

MINISTRY OF COMMUNICATION, TECHNOLOGY AND INNOVATION



REPUBLIC OF SIERRA LEONE

**SIERRA LEONE DIGITAL TRANSFORMATION PROJECT
IDA- E1130-SL**

Terms of Reference

for

**The Recruitment of a Technical Advisor under the Western Africa Regional Digital
Integration Program – Series of Projects Phase 2 (WARDIP SOP2), Sierra Leone**

SL-MOF-202602-CS-INDV

July 2026

1. Background

The Government of Sierra Leone, through the Ministry of Communication, Technology and Innovation (MoCTI), is implementing the Western Africa Regional Digital Integration Program – Series of Projects 2 (WARDIP-SOP2), a World Bank-financed regional initiative aimed at accelerating digital transformation and integration across West Africa. The project is part of a broader regional program that builds on the first phase (SOP1) and expands coverage to additional countries, including Sierra Leone, Liberia, and Benin.

WARDIP-SOP2 is designed to address persistent structural challenges in the digital ecosystem across the region, including limited international connectivity, high broadband costs, weak cross-border infrastructure, fragmented regulatory frameworks, and insufficient private sector investment. These constraints continue to hinder the development of inclusive digital economies, limit access to digital services, and restrict opportunities for job creation, particularly for youth, women, and underserved populations.

The Project Development Objective (PDO) is to increase broadband access, financing, and usage in participating countries and to enable the environment for cross-border digital services in Western Africa.

To achieve this objective, the project adopts a regional integration approach that combines policy reforms, infrastructure investments, and market development interventions. A key focus is the mobilization of private capital through public-private partnership (PPP) models, particularly for large-scale digital infrastructure such as submarine cable systems, cross-border backbone networks, and data infrastructure.

In Sierra Leone, WARDIP-SOP2 is being implemented by MoCTI through the Project Coordination Unit (PCU) of the Sierra Leone Digital Transformation Project (SLDTP), in close coordination with regional institutions, private sector stakeholders, and development partners.

A central component of the Sierra Leone intervention under WARDIP-SOP2 is the development of international connectivity infrastructure through submarine cable systems, which requires complex technical, commercial, and institutional coordination. Given the technical sophistication and strategic importance of these investments, the Project requires a dedicated Technical Advisor to support the PCU in ensuring that all technical aspects of the project, particularly submarine cable deployment and related infrastructure, are properly designed, evaluated, and implemented in line with international best practices and World Bank requirements.

2. Project Description

The WARDIP SOP2 project is designed to support participating countries, including Sierra Leone, in increasing broadband access, improving digital infrastructure, and enabling an environment for cross-border digital services through a combination of policy, infrastructure, and market development interventions.

The project is structured around five key components:

- **Component 1: Building Policy and Financing Pathways for a West African Single Digital Market**

This component focuses on strengthening the legal, regulatory, and institutional frameworks required to support a harmonized digital market across the region. It includes support for digital governance, regulatory harmonization, and development of financing mechanisms to mobilize investment in digital infrastructure.

- **Component 2: Connectivity Market Development and Integration**

This component supports the expansion of broadband infrastructure through catalytic public financing aimed at leveraging private sector investment. In Sierra Leone, this includes investments in international connectivity, particularly submarine cable systems and landing stations, as well as strengthening regulatory frameworks to ensure open access and competitive pricing.

- **Component 3: Data Market Development and Integration**

This component aims to enhance data infrastructure and promote secure, reliable, and interoperable data systems. It includes activities to strengthen cybersecurity, data governance, and digital infrastructure required for efficient data exchange and cloud services.

- **Component 4: Online Market Development and Integration**

This component focuses on strengthening the digital economy ecosystem by promoting e-commerce, digital entrepreneurship, and the adoption of digital technologies by businesses. It also supports the development of inclusive digital services and innovation ecosystems.

- **Component 5: Project Management and Implementation Support**

This component provides support for project coordination, monitoring and evaluation, fiduciary management, and environmental and social risk management, ensuring effective and compliant implementation of project activities.

Sierra Leone's Scope under WARDIP SOP2

Under the WARDIP SOP2 program, Sierra Leone is implementing only Components 2 and 5:

- **Component 2** – focusing on investments in international connectivity infrastructure, including submarine cable systems and associated facilities, as well as enabling regulatory frameworks for open access and market competitiveness.
- **Component 5** – supporting project coordination, fiduciary management, monitoring and evaluation, and environmental and social safeguards implementation.

All other components are implemented at the regional level or by other participating countries and institutions.

3. Governance and Institutional Arrangements

The implementation of WARDIP-SOP2 in Sierra Leone is anchored within a multi-stakeholder governance framework involving government, project-level structures, and private sector entities.

MoCTI is the implementing agency, providing overall policy direction and ensuring alignment with national digital priorities. Day-to-day project implementation is carried out by the PCU under SLDTP, which is responsible for procurement, financial management, safeguards, monitoring and evaluation, and reporting to the World Bank.

Under Component 2, implementation will be carried out through a Special Purpose Vehicles (SPV) established under a PPP arrangement. These entities will be responsible for financing, deploying, and operating the infrastructure, with majority ownership by private sector partners and minority government participation. Their operations will be governed by commercial agreements and subject to World Bank requirements, including open-access principles and safeguards compliance.

Within this framework, the Technical Advisor will support the PCU by providing expert guidance on technical design, evaluation, and implementation of infrastructure investments, ensuring alignment with international standards and project objectives.

4. Objectives of the Assignment

4.1.General Objective

The overall objective of this assignment is to provide expert technical advisory support to the PCU of the Sierra Leone Digital Transformation Project (SLDTP) in the implementation of WARDIP-SOP2, with a primary focus on the design, development, and deployment of submarine cable infrastructure and related connectivity investments.

4.2.Specific Objectives

The specific objectives of the assignment are to:

- Provide technical guidance on the planning, design, and implementation of submarine cable systems and associated infrastructure;
- Support the PCU in reviewing and evaluating technical studies, designs, and proposals submitted by consultants, contractors, and private partners;
- Ensure that all technical solutions comply with international standards, best practices, and World Bank requirements, including climate resilience and energy efficiency considerations;
- Advise on the integration of submarine cable infrastructure with national and regional digital connectivity ecosystems;
- Support the Government of Sierra Leone in effectively engaging with private sector partners under PPP arrangements, including SPVs;
- Strengthen the technical capacity of the PCU to manage complex digital infrastructure projects.

5. Scope of Work

The Technical Advisor will work under the supervision of the Project Coordinator and in close collaboration with the PCU team, MoCTI, and relevant stakeholders. The scope of work will include, but not be limited to, the following:

5.1.Technical Advisory on Submarine Cable Infrastructure

- Provide expert advice on the technical design, specifications, and architecture of submarine cable systems, including landing stations and terrestrial backhaul integration;
- Review feasibility studies, system designs, route planning, and technical documentation related to submarine cable deployment;

- Advise on technology choices, capacity planning, redundancy, and resilience measures to ensure reliability and future scalability;
- Ensure incorporation of climate-resilient and energy-efficient design principles in line with international standards.

5.2.Support to Procurement and Technical Evaluation

- Support the preparation and/or review of technical specifications, bidding documents, and Terms of Reference for procurement processes;
- Participate in the evaluation of technical proposals submitted by bidders, ensuring compliance with defined requirements and international best practices;
- Provide technical inputs during bid clarification processes and contract negotiations, as required.

5.3.Quality Assurance and Implementation Support

- Provide ongoing technical oversight during project implementation to ensure adherence to approved designs, specifications, and standards;
- Review contractor deliverables, engineering designs, and implementation plans;
- Identify technical risks and propose mitigation measures to ensure timely and effective delivery of infrastructure.

5.4.Coordination and Stakeholder Engagement

- Liaise with key stakeholders, including government agencies, regulators, private operators, regional bodies, and development partners, on technical matters;
- Support coordination with regional initiatives and ensure alignment with cross-border infrastructure development plans.

5.5.Capacity Building and Knowledge Transfer

- Provide on-the-job training and technical guidance to PCU staff and relevant government counterparts;
- Strengthen institutional capacity in managing digital infrastructure projects, particularly submarine cable systems and PPP arrangements;
- Support knowledge transfer to enhance local capacity for managing and sustaining digital infrastructure investments.

5.6.Reporting

- Prepare technical reports, advisory notes, and inputs to project documentation as required by the PCU;
- Provide periodic updates on key technical issues, risks, and recommendations to support decision-making.

5.7.Other Advisory and Support Functions

- Support the Project Coordinator in addressing technical challenges affecting project implementation;
- Provide strategic technical advice on emerging technologies and infrastructure trends relevant to the project;
- Perform any other related technical duties as may be assigned by the Project Coordinator.

6. Qualification and Experience Requirements

6.1.Academic Qualifications

The Technical Advisor shall possess:

- A minimum of a Master's Degree in Telecommunications Engineering, Electrical/Electronic Engineering, ICT, or a related technical field;
- Relevant professional certifications in telecommunications, network design, or project management (e.g., PMP, PRINCE2, Cisco, or equivalent) will be an added advantage.

6.2.Professional Experience

The Technical Advisor shall have:

- A minimum of 10 years of relevant professional experience in telecommunications, digital infrastructure, or ICT systems;
- Demonstrated experience in the design, deployment, or management of large-scale connectivity infrastructure projects, preferably including submarine cable systems, fiber optic networks, or international connectivity infrastructure;
- Proven experience working on public-private partnership (PPP) projects or infrastructure investments involving private sector participation;
- Experience supporting project implementation in World Bank or other donor-funded projects, with a strong understanding of procurement processes, technical evaluation, and project management requirements;
- Demonstrated experience in reviewing technical studies, engineering designs, and contractor deliverables;
- Experience working in Sub-Saharan Africa or similar developing country contexts is highly desirable.

6.3. Technical Competencies

The Technical Advisor shall demonstrate:

- Strong technical knowledge of submarine cable systems, including system architecture, landing stations, and integration with terrestrial networks;
- Solid understanding of broadband infrastructure, fiber optic systems, and international connectivity ecosystems;
- Knowledge of network resilience, redundancy planning, and climate-resilient infrastructure design;
- Familiarity with open-access principles, infrastructure sharing, and regulatory frameworks in the telecommunications sector;
- Ability to assess and advise on technical specifications, capacity requirements, and emerging technologies in digital infrastructure.

6.4. Knowledge of World Bank Procedures and Standards

- Good understanding of World Bank procurement regulations, project implementation procedures, and reporting requirements;
- Familiarity with the World Bank Environmental and Social Framework (ESF) and its application to infrastructure projects;
- Ability to ensure compliance of technical solutions with World Bank guidelines and international standards.

6.5. Skills and Competencies

The Technical Advisor shall possess:

- Strong analytical and problem-solving skills with the ability to provide practical technical solutions;
- Excellent report writing and documentation skills;
- Strong interpersonal and stakeholder engagement skills, with the ability to work effectively with government officials, private sector partners, and development partners;
- Ability to work in a multidisciplinary team and manage multiple tasks under tight deadlines;

- High level of professional integrity, accountability, and ethical standards.

7. Responsibility of the Employer

The PCU will provide office space, office equipment, internet facilities, project documents and other relevant materials required by the Specialist to perform his/her duties as specified in this ToR.