



Republic of Ghana

Ministry of Communication, Digital Technology and Innovations

Ghana Digital Acceleration Project (GDAP)

(IDA – 70960 GH)

Terms of Reference

For

DATA SPECIALIST

Contract ID: GH-MOCDTI-486117-CS-INDV

April 2025

TERMS OF REFERENCE FOR DATA SPECIALIST

1.0.Introduction

The Ministry of Communication, Digital Technology and Innovations (MoCDTI) has received financing in the amount of US\$ 200 million (two hundred million US dollars) from the World Bank toward the cost of the Ghana Digital Acceleration Project (GDAP). The GDAP Project officially commenced after it has received both cabinet and parliamentary approval in June 2023.

The GDAP aims to expand access to broadband, enhance the efficiency and experience of selected digital public services, and strengthen the digital innovation ecosystem. To achieve this objective, the project will consist of three interlinked technical components, in addition to the Project Management and Coordination Component and a Contingent Emergency Response Component (CERC) to address the key binding constraints for the development and attainment of a digital economy. The GDAP is structured into four main components as follows.

Component 1: Ensuring Inclusive and Safe Digital Transformation

This component aims to support the government's continued efforts to build solid foundational building blocks for inclusive and safe digital transformation. The activities are designed to establish enabling regulatory and institutional frameworks for a competitive broadband market, to expand coverage of broadband networks in lagging areas; and, to strengthen cybersecurity and data governance, protection, and privacy.

Component 2: Modernizing Digital Government Services

This component aims to establish an agile, user-centric digital government model in Ghana by making investments that improve the front-end user experience of digital public services and increase the efficiency of back-end government systems. The activities are focused on building next-generation government infrastructure and delivering transactional and digital-by-design public services by supporting a shift in service delivery.

Component 3: Support for Digital Transformation of Productive Strategic Sectors

The component aims to empower digital technology entrepreneurs and firms to bring digital-driven, innovative products to emerging and frontier markets as a critical step in achieving a diverse digital economy. The project aims to strengthen the local digital entrepreneurial and innovation ecosystem and support digital start-ups and firms that can help develop data-driven digital products and services.

The Project will be coordinated through the Ministry of Communication, Digital Technology and Innovation (MoCDTI) as the Project implementing institution. A dedicated Project

Coordination Unit (PCU) is thus being set up and operationalized at MoCDTI that will have overall responsibility for supporting project preparation and implementation.

2 Objectives of Assignment

The objective is to recruit a dynamic and results-oriented individual as a **Data Specialist** who will play the key role in data collection and analysis of information generated under the various project interventions to assist more data driven and evidence based policy formulation and decision making.

3 Scope of Service

The Data Specialist is expected to undertake the following tasks:

- a) Conduct data analytics on the following key interventions of GDAP among others:
 - Public key infrastructure
 - Expanded Ghana.gov portal
 - GOVCERT (Governmental Computer Emergency Response Team)
 - Data exchange hub
 - Regulatory management system for NITA (National Information Technology Agency)
 - Digitalisation and expansion of network of observation stations
 - Refresh/upgrade of National Data centre
 - Provide analytics on the various portals to be developed under the project, notably for Office of Head of Civil Service (OHCS), Data Protection Commission (DPC) and Ghana.gov and the educational portals)
 - Operations of the Health, education and transport CERTs (Computer Emergency Response Teams) that will be established under the project
 - Various electronic applications supported under the project (notably, eprocurement, ejustice, etc.)
- b) Lead research efforts in the following areas of GDAP:
 - Sector assessment and digital transformation strategy of Ministry of Food and Agriculture (MOFA)
 - Conduct of innovation ecosystem assessment and gap analysis
- c) Collaborate with NITA to drive analytics of the Open data portal that was developed under the eTransform project
- d) Drive the integrated use of digital tools in data collection and analysis of project interventions
- e) Design and implement data systems and databases on the project
- f) Maintain and secure databases by establishing sufficient data governance, enforcing policies, and procedures
- g) Ensuring the integrity and accuracy of data
- h) Extracting data and generating reports to assist in decision-making
- i) Assist MoCDTI to identify areas to increase efficiency and automation of processes
- j) Providing technical expertise on data storage structures, data mining, and data cleansing to PCU and MoCDTI staff
- k) Collaborate with teams and management to understand business needs and devise possible solutions

- l) Address data-related problems in regards to systems integration, compatibility, and multiple-platform integration
- m) Transfer essential Data Analytics skills to internal staff members to enhance their proficiency in data analysis and management.

Other Functions

The Data Specialist will perform other related duties as assigned for the purpose of ensuring the efficient and effective functioning of other MoCDTI programmes as and when required.

4 Reporting and Time Schedule

Reporting Requirement

The Data Specialist will report to the Project Coordinator of GDAP.

Duration of Assignment and Deliverables

The duration of this assignment is one year and will be renewed on a yearly basis, based on satisfactory performance.

The Data Specialist will be based in the offices of MoCDTI in Accra and submit Monthly, Quarterly, Bi-Annual and Annual reports on the activities under the above-mentioned component under his supervision.

5 Qualification Requirements

- Master's degree in computer science, Mathematics, Statistics, or a related field
- Minimum of 5 years of experience in a data-related role
- Experience with cloud-based data storage solutions such as AWS or Azure
- Familiarity with machine learning algorithms and their applications
- Strong knowledge and hands-on experience in evidence-based policy formulation and decision making
- Strong knowledge and experience in data governance, data standards, as well as related policies and legislations
- Project management experience
- Strong interpersonal skills and the ability to work with stakeholders of all levels
- Strong proficiency in SQL, Python, and data visualization tools such as Tableau or PowerBI and other data manipulation languages
- Adept at queries, report writing and presenting findings
- Strong analytical skills with the ability to collect, organize, analyze, and disseminate significant amounts of information with attention to detail and accuracy
- Excellent problem-solving and critical thinking skills
- Excellent written and verbal communication skills
- Ability to work independently and as part of a team

6 Data, Facilities and Personnel to be provided by the Client

MoCDTI will provide relevant tools and suitable office space for this role.

MoCDTI will furnish copies of project implementation documentation and other information relevant to the assignment.