GOVERNMENT OF PAKISTAN

MINISTRY OF NATIONAL FOOD SECURITY & RESEARCH (MNFSR)

REQUEST FOR PROPOSAL (RFP)

Design, Development, Deployment, Hosting and Three (3) Years' Managed Support of an Enterprise AI Assistant for Ministry of National Food Security & Research (MNFSR)

RFP No: MNFSR/ITD/AI-ASSISTANT/RFP-01/2026

Date of Issue: XXXXXXXXXX, 2026

Procurement Method: Single Stage – Two Envelope Procedure

Issued by:

Ministry of National Food Security & Research(MNFSR)
Email: procurement@MNFSR.gov.pk | www.MNFSR.gov.pk

Disclaimer

This Request for Proposal ("RFP") is issued by the Ministry of National Food Security & Research(MNFSR) solely for the purpose of inviting proposals from eligible and interested Bidders for the design, development, deployment, hosting and three (3) years' managed support of an Enterprise AI Assistant for MNFSR . This document does not constitute an offer or contract and confers no rights on any recipient. MNFSR reserves the right, at its sole discretion and without assigning any reason, to amend, withdraw, cancel or annul this RFP, in whole or in part, at any stage prior to contract signing, and to reject any or all proposals, without incurring any liability towards any Bidder, in accordance with the Public Procurement Rules, 2004 issued by the Public Procurement Regulatory Authority (PPRA). All costs associated with the preparation and submission of proposals shall be borne solely by the Bidders.

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1. Introduction & Background

1.1 About MNFSR

The Ministry of National Food Security & Research (MNFSR) is the principal federal ministry responsible for national food security, agricultural policy, research coordination, and the sustainable development of Pakistan's agriculture, livestock, fisheries, and allied sectors. Its mandate includes policy formulation, strategic planning, agricultural research, crop forecasting, food availability, plant and animal quarantine, seed certification and registration, agricultural trade facilitation, and coordination with provincial governments and relevant national and international organizations. The Ministry operates through its specialized Wings and technical units, as well as attached departments and autonomous organizations, including the Pakistan Agricultural Research Council (PARC), Federal Seed Certification & Registration Department (FSC&RD), Department of Plant Protection (DPP), Animal Quarantine Department, Agricultural Policy Institute (API), Pakistan Central Cotton Committee (PCCC), Fisheries Development Board (FDB), Livestock and Dairy Development Board (LDDB), and Pakistan Agricultural Storage & Services Corporation (PASSCO).(https://www.mnfsr.gov.pk/)

MNFSR administers, implements, and contributes to a broad and continuously evolving body of federal laws, rules, policies, regulations, notifications, guidelines, research publications, technical standards, food-security assessments, agricultural statistics, and official decisions. These cover areas such as seed certification, plant protection and quarantine, animal health and quarantine, agricultural research, crop production, livestock development, food availability, strategic reserves, agricultural inputs, and the import and export of agricultural commodities. Officers across MNFSR's Wings, attached departments, and autonomous organizations—as well as provincial governments, researchers, farmers, exporters, development partners, policymakers, and the general public—routinely require fast, accurate, and properly referenced information drawn from this extensive and technical repository of agricultural and food-security knowledge.

1.2 Rationale for this Assignment

In alignment with the Ministry of National Food Security & Research's (MNFSR) the Government of Pakistan's Pakistan Cloud First Policy (2022), MNFSR intends to engage a competent, experienced, and financially sound Bidder ("the Bidder"/"the Bidder") to design, develop, deploy, and operate an enterprise-grade Artificial Intelligence (AI) Assistant ("the Solution"). The Solution shall support MNFSR's officers and staff, attached departments, autonomous organizations, policymakers, researchers, and other authorized stakeholders across the Ministry's core domains, including food security, agriculture, livestock, fisheries, agricultural research, crop monitoring, plant and animal health, seed certification, agricultural trade, and policy formulation. Where approved by MNFSR, the Solution may also provide controlled access to relevant information and services for farmers, exporters, development partners, and the general public. All data processed by the Solution shall be securely hosted, stored, and retained exclusively within the territorial jurisdiction of Pakistan.

This document sets out the objectives, eligibility and qualification requirements, scope of work, functional and technical requirements, implementation approach, deliverables, service-level requirements, technical evaluation criteria, financial proposal format, and applicable information security, data governance, privacy, and data-residency requirements for the engagement. Interested Bidders are invited to submit their Technical and Financial Proposals strictly in accordance with the instructions, terms, and conditions contained herein.

1.3 Definitions

- **"MNFSR"** means the Ministry of National Food Security and Research, Federal Ministry of the Government of Pakistan.
- **"Bidder or Vendor"** means a company, Bidder, joint venture or consortium submitting a proposal in response to this RFP.
- **"Solution or AI Assistant"** means the complete AI-based software application, models, infrastructure and services proposed and delivered under this RFP.
- **"Contract Period"** means the implementation period plus three (3) years of hosting, operations and managed support following Go-Live.
- **"GoP"** means the Government of Pakistan
- **"PPRA"** means the Public Procurement Regulatory Authority.

2. Objectives of the Assignment

The overarching goal of this assignment is to design, develop, deploy, and operate a secure, reliable, and Pakistan-hosted Enterprise AI Assistant that materially improves the speed, accuracy, consistency, and accessibility of information and services across the Ministry of National Food Security & Research (MNFSR). The specific objectives of the assignment are to:

1. Provide MNFSR officers and staff across all Wings, attached departments, and autonomous organizations with an AI-powered assistant capable of rapidly retrieving, summarising, and citing relevant laws, rules, policies, regulations, notifications, guidelines, technical standards, research publications, official decisions, and internal Standard Operating Procedures (SOPs).

2. Reduce the average time required to research, draft, review, and finalise official correspondence, policy briefs, summaries, notifications, reports, meeting minutes, parliamentary responses, technical notes, and other official documents through AI-assisted drafting, subject to mandatory human review and approval.

3. Provide a 24/7 self-service AI helpdesk for farmers, researchers, exporters, importers, agricultural businesses, development partners, and the general public to address frequently raised queries relating to food security, crops, livestock, fisheries, seeds, plant and animal quarantine, agricultural research, applicable procedures, and MNFSR's public services.

4. Support food-security monitoring, agricultural planning, crop forecasting, plant and animal health surveillance, seed certification, agricultural trade facilitation, and policy analysis through AI-assisted document review, data analysis, anomaly identification, trend detection, and summarisation of technical records, while ensuring that all official decisions remain subject to human authority and accountability.

5. Establish a reusable, scalable, and extensible enterprise AI platform comprising data ingestion, document processing, retrieval-augmented generation (RAG), model orchestration, access controls, security guardrails, system integrations, monitoring, and analytics that may be progressively extended to additional MNFSR business domains and authorized stakeholders.

6. Ensure complete data sovereignty by requiring all MNFSR data, documents, databases, embeddings, vector stores, model components and weights, user interactions, audit logs, system logs, and backups to be hosted, processed, stored, and retained exclusively within the territorial boundaries of Pakistan throughout the Contract Period.

7. Ensure that the Solution is secure by design, protects sensitive and official information, and remains resilient against common AI and Large Language Model (LLM) risks, including prompt injection, unauthorized access, data leakage, insecure outputs, model manipulation, bias, and hallucination. The Solution shall comply with applicable Pakistani laws, cybersecurity requirements, and relevant Government of Pakistan digital, cloud, data-governance, and information-security policies.

8. Build MNFSR's internal institutional and technical capacity through structured training, documentation, hands-on knowledge transfer, and administrative access, enabling MNFSR's designated Information Technology/Digital Transformation team to progressively

administer, monitor, configure, integrate, extend, and, where required, internalise the Solution.

9. Establish a measurable and Service-Level Agreement (SLA)-governed managed-services and technical-support model for a period of three (3) years following Go-Live, including defined performance indicators, response and resolution times, system-availability targets, incident management, security monitoring, periodic reporting, model and knowledge-base updates, and continuous improvement of the Solution.

3. Scope of Work

The Scope of Work is organised into:

(a) Functional scope across MNFSR's

(b) Technical and solution scope

(c) AI infrastructure and hosting requirements for three (3) years

(d) implementation phases

(e)training and knowledge transfer

(f) exit management.

The selected Bidder shall be responsible, on an end-to-end basis, for the discovery, design, development, integration, testing, security hardening, deployment, in-country hosting, operation, maintenance, and managed support of the Solution.

3.1 Functional Scope - Business Domains & Use Cases

The AI Assistant shall be a single, unified platform serving the following MNFSR business domains and user groups, at minimum. The Bidder's Technical Proposal shall demonstrate a clear understanding of, and a proposed approach for, each of the representative use cases set out below.

Business Domain / Wing	Representative Use Cases	Primary Users
Food Security Policy, Planning & Coordination	AI-assisted policy research; retrieval and comparison of laws, policies, notifications, strategies and international commitments; preparation of briefs, summaries, meeting material and evidence-based policy notes.	MNFSR policy and technical Wings; senior management; authorized policymakers
Crop Monitoring, Forecasting & Agricultural Statistics	Analysis and summarisation of crop-area, production, yield, price, weather and supply data; trend identification; anomaly alerts; support for crop forecasts, food-balance assessments and management dashboards.	Crop and food-security analysts; statistical teams; senior management
Agricultural Research & Innovation	Search and synthesis of agricultural research, technical reports, trial results, publications and best practices; identification of relevant technologies, evidence gaps and research linkages.	MNFSR; PARC/NARC and research institutes; researchers; technical experts
Seed Certification & Registration	Guided assistance on seed laws, variety registration, certification procedures, field inspection requirements, testing standards,	MNFSR and FSC&RD staff; seed companies; breeders; applicants; farmers

	licensing and application-status information from authorized systems.	
Plant Protection, Quarantine & Pesticide Management	Query resolution on plant quarantine, import/export procedures, phytosanitary requirements, pest surveillance, pesticide registration and related technical guidelines; summarisation of inspection and surveillance records.	MNFSR and DPP staff; inspectors; importers/exporters; growers; laboratories
Livestock, Animal Health & Animal Quarantine	Assistance on animal quarantine procedures, import/export requirements, disease surveillance, livestock development, breeding, dairy and fisheries-related policies and technical material.	MNFSR and attached organizations; veterinarians; livestock and fisheries stakeholders
Agricultural Trade, Markets, Storage & Strategic Reserves	Analysis of agricultural trade, prices, stocks, procurement, storage and supply-chain information; retrieval of export/import requirements; support for market briefs, food-supply monitoring and strategic-reserve planning.	MNFSR; API; PASSCO; trade and market analysts; authorized stakeholders
Cotton, Fisheries & Other Sectoral Programmes	Retrieval and summarisation of sector-specific policies, research, production data, programme records and technical guidance; support for project monitoring and stakeholder queries.	MNFSR; PCCC; FDB and other relevant entities; technical teams; sector stakeholders
Farmer and Stakeholder Services / Public Helpdesk	Public-facing chatbot on mnfsr.gov.pk and approved portals for frequently asked questions, procedural guidance, programme information, application or request status where integrated, and escalation to designated human support channels.	Farmers; researchers; exporters/importers; agribusinesses; development partners; general public
Corporate Support Functions (Legal, HR, Finance, Administration, Procurement & IT)	Internal knowledge assistant for applicable laws, Rules of Business, SOPs, HR policies, financial and procurement procedures, administrative instructions, IT support material and official drafting templates.	All authorized MNFSR employees

The Bidder shall propose a phased rollout sequence across these domains, prioritised in consultation with MNFSR during the Discovery and Solution Design phase. The final sequence shall reflect business criticality, data readiness, security classification, integration dependencies, expected public value, and the availability of designated content owners and subject-matter experts.

3.2 Technical / Solution Scope

Technology neutrality: This RFP is technology-neutral. MNFSR does not mandate, and has no preference for, any specific product, brand, programming language, framework, hardware manufacturer, cloud service provider, or foundation-model vendor. Where a functional capability is described below (for example, a vector database, retrieval-augmented generation framework, orchestration layer, or model-serving stack), it identifies a required capability only and not a named product. Bidders may propose an open-source, proprietary, or hybrid technology stack that best meets the functional, performance, security, interoperability, scalability, and data-residency requirements of this RFP. Proposals shall be evaluated on their demonstrated compliance and technical merit rather than on the specific technologies selected.

Knowledge ingestion and retrieval: Design and implement a secure data-ingestion pipeline covering applicable laws, rules, policies, notifications, guidelines, technical standards, research publications, reports, manuals, SOPs, project records, datasets and other authorized content held by MNFSR, its attached departments and autonomous organizations. The Solution shall use a Retrieval-Augmented Generation (RAG) architecture that grounds substantive answers in relevant, version-controlled and traceable source material, with document-level citations and metadata.

Language model layer: The Bidder may propose any suitable Large Language Model or combination of models, whether open-weight or proprietary/licensed, provided that: (a) inference, fine-tuning, embedding generation and model evaluation occur solely on infrastructure physically located within Pakistan; (b) no prompt, response, document, dataset, embedding, telemetry or derivative of MNFSR data is transmitted to, cached by, or processed on any server, endpoint or API outside Pakistan at any stage; and (c) the licensing arrangements permit private, in-country deployment and continued operation for the full Contract Period.

Bilingual support: The Solution shall support English and Urdu queries and responses at minimum, including accurate handling of agricultural terminology, Government of Pakistan drafting conventions and mixed-language queries. Bidders may separately propose support for additional regional languages.

Access and identity: Integrate with MNFSR's existing or designated identity and access management (IAM) and single sign-on (SSO) environment through supported standards-based protocols, such as SAML, OIDC or LDAP. Role-based access control shall ensure that responses, functions and source documents are limited to the requesting user's role, Wing, organization and security clearance. A separate, appropriately throttled, content-filtered and isolated channel shall be provided for public and external users.

Guardrails and quality assurance: Provide hallucination mitigation, mandatory source citation, confidence or evidence indicators, content and security filters, configurable refusal and escalation rules, and human-in-the-loop review for AI-generated content intended for official use. The Solution shall capture structured user feedback and support controlled testing, evaluation and improvement of prompts, models and retrieval quality.

Administration console: Provide a secure back-office console for MNFSR's designated Information Technology/Digital Transformation team and authorized content administrators to manage data sources, ingestion status, document versions, user roles, prompts, guardrail policies, integrations, analytics, feedback, audit logs and system configuration.

Channels: Provide a responsive web application and an embeddable chatbot widget for mnfsr.gov.pk and other approved MNFSR portals. Integration with MNFSR's internal collaboration, intranet or messaging tools may be proposed as an optional component and shall be separately priced.

Integration: Provide secure, standards-based API integration with authorized MNFSR systems, including, where applicable, e-Office, knowledge-management repositories, websites and portals, dashboards, programme-monitoring systems, laboratory or registration systems, and systems of attached departments and autonomous organizations. Real-time or transactional information, such as application, inspection, programme or request status, shall be obtained from the authoritative source system rather than inferred from static content.

Analytics: Provide role-based dashboards covering usage, user adoption, query trends, response quality, frequently accessed topics, unanswered or low-confidence queries, source-document gaps, system performance and user satisfaction. Analytics shall support continuous improvement without exposing restricted content or personal information to unauthorized users.

3.3 AI Infrastructure & Hosting Requirements (Three-Year Term)

The Bidder shall design, provision, secure and operate — for the full three (3)-year hosting term following Go-Live — all AI infrastructure required to run the Solution at production scale, entirely within Pakistan. At minimum, the proposed infrastructure and hosting model shall meet the following requirements:

3.3.1 Facility & Hosting Model

- Hosting shall be provided via a private cloud arrangement with a data centre physically located within Pakistan, either owned by the Bidder or contracted through a licensed Pakistani data centre/cloud service provider (CSP) — public-cloud regions located outside Pakistan are not acceptable for any environment (Dev/Test/UAT/Prod).
- The data centre facility must be, at minimum, Uptime Institute Tier III (or equivalent) certified, with ISO/IEC 27001 certification for its Information Security Management System (ISMS).
- The Bidder shall classify all Solution data in accordance with the Government of Pakistan's Cloud First Policy (2022) data classification scheme and Bidder that MNFSR data (regulatory records, case files, personally identifiable information, model weights and embeddings) is treated at minimum as "Sensitive/Confidential", requiring an Accredited Government Cloud/CSP located within Pakistan.

3.3.2 Compute, Storage & Scalability

- Dedicated GPU-accelerated compute for LLM inference and (if applicable) fine-tuning, delivered as integrated AI all-in-one appliance units that meet, at minimum, every parameter of the GPU Compute Appliance specification at Section 3.3.7 and Table 3-1, and sized to support the concurrency and response-time targets defined in the Bidder's Technical Proposal (indicative baseline: minimum 300 concurrent internal users and 500 concurrent public/eZfile users at peak, 95th-percentile response latency under 5 seconds for retrieval-augmented queries). This GPU compute infrastructure shall be financed and, on completion of the three-year hosting term, transferred to MNFSR as set out in Section 3.3.6.
- Separate, logically and physically isolated Development, Test, User Acceptance Testing (UAT), and Production environments.

- Encrypted primary storage with automated daily backups; minimum 7-year retention for regulatory records-linked data (or as directed by MNFSR's record-retention policy), with backups also retained exclusively within Pakistan.
- Elastic scalability to accommodate at least 100% growth in usage over the Contract Period without requiring a change in hosting jurisdiction or a fresh procurement. Scale-out shall be achieved by clustering additional appliance units into the existing unified cluster in accordance with Section 3.3.7, without re-architecting or interrupting the deployed environment.

3.3.3 High Availability & Disaster Recovery

- High-availability (active-active or active-passive) architecture within Pakistan; a geographically separate Disaster Recovery (DR) site also located within Pakistan.
- Target Recovery Time Objective (RTO) of 4 hours and Recovery Point Objective (RPO) of 1 hour, or better, to be conBiddered in the Technical Proposal.
- Guaranteed minimum production uptime of 99.5% measured monthly, with Service Level Agreement (SLA) credits for non-compliance as defined in the Contract.

3.3.4 AI/LLM Platform Stack

- A production-grade model-serving/inference stack, a vector database or equivalent retrieval index for embeddings, an orchestration/RAG framework, and MLOps/LLMOps tooling for monitoring model performance, drift and cost. These components shall be delivered as a pre-integrated, factory-installed and vendor-validated cloud-native AI stack on the appliance units specified at Section 3.3.7, rather than as separately assembled components integrated for the first time on this engagement; the Bidder shall evidence prior validation of the stack as an integrated whole and shall justify its choices in the Technical Proposal.
- Comprehensive audit logging of all prompts, responses, retrieved sources and administrative actions, retained within Pakistan and made available to MNFSR on request.

3.3.5 Managed Hosting Services (Years 1–3)

- 24×7 infrastructure monitoring and alerting; patch and vulnerability management; capacity planning and tuning; tiered technical support (L1/L2/L3) with defined response and resolution SLAs by severity.
- Quarterly performance, security and usage reports to MNFSR's ITD throughout the hosting term.

3.3.6 GPU Capital Asset Financing & Ownership Transfer

MNFSR intends to acquire, over time, ownership of the GPU and directly-associated AI-compute hardware underpinning the Solution, rather than procuring it as a pure ongoing service. Accordingly, the following capital-asset model shall apply, in addition to the recurring hosting/operations cost at Section 3.3.5:

- **Capital cost recovery:** The Bidder shall procure, install, commission and own the GPU/AI-compute hardware for the duration of the three-year hosting term. MNFSR shall pay the Bidder the capital cost of this hardware (as itemised in Form F-2A) in instalments distributed over the three (3)-year hosting term, in addition to — and shown separately from — the recurring AI infrastructure hosting cost (Form F-2B) and managed support cost (Form F-3).
- **Transfer of ownership:** Upon (a) expiry of the three-year hosting term (or earlier if MNFSR and the Bidder agree to an accelerated buy-out), and (b) receipt by the Bidder of the full GPU Capital

Cost Recovery Charge for all three years, title to and ownership of the GPU hardware (and the directly-associated compute/networking hardware costed under Form F-2A) shall transfer to MNFSR automatically and unconditionally, free of any lien, charge, encumbrance or third-party interest, and the hardware shall thereafter be recorded as a fixed asset of MNFSR.

- **Condition, maintenance & insurance:** Throughout the three-year term, the Bidder shall be responsible, at its own cost, for the insurance, maintenance, Bidderware/driver updates, warranty management and replacement of any faulty, degraded or failed GPU units, and shall deliver the hardware to MNFSR at the point of transfer in good operating condition consistent with normal wear and tear.
- **Handover documentation:** At the point of transfer, the Bidder shall execute a formal Certificate of Asset Transfer with MNFSR, reconciling each physical unit against the Form F-2A Asset Register (make, model, serial number, location), and shall hand over all manufacturer warranties (to the extent transferable), manuals, and maintenance records.
- **Early termination:** If the Contract is terminated prior to completion of the three-year term for reasons attributable to the Bidder, no further Capital Cost Recovery Charge shall fall due and ownership shall not transfer until MNFSR, at its option, either (i) pays the Bidder the un-recovered balance of the GPU Capital Cost and takes immediate ownership, or (ii) procures continuity of hosting from a successor vendor, in which case the outgoing Bidder shall cooperate fully with relocation/handover of the hardware as directed by MNFSR, in accordance with the Contract's termination clause.
- **No effect on data/IP ownership:** This hardware ownership-transfer arrangement is independent of, and additional to, MNFSR's ownership of source code, models, data and configurations under Section 8.6, which vests in MNFSR throughout the Contract Period regardless of the hardware transfer date.

3.3.7 GPU Compute Appliance — Minimum Technical Specification

The GPU and directly-associated AI-compute hardware financed under Section 3.3.6 and costed at Form F-2A shall conform to the minimum specification set out below. This specification defines the floor of acceptable capability only; the Bidder remains responsible for sizing the deployment to meet the performance, availability and environment-separation requirements of Sections 3.3.2 and 3.3.3.

- **Configuration basis:** The Bidder shall supply GPU compute capacity in the form of an integrated AI all-in-one appliance — a factory-integrated, rack-mountable GPU server combining compute, high-speed card-to-card interconnect, local NVMe storage and a pre-installed AI software stack in a single unit.

  All values in Table 3-1 are minimum acceptable values per unit; “≥” denotes “not less than”. Proposals offering values below any minimum in Table 3-1 shall be treated as non-responsive.

#	Parameter	Minimum Requirement
1	Processors	≥ 2 CPUs, ≥ 48 physical cores per CPU (≥ 96 cores per unit)
2	System memory	≥ 2 TB (2,048 GB)
3	GPU accelerators per unit	16
4	GPU memory per accelerator	≥ 96 GB
5	Aggregate GPU memory per unit	≥ 1,536 GB
6	Aggregate GPU memory bandwidth per unit	≥ 44 TB/s

7	Card-to-card interconnect bandwidth	≥ 700 GB/s per accelerator, via a high-speed intra-node interconnect fabric
8	Node-to-node interconnect (where multi-node scale-out is proposed)	≥ 1,600 Gbps RDMA per node
9	Local storage	≥ 4 × 3.84 TB NVMe SSD
10	Whole-unit compute performance (BF16/FP16)	≥ 1.9 PFLOP/s

Table 3-1 — Minimum specification per GPU server unit

Note: Any additional hardware/software requirement may also be the responsibility of the selected vendor.

- **Single-unit model-serving capability:** A single unit shall be capable of hosting and serving, at full BF16 precision and without accuracy loss from quantisation, a mixture-of-experts large language model of not less than 671 billion parameters, or a model of not less than 235 billion parameters, without distributing the model across multiple units. Indicative minimum serving performance on a single unit shall be: for a 671B-class model on all 16 accelerators, aggregate output throughput ≥ 1,300 tokens/s at ≥ 128 concurrent sessions; for a 235B-class model on 8 accelerators, aggregate output throughput ≥ 2,000 tokens/s at ≥ 256 concurrent sessions. This capability underpins the concurrency and latency targets at Section 3.3.2.
- **Scale-out and unified management:** The appliance shall support decentralised horizontal scale-out by clustering multiple single-unit appliances into a unified cluster — to a minimum of 48 GPU server units — to increase model concurrency and to extend retrieval-augmented-generation and agent services, without re-architecting or interrupting the deployed environment. The solution shall provide a unified management console covering single sign-on and authorisation, load balancing, multi-node management, monitoring and alerting. This clause gives effect to the elastic scalability requirement at Section 3.3.2.
- **Software stack:** Each unit shall be delivered with a cloud-native AI software stack, factory-installed and validated, comprising: an optimised high-performance inference engine; full-lifecycle model capabilities covering development, training, fine-tuning, inference, RAG and agent orchestration; PaaS components including a vector database, cache, full-text search and application observability; and an optional model-scheduling platform. The stack shall support both open-weight and licensed models deployed wholly within the delivered infrastructure, consistent with Sections 3.2 and 8.1.
- **Processor platform options:** The Bidder may offer the configuration on either an international or a domestically manufactured CPU platform. Where a domestic CPU platform is offered, all minimum parameters of Table 3-1 shall apply, except that system memory shall be not less than 1.5 TB (1,536 GB) on that platform. The Bidder shall state, per offered platform, the exact make and model of CPU, GPU, interconnect fabric and memory configuration.
- **Evidence:** The Bidder shall substantiate each value in Table 3-1 and each capability as mentioned above, by cross-reference to the relevant page of its Technical Proposal and, where available, to manufacturer datasheets or independent benchmark reports. A declaration of compliance unsupported by such reference may be disregarded.

3.4 Implementation Phases

Phase	Title	Key Activities
0	Inception	Contract signing, mobilisation, project governance setup, detailed work plan.
1	Discovery & Solution Design	Requirements workshops with all Wings, data/content inventory, solution architecture, security architecture, infrastructure design, sign-off on SRS/SDD.
2	Build, Integration & Content Ingestion	Development of application layers, RAG pipeline build-out, model deployment, integration with MNFSR systems, iterative demos.
3	Testing, Security Audit & UAT	System/integration testing, independent VAPT and security audit, remediation, User Acceptance Testing with MNFSR Wings, sign-off.
4	Go-Live & Change Management	Phased roll-out by domain, user training, communication/change-management support, hypercare period (minimum 4 weeks).
5	Managed Hosting, Support & Continuous Improvement (Years 1–3)	SLA-governed hosting and support, quarterly reviews, periodic security re-assessment, content/model refresh, roadmap for extension to new domains.

3.5 Training & Knowledge Transfer

- End-user training for staff across all in-scope Wings, delivered in-person and/or via recorded modules, with user guides in English and Urdu.
- Administrator training for MNFSR Focal Persons, covering content management, prompt/guardrail configuration, analytics, and infrastructure operations.
- Technical knowledge transfer to designated MNFSR Focal Persons, covering architecture, deployment pipelines, model retraining/refresh procedures and incident response, sufficient for MNFSR to progressively co-manage the Solution.

3.6 Exit Management

Not less than six (6) months prior to expiry of the three-year hosting term (or immediately upon early termination), the Bidder shall prepare and execute an Exit/Transition-Out Plan, approved by MNFSR, covering secure handover of all source code, configurations, fine-tuned model weights, embeddings, ingested content and data to MNFSR or a successor vendor, followed by certified secure deletion of all MNFSR data from the Bidder's own systems, as further detailed in Section 8 (Information Security & Data Residency Requirements).

4. Deliverables

The Bidder shall submit the following deliverables at each stage of the assignment. All deliverables shall be in English, in editable and PDF format, and are subject to formal review and written acceptance by MNFSR's ITD before associated payment milestones (Section 10) are released.

#	Deliverable	Acceptance Criteria	Indicative Timeline
1	Inception Report & Detailed Project Plan	Approved by MNFSR Project Steering Committee (PSC)	T + 2 weeks
2	Business Requirements & Solution Design Document (incl. security & infrastructure architecture)	Signed off by PSC	T + 6 weeks
3	Data Governance & Content Ingestion Plan	Approved by ITD; classification aligned to Cloud First Policy	T + 6 weeks
4	Developed AI Assistant Application (source code, configs, documentation)	Passes system/integration testing	Per phased build plan
5	Provisioned AI Infrastructure (Dev/Test/UAT/Prod, DR) with architecture diagrams & runbooks	Infrastructure walkthrough and documentation accepted by PSC	Before UAT commencement
6	Independent Security Assessment / VAPT Report & Remediation ConBidderation	Critical/High findings remediated and closed	Before Go-Live
7	User Manuals & Administrator Manuals (English & Urdu, where applicable)	Accepted by PSC	Before Go-Live
8	Training Completion Report	Minimum 90% of nominated staff trained	Within Go-Live phase
9	UAT Sign-Off Report	Formal written sign-off by MNFSR	End of Phase 3
10	Go-Live Report & Hypercare Summary	Solution live in production; hypercare issues closed	End of Phase 4
11	Quarterly Service, Security & Performance Reports	Submitted within 10 working days of quarter-end throughout hosting term	Quarterly, Years 1–3
12	Exit / Transition-Out Plan and Certified Data & IP Handover	MNFSR conBidders receipt of all code, data, models; secure deletion certificate provided	6 months before contract expiry / on termination
13	GPU/AI-Compute Hardware Asset Register (Form F-2A) & Certificate of Asset Transfer	Physical hardware reconciled unit-by-unit against the Asset Register; title formally transferred to MNFSR per Section 3.3.6	End of Year 3 hosting term / contract expiry

5. Qualifying / Eligibility Criteria for Bidders

The following mandatory (Pass/Fail) criteria establish the minimum eligibility of a Bidder to participate in this RFP. Envelope I (Technical Proposal) of any Bidder that fails to satisfy ALL mandatory criteria, supported by documentary evidence, shall be rejected and its Envelope II (Financial Proposal) shall not be opened. Joint ventures/consortia are permitted, provided a lead partner is clearly designated and all partners are jointly and severally liable; the consortium as a whole must meet the criteria below, with the lead partner meeting at least 60% of the financial thresholds.

#	Mandatory Eligibility Criterion	Documentary Evidence Required
1	Legally registered entity in Pakistan (company/Bidder/registered branch office), with valid and active NTN and Sales Tax/STRN registration, appearing on FBR's Active Taxpayers List.	Certificate of Incorporation/Registration, NTN certificate, ATL screenshot
2	Demonstrated ownership of, or a binding contractual arrangement with, a Tier III (or higher) data centre physically located within Pakistan.	Data centre ownership/lease/service agreement; Tier & ISO 27001 certificates
3	Not currently blacklisted or debarred by PPRA, any Government of Pakistan entity, MNFSR, State Bank of Pakistan, or any other regulatory authority.	Signed affidavit on judicial-stamp paper (Annex-F)
4	Proposed core project team meeting minimum qualification thresholds (Solution Architect, AI/ML Engineers, Data Engineer, Cybersecurity Specialist, PMP/PMI-certified Project Manager) with CVs.	CVs (Annex-H) and certifications
5	Declaration of no conflict of interest with MNFSR or its officials, and compliance with MNFSR's Code of Conduct for Vendors.	Signed declaration
6	Manufacturer/OEM authorisation letters for any proposed proprietary LLM platform, hardware or software licences (where applicable).	OEM/authorised-partner letters

6. Technical Evaluation Criteria

Technical Proposals (Envelope I) of Bidders who satisfy all mandatory eligibility criteria in Section 5 shall be evaluated by MNFSR's Technical Evaluation Committee (TEC) against the weighted criteria below, on a scale of 100 points. Only Bidders scoring a minimum of seventy-five (70) marks out of 100 shall be declared "technically qualified" and shall have their Financial Proposals (Envelope II) opened, in accordance with the Single Stage – Two Envelope procedure under Rule 27(b) of the Public Procurement Rules, 2026.

#	Evaluation Criterion	Sub-Factors (Indicative)	Marks
1	Bidder's Profile, Corporate Experience & Financial Capacity	10 points for more than 05 Years in business; turnover of more than PKR. 200 million in the last financial year 05 points for less than 05 Years in business; turnover of less than PKR. 200 million but more than PKR 100 million in the last financial year.	10
2	Relevant Past Experience / Similar Assignments	Number and relevance of prior AI/GenAI deployments; public-sector/Agriculture and Livestock references; scale and complexity More than 05 projects: 10 points Less than 05 but more than 02 projects: 05 points	10
3	Understanding of Requirements & Proposed Technical Solution	Depth of understanding of MNFSR's business domains; RAG/LLM architecture; bilingual support; guardrails; integration approach Fill Annexure-AA with appropriate response tag against each requirement 01 point for fully compliant, 0.5 points for partially compliant and 0 for non-compliant. Each requirement carry maximum of 01 point. **Annexure-AA contains thirty (30) requirements. The raw score out of 30 shall be normalised to the 25 marks allocated to this criterion, i.e. Marks = (raw score ÷ 30) × 25.**	25

#	Evaluation Criterion	Sub-Factors (Indicative)	Marks
4	AI Infrastructure, Hosting & Security Proposal	In-country data centre credentials; HA/DR design; scalability; ISO 27001/security posture; compliance with Section 8. Fully compliant: 20 pts Partial compliant: against any point qualifies the bidder for securing ½ points allocated for respective section. Non-Compliance: against any point qualifies the bidder for securing zero points allocated for respective section. 8.1: 05 points 8.2: 04 points 8.3: 04 points 8.4: 04 points 8.5: 04 points 8.6: 04 points **Compliance with the GPU Compute Appliance specification at Section 3.3.7 and Table 3-1 shall be assessed under this criterion; any parameter below the stated minimum renders the proposal non-responsive under Section 3.3.7(a).**	25
5	Implementation Methodology & Project Plan	Realism and clarity of work plan, phasing, risk management, governance (qualitative)	10
6	Key Personnel Qualifications	Relevant experience/certifications of Solution Architect, AI/ML Engineers, Security Specialist, Project Manager (10 points for more than 5 years relevant experience, 05 points for less than 05 years experience)	10
7	Training, Knowledge Transfer, Support & SLA Commitments	Quality of training plan; KT approach; proposed SLA/support model (Qualitative)	10
	Total		**100**

6.1 Combined Technical & Financial Scoring

For Bidders declared technically qualified (score ≥ 70), the final ranking and award recommendation shall be determined using a combined score, weighted 70% Technical and 30% Financial, computed as follows:

- **Normalised Technical Score (NTS)** = (Bidder's Technical Score ÷ Highest Technical Score obtained) × 100
- **Normalised Financial Score (NFS)** = (Lowest Total Evaluated Cost among qualified Bidders ÷ Bidder's Total Evaluated Cost) × 100
- **Combined Score** = (NTS × 0.70) + (NFS × 0.30)

The Contract shall be recommended for award to the technically qualified Bidder obtaining the highest Combined Score. MNFSR's Procurement/Technical Evaluation Committee reserves the right to conduct clarification meetings, technical demonstrations, proof-of-concept evaluations, and reference checks prior to finalising the evaluation.

7. Financial Proposal Format

The Financial Proposal (Envelope II) shall be submitted strictly in the formats prescribed below (Forms F-1, F-2A, F-2B, F-3 and F-4, reproduced in blank in Annex-B). Financial Proposals not conforming to this format may be rejected. Key instructions:

- All prices shall be quoted in Pakistani Rupees (PKR) only, inclusive of all applicable taxes, duties, levies, insurance, travel and out-of-pocket expenses, unless a line item explicitly states otherwise.
- Prices shall remain Bidder and fixed for the entire Contract Period.
- The Financial Proposal shall remain valid for 120 days from the closing date for submission of proposals.
- Any discrepancy between figures and words shall be resolved in favour of the amount expressed in words; any arithmetic error shall be corrected by MNFSR and the corrected total shall bind the Bidder.
- **Capital cost of GPU/AI-compute hardware (Form F-2A) shall be quoted and evaluated separately from recurring hosting/operations costs (Form F-2B).** MNFSR shall pay the GPU capital cost to the Bidder in instalments distributed over the three (3)-year hosting term, in addition to the recurring hosting cost; ownership of the GPU hardware shall transfer to MNFSR at the end of the three-year term, as detailed in Section 3.3.6 and Section 7.2A below.

7.1 Form F-1 — One-Time Development & Implementation Cost

#	Cost Component	Unit	Amount (PKR)
1	Discovery, Requirements & Solution Design	Lump Sum	
2	Application Development & AI/RAG Platform Build (per business domain, itemised)	Lump Sum	
3	Data/Content Ingestion & Preparation	Lump Sum	
4	Integration with Existing MNFSR Systems	Lump Sum	
5	Security Hardening & Independent VAPT (pre-Go-Live)	Lump Sum	
6	Training & Knowledge Transfer	Lump Sum	
7	Project Management (Phases 0–4)	Lump Sum	
8	Contingency / Miscellaneous (max 5% of subtotal)	Lump Sum	
	Sub-Total (Form F-1)		

7.2A Form F-2A1 — GPU / AI-Compute Capital Cost & Asset Register

This form captures the one-time capital cost of all GPU and directly-associated AI-compute hardware that the Bidder will procure, install and dedicate to the Solution. This capital cost is recovered from MNFSR over the three-year hosting term (see the Capital Cost Recovery Schedule below) and, upon full payment, ownership of this hardware transfers to MNFSR as its fixed asset, in accordance with Section 3.3.6.

#	GPU / AI-Compute Hardware Item (Make, Model & Specification as proposed in the Technical Proposal)	Qty	Unit Capital Cost (PKR)	Total Capital Cost (PKR)
1	GPU compute appliance units — integrated AI all-in-one GPU server, each providing 16 GPU accelerators and conforming to Table 3-1 (Section 3.3.7). Quantity below is expressed in appliance units, not individual accelerator cards.			
2	Directly-associated compute/networking hardware dedicated to the GPU cluster not already integrated within the appliance units above (e.g., high-speed interconnect/switching between appliance units, external storage) — itemise each			
3	Installation, commissioning & burn-in testing of the above hardware			
	TOTAL GPU CAPITAL COST (Asset Register value transferred to MNFSR at Year 3 — see Section 3.3.6)			

Capital Cost Recovery Schedule — the Total GPU Capital Cost above shall be paid to the Bidder by MNFSR as an Annual Capital Cost Recovery Charge distributed over the three-year hosting term (equal instalments unless the Bidder proposes, and justifies, an alternative schedule):

7.2A Form F-2A2 — GPU/ Annual GPU Capital Cost Recovery Charge

Component	Year 1	Year 2	Year 3	3-Yr Total
Annual GPU Capital Cost Recovery Charge				

7.2B Form F-2B — AI Infrastructure Hosting & Operations Cost (Recurring, Years 1–3)

This form captures the recurring, service-based (operating expenditure) costs of hosting and operating the Solution. Unlike Form F-2A, none of these items result in an asset transfer to MNFSR; they represent the Bidder's ongoing service fee for the duration quoted.

Cost Component	Year 1	Year 2	Year 3	3-Yr Total
Non-GPU Compute & Platform Operations (orchestration/application servers, platform administration — excludes capitalised GPU hardware costed under Form F-2A)				
Storage, Backup & Retention				
Data Centre / Colocation / Private Cloud Fees (facility, power, cooling, rack space)				
Network, Bandwidth & Security Appliances (Firewall/WAF/IDS-IPS)				

Cost Component	Year 1	Year 2	Year 3	3-Yr Total
LLM/Software Licensing (if any, excluding public foreign APIs)				
Disaster Recovery Site & Failover Testing				
Managed Services: 24×7 Monitoring & L1/L2/L3 Support				
GPU Hardware Insurance & Warranty Management (until title transfers to MNFSR)				
Sub-Total (Form F-2B)				

7.3 Form F-3 — Annual Managed Support & SLA Cost (Post-Warranty)

Cost Component	Year 1	Year 2	Year 3	3-Yr Total
Application Support & Maintenance (bug-fixes, minor enhancements)				
Model/Content Refresh & Retraining Cycles				
Periodic Security Re-Assessment (Annual VAPT)				
Helpdesk / Support Desk Personnel				
Sub-Total (Form F-3)				

7.4 Form F-4 — Grand Summary: 3-Year Total Cost of Ownership (TCO)

Component	Amount (PKR)
Sub-Total Form F-1 (One-Time Development & Implementation)	
Sub-Total Form F-2A1 (GPU Capital Cost, 3-Year Recovery — Asset Transfers to MNFSR at Year 3)	
Sub-Total Form F-2A2 — GPU/ Annual GPU Capital Cost Recovery Charge	
Sub-Total Form F-2B (AI Infrastructure Hosting & Operations, 3 Years)	
Sub-Total Form F-3 (Managed Support & SLA, 3 Years)	
TOTAL EVALUATED COST (Used for Financial Scoring — Section 6.1)	

Note: The GPU Capital Cost (Form F-2A) is included in the Total Evaluated Cost for financial scoring purposes and is a genuine cost to MNFSR; however, it converts to an owned MNFSR asset at the end of Year 3 and is not a sunk service fee, unlike Forms F-1, F-2B and F-3.

8. Information Security & Data Residency Requirements

Given the highly sensitive nature of MNFSR's regulatory, corporate and personal data, compliance with this Section is mandatory and non-negotiable. Non-compliance identified at any stage — proposal evaluation, implementation or operations — shall constitute grounds for disqualification or contract termination for cause, as applicable.

8.1 Data Residency

- All data processed by the Solution — including but not limited to ingested regulatory content, case files, personally identifiable information (PII) of registered companies/investors/staff, user queries and AI-generated responses, embeddings, fine-tuned model weights, logs, analytics and backups — shall be hosted, processed, stored and backed up exclusively within the territorial boundaries of Pakistan for the entire Contract Period, with no exception.
- This requirement aligns with the Ministry of IT & Telecommunication's Cloud First Policy (2022), under which MNFSR's data is classified at minimum as "Sensitive/Confidential", mandating hosting on an Accredited Government Cloud/CSP located within Pakistan, and anticipates the data-localisation provisions for critical and sensitive personal data under Pakistan's Personal Data Protection Act (pending enactment).
- No public, foreign-hosted LLM or API service (e.g., any model endpoint hosted outside Pakistan) may be used for inference, fine-tuning, or embedding generation on any MNFSR data. Only models self-hosted on in-country infrastructure — whether open-weight or licensed for on-premises/private-cloud deployment — are permitted.
- Remote access to production systems or data by the Bidder's personnel located outside Pakistan is strictly prohibited unless explicitly pre-approved in writing by MNFSR's ITD for a specific, time-bound, logged and supervised purpose.
- The Bidder shall provide, at contract signing and annually thereafter, a signed attestation conBiddering full compliance with this data residency clause, supported by evidence (e.g., data centre location certificates, network architecture diagrams).

8.2 Regulatory & Standards Compliance

- Compliance with the Prevention of Electronic Crimes Act (PECA), 2016 and all applicable directives issued by MNFSR, and, where relevant, the State Bank of Pakistan and Pakistan Telecommunication Authority.
- Information Security Management aligned to ISO/IEC 27001:2022; the Bidder's hosting environment shall hold, or achieve within 6 months of contract signing, a valid ISO/IEC 27001 certification. ISO/IEC 27701 (Privacy Information Management) is desirable.
- Application-level security aligned to the OWASP Top 10 and the OWASP Top 10 for Large Language Model Applications (prompt injection, insecure output handling, training-data poisoning, model denial-of-service, sensitive information disclosure, etc.).
- Readiness to comply with Pakistan's Personal Data Protection Act upon its enactment, including data subject rights, breach notification and localisation obligations for critical/sensitive personal data.

8.3 Technical Security Controls

- Encryption of data at rest using AES-256 (or stronger) and data in transit using TLS 1.2 or higher; cryptographic key management via a Hardware Security Module (HSM) located within Pakistan.
- Role-based access control (RBAC) integrated with MNFSR's identity provider, multi-factor authentication (MFA) for all privileged and administrative access, and a documented Privileged Access Management (PAM) process.
- Network segmentation, next-generation firewalls, Web Application Firewall (WAF), intrusion detection/prevention (IDS/IPS), and continuous security monitoring (SIEM) with alerting to both the Bidder's and MNFSR's security teams.
- LLM-specific guardrails: input/output content filtering, prompt-injection detection, mandatory source citation for factual claims, hallucination-rate monitoring, configurable human-in-the-loop review gates for any AI-drafted content prior to official use, and comprehensive logging of all interactions.
- Independent penetration testing (VAPT) prior to Go-Live and at least annually thereafter throughout the hosting term, performed by a third party acceptable to MNFSR, with all Critical/High findings remediated prior to sign-off/continued operation.

8.4 Personnel & Organisational Security

- All Bidder personnel with access to MNFSR data shall be Pakistani nationals unless MNFSR grants a specific written exception; all such personnel shall execute Non-Disclosure Agreements (Annex-G) and undergo background verification prior to being granted access.
- The Bidder shall maintain an access log/register of all personnel with access to MNFSR systems/data, provided to MNFSR on request, and shall immediately revoke access upon personnel exit or role change.

8.5 Audit, Incident Response & Right to Inspect

- MNFSR, and any government auditor, regulator or body it designates (including PPRA), shall have the right to audit the Bidder's data centre, security controls, processes and documentation relevant to this Contract, with reasonable notice.
- The Bidder shall notify MNFSR of any actual or suspected security incident or data breach within twenty-four (24) hours of detection, followed by a full written incident report within seventy-two (72) hours, and shall cooperate fully with MNFSR's incident response and any regulatory reporting obligations.

8.6 Intellectual Property, Business Continuity & Exit

- All source code, configurations, fine-tuned model weights, embeddings, ingested content, and data created or used under this Contract shall be the sole and exclusive property of MNFSR upon corresponding payment; the Bidder shall retain no residual rights to reuse MNFSR-specific data, content or fine-tuned models for any other client.
- Ownership of the GPU and directly-associated AI-compute hardware transfers to MNFSR separately, under the capital-asset financing arrangement at Section 3.3.6, upon completion of the three-year Capital Cost Recovery Charge; this is in addition to, and independent of, MNFSR's ownership of code, data and models under this Section.

- A source-code and configuration escrow arrangement (with a mutually agreed escrow agent within Pakistan) shall be maintained throughout the Contract Period.
- On expiry or termination of the Contract, the Bidder shall, within the timelines in Section 3.6, securely transfer all code, data, models and documentation to MNFSR or a successor vendor, and thereafter certify secure and complete deletion of all MNFSR data from its own systems and those of any subcontractor, subject to MNFSR's verification.

9. Implementation Timeline

The Bidder shall propose a detailed, resource-loaded project schedule in its Technical Proposal. The indicative overall timeline — from contract signing (T0) to Go-Live, followed by three years of hosting and managed support — is summarised below; the Bidder may propose an accelerated schedule with justification.

Phase	Indicative Duration (from Contract Signing)
Phase 0 – Inception & Mobilisation	T0 to T0 + 2 weeks
Phase 1 – Discovery & Solution Design	T0 + 2 to T0 + 8 weeks
Phase 2 – Build, Integration & Content Ingestion	T0 + 8 to T0 + 22 weeks
Phase 3 – Testing, Security Audit & UAT	T0 + 22 to T0 + 30 weeks
Phase 4 – Go-Live & Hypercare (phased by domain)	T0 + 30 to T0 + 36 weeks
Phase 5 – Managed Hosting, Support & Continuous Improvement	T0 + 36 weeks to T0 + 36 weeks + 3 years

Total build-to-Go-Live duration shall not exceed nine (9) months from contract signing, followed immediately by a three (3)-year hosting and managed support term, giving a total indicative Contract Period of approximately three years and nine months.

10. Contract Period & Payment Schedule

10.1 Contract Period

The Contract shall remain in force from the date of signing until three (3) years after the date of Go-Live (formal acceptance of the Solution into production), unless extended or terminated earlier in accordance with the Contract's terms and conditions. MNFSR may, at its sole discretion, extend the hosting and managed-support term for up to two (2) further one-year periods on the same terms, subject to satisfactory performance and budgetary availability.

10.2 Indicative Payment Schedule

#	Milestone	% of Form F-1	Timing
1	Contract Signing & Mobilisation Advance	10%	On contract signing (against bank guarantee)
2	Sign-off of Solution Design (SRS/SDD) — Phase 1 completion	15%	T0 + 8 weeks
3	Completion of Build & Successful Security Assessment — Phase 2/3 completion	25%	T0 + 30 weeks
4	UAT Sign-off	20%	End of Phase 3
5	Go-Live & Successful Completion of Hypercare	30%	End of Phase 4

Form F-2B (AI Infrastructure Hosting & Operations) and Form F-3 (Managed Support) costs shall be paid quarterly in arrears throughout the three-year hosting term, subject to SLA compliance and applicable service credits/penalties as defined in the Contract's SLA schedule.

10.3 GPU Capital Cost Recovery Payments

The Annual GPU Capital Cost Recovery Charge (Form F-2A) is a distinct payment stream from the Form F-1 milestone payments and the Form F-2B/F-3 recurring service fees. It shall be invoiced and paid quarterly in equal instalments across each of the three hosting years (i.e., one-twelfth of the applicable Annual Capital Cost Recovery Charge per quarter), commencing from the quarter following successful installation and commissioning of the GPU hardware and Go-Live. Payment of the final instalment in Year 3 is a precondition for transfer of ownership under Section 3.3.6, and shall be released only upon MNFSR's acceptance of the Certificate of Asset Transfer and reconciled Asset Register (Deliverable 13, Section 4).

11. Instructions to Bidders & Submission Requirements

11.1 Procurement Method

This procurement shall follow the Single Stage – Two Envelope procedure prescribed under Rule 27(b) of the Public Procurement Rules, 2026 revised SRO 1658(1) 2026 (PPRA). Each Bidder shall submit its proposal in two separate, clearly marked, sealed inner envelopes, both placed inside one sealed outer envelope:

- **Envelope I – Technical Proposal:** containing all eligibility documents (Section 5) and the full technical response (Sections 3, 6 and Annex-A), but excluding any price/cost information.
- **Envelope II – Financial Proposal:** containing the Financial Proposal strictly in the format of Section 7 / Annex-B.

Envelope I shall be opened first, on the date and time specified in the RFP notice, in the presence of Bidders' authorised representatives who choose to attend. The Technical Evaluation Committee shall evaluate Envelope I as per Sections 5 and 6. Envelope II of only those Bidders declared technically qualified (score ≥ 75) shall be opened publicly on a subsequently notified date; Envelope II of technically disqualified Bidders shall be returned unopened.

11.2 Bid Security

Each Bidder shall submit a Bid Security (earnest money) of two percent (2%) of the Bidder's Total Evaluated Cost (Form F-4), in the form of a Pay Order, Demand Draft, or unconditional Bank Guarantee from a scheduled bank operating in Pakistan, valid for a period of 28 days beyond the validity of the Financial Proposal (i.e., 148 days from the closing date). Proposals not accompanied by a valid Bid Security shall be rejected. Bid Security of unsuccessful Bidders shall be returned within 30 days of contract award; that of the successful Bidder shall be retained until submission of the Performance Guarantee.

11.3 Pre-Bid Meeting & Clarifications

A pre-bid meeting shall be held at MNFSR Head Office, Islamabad (and via video conference for outstation Bidders) on a date to be notified at least seven (7) days after issuance of this RFP. Written queries may be submitted to the Focal Person (Section 11.7) up to three (3) working days before the pre-bid meeting. Responses to all queries, along with any RFP amendments, shall be communicated to all prospective Bidders and published on MNFSR's and PPRA's websites.

11.4 Proposal Validity, Language & Currency

- Proposals shall remain valid for 120 days from the closing date for submission.
- All proposals shall be submitted in English.
- Financial Proposals shall be denominated in Pakistani Rupees (PKR) only.

11.5 Submission Mechanics

- One (1) original and two (2) copies each of Envelope I and Envelope II, clearly marked "ORIGINAL" and "COPY", plus one soft copy (USB/CD) of the Technical Proposal, shall be submitted.

- Proposals must be received at the address in Section 11.7 by the closing date and time specified in the RFP notice/PPRA advertisement. Proposals received after the deadline shall not be accepted under any circumstances.
- Proposals submitted by fax or e-mail shall not be accepted.

11.6 Integrity Pact & Other Undertakings

As this procurement's estimated value exceeds the threshold prescribed under the applicable Integrity Pact policy, the successful Bidder shall be required to sign an Integrity Pact (Annex-E) at the time of contract signing. All Bidders shall additionally submit the Affidavit of Non-Blacklisting (Annex-F) and the Non-Disclosure & Data Security Undertaking (Annex-G) with their Technical Proposal.

11.7 Right to Reject & Reservations

MNFSR reserves the right to accept or reject any or all proposals, and to annul the procurement process at any time, without assigning any reason and without incurring any liability to the affected Bidder(s), in accordance with the Public Procurement Rules, 2004. MNFSR also reserves the right to negotiate scope and price with the highest-ranked technically qualified Bidder prior to contract award, in accordance with applicable PPRA guidance, without prejudice to the evaluation outcome.

11.8 Focal Person & Submission Address

12. Annexures

Annex-A: Technical Proposal Checklist / Compliance Sheet

Bidders shall submit a self-certified, item-by-item compliance statement against every requirement in Sections 3, 5, 6 and 8 of this RFP, cross-referenced to the corresponding page/section of their Technical Proposal where each requirement is addressed.

Annex-B: Financial Proposal Forms (F-1, F-2A1,F-2A2, F-2B, F-3, F-4)

Blank templates of Forms F-1, F-2A (GPU Capital Cost & Asset Register), F-2B (Hosting & Operations), F-3 and F-4 (Section 7) shall be provided as fillable annexures to this RFP and shall be reproduced by the Bidder exactly as formatted, with all cells completed.

Annex-C: Eligibility / Mandatory Documents Checklist

A single checklist enumerating all documentary evidence required under Section 5, to be completed and submitted as the first page of Envelope I.

Annex-D: Format of Bid Security

Standard Bank Guarantee / Pay Order format acceptable to MNFSR for the Bid Security referred to in Section 11.2, to be obtained from a scheduled bank operating in Pakistan.

Annex-E: Integrity Pact

Standard Integrity Pact format, to be executed by the successful Bidder at contract signing, in accordance with the Government of Pakistan's Integrity Pact policy.

Annex-F: Affidavit of Non-Blacklisting

Affidavit, on judicial-stamp paper, afBiddering that the Bidder (and its directors/partners) is not blacklisted or debarred by PPRA or any Government of Pakistan entity, regulator, or financial institution.

Annex-G: Non-Disclosure & Data Security Undertaking

Undertaking to be signed by the Bidder and by each of its personnel granted access to MNFSR data/systems, binding them to confidentiality, data residency, and information security obligations set out in Section 8, surviving termination or expiry of the Contract.

Annex-H: Curriculum Vitae (CV) Format for Key Personnel

Standard CV template capturing academic qualifications, professional certifications, years of relevant experience, and details of at least three (3) similar assignments for each proposed key resource (Solution Architect, AI/ML Engineers, Data Engineer, Cybersecurity Specialist, Project Manager).

Annexure “AA”

Technical Evaluation Compliance Matrix

Instructions to Bidders
The bidder shall complete this matrix without modifying the requirement descriptions.
The bidder shall indicate compliance using only the following classifications:

Response	Meaning
Fully Compliant	Requirement is supported without modification, qualification or future development
Partially Compliant	Requirement is supported with limitations, dependencies or additional work
Not Compliant	Requirement is not supported

A response of “Fully Compliant” without a supporting proposal reference may not be considered sufficient.

Compliance Matrix

ID	Requirement	Bidder Compliance	Proposal Reference	Remarks / Qualification
1.	The proposed solution shall provide a reusable Enterprise AI Foundation supporting multiple MNFSR business domains.			
2.	The solution shall support multiple approved AI models without requiring replacement of the underlying platform.			
3.	The bidder shall clearly disclose all proposed AI models, platform components, licenses and third-party dependencies.			
4.	The solution shall provide enterprise knowledge retrieval, semantic search and Retrieval-Augmented Generation capabilities.			
5.	AI-generated responses shall support reference to approved knowledge sources where applicable.			
6.	The solution shall provide an Agentic AI framework supporting assistants, copilots and controlled task-oriented agents.			
7.	Human-in-the-loop review and approval controls shall be configurable for controlled business activities.			
8.	The solution shall provide secure APIs and integration capabilities for existing and future MNFSR systems.			
9.	The solution shall support English and Urdu, with extensibility for additional languages.			

10.	The solution shall provide centralized administration, monitoring, logging and audit capabilities.			
11.	All production systems and AI services shall operate exclusively within infrastructure physically located in Pakistan.			
12.	No MNFSR data, prompts, responses, embeddings, indexes, metadata, logs, telemetry, backups or derived information shall be processed, stored, cached, replicated or transmitted outside Pakistan.			
13.	Disaster recovery and backup environments shall be physically located within Pakistan.			
14.	MNFSR information shall not be used to train, fine-tune, optimize or improve any public, shared, commercial or third-party model.			
15.	Prompts, conversations, outputs and enterprise knowledge shall not be retained for external or shared model learning.			
16.	All mandatory external communications, internet dependencies and telemetry mechanisms shall be disclosed.			
17.	The solution shall support encryption in transit and at rest.			
18.	The solution shall support role-based access control, enterprise identity integration and multifactor authentication.			
19.	Regulatory, supervisory, enforcement and legal decisions shall remain subject to authorized human review and accountability.			
20.	Existing operational systems and the new MNFSR website shall not be unnecessarily replaced or redeveloped.			
21.	The bidder shall submit implementation, testing, training, knowledge-transfer and support plans.			
22.	The bidder shall provide architecture, deployment, security, integration and operational documentation.			
23.	The solution shall support export of MNFSR owned data, configurations and knowledge assets in usable formats.			

24	All recurring, one-time, optional and third-party costs shall be separately disclosed.			
25.	All assumptions, exclusions, dependencies and deviations shall be explicitly declared.			
26.	GPU compute shall be delivered as factory-integrated AI all-in-one appliance units meeting every minimum parameter of Table 3-1 (Section 3.3.7).			
27.	Each appliance unit shall provide 16 GPU accelerators with aggregate GPU memory ≥ 1,536 GB and aggregate GPU memory bandwidth ≥ 44 TB/s.			
28.	A single appliance unit shall serve a ≥ 671B-parameter MoE model at full BF16 precision without sharding the model across units or quantisation-induced accuracy loss.			
29.	Each unit shall be delivered with a factory-installed, validated cloud-native AI stack (inference engine, full model lifecycle, vector database, cache, full-text search, observability).			
30.	The appliance shall cluster to a minimum of 48 units under a unified management console without re-architecting or interrupting the deployed environment.			