

CONSULTING SERVICES– INDIVIDUAL CONSULTANT

AFRICA CENTRES FOR DISEASE CONTROL SUPPORT PROGRAM TO COMBAT CURRENT AND FUTURE PUBLIC HEALTH THREATS PROJECT (P178633) – IDA-E1110

Recruit senior consultant on system development and integration to support the Enhancement of the Event Management System (EMS) (6 months consultancy)

Reference No: ET-AUC-485981-CS-INDV

Introduction and Background

The Africa Centres for Disease Control and Prevention (Africa CDC), a specialized technical institution of the African Union, plays a central role in strengthening disease surveillance, epidemic intelligence, and emergency response across the continent. With financing from the World Bank through the "Africa Centres for Disease Control Support Program to Combat Current and Future Public Health Threats Project," Africa CDC aims to enhance its capacity to support AU Member States in preventing, detecting, and responding to public health emergencies.

To advance this objective, Africa CDC developed the Event Management System (EMS)—a digital platform under the Africa Epidemic Intelligence Platform (AEIP)—to enable real-time detection, tracking, and analysis of public health events. The EMS facilitates swift decision-making and coordinated response by providing Member States and Africa CDC with a common operational picture of emerging threats.

This Terms of Reference (ToR) outlines the consultancy services required to assess the current EMS implementation in six Member States, identify usability and integration gaps, and support targeted upgrades. The goal is to deliver a user-friendly, technically robust, and interoperable EMS platform that enhances early warning capabilities and strengthens surveillance integration across the continent. This effort will contribute to a unified epidemic intelligence framework that informs preparedness, risk analysis, and coordinated public health response.

Objectives of the consultancy:

The primary objective of this consultancy is to assess, upgrade the Africa CDC EMS and integrate it with national surveillance systems in selected AU member states to improve usability, interoperability, real-time data analysis and exchange, as well as epidemic intelligence and early warning capabilities across Africa, while considering ethical data practices (confidentiality and security), safeguarding measures and long-term sustainability plan.

Specific objectives:

- Conduct a comprehensive technical and usability assessment of EMS in six Member States.
- Upgrade the EMS: Enhance the EMS's performance, scalability, and usability to better manage real-time data collection, monitoring, and analysis.
- Design and Implement Interoperability Frameworks: Develop and implement interoperability frameworks that will enable the integration of the EMS with national surveillance systems in targeted African countries.
- Facilitate Data Exchange: Develop secure, efficient, and automated data exchange mechanisms to enable seamless information flow between Africa CDC and Member States.
- Strengthen Detection and Notification of Events: Improve the EMS's capacity to detect and notify of health events in real-time, ensuring more accurate and timely risk assessment and response.
- Ensure ethical data use and safeguarding, including compliance with AU standards, GDPR, and HIPAA.
- Build capacity and provide Technical Support: Conduct targeted training sessions for national surveillance teams and Africa CDC staff to ensure the long-term sustainability of the upgraded EMS, fostering national ownership and operational independence
- Design relevant monitoring and evaluation tools to assess performance, usage, and long-term impact of EMS integration.

Scope of Work:

The consultant will support Africa CDC in assessing, upgrading, and integrating the Event Management System (EMS) with national surveillance platforms in six AU Member States. The scope of work includes a mix of technical, operational, and strategic tasks aimed at strengthening real-time event detection, interoperability, early warning systems, and data governance.

Key responsibilities include:

- Conducting a comprehensive usability and functionality assessment of the current EMS at Africa CDC and in selected Member States.
- Designing a revised technical architecture and prioritized upgrade roadmap to enhance system performance, usability, and scalability.
- Developing a fully compliant interoperability framework and secure data exchange protocols based on international standards (e.g., HL7, FHIR).
- Improving the EMS's early warning and real-time detection capabilities, including configurable threshold alerts and visualization outputs.
- Embedding ethical governance and safeguarding protocols to ensure compliance with AU policies, GDPR, HIPAA, and relevant international standards.
- Delivering training and knowledge transfer sessions to build national and regional capacity and promote ownership and sustainability.

- Establishing a results-based monitoring and evaluation (M&E) system to assess EMS performance and guide continuous improvement.

The following table summarizes each scope area, the expected deliverables, timeline, and associated payment milestones:

Output	Scope of Work Activities	Key Deliverables	Timeline	Payment (%)
1. EMS Usability and Gap Assessment Report	<ul style="list-style-type: none"> - Conduct baseline assessment in Africa CDC + 6 Member States - Identify technical, operational, and integration gaps - Evaluate alignment with national workflows 	<ul style="list-style-type: none"> - EMS Usability Assessment Report - List of gaps and technical requirements - Country-specific findings summary 	Week 1–4	20
2. System Upgrade Plan and Feature Prioritization	<ul style="list-style-type: none"> - Design updated technical architecture - Enhance usability, performance, dashboards - Prioritize user-requested features based on field feedback 	<ul style="list-style-type: none"> - EMS Upgrade Plan (with specs & roadmap) - Feature prioritization report - Implementation roadmap aligned with 	Week 5–7	15%
3. Interoperability Framework and Data Exchange Protocols	<ul style="list-style-type: none"> - Develop HL7/FHIR-compliant integration framework - Create API specifications - Design secure, automated data flow mechanisms 	<ul style="list-style-type: none"> - Interoperability Framework Document - API specifications & data exchange blueprint - Country-level integration 	Week 8–9	15%
4. Early Warning & Output Visualization Enhancements	<ul style="list-style-type: none"> - Integrate real-time alerts and threshold detection (system capable of generating alerts within 24hrs reaching threshold) - Add visualization (charts/graphs) to weekly reports - Create configurable alert parameters 	<ul style="list-style-type: none"> - Updated EMS modules for early warning - Visualization - Country-defined threshold settings 	Week 10–11	15%
5. Ethical Governance, Safeguarding & Data Protection Protocols	<ul style="list-style-type: none"> - Review policies, implement protocols for ethical use - Embed safeguarding and AU-compliant privacy features - Conduct risk mitigation analysis 	<ul style="list-style-type: none"> - Ethics & Safeguarding Compliance Report - Integrated data protection plan - Risk log with mitigation actions 	Week 10–11	10%
6. Capacity Building and	<ul style="list-style-type: none"> - Develop SOPs, training guides, ToT packages 	<ul style="list-style-type: none"> - Training Toolkit (manuals, SOPs, 	Week 12	10%

Knowledge Transfer Toolkit	<ul style="list-style-type: none"> - Conduct 1 regional training and virtual follow-ups - Plan for sustainability and local ownership 	<ul style="list-style-type: none"> slides) - Workshop completion reports - Sustainability and handover plan 		
7. M&E Toolkit and Final Consultancy Report	<ul style="list-style-type: none"> - Develop KPIs, feedback tools, and dashboards - Conduct post-rollout review and compile lessons - Submit technical documentation and final report 	<ul style="list-style-type: none"> - Final Technical Report (with annexes) - Maintenance plan & post-implementation check tools 	Week 12	15%

Duration of the consultancy:

The expected duration of the consultant service is six (6) months after the starting date of the project. The consultancy services accomplishment will be the successful completion of the key deliverables and submission of all reports to Africa CDC

Working Arrangement and Supervision:

The consultancy will be conducted under a hybrid arrangement, combining remote work with onsite missions as required. The consultant will work under the technical supervision of designated focal points from Africa CDC's Mortality Surveillance and MIS teams, and will submit progress updates at the end of each major phase. Participation in monthly review meetings will be required to track progress and align deliverables.

The consultant is responsible for securing all tools and resources needed to complete the assignment. Travel-related costs for approved field missions will be covered by Africa CDC in accordance with AU travel policies.

Reporting Lines and Coordination:

The consultant will report to the Head of the Surveillance and Disease Intelligence (SDI) Division or a delegated representative. Technical oversight and coordination will be provided by the Event-Based Surveillance (EBS) team within the SDI Division.

The consultant will also coordinate closely with:

- The Digital Health and Information Systems team
- Regional Collaborating Centres (RCCs)
- Ministry of Health focal points in six AU Member State

Regular coordination meetings will be held—virtually or in-person—to review progress, validate outputs, and incorporate stakeholder feedback.

Minimum Qualifications and Experience

Educational Qualifications:

A Master's degree or higher in Public Health Informatics, Computer Science, Information Systems, or a related field from a recognized institution.

Professional Experience:

- Minimum of 10 years of experience in digital health, disease surveillance systems, and health informatics.
- Demonstrated experience working with AU Member States, regional public health institutions, or Ministries of Health on large-scale system integration and health information management.
- Prior consultancy or technical support in donor-funded or AU-aligned projects is highly desirable.

Technical Expertise / Skills:

- Proven proficiency in health information system design, particularly in surveillance systems, DHIS2, or EMS platforms.
- Expertise in system architecture, API development, and interoperability using HL7/FHIR standards.
- Experience with real-time data analytics, dashboard design, machine learning-based early warning systems, and secure data-sharing mechanisms.
- Strong understanding of cloud-based platforms (AWS, Azure, Google Cloud), cybersecurity protocols, and data governance frameworks (e.g., GDPR, HIPAA, WHO standards).
- Ability to design and deliver technical training for public health professionals.

Languages:

- Excellent written and verbal communication skills in English are required.
- Working knowledge of other AU working languages is an asset.

Ethical Standards and Safeguarding

- The consultant must operate in compliance with the African Union's ethical guidelines and international public health principles. Specific requirements include:
- Adherence to AU and Africa CDC data privacy and confidentiality protocols
- Integration of child protection and PSEA (Protection from Sexual Exploitation and Abuse) safeguards
- Ethical data collection, storage, and dissemination practices
- Commitment to gender equity, non-discrimination, and inclusive engagement

Monitoring, Evaluation, and Performance Criteria

Performance will be monitored throughout the consultancy using:

- Key Performance Indicators (KPIs) linked to each deliverable
- Feedback from Africa CDC technical teams and Member State stakeholders
- Participation in monthly review meetings and timely delivery of outputs
- Final validation of deliverables by Africa CDC technical leads and the World Bank Project Implementation Unit

Budget and Payment Schedule:

The total payment for the Consultant's services shall be a fixed amount of **USD 63,000**, payable upon successful completion and delivery of the milestone's agreed deliverable. This fixed amount is inclusive of all Consultant fees, reimbursable expenses, and any applicable taxes or tax obligations imposed on the Consultant.

This consultancy will be managed as a lump sum contract. The total fee must include all professional services, applicable taxes, and the consultant's equipment or software. Travel-related costs (airfare, DSA, accommodation) for approved field missions will be covered directly by Africa CDC, in accordance with AU travel regulations.

Deliverable	Payment (%)
Usability Assessment Report	20
System Upgrade Plan	15
Interoperability Framework & API Specs	15
Early Warning Enhancements & Visualization Outputs	15
Ethics, Safeguarding & Data Protection Compliance	10
Capacity Building Toolkit and Workshop Report	10
Final Report, M&E Toolkit, and Transition Plan	15
Total	100

Evaluation and Qualification Criteria:

Technical Evaluation

- a. Education, Qualification, and Relevant Training – 20
- b. Experience of the consultant and relevance to the assignment and number of years– 80

Required Documentation:

- a. Cover letter with statement of understanding
- b. A detailed and updated curriculum vitae (CV), and indicating nationality, age and gender.
- c. Two written references

Services and Facilities to be provided by Africa CDC:

The individual consultant will be supervised by the Head of SDI, Africa CDC for the purpose of delivering the above outputs within the agreed time frame. This consultancy will be based in Addis Ababa at the Africa CDC Headquarters. The consultant must comply with the African Union rules and procedures related to security and code of conduct.

Africa CDC will cover the cost of travel including economy-class air tickets and other necessary expenses when travel is required according to the AU rules and regulations. Africa CDC will provide the consultant the following document and facilities:

- a. The Africa CDC will identify and assign technical staff to support the implementation process.
- b. Africa CDC will provide the necessary documentation and information required for the assignment.
- a. Maintain regular follow-up of the activities done by the consultants, review and comment on the submitted deliverables and work done.
- b. Assist in organizing consultative meetings with Member States and other stakeholders

INVITATION

The African CDC now invites eligible Individual Consultants ("Consultants") to submit their CVs in providing the Services and required documents as listed in the ToR. Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services.

The attention of interested Consultants is drawn to Section III, paragraphs, 3.14, 3.16, and 3.17 of the World Bank's "Procurement Regulations for IPF Borrowers" July 2016, revised March 2025 ("Procurement Regulations"), setting forth the World Bank's policy on conflict of interest.

A Consultant will be selected in accordance with the Individual Selection method set out in the Procurement Regulations.

Further information can be obtained at the address below during office hours 8:00-13:00hrs and 14:00-17:00 hours, Addis Ababa Time.

CVs must be delivered in written form following the above shortlisting criteria to the emails below before 15:00 Hours Local Time on 31 July 2025.

Africa CDC,
Africa Centres for Diseases Control and Prevention,
Supply Chain Division
Administration Directorate
Lafto Square, Haile Garment, Addis Ababa, Ethiopia
Africa CDC Office, Dr. John Nkengasong,
4th floor, Room No. 408

E-mails: tender@africacdc.org and Selamg@africacdc.org