

(CONSULTING SERVICES-INDIVIDUAL CONSULTANT)

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

Development of a Mortality Surveillance Continental Database

Reference No. ET-AUC-485996-CS-INDV

The African Union has received financing from the World Bank for the "Africa Centres for Disease Control Support Program to Combat Current and Future Public Health Threats Project".

Development Objective of the Project: Enhance the capacity of Africa Centres for Disease Control and Prevention (Africa CDC) to support AU Member States in preventing, detecting, and responding to current and future public health threats.

1. BACKGROUND

Officially launched in Addis Ababa, Ethiopia, in 2017 as a specialized technical institution of the African Union, the Africa Centres for Disease Control and Prevention(Africa CDC) is Africa's first continent-wide public health agency. Africa CDC envisions a safer, healthier, integrated, and stronger Africa, where the Member States can effectively respond to outbreaks of infectious diseases and other public health threats. The agency's mission is to strengthen Africa's public health institutions' capabilities to detect and respond quickly and effectively to disease outbreaks and other health burdens through an integrated network of continent-wide preparedness and response, surveillance, laboratory, and research programs. In 2019, Africa CDC was mandated by the 5th conference of ministers responsible for civil registration and vital statistics (CRVS) "to provide technical guidance and support to AU Member States and to mobilize resources for strengthening mortality surveillance systems in alignment with CRVS." In 2022, Africa CDC launched the Continental Framework for Strengthening Mortality Surveillance systems in Africa with the ultimate goal of improving availability of mortality data for public health decisions and policies.

Mortality Surveillance is the on-going and systematic collection, analysis, and interpretation of mortality data to understand patterns, trends and causes of death, identify emerging public health threats and guide effective interventions in a population. The development of a continental mortality surveillance database is critical for monitoring mortality trends, understanding the burden of diseases, and informing policy decisions across the continent. The database will integrate national mortality data to create a continental overview, standardize reporting, and support real-time analysis to improve public health preparedness and response strategies. Africa CDC seeks to develop this



databaseanimevalignment with the continental framework for strengthening mortality surveillance and the operational guide for establishing and implementing mortality surveillance in Africa.

2. OBJECTIVE OF THE CONSULTANCY

The main objective of this assignment is to support the design of a continental mortality surveillance database that will be used by Africa CDC to monitor mortality trends for early detection of health threats and inform preparedness and response strategies, understand the burden of diseases, and inform policy decisions at different levels.

Specific Objectives:

- Lead the design and development of a continental mortality surveillance database
- o Provide technical coordination for data integration from various countries
- Develop systems for real-time or periodic data updates
- Guide implementation analytic tools for mortality trend analysis, time series analyses, geospatial mapping, and predictive modeling
- Lead training and capacity-building as well as guide on how to use and maintain the database

3. SCOPE OF WORK

The consultant will work with the Africa CDC teams including Surveillance and MIS team to develop and pilot a scalable mortality surveillance database that leverages existing infrastructure and conforms to the institution's standards and protocols for database development and data management as necessary. The consultant will collaborate and coordinate closely with other teams working on similar work, including the consultant working on **Baseline Assessment of Mortality Data sources** in AU Member States and the DHIS 2 development team within the Africa CDC, to pilot the design and architecture of the developed database for data integration and interoperability. The consultant is expected to accomplish the following tasks:

Database Design and Architecture

- Design and develop a user-friendly, scalable and secure database for mortality data entry, storage, and retrieval, considering the specific needs of various stakeholders.
- Develop data integration protocols and mechanisms to merge and harmonize data from different sources and countries, ensuring consistency, standardization (e.g. ICD standards) and data quality.
- Develop data models, normalization, and schema for different mortality indicators (e.g., age, sex, causes of death, location).

Pilot test the tool for integration and interoperability in selected AU Member States

- Pilot test the tool for interoperability and integration of data from multiple sources in selected AU Member States
- Establish protocols for data collection, reporting, standardization and quality assurance to ensure consistency and reliability across countries



- all evelop and implement data integration strategies to harmonize and merge datasets from different sources
- Implement robust data validation and quality assurance processes to identify and handle missing, incomplete, or erroneous data

Capacity Building and Training

- Develop Standard Operating Procedures (SoPs) for the use of the database system.
- Provide training and capacity building for relevant stakeholders on using the database, data management, analysis and reporting.
- Prepare comprehensive documentation, including system specifications, user manuals, and technical documentation for the developed database.

Project Management and Coordination

- o Develop a detailed project plan with timelines, milestones, and deliverables.
- Coordinate with Africa CDC Mortality programme personnel and focal points in Member States
- Ensure the timely and effective delivery of tasks, reporting regularly on progress and addressing any emerging issues
- Provide recommendations for ongoing maintenance and improvement of the system post-implementation

4. KEY DELIVERABLES

- An integrated and functional continental mortality surveillance database
- Detailed documentation of database design and architecture
- Mobile and web-based data entry interfaces
- Clearly outlined data integration strategies and protocols for data standardization and cleaning
- Mortality surveillance dashboard for real-time monitoring
- Training SoPs and user documentation for database usage and maintenance
- Training workshops and capacity-building sessions for relevant stakeholders
- Final report on the pilot test with lessons learned and recommendations for tool refinement

5. TIME FRAME

Specific milestones and timelines will be agreed upon with the selected consultant, but a tentative breakdown is as follows:

- Phase 1 (Month 1-2) System Design: Database design, architecture, and data source assessment
- Phase 2 (Month 3-4) Piloting for Interoperability and Data Integration: Data integration, testing, and initial analytics tool development.
- Phase 3 (Month 5-6) Capacity Building and Handover: System deployment, training, and final reports.

6. DURATION OF CONSULTANCY



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

7. CONSULTANCY FEE

Africa CDC shall pay the consultant an overall amount of 40,000 USD over the 6-month period, subject to performance on expected deliverables. The payment schedule is as follows:

Phase 1	30%	After submission and validation of
		Phase 1 deliverables
Phase 2	30%	After successful demo of integrated
		database and draft tools
Phase 3	40%	Upon training completion and final
		report sign-off

8. WORKING STATION/SUPERVISION

The consultant will work both remotely and onsite and closely supervised by the Africa CDC focal points, from the Mortality Surveillance and MIS teams for the period of the contract. Regular progress reports will be required at the end of each phase, and the consultant will participate in monthly project review meetings.

The consultant will be responsible for acquiring the resources and facilities required for completion of the activity.

9. QUALIFICATION AND EXPERIENCE OF THE CONSULTANT

Education

• Post-graduate University Degree in Health Informatics, Public Health, Information Technology, Data science, and/or other related field.

Experiences and Technical skills

- At least 7 years of professional experience in public health data systems, disease/mortality surveillance, digital solution implementation or related fields
- In-depth knowledge of epidemiological surveillance methodologies and practices, data collection processes and management platforms, and mortality surveillance systems is vital.
- Strong knowledge of database management systems, data integration tools, cloud technologies, and data analytics platforms
- A background in integrating digital solutions with existing health systems and data management platforms.
- Proven ability to align technology with the unique contexts of AU Member States to support effective implementation and sustainability of improved mortality data



10. EVALUATION AND QUALIFICATION CRITERIA

Technical Evaluation

- a) Education, Qualification, and Relevant Training 30
- b) Experience of the consultant and relevance to the assignment, and number of years 70

11. REQUIRED DOCUMENTATION

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

12. 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.
- c) Maintain regular follow-up of the activities done by the consultants, review and comment on the submitted deliverables and work done.
- d) Assist in organizing consultative meetings with Member States and other stakeholders

13. 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



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 a written form following the above shortlisting criteria to the emails below before 15:00 Hours Local Time on 15 August 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 TigistB@africacdc.org (CV and application shall

be submitted to both emails)