REPUBLIC OF KENYA

MINISTRY OF AGRICULTURE AND LIVESTOCK DEVELOPMENT

STATE DEPARTMENT FOR AGRICULTURE

ADDENDUM 2

The State department for Agriculture, wishes to inform prospective bidders that the under listed tender **KE-MOALF-550199-NC-RFB; Development of an automated Web based Integrated Grievance Feedback Referral and Resolution Management System** received a number of requests for clarifications. We wish to provide responses as tabulated below:

Bidder's Request for Clarification					
Sl. No.	**RFP Reference (Section No., Clause, Page No.)**	**Content of RFP**	**Clarification Sought**	**Response**	**Tender Submission date**
1	System Architecture, Pages 132-139	Integration with Google Maps API, Twilio, Mailgun, SendGrid, Firebase FCM.	Will KALRO provide subscriptions/licenses and credentials for these third-party services, or should bidders include them in their commercial proposal?	The bidder should include all required production-grade subscriptions, licences, API usage fees, credentials setup, and support costs for Google Maps/API services, SMS, WhatsApp, email, push notifications, cloud monitoring and related third-party services.	**2nd July 2026 at 11.00am. East African Time**

2	System Architecture, Page 133	Primary deployment on Cloud Platform and on-premises backup.	Please specify the preferred cloud platform (AWS, Azure, GCP, Government Cloud, etc.) and clarify who will bear the cloud hosting costs(Client/bidder)	Primary hosting will be on Government Cloud, with a secondary cloud/on-premises backup or disaster recovery environment. The bidder should include the full cost of cloud infrastructure, Kubernetes/container orchestration, managed database/storage services, security services, monitoring, backup, and DR replication. The design should observe data residency and Government ICT requirements.	
3	Section 1.3.1.2 Hardware Architecture, Page 125	Hardware infrastructure hosted in KALRO Data Centre.	Please clarify whether all required infrastructure (servers, storage, networking, security appliances) will be provisioned by KALRO or forms part of the bidder's scope.	The Client/KALRO Data Centre is expected to provide the physical hosting environment for any on-premises backup/DR components, including space, power, cooling and core network connectivity. The bidder should nevertheless include any application-specific servers, storage, security appliances, licences, installation, configuration and DR replication components required to meet the proposed. architecture and agreed RTO/RPO.	

4	Section 1.5.1, Page 126	Unlimited concurrent users and real-time processing.	Kindly provide expected user base, peak concurrent users, daily transactions, and annual growth projections for sizing	For sizing purposes, assume deployment across the Ministry/FSRP Head Office and the 13 target counties: Turkana, Marsabit, Mandera, Wajir, Garissa, Tana River, Lamu, Samburu, Isiolo, West Pokot, Baringo, Laikipia and Elgeyo-Marakwet. Plan for approximately 300-800 named internal users initially, scalable to at least 2,500 named users over the programme life. Peak authenticated concurrent users should be sized at 300-500, with stress-test capacity of at least 1,000 concurrent sessions, plus public/anonymous grievance submissions.	
5	Section 2.5.1, Page 128	Data conversion and migration services.	Kindly provide estimated data volumes, file formats.	Expected migration data will include common document and data formats such as Word, Excel, CSV, plain text, PDF, scanned documents, images, audio/video files and existing database exports where available. For bidding, assume migration/ingestion of 50,000-150,000 historical/legacy records and 0.5-2 TB of legacy attachments, subject to	

				confirmation through a data discovery and cleansing exercise during inception.	
6	Section 2.5.1, Page 128	Recording and transmitting grievance data to a central database.	Please provide expected annual grievance volumes, document attachment volumes, and storage growth estimates.	For planning purposes, estimate an average of 50-100 grievances per day across all channels, with peak periods of up to 300 grievances per day during field campaigns, drought/flood events, stakeholder mobilisation or payment/service-delivery cycles. The system should be engineered to handle at least 1,000 submissions per day without redesign. This translates to approximately 18,000-36,500 grievances per year and a six-year lifecycle range of about 100,000-220,000 grievance records, with room for growth.	

7	Database Design, Pages 143-144	Polyglot database architecture (PostgreSQL, MongoDB, Redis, Elasticsearch).	Is the proposed database architecture mandatory, or can bidders propose technically equivalent alternatives?	Bidders may propose technically equivalent alternatives to the proposed database architecture provided the solution maintains clear data ownership by service, strong transactional integrity for case records, geospatial capability, full-text search, auditability, analytics, backup/restore, security controls, scalability and maintainability. Any deviation should be justified with an architecture rationale and mapped to the stated functional and non-functional requirements.	
8	Technology Architecture, Pages 137-142	Specified technologies such as Angular, NestJS, Kafka, PostgreSQL, MongoDB.	Is adherence to the proposed technology stack mandatory, or can equivalent technologies be proposed?	The proposed stack is indicative/preferred and may be substituted with technically equivalent technologies where the bidder can demonstrate equal or better scalability, security, interoperability, maintainability and supportability. The final solution must remain cloud-native, API-driven, well documented, auditable, secure, and able to integrate with existing Government/Ministry	

				systems and future programme platforms.	
9	GIS Service, Pages 138 & 141	GIS and mapping services using PostGIS and Google Maps.	Please provide detailed GIS functional requirements, required layers, boundary datasets, and whether GIS data will be provided by KALRO.	GIS requirements should cover national, county, sub-county, ward and community/project-level mapping for the 13 FSRP target counties: Turkana, Marsabit, Mandera, Wajir, Garissa, Tana River, Lamu, Samburu, Isiolo, West Pokot, Baringo, Laikipia and Elgeyo-Marakwet. Required layers should include administrative boundaries, project sites, service/facility locations, grievance locations, hotspot/heatmap layers, jurisdiction/assignment boundaries and relevant infrastructure or livelihood zones where provided. Acceptable formats should include GeoJSON, Shapefile,	

				KML/KMZ, GeoPackage and CSV with coordinates.	
10	Grievance/Incident Service, Pages 138 & 140	TensorFlow-based grievance analysis.	Please clarify the expected AI/ML capabilities, use cases, training data availability, and acceptance criteria for ML functionalities.	Expected AI/ML functionality should be assistive rather than replacing human decision-making. The system should support NLP-based grievance categorisation, keyword/theme extraction, duplicate detection, priority/severity suggestion, language detection/translation support where feasible, sentiment/risk flags, and semantic search over grievance narratives. Model training data will be built progressively from approved project records; all AI suggestions must remain explainable and subject to officer review and override.	

11	Alert & Notification Services, Pages 138 & 140	SMS, WhatsApp, Email, and Push notifications.	Please provide expected monthly volumes for each communication channel and clarify who will bear recurring messaging costs.	For costing purposes, assume 50-100 grievances per day, with each case generating 2-5 communications across acknowledgement, assignment, reminder, escalation and closure stages. Monthly planning volumes may be estimated as follows: SMS 10,000-30,000; WhatsApp 5,000-20,000; email 20,000-60,000; and push notifications 20,000-100,000. Bidders should price scalable tiers and clearly state unit rates, assumptions and overage costs.	
12	Document Management Service, Page 141	File storage, retrieval, and versioning.	Please provide estimated document volumes, file size limits, retention requirements, and expected storage growth.	DMS sizing should align to the projected grievance volumes. Assume 100,000-220,000 grievance records over the programme lifecycle, with 2-5 attachments per case. Average attachment size may range from 2-10 MB, with larger audio/video files where supported. Plan for 5-20 TB of active object storage initially, scalable to at least 50 TB, with retention, versioning, backup, archival and secure deletion policies aligned to Government and	

				project requirements. Recommended per-file limits: 25 MB for documents/images and 100 MB for audio/video, unless otherwise agreed.	
13	Pg. 131	Performance Requirements of the Information System	The system requires 99.9% availability. Kindly clarify whether the uptime requirement excludes planned maintenance windows and whether active-active or active-passive high availability architecture is expected.	The 99.9% availability target should apply to the production application and exclude agreed planned maintenance windows communicated in advance. Bidders should propose a highly available architecture, active monitoring, incident response process, monthly uptime reporting, and DR arrangements. Recommended minimum targets are RTO of 4 hours and RPO of 15-60 minutes for critical production data.	

14	Pg. 131	Performance Requirements of the Information System	The RFP requires the system to support unlimited concurrent users, 24x7 operation and 99.9% availability. Kindly provide the estimated number of registered users, active users and peak concurrent users for accurate infrastructure sizing and cloud resource estimation.	The term unlimited concurrent users should be interpreted as a scalability objective rather than a fixed physical limit. For bid sizing, use 300-800 initial named internal users, scalable to at least 2,500 named users, with 300-500 peak concurrent authenticated users and stress-test capacity of at least 1,000 concurrent sessions. The public-facing grievance submission channel should support additional anonymous/public traffic through autoscaling and rate limiting.	
15	Pg. 132	System Analysis, Design and Customization/Development	The RFP requires integration with ODK, KoboCollect, Business Intelligence tools and APIs. Kindly provide details of existing systems, API documentation and expected transaction volumes for integration sizing.	The solution should provide standards-based integration through secure REST/JSON APIs, webhooks, scheduled imports/exports and documented OpenAPI/Swagger specifications. Integration should be supported for ODK/KoboCollect data collection, BI/reporting tools such as Apache Superset/Power BI, SMS, email, WhatsApp, GIS layers, document storage and any existing Ministry/FSRP systems. Specific endpoint	

				credentials and production API details should be confirmed during inception.	
16	Pg. 133	Data Conversion and Migration	Kindly provide the expected database size at Go-Live and projected data growth over the contract period for accurate sizing of backup repositories.	At Go-Live, plan for 1-3 TB of migrated and operational data, including database records, documents, logs and indexes. Over the programme lifecycle, active storage should be expected to grow to approximately 5-20 TB depending on attachment/media usage, with object storage and backup/archive capacity scalable to 50-100 TB. Growth assumptions should be validated during inception and reviewed annually.	

17	Pg. 137	System Architecture	Kindly confirm whether SSL certificates, domain name, SMS gateway, email gateway and third-party services such as Google Maps API, Twilio, Mailgun and Firebase subscriptions shall be provided by the Client or included in bidder scope.	The Client/KALRO will provide SSL/TLS certificates, domain and sub-domain configuration, DNS support. The Bidder should provide and include as part of its cost SMS gateway, email gateway, WhatsApp integration, push notification setup, cloud monitoring/logging and related third-party service. All credentials, secrets and keys must be transferred to or managed under the Client's approved environment before go-live.	
18	1.3.1.2 Software Architecture	System should be scalable and highly available with backup and disaster recovery.	Kindly confirm the expected number of registered users, concurrent users, and annual transaction volume for infrastructure sizing.	For the FSRP deployment, assume 300-800 named internal users initially across Head Office and the 13 target counties, scalable to at least 2,500 named users. Assume 300-500 peak concurrent users, stress-tested to 1,000 concurrent sessions; average transaction volume of 50-100 grievances per day, peaks of 300 per day, and minimum engineered capacity of 1,000 submissions per day. Reporting dashboards should support national and county-level users concurrently.	

19	Pg. 156	Network and Communications Specifications	The tender specifies a minimum shared storage capacity of 100 TB and backup storage of 50 TB tape storage. Kindly confirm the estimated data volume to be stored during the project lifecycle and whether the proposed capacities are mandatory or indicative.	For GRM application data, bidders should not size only for 2 TB. The 100 TB requirement should be treated as an overall shared storage/backup/DR planning requirement unless revised by the Client. A reasonable GRM baseline is 10-20 TB active application/object storage, scalable to 50-100 TB over the programme lifecycle, including attachments, audit logs, analytics indexes, backups and archives.	
20	Pg. 156	Network and Communications Specifications	The document refers to all printers and scanners in each implementing unit. Kindly provide the quantity, specifications for the same	Printer and scanner quantities are not defined in the current specification.	

21	Pg. 156	Network and Communications Specifications	The tender mentions Firewall and IDS for cybersecurity protection; however, detailed technical specifications and quantities have not been provided. Kindly share the minimum technical specifications, deployment locations, required throughput, number of users/sites to be secured, and licensing/subscription duration to enable accurate sizing and costing of the solution.	Will be provided by the Client/KALRO	
22	Pg. 156	Network and Communications Specifications	Kindly provide the detailed Network and Communication Architecture for the proposed solution, connectivity requirements, bandwidth availability, WAN/LAN topology, VPN requirements, and inter-site communication mechanisms to enable accurate solution design and costing.	The Client/KALRO will provide adequate network connectivity required for such a system	

23	Pg. 156	Network and Communications Specifications	Kindly clarify whether network infrastructure components including switches, routers, wireless access points, network security devices, and structured cabling are required to be supplied under this tender. If yes, please provide detailed specifications, quantities, and site-wise deployment requirements.	Core LAN/WAN infrastructure, such as switches, routers, local cabling, end-user devices and existing internet connectivity, should generally be treated as Client-provided. The bidder should include the application platform infrastructure, cloud networking, VPN configuration, WAF/API gateway, security monitoring and any specific network equipment required for the proposed DR architecture.	
24	Pg. 173-174	System Validation Requirement	Kindly provide the estimated document attachment volume, average attachment size and retention period to enable sizing of object storage and backup infrastructure.	For document attachments, assume 100,000-220,000 grievance records over the programme lifecycle, with 2-5 attachments per case and average attachment sizes of 2-10 MB. The system should support standard documents, scanned PDFs, images, audio and video. Active storage should be planned at 5-20 TB initially, scalable to at least 50 TB, with versioning, backup, audit logs, virus scanning, role-based access and retention controls.	

25	Pg. 181	System Deployment Requirements	Kindly clarify whether hosting shall be on Government Cloud, Client Data Centre, Private Cloud or Public Cloud (AWS/Azure/GCP), and whether any preferred cloud platform is mandated.	Primary hosting should be on Government Cloud, with a secondary DR/backup environment on another approved cloud provider or Client/KALRO Data Centre infrastructure. The bidder should include the full cost for production, staging, testing and development environments, including Kubernetes/container services, databases, object storage, backup, monitoring, security, SSL and third-party services unless explicitly provided by the Client.	
26	Pg. 181	System Deployment Requirements	The system is required to be deployed across Head Office and 13 Counties with offline synchronization support. Kindly provide the expected number of county users and offline users per county for sizing synchronization, storage and bandwidth requirements.	Deployment should cover the Ministry/FSRP Head Office and all 13 target counties. For planning, assume 15-30 active users at Head Office, 10-30 users per county office, plus administrators, grievance committees, technical support users and read-only reporting users. This produces an initial internal user range of 300-800 and a scalable design target of at least 2,500 named users, in addition to public grievance submitters.	

27	System Architecture Overview	Cloud-native microservices architecture with Kubernetes deployment.	Is Kubernetes infrastructure expected to be supplied by the bidder, or will the purchaser provide container orchestration	For the primary cloud deployment, the bidder should include the Kubernetes/container orchestration infrastructure. A managed Kubernetes service is preferred for reliability and maintainability, with separate namespaces/environments for production, staging, testing and development, autoscaling, secrets management, monitoring and backup. DR Kubernetes capacity should also be included or clearly priced as an option.	
28	Hybrid Deployment Strategy	Primary cloud deployment with on-premises backup.	Kindly specify the infrastructure available for on-premises DR and backup deployment.	The Client will provide adequate infrastructure for on-premises DR and backup deployment.	
29	5.1 Warranty Defect Repair	One-year warranty after operational acceptance.	Please clarify whether Annual Maintenance Support (AMC) beyond the warranty period is required and, if yes, for what duration.	The mandatory post-go-live warranty is one year after operational acceptance and should cover defect correction, security fixes, configuration defects and support for stabilisation. Because the FSRP runs through August 2029, bidders should also provide optional AMC/support pricing for the remaining programme period, including helpdesk	

				support, preventive maintenance, upgrades, security patching, monitoring, minor enhancements and SLA-based incident response.	
30	DR & Availability		Please provide target SLA, RTO, and RPO requirements for production and disaster recovery environments.	Target service levels should be 99.9% monthly production availability excluding agreed planned maintenance. Recommended minimum DR targets are RTO of 4 hours and RPO of 15-60 minutes for critical databases and document metadata, with object storage backups replicated according to the agreed backup schedule. Bidders should include backup frequency, retention period, DR testing approach, monitoring and incident escalation procedures.	

31	Pg 153 and 154	Shared Data Storage Devices All printers and scanners in each implementing unit. Consumables 3.5.1 Printer Ink / Toner – Printer Type 1: Other Non-IT Goods 3.6.1 Workstation Desks: 3.6.2 Photocopiers: 3.6.3 Specialized Mechanical Systems – Datacenter [for example, specify: raised floor system, electrical distribution subsystem, etc.]	Please clarify what will be the quantity and also the specifications and who will be providing the mentioned goods?	Quantities/specifications for the listed goods should be provided separately by the Client/KALRO where they are required under the tender. Unless expressly itemised, such goods should not be assumed to be part of the core GRM software development scope.	
32	Pg 156	Network and Communications Specifications	The tender specifies a minimum shared storage capacity of 100 TB and backup storage of 50 TB tape storage. Kindly confirm the estimated data volume to be stored during the project lifecycle and whether the proposed capacities are mandatory or indicative. Kindly Share the Backup policy As per standard Daily, weekly & Monthly backup are taken with some retention period	The 100 TB shared storage capacity should be treated as the overall shared storage/backup/DR capacity requirement unless formally revised. For GRM application storage, bidders should plan for 10-20 TB initial active storage, scalable to 50-100 TB over the programme lifecycle, covering attachments, indexes, logs, audit trails, reports, backups and archives. The storage design should support encryption, versioning, lifecycle	

				management and secure retention.	
33	System Architecture Overview	Cloud-native microservices architecture with Kubernetes deployment.	Is Kubernetes infrastructure expected to be supplied by the bidder, or will the purchaser provide container orchestration As they have mentioned, the existence of Kubernetes What is exiting version they are using?	For the primary cloud deployment, Kubernetes/container orchestration should be included in the bidder's technical and commercial proposal unless the Client confirms availability of an existing platform. The design should include production and non-production environments, autoscaling, ingress/API gateway, container registry, secrets management, monitoring, logging, backup and DR replication.	

34	Pg 46	The deadline for Bid submission is: Date: **2nd July 2026 at 11.00am. East Africa Time**	Please allow us for two weeks extension for at least a two-week extension to the current bid submission deadline so that we can incorporate the requirements mentioned in the bid clarification	Any extension to the bid submission deadline, if approved, should be issued formally by the Procuring Entity through an addendum and communicated to all bidders through the official procurement channel.	
35.			**Hosting Requirements** Does the Ministry have any specific preference or restriction regarding cloud-based, on-premises, or hybrid deployment? Additionally, are there any government data governance or data residency requirements that we should take into consideration?	Primary hosting will be on Government Server (KALRO), with a secondary cloud/on-premises backup or disaster recovery environment. The system must comply with applicable Government of Kenya requirements, including the Data Protection Act, 2019, Computer Misuse and Cybercrimes Act, 2018, and National ICT Policy Guidelines, 2020. Data ownership shall remain with the Ministry/FSRP.	
36.			**Training Location** The ToR specifies three days of end-user training and three days of system administration training; however, the location is not clearly defined. Kindly confirm whether the training is expected to be conducted in Nairobi only or across all 33 counties.	Training will be conducted at a central place, possibly outside Nairobi e.g., Naivasha, for ToTs across all the target counties.	

37.			**Number of Users / System Load** The ToR mentions 33 counties and NPCU/CPCU staff; however, it does not specify the expected number of concurrent users or total registered users. Kindly provide an estimate to support accurate sizing and planning.	Plan for approximately 300-800 named internal users initially, scalable to at least 2,500 named users over the programme life. Peak authenticated concurrent users should be sized at 300-500, with stress-test capacity of at least 1,000 concurrent sessions, plus public/anonymous grievance submissions.	
38.			**Post-Implementation Support Scope** The ToR mentions six months of technical support but does not clearly define the scope. Kindly confirm whether this support is limited to bug fixes only or whether it also includes enhancements and feature additions, as this will impact the overall pricing.	Should cover defect correction, security fixes, configuration defects, and support for stabilisation. Because the FSRP runs through August 2029, bidders should also provide optional AMC/support pricing for the remaining programme period, including helpdesk support, preventive maintenance, upgrades, security patching, monitoring, minor enhancements, and SLA-based incident response.	

State Department for Agriculture

For: Principal Secretary