



**Consultancy for the Development of Structured Methodologies for  
Extracting Data Insights for the Accelerated Implementation of  
Agenda 2063**

*under*

**The Support for Capacity Development of the AUC and other AU  
Organs Project (P126848): World Bank Group**

**TERM OF REFERENCE (TOR)**

**ET-AUC-178374-CS-QCBS**

October 2020

**1. Background**

**Project Development Objectives:** The objective of the Project is to strengthen African Union Commission's capacity to facilitate socio-economic development results and transformation through enhanced institutional efficiency. This will be achieved by enhancing the AUC's internal human resources and management systems, and supporting result-oriented external partnerships and collective actions designed to enhance the implementation of regional economic development initiatives in priority areas (e.g. regional trade, energy, infrastructure, governance, natural resource management) for the benefit of African Union Member States, the Regional Economic Communities (RECs) and African citizens.

The Project consists of the following parts:

- **Strengthening Institutional Capacity:** Support for improvement of budget execution, staff capacity, and ICT to provide efficient corporate and functional services through: (a) enhancing corporate governance and management systems and procedures in strategic planning, financial management, budgeting, procurement, recruitment, conference management and all other services as per international standards; (b) driving operational efficiency by (i) modernization of ICT infrastructure; (ii) development of human resources; and (iii) peer-to-peer learning; and (c) enhancing stakeholder communication, feedback and participation through branding, media and outreach.
- **Facilitating Economic Development Results with Stakeholders:** Support for promotion of regional transformation and improvement of policy standards and African Union agreements monitoring through: (a) support for piloting select external institutional partnerships towards the advancement of common goals for regional transformation; (b) monitoring of African Union agreements and programs implementation; and (c) Project monitoring and evaluation and learning.

**Project Beneficiaries:** Project beneficiaries include the AUC and other AU Organs. Support for capacity development is expected to improve the beneficiaries' organizational performance and their ability to facilitate collective action in priority economic development areas (e.g. regional trade, agriculture, energy, infrastructure, governance, natural resource management) for the direct benefit of AU Member

States and RECs. The project is also expected to indirectly benefit public and private entities and citizens, civil society and Diaspora groups in general in Africa. An improved and effective AUC would also benefit the development partners and other entities engaged in peace building and economic development programs in the region and beyond. Attention to strategic priorities would also benefit women, youth and vulnerable groups in society through better information on policies and programs.

## **2. Introduction and Context**

Most African countries aspire to have innovation-led knowledge-based economies characterized by the full participation of their citizens. Citizen engagement in policy and decision-making processes, at different levels of community, government and business, shapes pathways to the desired national socioeconomic and wellbeing status. The types of citizen participation should continuously move from to consult, to involve, to collaborate and ultimately to empower. Most development interventions are still based on consultation and involvement of citizens mode with its loosely defined way and manner of practice. For effective and sustainable interventions, AUC and AUDA-NEPAD must thoughtfully and intentionally engage citizens in ways that promote leadership, ownership, partnership, resilience and co-creation of activities that are central to the livelihoods of citizens. For example, citizens should be genuinely involved in the entire value creation chain from integrated data-driven knowledge generation, and use of the knowledge in planning, designing and implementation of interventions. Given that citizen engagement is the hallmark for this project, the primary aim of making data, digital tools and information on development accessible and reusable by the public and private agents is to co-create economic and social value in all spheres of life for the African citizen. The overall goal of this project is to use insights from data and digital tools to drive innovation and citizen engagement to devise pathways for accelerating the implementation of Agenda 2063. This goal is achieved by implementing the following Specific Objectives:

1. Establish 'AU Innovation Data Hub' for the collection, processing, analyzing and dissemination of innovation (including social) data from the Member States to African citizens for engaged policy response on developmental issues;

2. Develop and roll out an AU Citizen Engagement Strategy in line with standardized tools, instruments and indicators for engaging African citizens on Agenda 2063 implementation;
3. Use the generated knowledge and insights from Specific Objectives 1 and 2 to influence Africa's strategic thinking and development discourse at the political level; and
4. Use the technologies and digital platforms in Specific Objectives 1 and 2 to create platforms for MSMEs to exploit the gaps across markets and identify business opportunities, develop new products and services and develop new business models

### **3. Objective of the Consultancy**

In Africa, leveraging on data for socio-economic development is impeded by inadequate data infrastructure and digital platforms which limit the capacity of organizations (in the private and public sector) to design methodologies for data use, curation and repurposing. There is a need to create processes and digital tools that impel decision-makers to act on insights derived from the small-to-big data. A connection between those who work on the data and those who make decisions is crucial. The challenge has three dimensions namely; data gaps (i.e., absence or limited availability of the data that adds value to development interventions and public engagement), access gaps (i.e., limited accessibility to the existing datasets) and usability gaps (i.e., the ineffective and sub-optimal use of available data). These gaps exist despite the increased computing power and access to data in recent decades, the ability of public and private sector organizations to use data in the decision-making processes is compromised. Therefore, the development of a data use methodology to provide solutions for real-world socio-economic problems is one of the top priorities for the AUC, AUDA-NEPAD, RECs and the Member States participating in the project summarized in section 1. This assignment will directly contribute to specific objectives 1 to 4 of the Data for Development Project. The objective of the assignment is to ***enhance the capacity of stakeholders to extract insights that contribute to accelerated implementation of Agenda 2063.***

The methodology will lay a strong foundation to understand development issues based on knowing the key questions to ask of the data. This methodology will also guide;

- a) The selection and use of key performance indicators (and their drivers) for the accelerated implementation of Agenda 2063,
- b) How to invest data curation time and resources,
- c) What data is there (the sources of data, who wants to use the data),
- d) How the data could be used (tools and analytics) to derive insights, and
- e) How the insights are communicated to impel actions by decision-makers.

#### **4. Scope of the Consultancy**

The consultancy firm will be responsible for developing a data (science) use methodology and related databases, manage the datasets and information required for generating insights for policy, decisions and actions related to the implementation of Agenda 2063 and the AUDA-NEPAD Strategic Plan 2019-2023. The data use methodology should include a full data journey focusing on examples (use cases) of solutions to the development problems or opportunities identified in the different African continental frameworks and policy instruments. The methodology should develop the means of collecting and managing the relevant data and extract insights that contribute to examples of possible smart decisions and impactful actions by AUC, AUDA-NEPAD, RECs and the Member States. The methodology would include the following activities;

- a) Understand the business and articulate the strategic problem(s) to be solved (or opportunities to be exploited) for each data use case
- b) Devise and validate hypotheses-based solutions to the problem
- c) Identify the data requirements for the selected solution(s) and develop easy to use tools for collecting the data
- d) Collect the data (and devise ways of storing and managing the data) from selected Member States based on specific priority areas (guided by the AUDA-NEPAD Strategic Plan 2019-2023)
- e) Develop and share an understanding of the data, including how the data will be used to solve specific problems
- f) Prepare the data into relevant subsets of the data or datasets suitable for appropriate modelling

- g) Train and test the data model
- h) Evaluate and deploy the model
- i) Get feedback on the performance of the model
- j) Produce a report on insights for policy or programme planning, prioritizing and reporting

## **5. Expected Deliverables**

The following are the expected deliverables of consultancy

### **5.1. A Report on Data Sources and Data Collected for Developing Structured Methodologies**

This entails details of data collected from selected Member States based on specific priority areas (guided by the AUDA-NEPAD Strategic Plan 2019-2023). It also articulates the type data sources identified (and described) and data collected on specific attributes or features critical to the solution or methodology.

### **5.2. Analytical Datasets Curated for the Structured Methodologies**

This deliverable will require the consulting firm to show evidence of sharable and accessible datasets suitable for modelling approach. The databases developed and datasets stored should continuously maintained throughout the consultancy.

### **5.3. First Technical Report**

The first technical report will identify and discuss baseline models and analytical frameworks needed for the exercise

### **5.4. Second Technical Report**

The first technical report will illustrate the approach used in testing the models as well as documenting the results. The required diagnostic measures for the model will be identified in the report.

### **5.5. Two Knowledge Products Published in Peer-Reviewed Journals**

The firm is expected to produce and publish two knowledge products on the use of data insights for accelerated implementation of Agenda 2063.

## **5.6. Final Technical Report**

The final technical report will demonstrate all the processes and models used in the structured methodologies. It will also illustrate practical processes and approach for using the methodologies, models and tools.

## **6. Duration of the Consultancy**

The consultancy is for 100 full-time Man/days from the date the contract is signed. The consultancy is expected to be implemented between October 2020 and January, 2021.

## **7. Governance and Management of the Consultancy**

The governance and management of this consultancy is under the direct supervision of the Directorate of Programme Innovation and Planning, AUDA-NEPAD. The consulting firm will report to the Division of Data Analytics and Research (Technology Innovation Hub). The division working with the procurement department, will manage the evaluation process including the provision of technical guidance, AUDA-NEPAD documents (e.g. Strategic Plan) and ensure that procurement policies and processes are followed.

## **8. Required Experience of the Firm**

The following are the minimum requirements for the prospective firm:

- At least 8 years of proven experience in using data to develop innovative programmes for socio-economic development and citizen engagement;
- Conversant with African Union continental frameworks, strategies, policies and decision-making processes;
- Knowledgeable about Agenda 2063, Medium Term Plan, AUDA-NEPAD Strategic Plan 2019-2023, Regional Economic Communities and Member States Development Plans;

- A track record of using data to develop solutions for societal challenges that involved working with multiple organizations and stakeholders;
- A strong understanding of data science methodology and business process modelling;
- Experience in creating and managing databases; and
- Good knowledge of national innovation systems and the use of results-based performance management systems in programme development will be an advantage.

The consultancy firm is expected to assign three key experts with the following minimum requirements:

#### **8.1. Data Curator and Processing Expert**

- A minimum of a BSc. degree in Data Science or Statistics or Information Engineering or equivalent qualification.
- Demonstrated experience in conducting background research from external data sources
- At least 3-5 proven experience in developing and deploying database systems
- Demonstrated knowledge and experience in Relational Databases operations and transactions
- Demonstrated experience in ETL Technologies
- Experience data documentation standards such as DDI and DataVerse

#### **8.2. Senior Data Scientist**

- A minimum of a Master's degree in Demography or Data Science or Statistics. A PhD will be a plus
- At least 8 years of experience related to statistics, data and modelling on international development issues and topics
- Knowledge of national and international statistical systems
- Experience with phases of the data management lifecycle and associated modelling methodologies.
- Demonstrated experience in the ability to derive information from data and present evidence to decision-making



### 8.3. Senior Economist

- A minimum of a Master's degree in Economics or Econometrics or equivalent. A PhD will be a plus
- Experience in developing reports based on data analysis, recommended requirements and specifications,
- A minimum of 7-10 years of experience as a Research Economist, preferably in development economics. Evidence of publications in scholarly journals will be required
- Demonstrated experience in development impact analysis
- Familiar with the African Union and Regional Economic Communities functions and processes,
- Knowledge of African Union development frameworks (e.g. Agenda 2063, STISA 2024, African Pharmaceutical Manufacturing Plan, PIDA, and others), the African Union Development Agency-NEPAD Strategic Plan 2019-2023, and RECs and Member States Development Plans.

## 9. Schedule of Payments

The schedule of payment, outlined in the table below, is based on the deliverables in Section 5.

No	Description	% of Payment
1	A Report on Data Sources and Data Collected for Developing Structured Methodologies	10%
2	Analytical Datasets Curated for the Structured Methodologies	30%
3	First Technical Report	20%
4	Second Technical Report	
5	Two Knowledge Products Published in Peer-Reviewed Journals	20%
	Final Technical Report	

## 10. Man/Days Estimates for Key Experts from the Firm

Task	KE1	KE2	KE3
Preparation of data sources for developing the structured methodologies	30	28	28
Development of database for sharing and accessing datasets for the modelling approach	10	17	10

Development and stress-testing the methodologies and models	10	17	10
Development guidelines and processes for the practical use of the models and methodologies	10	17	10
Production of technical reports and knowledge products	10	17	10
<b>Total Man/Days</b>	<b>70</b>	<b>96</b>	<b>68</b>

### Legend

KE1: Data Curator and Processing Expert

KE2: Senior Data Scientist

KE3: Senior Economist