of such disclosure. Confidential Information does not include information which:
(a) the recipient knew or had in its possession, prior to disclosure, without limitation on its confidentiality;
(b) is independently developed by the recipient without breach of this Agreement;
(c) information in the public domain as a matter of law;
(d) is received from a third party not subject to the obligation of confidentiality with respect to such information;
(e) is released from confidentiality with the written consent of the other party.

iv) SI and its agents shall exercise professionally reasonable care to maintain the required confidentiality and privacy with regard to FSSAI data, wherever applicable.

All hardware, equipment and custom developed artifacts, data models, AI/ML algorithms, technical documents and services obtained for the express purpose of this engagement shall be in favour of the FSSAI and shall be submitted to FSSAI on demand subject to the terms of this Agreement.

All records pertaining to this engagement shall be made available to the FSSAI and its authorized agents upon request for verification and/or audit, on the basis of a written request.

FSSAI shall retain exclusive intellectual property rights to all artifacts to which FSSAI has sovereign rights or by virtue of a formalized agreement with another party. Nothing herein shall or will be construed or deemed to grant to the MSP any right, title, license, sub-license, proprietary right or other claim against or interest in, to or under (whether by estoppels, by implication or otherwise) to the aforesaid FSSAI rights;

All proprietary information, correspondence and documentation etc., exchange among MSP and FSSAI in relation to managing and monitoring to the implementation to the project and the

performance, shall be considered as confidential and privileged by the parties and disclose only to their respective Officers and members of committees on a need to know basis. MSP shall treat implementation as confidential and not use the same partially or totally for any purpose other than that of the agreement without the prior written approval of FSSAI.

The Intellectual Property Rights of the pre-existing COTS platform and Standard Materials shall remain vested with the OEM, subject to a perpetual, royalty-free license to FSSAI. However, all custom-developed artifacts, configurations, FSSAI-specific data models, trained AI/ML algorithms, and custom pipelines built during the engagement shall remain the exclusive property/IPR of FSSAI.

## 19. Post-Contract Continuity, Perpetual Licensing and Annual Technical Support (ATS)

### A: Post-Warranty & Annual Technical Support (ATS) Continuity:

The software licenses provided under this contract shall be perpetual in nature and shall not expire upon completion, termination, or expiry of the implementation and Operations & Maintenance (O&M) period. FSSAI shall retain the irrevocable, perpetual, non-exclusive, enterprise-wide right to use the licensed COTS-Based AI-Enabled Data Platform, including all custom configurations, workflows, integrations, metadata, dashboards, reports, AI/ML models, and related artefacts developed under this contract.

The entire solution shall be deployed on infrastructure owned, controlled, or designated by FSSAI, including Government Cloud, Private Cloud, or any other infrastructure approved by FSSAI.

Upon completion of the initial contract period, comprising implementation and three (3) years of Operations & Maintenance (O&M), FSSAI shall have the sole discretion, but not the obligation, to renew Annual Technical Support (ATS) and O&M services with the OEM and/or Selected Bidder on an annual basis.

The OEM/Selected Bidder shall guarantee that the ATS and O&M charges for Year 4 and Year 5 shall not exceed seven percent (7%) escalation over the annualized ATS/O&M charges applicable during Year 3 of the contract.

Any further extension beyond Year 5 shall be governed through mutually agreed commercial terms, subject to applicable Government of India procurement policies and approval of the Competent Authority.

### B: Operational Continuity in Absence of ATS Renewal

In the event FSSAI elects not to renew ATS and/or O&M services after expiry of the contract period, the solution shall continue to remain fully operational without interruption,

degradation, deactivation, license expiry, remote lockout, feature restriction, or dependency on any vendor-controlled mechanism.

Under such circumstances, FSSAI shall continue to retain:

a) Full and unrestricted access to the platform and all deployed components.

b) Access to all historical and current data, metadata, reports, dashboards, workflows, configurations, and integrations.

c) Continued execution of configured data ingestion pipelines, data processing workflows, analytics, and AI/ML models already deployed within the environment.

d) Administrative control over the deployed infrastructure and application environment.

e) Rights to engage any third-party agency or internal team for operation and maintenance of the platform.

However, in the absence of ATS/O&M renewal, FSSAI shall not be entitled to:

a) New software releases, feature upgrades, or version enhancements issued by the OEM.

b) Security patches, bug fixes, hotfixes, or software updates released after expiry of the support period.

c) SLA-backed technical support, helpdesk services, or incident management support from the OEM/Selected Bidder.

d) OEM product warranty obligations beyond the contracted support period.

The OEM/Selected Bidder shall not incorporate any technical, contractual, or licensing mechanism that may restrict, disable, suspend, degrade, or otherwise impact the continued use of the platform by FSSAI after expiry of the support period.

## 20. Exit Management

The Selected Bidder shall provide comprehensive Exit Management support during the last six (6) months of the contract period or as directed by FSSAI.

The objective of Exit Management shall be to ensure seamless transition of operations, administration, maintenance, and support responsibilities to FSSAI personnel or any agency nominated by FSSAI without disruption to services.

As part of Exit Management, the Selected Bidder shall mandatorily provide:

a) Complete system architecture documentation, deployment topology, configuration details, and infrastructure inventory.

b) Administrative credentials, privileged access documentation, service accounts, certificates, and key management procedures, wherever permitted under security policies.

c) Complete configuration maps, integration specifications, API documentation, metadata definitions, data models, workflow configurations, and dashboard catalogues.

d) Standard Operating Procedures (SOPs), operational manuals, troubleshooting guides, incident response procedures, and maintenance documentation.

e) Runbooks covering service startup and shutdown procedures, application monitoring, health checks, data ingestion monitoring, log management, backup and recovery procedures, and routine maintenance activities.

f) Complete deployment, installation, configuration, upgrade, migration, and rollback scripts required for independent operation and maintenance of the environment.

g) Knowledge transfer sessions, workshops, and hands-on operational training for designated FSSAI personnel or nominated service providers.

h) Support for migration or transition activities, if required by FSSAI.

The Exit Management phase shall be deemed complete only upon written acceptance by FSSAI.

## 21. Knowledge Transfer

The Selected Bidder shall ensure structured and comprehensive knowledge transfer throughout the project lifecycle and during the Exit Management phase.

The Knowledge Transfer programme shall include, but not be limited to:

a) Platform administration and configuration management.

b) Monitoring and management of data ingestion and processing pipelines.

c) Administration of analytics, reporting, AI/ML, and data governance components.

d) User management, role management, security administration, and audit management.

e) Backup, restoration, disaster recovery, and business continuity procedures.

f) Environment deployment, scaling, patch management, and upgrade procedures.

g) Troubleshooting and issue resolution processes.

h) Operational runbooks, deployment scripts, configuration repositories, and technical documentation.

The Selected Bidder shall provide all training materials, manuals, recordings, presentations, and operational documentation in editable formats. FSSAI shall have perpetual rights to use such documentation for internal operational and maintenance purposes.

## 22. Data Ownership

All data, databases, metadata, reports, dashboards, analytical outputs, AI/ML models, training datasets, derived datasets, and related artefacts created, processed, or maintained under this contract shall remain the sole property of FSSAI.

## 23. Security Audit

The selected bidder shall conduct Vulnerability Assessment and Penetration Testing (VAPT) through a CERT-In empanelled auditor before Go-Live and annually thereafter during the contract period.

## 24. Failure to agree with the Terms and Conditions of the RFP

Failure of the successful Bidder to agree with the Terms & Conditions of the RFP shall constitute sufficient grounds for the annulment of the award, in which event the Purchaser may award the contract to the next best value Bidder or call for new Proposals from the interested Bidders. In such a case, the Purchaser shall invoke the EMD of the most responsive Bidder.

Government eProcurement System

# eProcurement System Government of India

## Tender Details

Date : 19-Aug-2026 04:56 PM

Print

### Basic Details

| | | | |
|---|---|---|---|
| **Organisation Chain** | Food Safety and Standards Authority of India\|\|Head Office - FSSAI | | |
| **Tender Reference Number** | IT-11036/1/2023-IT-FSSAI | | |
| **Tender ID** | 2026_FSSAI_922737_1 | **Withdrawal Allowed** | Yes |
| **Tender Type** | Open Tender | **Form of contract** | EOI |
| **Tender Category** | Goods | **No. of Covers** | 1 |
| **General Technical Evaluation Allowed** | No | **ItemWise Technical Evaluation Allowed** | No |
| **Payment Mode** | Not Applicable | **Is Multi Currency Allowed For BOQ** | No |
| **Is Multi Currency Allowed For Fee** | No | **Allow Two Stage Bidding** | No |

### Cover Details, No. Of Covers - 1

| Cover No | Cover | Document Type | Description |
|---|---|---|---|
| 1 | Fee/PreQual/Technical/Finance | .pdf | Upload Document as per RFI and SOW |

### Tender Fee Details, [Total Fee in ₹ * - 0.00]

| | | | |
|---|---|---|---|
| **Tender Fee in ₹** | 0.00 | | |
| **Fee Payable To** | Nil | **Fee Payable At** | Nil |
| **Tender Fee Exemption Allowed** | No | | |

### EMD Fee Details

| | | | |
|---|---|---|---|
| **EMD Amount in ₹** | 0.00 | **EMD Exemption Allowed** | No |
| **EMD Fee Type** | fixed | **EMD Percentage** | NA |
| **EMD Payable To** | Nil | **EMD Payable At** | Nil |

Click to view modification history

### Work /Item(s)

| | | | | | |
|---|---|---|---|---|---|
| **Title** | RFI for Price Discovery and Validation of Requirements for Selection of an Agency for Implementation of a COTS-Based AI-Enabled Data Platform for FSSAI | | | | |
| **Work Description** | RFI for Price Discovery and Validation of Requirements for Selection of an Agency for Implementation of a COTS-Based AI-Enabled Data Platform for FSSAI | | | | |
| **Pre Qualification Details** | Please refer Tender documents. | | | | |
| **Independent External Monitor/Remarks** | NA | | | | |
| **Show Tender Value in Public Domain** | No | | | | |
| **Tender Value in ₹** | 0.00 | **Product Category** | Computer-Data Processing | **Sub category** | RFI for Price Discovery and Validation of Requirem |
| **Contract Type** | Tender | **Bid Validity(Days)** | 180 | **Period Of Work(Days)** | 365 |
| **Location** | FSSAI FDA Bhawan | **Pincode** | 110002 | **Pre Bid Meeting Place** | NA |
| **Pre Bid Meeting Address** | NA | **Pre Bid Meeting Date** | NA | **Bid Opening Place** | FSSAI FDA Bhawan IT Division |
| **Should Allow NDA Tender** | No | **Allow Preferential Bidder** | No | | |
| **Tenderer Class** | Not Applicable | | | | |

### Critical Dates

| | | | |
|---|---|---|---|
| **Publish Date** | 21-Aug-2026 03:00 PM | **Bid Opening Date** | 07-Sep-2026 02:00 PM |
| **Document Download / Sale Start Date** | 21-Aug-2026 03:00 PM | **Document Download / Sale End Date** | 04-Sep-2026 03:00 PM |
| **Clarification Start Date** | 21-Aug-2026 03:00 PM | **Clarification End Date** | 04-Sep-2026 03:00 PM |

| Bid Submission Start Date | 21-Aug-2026 03:00 PM | Bid Submission End Date | 04-Sep-2026 03:00 PM |
|---|---|---|---|

## Tender Documents

**NIT Document**

| S.No | Document Name | Description | Document Size (in KB) |
|---|---|---|---|
| 1 | Tendernotice_1.pdf | REQUEST FOR INFORMATION (RFI) for Price Discovery and Validation of Requirements for Selection of an Agency for Implementation of a COTS-Based AI-Enabled Data Platform for FSSAI | 1470.20 |

**Work Item Documents**

| S.No | Document Type | Document Name | Description | Document Size (in KB) |
|---|---|---|---|---|
| 1 | Tender Documents | RFISOWCOTSAI.pdf | RFI and SOW for Price Discovery and Validation of Requirements for Selection of an Agency for Implementation of a COTS-Based AI-Enabled Data Platform for FSSAI | 1454.43 |

## Bid Openers List

| S.No | Bid Opener Login Id | Bid Opener Name | Certificate Name |
|---|---|---|---|
| 1. | nileshkumar.89@fssai.gov.in | Nilesh Kumar | NILESH KUMAR |
| 2. | prince.kuleria89@fssai.gov.in | Prince Kuleria | PRINCE KULERIA |
| 3. | satija.lovish@fssai.gov.in | Lovish Satija | Lovish Satija |

## GeMARPTS Details

| | |
|---|---|
| **Reason for non availability of GeMARPTS ID** | Urgent nature of Procurement |
| **Remarks** | RFI for Price Discovery and Validation of Requirements for Selection of an Agency for Implementation of a COTS-Based AI-Enabled Data Platform for FSSAI |
| **Document Name** | Noting.pdf |
| **Document Size (in KB)** | 48.48 |

## Tender Properties

| | | | |
|---|---|---|---|
| **Auto Tendering Process allowed** | No | **Show Technical bid status** | Yes |
| **Show Finance bid status** | Yes | **Stage to disclose Bid Details in Public Domain** | Technical Bid Opening |
| **BoQ Comparative Chart model** | NIL | **BoQ Compartive chart decimal places** | 2 |
| **BoQ Comparative Chart Rank Type** | NIL | **Form Based BoQ** | No |

## TIA Undertaking

| S.No | Undertaking to Order | Tender complying with Order | Reason for non compliance of Order |
|---|---|---|---|
| 1 | PPP-MII Order 2017 | Agree | |
| 2 | MSEs Order 2012 | Agree | |

## Tender Inviting Authority

| | |
|---|---|
| **Name** | CTO |
| **Address** | FSSAI FDA Bhawan IT Division |

## Tender Creator Details

| | |
|---|---|
| **Created By** | Nilesh Kumar |
| **Designation** | ASSISTANT MANAGER (IT) |
| **Created Date** | 19-Aug-2026 12:48 PM |