FEDERAL MINISTRY OF COMMUNICATION, INNOVATION AND DIGITAL ECONOMY (FMCIDE)

BUILDING RESILIENT DIGITAL INFRASTRUCTURE FOR GROWTH (BRIDGE) -(P508383)

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

AUGUST, 2025

TABLE OF CONTENTS

List of Tables

List of Figures

ABBREVIATIONS & ACRONYMS

BRIDGE	Building Resilient Digital Infrastructure for Growth
CITES	Convention on International Trade against Endangered Species
CEDAW	Convention on the Elimination of All forms of Discrimination against Women
CoCs	Code of Conduct
DFI	Development Finance
DISREP	Nigeria Distribution Sector Recovery Program
DMP	Dust Management Plan
EHS	Environment Health and Safety
EEE	Electrical and Electronic Equipment and generated
ESCP	Environment and Social Commitment Plan
ESF	Environmental and Social Framework
ESSs	Environmental and Social Standards
ESIA	Environmental and Social Impact Assessments
ESMP	Environmental and Social Management Plans
FMCIDE	Federal Ministry of Communications Innovation and Digital Economy
FMEnv)	Federal Ministry of Environment
FGN	Federal Government of Nigeria
FGDs	Focused Group Discussions
GBV	Gender Based Violence
GRM	Grievance Redress Mechanism
GIIP	Good International Industry Practice
IP	Implementing Parties
IFC	International Finance Corporation
IEC	Information Education and Communication
ICR	Implementation Completion Report
ITCZ	Inter-Tropical Convergence Zone
IUCN	International Union for Conservation of Nature
LMP	Labor Management Procedures
PDO	Project Development Objectives
OPGW	Optical Ground wire
PIU's	Project Implementation Unit
SEA	Sexual Exploitation and Abuse
SH	Sexual Harassment
RPF	Resettlement Policy Framework
SEP	Stakeholder Engagement Plan
OHSMP	occupation Health and Safety Management Plan
SEPAs	State Environmental Protection Agencies
SHE	Safety Health and Environment
SPV	Special Purpose Vehicle
SWMAs	State Waste Management Agencies
PAD	Project Appraisal Document
PSEA	Project Sexual Exploitation and Abuse
WEEE	Waste Electrical and Electronic Equipment
MG& IP	Vulnerable and Marginalized Groups and Indigenous People
NESREA	National Environmental Standards and Regulations Enforcement Agency
PLWD	Persons Living With Disabilities
VAC	Violence against Children

TPMA	Third Party Monitoring Agents

EXECUTIVE SUMMARY

PROJECT INFORMATION

The Federal Government of Nigeria (FGN), through the Federal Ministry of Communication, Innovation and Digital Economy (FMCIDE) aims to deploy the remaining 90,000 km gap through the proposed Building Resilient Digital Infrastructure for Growth (BRIDGE)-(P508383). The Project Development Objective (PDO) To expand inclusive use of high quality and climate resilient broadband internet in selected unserved and underserved areas of Nigeria. The Project are (i): Component 1: Resilient Digital Infrastructure (IDA: US$495 million; PCM: US$1.1 billion) and Component 2: Project Management and Implementation Support (IDA: US$5 million) will finance support to the Borrower's Project Implementation Unit (PIU).

EMSF FRAMEWORK

This project will be screened for environmental and social risks using the World Bank's Environmental and Social Framework (ESF). The ESF consists of a Vision for Sustainable Development,[1] and ten Environmental and Social Standards (ESSs),[2] which set out the requirements that apply to the Federal Government of Nigeria (FGN) , an Environmental and Social Policy for Investment Project Financing (IPF),[3] which sets out the requirements that apply to the Bank, and an Environmental and Social Directive for IPF[4] and a Directive on Addressing Risks and Impacts on Disadvantaged or Vulnerable Individuals or Groups.[5] The Framework applies to all IPF projects initiated on or after October 1, 2018.

The ESF supports green, resilient, and inclusive development by strengthening protections for people and the environment and making important advances in areas such as labor, inclusion and non-discrimination, gender, climate change, biodiversity, community health and safety, and stakeholder engagement. It uses a risk-based and proportionate approach that applies increased oversight and resources to complex projects and allows for greater responsiveness to changes in project circumstances through adaptive risk management and stakeholder engagement. It promotes integrated environmental and social risk management.

The ESF emphasizes strengthening national environmental and social management systems and institutions and supporting Borrower capacity building. It promotes enhanced transparency and stakeholder engagement through timely information disclosure, meaningful and ongoing consultations throughout the project life cycle, and responsive grievance mechanisms to facilitate the resolution of concerns and grievances of project-affected parties.

[1] See https://thedocs.worldbank.org/en/doc/837721522762050108-0290022018/original/ESFFramework.pdf#page=15&zoom=80
[2] https://www.worldbank.org/en/projects-operations/environmental-and-social-framework/brief/environmental-and-social-standards
[3] https://thedocs.worldbank.org/en/doc/360141554756701078-0290022019/original/WorldBankEnvironmentalandSocialPolicyforInvestmentProjectFinancing.pdf
[4] https://ppfdocuments.azureedge.net/52955d77-eaea-40fa-9e42-299529933719.pdf
[5] https://policies.worldbank.org/en/policies/all/ppfdetail/9598117e-421d-406f-b065-d3dfc89c2d78

This Environment and Social Management Framework (ESMF) is an instrument required under the Bank's ESF and has been prepared to assist in screening, assessment and management of environmental and social risks of the BRIDG project from early-stage project planning. The ESMF includes context-relevant mitigation measures that shall be incorporated into the design and implementation of project activities when actual project locations have not been identified. The ESMF provides specific guidance on the policies and procedures to be followed for environmental and social due diligence, screening and routine assessment, along with roles and responsibilities of the various stakeholders and agencies in the project.

The ESMF's focus is on identifying, characterizing, mitigating and monitoring the BRIDGE environmental and social (E&S) risks, including adverse E&S risks and impacts that are likely to occur during the implementation of activities in Components 1 and 2.

ESMF METHODOLOGY

This ESMF was prepared following standard procedures for environmental and social assessment, including World Bank Environmental and Social Standards (ESSs), other relevant international environmental and social assessment regulations and guidelines, and the Nigerian environmental assessment guidelines. This entailed literature review including (i) Project Appraisal Document (PAD) and (ii) ESMF of other projects such as Nigeria Distribution Sector Recovery Program (DISREP), among others, and stakeholder discussions. Consultations were conducted, as highlighted in **Table 9.2** presented under chapter 9 of this report.

ENVIRONMENTAL AND SOCIAL BASELINE

Climate: Nigeria has a tropical climate characterized by the hot and wet conditions linked with the movement of the Inter-Tropical Convergence Zone (ITCZ) north and south of the equator. The country experiences consistently high temperatures throughout the year. However, there are wide diurnal ranges in temperature, particularly in the very hot months. The mean monthly temperatures during the day sometimes exceed 36◦C while monthly average temperatures at night fall below 22◦C. Since temperature varies only slightly, rainfall distribution, over space and time, becomes an important factor in differentiating the seasons and climatic region except for the coastal zone, especially in the coastal area of the Niger Delta where it rains all year round. Rainfall is seasonal with distinct wet and dry seasons.

Vegetation: Savannah and Forest are the predominant types of vegetation in Nigeria. The savannah vegetation stretches from the central parts of Nigeria to the extreme northern parts. It is divided into marginal (i) Sahel savannah: in the North-Eastern borders, (ii) Short grass Sudan savannah: stretching from upper western borders to the North-Western borders and (iii) Woodland/Tall grass Guinea Savannah (lying below the short grass savannah and covering the central states and parts of the eastern region of the country). The tropical forest vegetation covers the remaining southern portion of the country and is divided into three types: i) Rain Forest with tall trees, ii) Freshwater swamp consisting of both fresh and saltwater swamps and iii) Mangrove Forest which is made up of mangrove vegetation.

Fauna: Uncontrolled development has been identified as one of the contributing factors that lead to the decline of wildlife habitats in the country. It is therefore imperative that impact of any development project or program on the wildlife habitats should be evaluated before it is embarked upon. The studies on fauna are conducted by visual observation, and where necessary by information from the local people, especially hunters. The species present in the country can be classified into major groups as; i). Herpetofauna (amphibians and reptiles), ii). Invertebrates (insects), iii). Birds (black kite, Egret, Robin, Songbird, Pigeon etc), iv). Mammals (Giant rat), etc. Some of these faunas may be endangered and vulnerable to poaching.

Hydrology: There are many rivers in Nigeria but the two principal river systems are the Niger – Benue and the Chad. The Niger River, the largest in West Africa, flows 4,000 km from Guinea through Mali, Niger, Benin, and Nigeria before emptying into the Gulf of Guinea. The Benue River and largest tributary flows 1,400 km from Cameroon into Nigeria, where it empties into the Niger River. The country's other river system includes the Yobe River, which flows along the border with Niger and empties into Lake Chad, the Gongola River, The Sokoto-Rima River System, the Ogun-Osun Rivers, Cross-River, Anambra-Imo Rivers, and numerous other rivers. The major aquifers in Nigeria are Basement aquifers, Sedimentary basins, Volcanic plateau, and River alluvium. There are eight major regional aquifer systems, 30 local and minor aquifers and 36 aquicludes, aquitards, and aquifuges in Nigeria. These eight mega regional aquifers have an effective average thickness of 360 m; with a range of 15–3,000m. The yields from the major aquifers range between 1.25 and 32 l/s whereby the sedimentary basins generally form the most prolific aquifers.

Geology and Soils: Nigeria's land mass is made up of two main rocks, Precambrian basement rocks, which cover about two-thirds of the country's landmass and Sedimentary rocks of Cretaceous, about half of the country. Other minor formations are the Tertiary Volcanics, Tertiary sediments, etc. The Precambrian basement rocks consist of gneisses, migmatites, schist, and various metamorphic rocks and granites. Soil types in Nigeria vary according to their composition, physical, chemical, morphological and mineralogical characteristics.

Biodiversity: Nigeria is an important centre for biodiversity. It is widely believed that the areas surrounding Calabar in Cross River State contain the world's largest diversity of butterflies. The drill monkey is only found in the wild in Southeast Nigeria. The total number of higher plant species in Nigeria is 4,715 (of which 119 are threatened). For mammals, the total number of species is 274 (27 threatened), and for breeding birds the total known species is 286. Nigeria has over 1,000 protected areas (nature reserves, wilderness areas, national parks), covering a total 5.5 million ha. The total land area under protection represents 6% of the total land area. Under categories I and II (the highest level of protection) Nigeria has 2.5 million ha.

Population and Demographics: Nigeria has the highest population in Africa. In 2024, its population amounted to over 227 million and was estimated to increase constantly in the next decades6. The largest city in Nigeria is Lagos, which is also the largest city in all of Sub-Saharan Africa. Abuja, the Capital

[6] https://www.statista.com/topics/6477/demographics-of-nigeria/#topicOverview

City of Nigeria, had about 1.2 million inhabitants in 2022, ranking seventh among the largest cities in Nigeria. The youths dominate Nigeria's population. In 2030, the population's median age is forecast to reach 18.3 years, meaning that about half of the population will be under 18.5 years.

Nigeria, has more than 250 ethnic groups, the larger of which are the Hausa and Fulani who are predominantly from the Northern part of Nigeria and they represent approximately 29% of the population, the Yoruba, predominantly from the South (South West) and represent approximately 21% of the population and the Igbo, predominantly from the East represent about 18% of the population. The other large groups are the Ijaw with about 10%, the Kanuri with about 4%, the Ibibio with about 3.5% and the TIV with about 2.5%. Nigeria's Middle Belt region shows the greatest ethnic diversity, particularly in Adamawa, Taraba and Plateau States. English is the official language while the vast majority of the population conducts commercial activities in their ethnic language and "pidgin" English.

Economy: Nigeria is among the largest economies in Africa, with a gross domestic product (GDP) of approximately US$363 billion in 2023, but over 40 percent of its population lives in poverty. Economic growth over the past decade has not maintained pace with population growth: income per capita in 2023 was US$1,621, lower than US$2,280 recorded in 2010. Nigeria's key development constraints include the high dependence on oil, insufficient economic diversification and inclusive growth, and a poor scorecard on governance and service delivery, including investments in human capital.

Land Use: The estimated land area of Nigeria is 924,000 km^2. Land use varies based on location and the needs of the community. However, the different uses of land revolve around agriculture, industry and social needs such as the provision of infrastructure. Recent data shows that between 50%- 60% of the land area of Nigeria is under various forms of intensive rainfed small holder agriculture (crop and animal) production and forest plantation. Agriculture in Nigeria is largely subsistence and is characterized by intensive small holder rainfed and extensive grazing. Various schemes had been put in place to further boost agricultural production, these includes the Irrigation system, FADAMA projects, grazing zones/routes, and Agro-allied business such as fertilizer production. In addition to fish farming activity, some coastal/riverine communities also engage in fishing activities and other aquatic resources.

Agricultural produce in Nigeria varies from one region to the other. Major produce in the north are cereals such as millet, rice, maize, beans, soya beans and vegetables. Irish potato, yam, and potato are the main agricultural produce in the middle belt, while cassava, cash crops such as cocoa, coffee, cola nuts and cashew nuts are grown in the south-western Nigeria. Also, red oil and cassava are exceptionally produced in the south-eastern region.

LEGAL FRAMEWORK

Environmental Impact Assessment (EIA) Act No. 86 of 1992: The Federal Ministry of Environment (FMEnv) is the apex policy making body responsible for addressing environmental issues in Nigeria. To fulfil this mandate, the main instruments in ensuring that environmental and social issues are mainstreamed into development projects is the Environmental Impact Assessment (EIA) Act No. 86 of 1992. With this Act, the FMEnv prohibits public and private sectors from embarking on major prospects or activities without due consideration, at early stages, of environmental and social risks and impacts.

The act makes an EIA mandatory for any development project and prescribes the procedures for conducting and reporting EIA studies. As part of the effective utilization of the EIA tool, the Ministry has produced Sectoral Guidelines detailing the necessary requirements of the EIA process for each Sector. One of these Sectoral Guidelines that apply to the proposed project is the 'Sectoral Guidelines on Infrastructure Development.

Relevant Guidelines on environment are summarized below

- National Policy on the Environment 2016
- National Environmental Standards and Regulations Enforcement Agency (NESREA Act) 2007
- National Environmental (Ozone Layer Protection) Regulations, 2009
- National Environmental (Soil Erosion and Flood Control) regulations 2011
- National Guidelines on Environmental Audit 2011
- National Environmental Protection (Management of Solid and Hazardous Wastes) Regulations 1991
- National Guideline and Standard for Environmental Pollution Control 1991
- Employee Compensation Act, 2010
- Urban and Regional Planning Decree No. 88 1992
- State waste management laws 1991
- National Environmental (Hazardous Chemicals and Pesticides Regulations) 2014
- Public Health Law 2014
- National Guidelines on Environmental Management Systems (EMS) 1999
- National Guidelines and Standards for Water Quality 1999
- National Air Quality Standard Decree No. 59 1991
- National Policy on Flood and Erosion Control (FMEnv) 2006
- National Environmental (Energy Sector) Regulations, S. I. No 63 2014
- National Environmental Protection (Effluent Limitation) Regulations, (1991)
- National Environmental Protection (Management of Solid and Hazardous Wastes) Regulations, (1991)
- National Environmental Protection (Pollution Abatement in Industries and Facilities Generating Wastes) Regulation, (1991)
- National Gender Policy (2008)
- National Guidelines on Environmental Management Systems (EMS) (1999)
-

Relevant statutes and laws related to Environmental and Social Management include:

- Consumer Protection Council Act 66 (1992)
- Federal Solid and Hazardous Waste Management Regulations (1991)
- Harmful Waste (Special Criminal Provisions) Act (2004)
- Land Use Act (1978)
- Nigeria Labour Law (2004)

- Occupational, Health and Safety Act (OSHA), 2007
- Penal Code Act (cap.63)
- Public Health Act (Cap. 242)
- Rehabilitation, Reconstruction and Development Act, 1990
- Social Development Act (1974)
- Standard Organization of Nigeria (SON) Act – Retained as Cap 412
- The Child Rights Act (2003)
- The Factories Acts 1990 being implemented by the Factories Inspectorate Division of Federal Ministry of Labour and Employment (FMLE).

Administrative Structure of Environmental Regulatory Bodies and Agencies: Besides the Federal Ministry of Environment, several other agencies are involved in enforcing environmental compliance in Nigeria, and are relevant to BRIDGE. These include:

- **National Environmental Standards and Regulations Enforcement Agency (NESREA)** - is an environmental agency of the Federal Government of Nigeria that was established by law in 2007 to "ensure a cleaner and healthier environment for Nigerians". The agency functions as a parastatal of the Federal Ministry of Environment and is headed by a Director General who is also the chief executive officer.
- **State Environmental Protection Agencies (SEPAs) –** The SEPAs enforce environmental regulatory compliance at the state levels respectively. They are mainly responsible for ensuring the overall protection of various aspects of the built, physical and biological environment by ensuring limits set by the FMEnv are not exceeded during development works, also ensuring that building constructions meets environmental requirements, proper sitting of factories, air, noise, water quality monitoring etc.
- **State Waste Management Agencies (SWMAs) –** Generally at the state level, the SWMAs undertake the task of providing guidelines or enforcing proper waste management procedures. In some instances, the SWMAs may have designated dumpsites for specific types of waste and guide the process for waste conveyance to the dumpsites by waste generators or procure the services of licensed waste collection vendors to carry out the services of waste collection, treatment and final disposal.

Applicable International Treaties/Agreements/Conventions
These include:

- Bamako Convention on Ban on the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa (1991)
- Basel Convention on the control of Transboundary Movement of Hazardous Wastes and their Disposal (1991)
- Convention on Oil Pollution Preparedness, Response, and Co-operation (1990)
- International Energy Charter (2015)
- Protocol on Water and Health (1999)

Relevant International Labour Organization (ILO) Instruments

- Convention concerning Safety in the use of Chemicals at Work (Entry into force: 04 Nov 1993) Adoption: Geneva, 77th ILC session (25 Jun 1990) - Status: Up-to-date instrument (Technical Convention)
- ILO Convention on the Safety of Chemicals at the Workplace, 1990 (No.170)
- Occupational Health Services Convention, 1985 (No.161)
- Occupational Safety and Health Convention (1981) and its Protocol of 2002
- Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187)

Other International and Regional Conventions and Treaties Relevant to GBV, SEA, VAC, Labour, Discrimination and People Living with Disabilities

- Abolition of Forced Labour Convention (1957)
- Convention Against Torture & other Cruel, Inhuman or Degrading Treatment or Punishment (CAT) 2001
- Convention on the Rights of Persons with Disabilities (2007)
- The Convention on the Rights of the Child (CRC) (1990),
- The National Action Plan for the Implementation of United Nations Security Council Resolution 1325 (2009);
- The Protocol to the ACHPR on the Rights of Women in Africa (the "Maputo Protocol") (2007).
- Convention concerning the Prohibition and Immediate Action for the Elimination of the worst forms of Child Labour (2002)
- International Convention on the Elimination of All Forms of Racial Discrimination (1976)
- Optional Protocol to the Convention on the Rights of Persons with Disabilities (2007)
- The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (1985),
- The Convention on the Rights of Persons with Disabilities (CRPD) (2012)
- The International Covenant on Civil and Political Rights (ICCPR) (2004);
- The International Covenant on Economic, Social and Cultural Rights (ICESCR) (2004)
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The World Bank's Environmental and Social Framework (ESF) requires the Bank and Borrowers to better manage environmental and social risks and impacts of projects and to improve development outcomes. BRIDGE is therefore subject to the World Bank ESF requirement. 9 of the 10 Environmental and Social Standards (ESSs) apply to the project. The ESS applicable to the project are summarized in **Table E.1** below.

Table E-1: Environment and Social Standards

Standard	Description	Applicability
ESS1: Assessment and Management of Environmental and Social Risks and Impacts	The ESS provides for Client's responsibilities for assessing, managing and monitoring environmental and social risks and impacts associated with each stage of a project supported by the Bank through Investment Project Financing, in order to achieve environmental and social outcomes consistent with the Environmental and Social Standards (ESSs).	The World Bank's ESS 1. Provides for the Environmental and Social Screening for each sub-activity under the project. These screening forms are to be filled and reviewed by an environmental and social safeguards expert under the PIU for BRIDGE, will decide, on a case-by-case basis, whether an ESIA/ESMP or a standalone ESMP must be developed.
ESS2: Labour and Working Conditions	ESS2 recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. Borrowers can promote sound worker-management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions. ESS2 applies to project workers including fulltime, part-time, temporary, seasonal and migrant workers.	These will include, PIU for BRIDGE Project including technical consultants supporting PIU from owners engineer and E&S firms, construction workers hired for the anticipated linear digital infrastructure installation of fibre cables and internet nodes.
ESS 3: Resource Efficiency and Pollution Prevention and Management	ESS3 recognizes that economic activity and urbanization often generate pollution to air, water, and land, and consume finite resources that may threaten people, ecosystem services and the environment at the local, regional, and global levels	There are potential ESS 3 related risks with project activities under localized greenhouse gas emissions, Construction activities may also account for an increased demand for resources including water, energy and raw materials that may generate hazardous wastes and increase demand for water and energy
ESS4: Community Health and Safety	ESS4 addresses the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of Borrowers to avoid or minimize such risks and impacts, with particular attention to people who, because of their particular circumstances, may be vulnerable	Construction activities may also account for an increased occupational health and safety issues within communities. Further, the project will lead to increased traffic movements, the impacts are expected to be moderate, and there is the likelihood for traffic congestion at the onset of construction activities, while the material is being transported, the impact will be significant in urban centres and may directly impact communities
ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	The overall objectives of the World Bank's ESS 5. Are to avoid land acquisition and involuntary resettlement where feasible, or to minimize resettlement while exploring all viable alternatives. Where it is not possible to avoid resettlement, activities will be conceived and executed as sustainable development programs, providing sufficient investment to enable the persons displaced by the project to share in the project benefits.	The project activities are not expected to lead to land acquisition however there might be displacement of encroachers within the Right-of-Way of transport and utility corridors. There might also be short-term restriction of access to business premises close to work areas.These potential physical and/or economic resettlement may differentially affect vulnerable groups, those with smaller land plots or informal rights to land use due to

		deployment of fibre cables.
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources,	ESS6 recognizes that protecting and conserving biodiversity and sustainably managing living natural resources are fundamental to sustainable development. ESS6 recognizes the importance of maintaining core ecological functions of habitats, including forests, and the biodiversity they support. This ESS also addresses sustainable management of primary production and harvesting of living natural resources.	The installation of fibre cables may require the construction of corridors crossing aquatic habitats with the potential to disrupt watercourses, wetlands, coral reefs, and riparian vegetation. However, this risk is not currently relevant based on the available information.
ESS7 Sub-Saharan Historically Underserved Traditional Local Communities	This ESS applies to a distinct social and cultural group identified in accordance with paragraphs 8 and 9 of this ESS.	There are no communities identified so far meeting the requirements of ESS7 in Nigeria, however, the application of ESS7 will be analysed (included in the ESMP) and a commitment to consult experts and potentially affected groups and to prepare an IPPF
ESS8: Cultural Heritage	This ESS recognizes that cultural heritage, in its many manifestations, is important as a sourced of valuable scientific and historical information, as an economic and social asset for development, and as an integral part of people's cultural identity and practice. The objective of this ESS is to protect cultural heritage from the adverse risks and impacts of project activities and to promote meaningful consultations with stakeholders regarding cultural heritage.	A chance finds procedure is a project-specific procedure which will be followed if previously unknown cultural heritage is encountered during project activities. It will be included in all contracts relating to the construction of the project, including excavations, demolition, movement of earth, flooding or other changes in the physical environment. The chance finds procedure will set out how chance finds associated with the project will be managed
ESS10: Stakeholder Engagement and Information Disclosure	ESS 10 applies as it addresses the importance of open and transparent stakeholder engagement, which is essential in improving the environmental and social sustainability of the project. Stakeholder engagement must be a socially inclusive process conducted throughout the project life cycle.	In consultation with the Bank, a Stakeholder Engagement Plan (SEP) has been developed. The SEP outlines the establishment of a functioning grievance redress mechanism.

ENVIRONMENT AND SOCIAL IMPACTS

Environmental Risks: **The implementation of project activities under the BRIDGE project Component 1** Component 1: Resilient Digital Infrastructure may potentially cause environmental impacts, including the alteration of terrestrial and aquatic habitats in Nigeria. This can have adverse impacts, especially if linear digital infrastructure passes through critical habitats or biodiversity hotspots during construction periods and possibly during maintenance. The installation of optic cables and access roads to transmission towers and other fixed infrastructure, may require construction of corridors crossing aquatic and terrestrial habitats with the potential to disrupt watercourses, wetlands, coral reefs, and riparian vegetation. Construction and electronic wastes may be generated from general construction activities and installations, contributing to increased waste loads in a country with no infrastructure for

waste management. Construction activities may also account for an increased demand for resources, including water, energy and raw materials, contributing to resource depletion, pollution and other deleterious impacts to ecosystems. In addition, there is the likelihood of the occurrence of occupational health and safety issues facing workers and the community, including installing the fiber and connectivity cables.

Social Risks include: The project activities are not expected to lead to land acquisition, however there might be displacement of encroachers within the Right-of-Way of transport and utility corridors. There might also be short-term restriction of access to business premises close to work areas. These potential physical and/or economic resettlement may differentially affect vulnerable groups, those with smaller land plots or informal rights to land use due to deployment of fibre cables. Construction of infrastructure resulting in labour influx which may impact community health and safety, conflict between workers and the community as well as risks associated with sexual exploitation and abuse and sexual harassment (SEA/SH) and Risks to project workers, and the rising of using of security personnel on work sites Risks to labour including the potential use of child or forced labour by contractors or in the supply chain

E-wastes: Apart from regular operation and maintenance, a number of issues would require special attention for reducing/avoiding possible adverse environmental impacts. The main component of adverse risks will be from IT apparatus, which generate e-wastes upon malfunctioning, e- wastes have been known to affect people's health due to lead and mercury poisoning and other heavy metals. **Key Mitigation measures for the risks are provided in detail in the ESMF.**

IDENTIFICATION OF ENVIRONMENTAL AND SOCIAL RISKS

In consistency with the requirements of ESS 1, the BRIDGE PIU will carry out environmental and social assessments of the program/activities to assess the environmental and social risks and impacts. The assessments to be carried shall be proportionate to the potential risks and impacts of the project and its subprojects, and will assess, in an integrated way, all relevant direct, indirect and cumulative environmental and social risks and impacts throughout the project life cycle, including those specifically identified in ESSs 2–10. The environmental and social risks screening will occur during the sub project preparation stage as a soon as the fairly accurate site location(s) is (are) known for the sub-project(s) using the screening checklist, outcome of screening will inform specific environment and social safeguards assessment and management plans that will be required (ESIA, ESMP, RAPs etc).

In carrying out the ESIA or ESMP and RAPs, supporting evidence of comprehensive public consultation shall be required, such as signed minutes of consultation meetings, attendance lists and filled questionnaires. Public consultations shall take place during the environmental and social screening process and during the validation of the ESIA and RAP report. The results of public consultation shall be incorporated and or influence the design of mitigation and monitoring measures. ESIA study reports for the subproject shall be disclosed in-country by the client (FMCIDE) in formats that are accessible to all project stakeholders and on the World Bank external website.

IMPLEMENTATION ARRANGEMENTS

A dedicated PIU will be established and maintained within FMCIDE. The PIUs will comprise Engineers, Project Engineers, Procurement Specialists, Environmental and Social Safeguards Specialists, Monitoring and Evaluation Specialists, etc., who will provide expert technical guidance on the matters concerning the sub-projects. Specifically, the Units Safeguards Specialists will provide Technical Assistance on the aspect of implementing the provisions of this ESMF in their respective areas; mainly in the screening and scoping of sub-projects and in the selection of appropriate environmental and social assessment instruments. The Special Purpose Vehicle (SPV), which will be established to deploy the Digital Infrastructure facilities under the project will also engage an E&S team to work under the coordination of the PIU E&S team during the project term.

FMEnv will give the approval for environmental and asocial assessment and work in collaboration with the PIU and World Bank in disclosing the environmental and social assessment instruments in-country. The FMENv will also aid the PIUs in coordinating with the FMENv's Ministries Departments and Agencies (MDAs) on monitoring responsibilities as regards this ESMF and other program instruments. State Ministry of Environment (SMEnv), Will play a vital role in environmental and social assessment and waste management at the States coverage area-levels respectively. Their responsibilities will surface around, guidelines, approvals and permits.

The World Bank has overall responsibility to ensure that ESF's ESSs and commitments made in the ESCP are complied with. In addition, the Bank will be responsible for the final review and clearance of environmental and social assessment instruments, as well as reviews and the giving of a "no objection" to the Terms of Reference for instruments (ESIAs, ESMPs, ESAPs, etc.). Conduct regular supervision missions to check on the performance of BRIDGE and assess its compliance to agreed grant covenants; and recommend measures for improving the performance.

CAPACITY DEVELOPMENT FOR ESMF

The ESMF provision on capacity enhancement of the environmental and Social Standards skills and competencies of the projects PIU has been built into the project design under component 2 which targets Project Management and Implementation Support. A project level capacity building support on E&S including setting up an E&S risk & impact management system, enhancing the E&S capacity through staffing and training on the ESF requirements based on a robust capacity building plan to be implemented. This will be complemented by institutional strengthening and capacity assessment in participating member states to roll out capacity building Plan accordingly

RESOURCE AND BUDGET

The ESMF provides a consolidated budget estimate for the implementation of overall Environmental and Social Management Framework instruments. The budget components include: implementing agency environmental and social risk management and associated capacity development activities; a training program for all relevant entities to implement their E&S responsibilities. Resettlement Policy Framework, Security Management Framework (SMF), Updated Stakeholder Engagement Plan, Labor Management Procedures, and GBV Action, subproject ESIAs, ESMPs, RAPs, etc.; and annual reviews. The estimated budget is **USD 4,160,000**

GRIEVANCE REDRESS MECHANISM

The World Bank ESSs require that Bank-supported projects facilitate mechanisms that address concerns and grievances that arise in connection with a project and include a GRM for project workers. One of the key objectives of ESS 10 (Stakeholder Engagement and Information Disclosure) is 'to provide project-affected parties with accessible and inclusive means to raise issues and grievances and allow borrowers to respond and manage such grievances. The Project GRM should facilitate the Project to respond to concerns and grievances of the project-affected parties related to the environmental and social performance of the project. The BRIDGE Project has set up a three-level grievance redress mechanism which includes:

- Site/Community Level;
- Project Implementation Unit/SPV Level; and
- FMCIDE level:

STAKEHOLDER ENGAGEMENT

Stakeholder engagement is an inclusive process conducted throughout the project life cycle. Where properly designed and implemented, it supports the development of strong, constructive and responsive relationships that are important for the successful management of a project's environmental and social risks. For this reason, stakeholders' engagement must be started early in the project cycle because it guarantees the 'social license to operate' by signaling to communities and other local stakeholders that their views and well-being are considered important. A Stakeholder Engagement Process was developed to achieve proper stakeholder identification and mapping. The process is further detailed in the stand-alone SEP. The objectives focused on obtaining the views of relevant stakeholders on the subject matter relating to proposed activities. In the Preparation of this ESMF, key stakeholders, including Finance Houses, IFC, DFI's and Telecommunication Companies, were engaged and involved. Details can be found in the Stakeholder Engagement Plan.

1 INTRODUCTION

1.1 Country Context

Nigeria, Africa's most populous country and home to the second-largest population living below US$2.15 per day, possesses substantial untapped economic potential yet is one of the least developed nations globally. It is among the largest economies in Africa, with a gross domestic product (GDP) of approximately US$363 billion in 2023, but over 40 percent of its population live in poverty.7 Economic growth over the past decade has not maintained pace with population growth: income per capita in 2023 was US$1,621, lower than US$2,280 recorded in 2010. Nigeria's key development constraints include the high dependence on oil, insufficient economic diversification and inclusive growth, and a poor scorecard on governance and service delivery including investments in human capital. As a diverse federation of 36 autonomous states and 225 million people, federal-state coordination is a challenge. However, by fostering better governance, empowering young entrepreneurs, and leveraging technologies, Nigeria can unlock the potential of digital economy to drive inclusive growth and diversify its economic base. Gender disparities also remain a key challenge in Nigeria's digital and economic development. Women face barriers such as lower digital literacy and high costs of broadband internet and smartphones. The gender digital divide is evident in disparities in use of broadband internet and employment in the IT services industry. Addressing these inequalities is crucial for inclusive growth. Climate change threatens development gains in Nigeria, with a disproportionate impact on the poor. Nigeria is highly vulnerable to climate shocks, including extreme heat, floods, and drought, all of which are predicted to become more frequent and severe with climate change. Rising temperatures, extreme heat, and changing precipitation pose challenges to critical infrastructure, including digital and telecommunications networks. Flooding, for instance, has increasingly damaged telecom installations, such as base stations and underground cables, leading to service disruptions.

1.2 Sectoral and Institutional Context

Nigeria is confronted with significant challenges related to broadband access. National fixed broadband household penetration stood at 7.3 percent in Q3 2024, which is 26 percentage points below Senegal (leading regionally) and 10 percentage points below the level observed in countries with a similar GDP per capita. In relation to mobile internet, unique subscriptions per 100 inhabitants are also low, at 66.8 percent. In terms of broadband quality, Ookla's analysis[7] indicates that majority of internet connections in Nigeria are below a speed of 10 Megabits per second (Mbps); approximately 70 percent of all connections are below 20 Mbps;[8] and only 5 percent of all connections are above a speed of 100 Mbps.

Private internet service operators are more active in urban areas than in rural areas; however, they are willing to scale up investments if major broadband infrastructure gaps and deficits are addressed. While eight international submarine cables land in Nigeria with over 350 Tbps of capacity, less than 10 percent of this capacity is utilized. The lack of backbone and backhaul connectivity outside the Lagos metropolitan

[7] World Bank (2022) A Better Future for All Nigerians: Nigeria Poverty Assessment 2022. Washington, DC. World Bank. https://openknowledge.worldbank.org/handle/10986/37295

[8] Out of 110 countries ranked by median download speed of mobile broadband, Nigeria is ranked 103rd with median speed of 18Mbps. Out of 154 countries ranked by median download speed of fixed broadband, Nigeria is ranked 130th with median speed of 23.2Mbps. This is consistent with countries of similar GDP in Africa. For comparison, respective values for country with similar GDP in ECA are 39Mbps and 73.78Mbps. 60 percent of all countries ranked are enjoying median download speed of mobile broadband above 50 Mbps and for fixed broadband – above 80 Mbps.. At: https://www.speedtest.net/global-index, data accessed on January 29th, 2025

area is cited by operators as a major bottleneck. Specifically, Federal Ministry of Communication and Digital Economy (FMCIDE) estimates that Nigeria needs approximately 120,000 km of fiber to achieve its strategic objectives outlined above. At present, there are only 30,000 km of fiber that have been laid. The FGN aims to deploy the remaining 90,000 km gap through the proposed BRIDGE project. With rural population density more than 40 times lower than in urban areas, last-mile network construction costs per subscriber are significantly higher in rural areas, leading to a lack of commercial viability and market failure. There is no commercial incentive for the private sector to bridge the backbone and backhaul connectivity gap in rural areas alone. However, preliminary analysis and consultations with operators indicate interest if public catalytic funding is provided. FGN plans to offer such funding under the proposed BRIDGE project, covering up to 49 percent of construction costs while attracting at least 51 percent of private capital.

1.3 Project Description

To address the critical broadband infrastructure deficit, the FGN aims to deploy the remaining 90,000 km gap through the proposed BRIDGE project. The project will be implemented in selected unserved and underserved areas of Nigeria with the aim of providing access to high-quality and climate resilient broadband infrastructure. Some of the project's targeted areas are anticipated to be in rural regions, which may include zones of fragility due to insecurity, pervasive poverty, and heightened vulnerability to climate change. The key priority criteria for connectivity expansion will be: (i) demand from un - and under-served populations, (ii) access to electricity (if there is no existing access, then the project will bring in renewable energy with less reliance on grid); (iii) climate vulnerable hotspots to be identified during implementation through feasibility assessments. A feasibility study is expected to be conducted by the Federal Ministry of Communication, Innovation and Digital Economy (FMCIDE) to assess the existing and planned infrastructure supply and demand by sub-regional levels, therefore identifying areas with missing fiber links that will be covered by the project. Also, given the scope and size of the envisaged infrastructure needs, the deployment is expected to take place in phases.

Environmental and social impacts of the Project will be associated mostly with Component 1: Resilient Digital Infrastructure : This component aims to finance the rollout of high-quality resilient backbone and backhaul digital infrastructure in unserved and underserved regions of Nigeria, enabling connections to households, public institutions, businesses, and mobile towers to broadband. The project is not expected to undertake major civil works such as construction of buildings, towers, and roads; however, it may involve minor civil works, including trenching, duct installation, and aerial fiber deployment works. Since the project aims to support rollout of backbone fiber networks that will be leveraged as a wholesale infrastructure, the project will not finance last-mile connectivity and will not involve works at the household level. Therefore, project activities are expected to be confined to the Right-of-Way for fibre-optic cables to be deployed by the SPV. To this end SPV will prioritize States that have waived rights of way fees or are compliant with the fee cap encouraged by the FGN.

1.3.1 Project Development Objective

The Project Development Objective is to expand inclusive use of high quality and climate resilient broadband internet in selected unserved and underserved areas[9] of Nigeria.

PDO Level Indicators

The achievement of the PDO will be measured by the following results indicators:

a) People using broadband internet (inferred use) (corporate scorecard indicator):
   i. Of which female
   ii. Of which youth

Intermediate Indicators

a) Total private capital mobilized (the amount of private sector participation in SPV) (USD)
b) Special Purpose Vehicle for fiberoptic infrastructure operational (Yes / No)
c) Facilities connected to broadband internet (number); of which
   i. public schools
   ii. health facilities
   iii. local government administration offices
d) Decrease in wholesale prices (percentage)
e) Contracts established between the SPV and SPV clients (non-monetary PCE indicator)
f) Fixed broadband median download speed (Mbps)
g) Fiber optic networks added by SPV (kilometers); of which climate-resilient[10] (percentage)
h) People trained in digital literacy training (number) - Of which female (Percentage)
i) Gender disaggregated data on digital connectivity used to inform the FGN's development of Broadband Strategy[11] (Yes/No)

1.3.2 *Project Components*

Component 1: Resilient Digital Infrastructure (IDA: US$495 million; PCM: US$1.1 billion): This component aims to finance the rollout of high-quality resilient backbone and backhaul digital infrastructure[12] in unserved and underserved regions of Nigeria, that allows private sector to then connect households, public institutions, businesses, and mobile towers to broadband. The component will seek to leverage catalytic public funding to mobilize private capital for infrastructure investments towards deploying such climate-resilient and low-carbon infrastructure. Specifically, the public funding will provide an input towards an established Project Company to be set up by the FGN. The Project

[9] Unserved and underserved are defined as areas with no operators and without technical feasibility to offer broadband connection with 25 Mbps download speed, respectively.
[10] The newly built and upgraded infrastructure will be subject to quality standards that include compliance with the requirements for disaster response and for climate change mitigation (to be elaborated in bidding documents). These requirements will include, for example, the usage of weather-resistant materials, waterproof coverings, and underground infrastructure with climate-resilient design to withstand floods.
[11] FMCIDE is currently in the process of forming a committee to develop a new Broadband Strategy as the current Strategy covers up to 2025
[12] A backbone network is connecting bigger cities together and routing data to the service centers; backhaul is Bringing Internet to a point in a community for broader distribution, see Annex C.

Company will take the form of a Special Purpose Vehicle (SPV) that will crowd-in private sector participation. The SPV will be responsible for implementing the rollout of 90,000 km of fiber infrastructure. Downstream telecommunications companies will then in turn invest in construction of last-mile networks expanding their subscribers base and expanding network coverage

Specifically, these activities will be a regular deployment of a liner network infrastructure that will include underground or aerial lying of small diameter cable in micro ducts. Construction will be undertaken in two different phases (further explained in the text below):

- Pre-construction phase: confirming deployment plans for sub-projects, preparation and applying for construction permits, procurement of network equipment and materials, the landing of procured commodities for BRIDGE at shipping docks/yards and international airports in Nigeria, and their temporary storage at these facilities prior to supply/transportation to selected warehouses.

- Construction phase: laying fiber along identified routes through trenching and backfilling as needed, aerial installations are also possible based on detailed technical design and implementation approach. Installation of equipment at network nodes.

Activity	Anticipated Environmental Risks	Anticipated Social Risks
Component 1: Resilient Digital Infrastructure Deployment of fiber optic networks (up to 90,000km)	- Land disturbance and vegetation clearance - Soil erosion - Water pollution - Waste generation - Impact on biodiversity - localized environmental impacts depending on region	- Land acquisition and potential displacement - Disruption to livelihoods - Community health and safety concerns - Labor influx and associated risks - Security risks for workers and communities - Unequal access to benefits

Component 2: Project Management and Implementation Support (IDA: US$5 million) will finance support to the Borrower's Project Implementation Unit (PIU). The PIU will be responsible for project management and implementation of project-related activities, including procurement, financial management (FM), monitoring and evaluation (M&E), project communications, as well as environmental and social safeguards and citizen engagement. Table 1.1 shows the project components and the tentative cost allocations

Table 1.1: Project Components and Tentative Cost Allocations

Components	IDA, Allocated Financing (US$ million)	Unguaranteed Commercial Financing (US$ million)	Total Financing (US$ million)
Component 1	495	1,100	1,595
Component 2	5	0	5
TOTAL	500	1,100	1,600

1.4 Environment and Social Management Framework

At this stage, the specific project investments and actual project locations have not been clearly identified; therefore, an ESMF provides a general impact identification framework to assist the project implementers in screening the projects and institute measures to address adverse environmental and social impacts. To aid in the assessment and management of environmental and social impacts at this early stage in project appraisal and planning, this ESMF has been prepared to provide a general E&S impact identification framework to assist project implementers in identifying preliminary E&S risks of the projects and institute measures to address adverse environmental and social impacts. Specific information on country-wide project locations, land requirements, biophysical features at a later stage when known will be subject to provisions of herein and of framework documents (Resettlement Policy Framework (RPF) and site instruments such as Environmental and Social Impact Assessment (ESIA), Environmental and Social Management Plan (ESMP) and Resettlement Action Plan (RAP), e-waste management plan, SEA/SH/GBV risk assessment and prevention, Labor Management Procedures (LMP) to be prepared at later phases of the project.

Specific objectives of the ESMF include;

- To ensure that the implementation of the project, for which the exact locations of the subproject sites are not definitively identified at this stage, will be carried out in an environmentally and socially sustainable manner.
- To provide information about scope of adverse E&S risks and impacts expected during subproject planning, construction and operation; describe the approach to mitigation and monitoring actions to be taken; and cost implications.
- To clarify the roles and responsibilities of PIU, SPV, and other stakeholders concerning E&S due diligence, management of risks and impacts, and monitoring.
- To provide the project implementers with an E&S screening process and risk management procedures that will enable them to identify, assess and mitigate potential E&S impacts of subproject activities, including through the preparation of a site-specific Environmental and Social Impact Assessments (ESIA) and/ or Environmental and Social Management Plans (ESMP) where applicable

1.5 Approach and Methodology

1.5.1 Literature Review

Review on the existing baseline information and literature material was undertaken and helped in gaining a further and deeper understanding of the proposed project. A desk review of the Nigerian legal framework and policies was also conducted in order to the relevant legislations and policy documents that should be considered during project implementation. Among the documents that were reviewed in order to familiarize and further understand the project included:

- Review of ESMF of similar projects in the region financed by the World Bank.
- Review of the Federal Republic of Nigeria policies, laws, and procedures, regulatory and administrative frameworks to determine the relevant legal requirements for the project.
- Review of Environment and Social Standards (ESS) of the World Bank (WB) to determine their applicability to the project.
- Review of other Safeguards documents related to the project, such as the Environmental and Social Commitment Plan ESCP, Stakeholder Engagement Plan - SEP, and the Project Appraisal Document (PAD);

1.5.2 Consultations

Stakeholder consultation formed part of the methodology in preparing this ESMF where the project interested and affected stakeholders who could be identified at this early stage were consulted. The stakeholder consultation was significant to the preparation of this ESMF and formed the basis for the determination of potential project impacts and design of viable mitigation measures. The issues raised and concerns expressed, including possible mechanisms of addressing these issues and concerns, are presented under the stakeholder Engagement Plan (SEP) and summarized in **Tables 9.2 to 9.4** presented under chapter 9 of this report

1.5.3 Preparation of ESMF

Preparation of the ESMF included the following stages:

- Collation of baseline data on the environmental conditions of the country in general.
- Identification of positive and negative environmental and social impacts of sub projects investments.
- Identification of environmental and social mitigation measures.
- Preparation of screening procedures to be used for sub project proposals.
- Formulation of environmental and social monitoring plans.

2 BASELINE ENVIRONMENT AND SOCIAL ECONOMIC INFORMATION

2.1 Biophysical Baseline

2.1.1 Climate

The project area of influence (which cuts across Nigeria) is divided into three main climatic regions: Tropical Rain Forest Region, Near Desert Region and Savannah Region. However, due to unequal elevations in different parts of the country, there are differences in temperature and rainfall distribution. The tropical rain forest region covering the southern part of the country, has an annual rainfall of around 2,000 mm (80 inches), the near desert region covering the far north of the country with an annual rainfall around 500 mm (20 inches) and the savannah region covering the central portion of the country has annual rains around 1,000 mm (40 inches).

The climate in Nigeria is semi-arid in the north, and humid in the south. Due to its location, Nigeria has a tropical climate characterized by the hot and wet conditions linked with the movement of the Inter-Tropical Convergence Zone (ITCZ) north and south of the equator. The country experiences consistently high temperatures throughout the year. However, there are wide diurnal ranges in temperature, particularly in the very hot months. The mean monthly temperatures during the day sometimes exceed 36◦C while monthly average temperatures at night fall below 22◦C. Since temperature varies only slightly, rainfall distribution, over space and time, becomes an important factor in differentiating the seasons and climatic regions, except for the coastal zone, especially in the coastal area of the Niger Delta where it rains all year round. Rainfall is seasonal with distinct wet and dry seasons. Figure 2.1 shows the mean annual rainfall for the country.

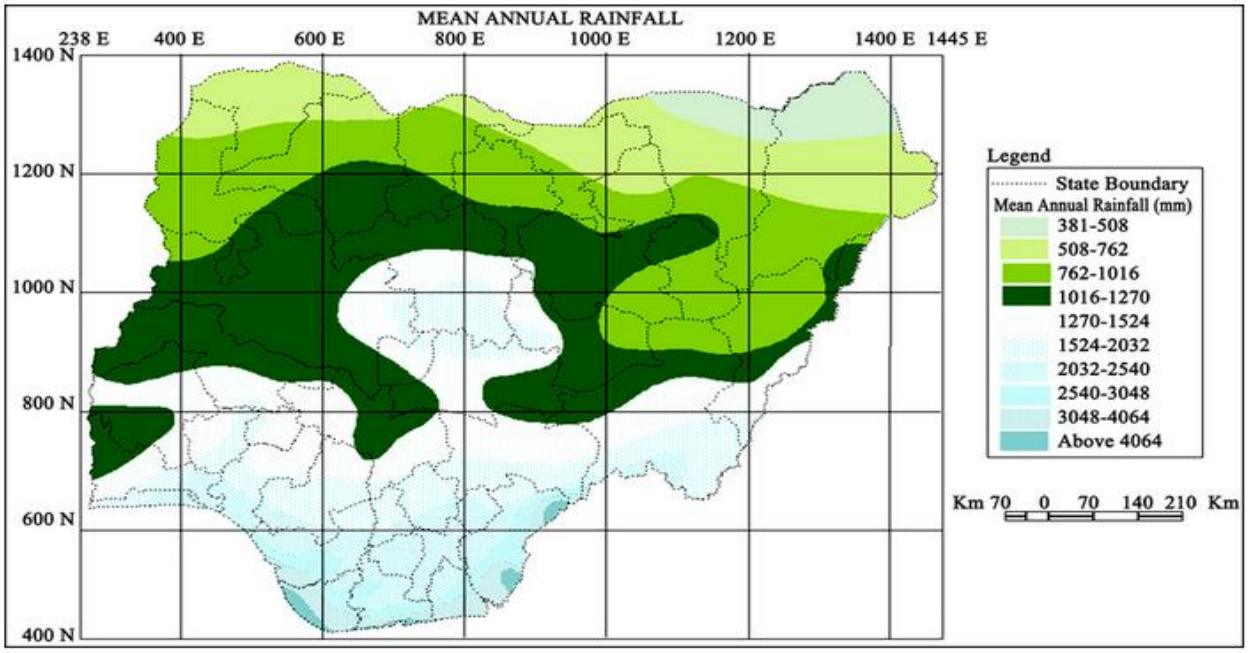

Figure 2.1: Mean Annual Rainfall of Nigeria

2.1.2 Vegetation

Savannah and Forest are the predominant types of vegetation in Nigeria. The savannah vegetation stretches from the central parts of Nigeria to the extreme northern parts. It is divided into marginal parts.

i. Sahel savannah: in the North-Eastern borders
ii. Short grass Sudan savannah: stretching from the upper western borders to the northwestern borders and
iii. Woodland/Tall grass Guinea Savannah (lying below the short grass savannah and covering the central states and parts of the eastern region of the country).

The tropical forest vegetation covers the remaining southern portion of the country and is divided into three types: i) Rain Forest with tall trees, ii) Fresh water swamp consisting of both fresh and saltwater swamps and iii) Mangrove Forest which is made up of mangrove vegetation.
Figure 2.2 shows the eco-climatic zones of Nigeria.

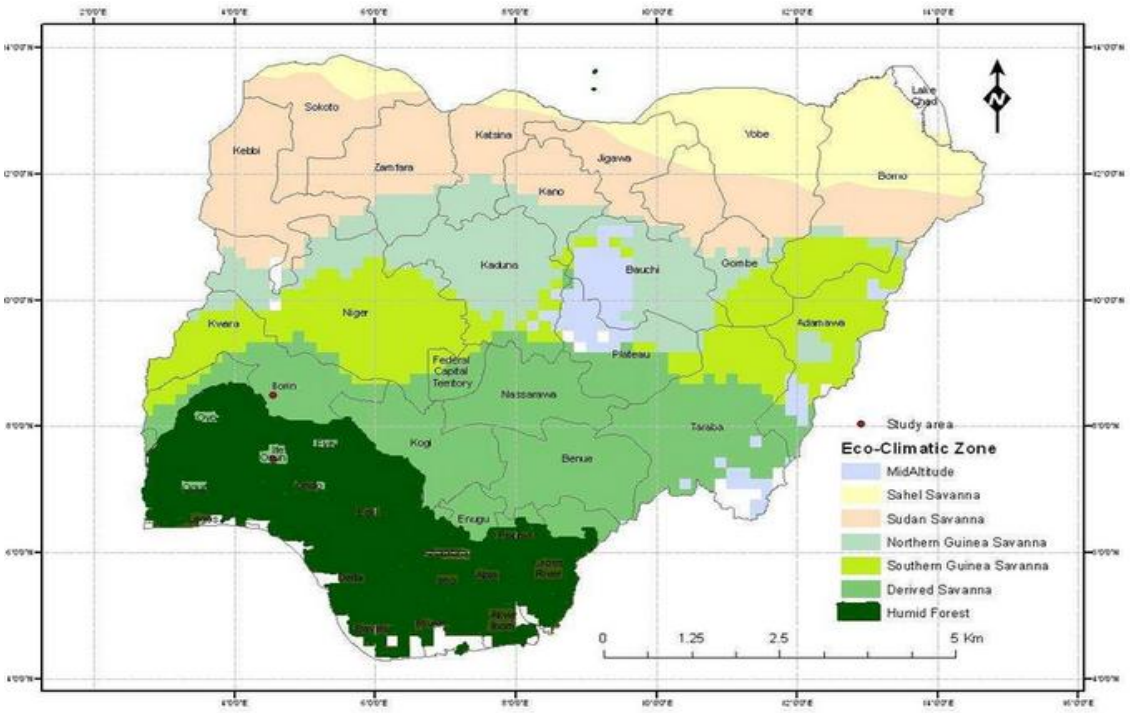

Figure 2.2: Eco-Climatic Zones of Nigeria

2.1.3 Fauna

Uncontrolled development has been identified as one of the contributing factors that lead to the decline of wildlife habitats in the country. It is therefore imperative that the impact of any development project or

program on the wildlife habitats should be evaluated before it is embarked upon. The studies on fauna are conducted by visual observation, and where necessary, by information from the local people, especially hunters. The species present in the country can be classified into major groups as; i). Herpetofauna (amphibians and reptiles), ii). Invertebrates (insects), iii). Birds (black kite, Egret, Robin, Songbird, Pigeon etc), iv). Mammals (Giant rat) etc. Some of these faunas may be endangered and vulnerable to poaching.

2.1.4 Hydrology

Surface Water

There are many rivers in Nigeria but the two principal river systems are the Niger – Benue and the Chad. The Niger River, the largest in West Africa, flows 4,000 km from Guinea through Mali, Niger, Benin, and Nigeria before emptying into the Gulf of Guinea. The Benue River and largest tributary flows 1,400 km from Cameroon into Nigeria, where it empties into the Niger River. The country's other river system includes the Yobe River, which flows along the border with Niger and empties into Lake Chad, the Gongola River, The Sokoto-Rima River System, the Ogun-Osun Rivers, Cross-River, Anambra-Imo Rivers, and numerous other rivers. Figure 2.3 shows the Nigeria Drainage System.

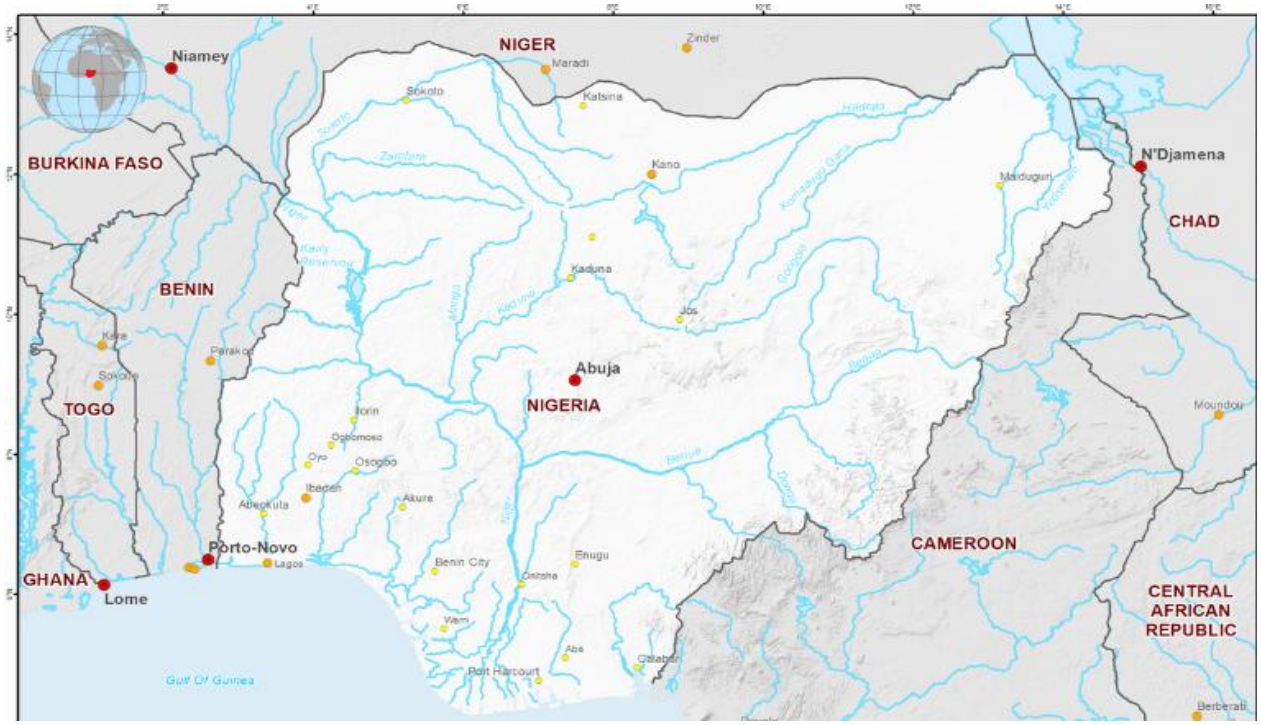

Figure 2.3: Nigeria Drainage System

Flooding

The southwestern part of Nigeria is vulnerable to flooding often during the rainy season, but other parts of the country has experienced intense flooding in recent years. Floods in Sokoto, Kogi, Jigawa, Kebbi, Kwara, etc, affected thousands of households and farm produce causing considerable material damages. In Nigeria, floods are usually as a result of heavy rains or storms where major river flows overflow into urban and rural areas resulting in significant damages to infrastructure, private property, agriculture, etc. In urban areas, the effect of old network, insufficient capacity, lack of facilities for wastewater treatment and poor drainage systems increases the potency for flooding to occur during heavy rainfalls.

Ground Water/ Hydrogeology

The major aquifers in Nigeria are Basement aquifers, Sedimentary basins, Volcanic plateau, and River alluvium. There are eight major regional aquifer systems, 30 local and minor aquifers and 36 aquicludes, aquitards, and aquifuges in Nigeria. These eight mega regional aquifers have an effective average thickness of 360 m; with a range of 15–3,000m. The yields from the major aquifers range between 1.25 and 32 l/s whereby the sedimentary basins generally form the most prolific aquifers.

Groundwater quality

Generally, groundwater in most of the aquifers in Nigeria are fresh with low concentrations of total dissolved solids (<500 mg L-1). However, groundwater is exposed to active pollution in major cities and rural communities due to increased urbanization, indiscriminate waste disposals, industrial activities etc.

2.1.5 Geology

Nigeria's land mass is made up of two main rocks, Precambrian basement rocks, which cover about two-thirds of the country's landmass and Sedimentary rocks of Cretaceous about half of the country. Other minor formations are the Tertiary Volcanics, Tertiary sediments etc. The Precambrian basement rocks consist of gneisses, migmatites, schist, and various metamorphic rocks and granites. Figure 2.4 shows some details of the geology of Nigeria

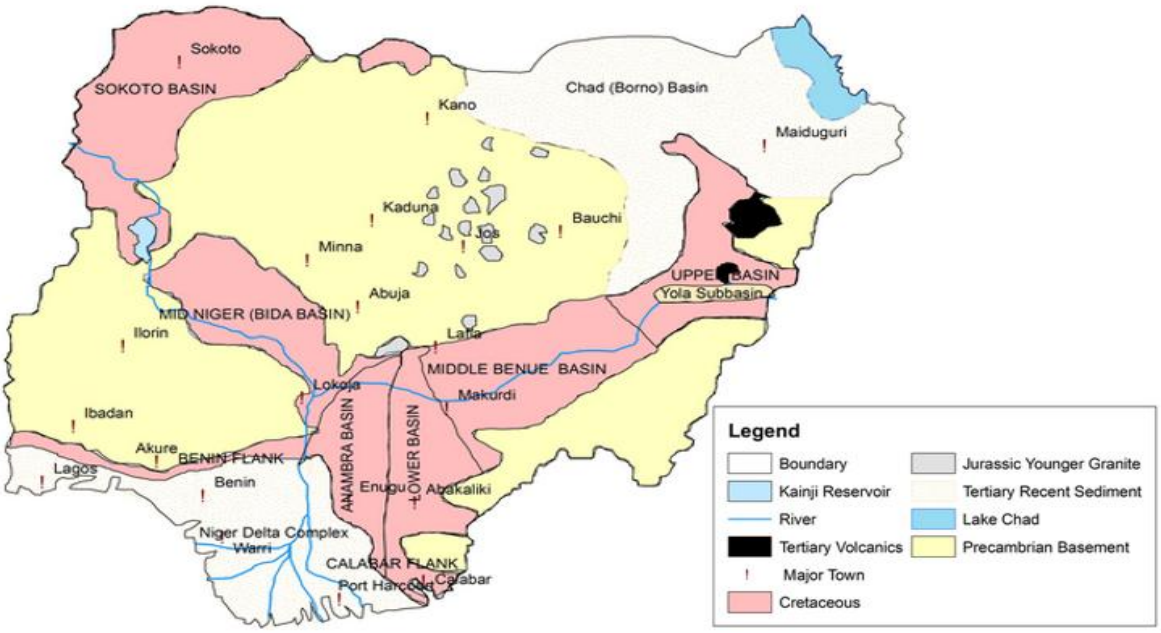

Figure 2.4: Nigeria Geological Map

2.1.6 Soil

Figure 2.5 shows the soil types in Nigeria. Soil types in Nigeria vary according to their composition, physical, chemical, morphological and mineralogical characteristics. The pedologic map of Nigeria represents a real mosaic.

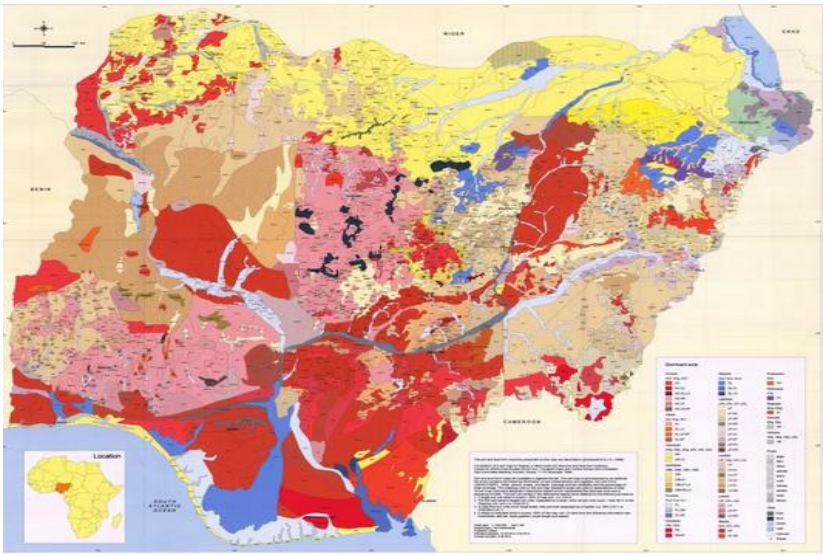

Figure 2.5: Nigeria Pedological Map

2.1.7 Ambient Air Quality and Noise levels in Nigeria

Air quality assessment will be conducted in-situ with the aid of digital equipment. The instruments are able to detect automatically (with the aid of sensors) the range of noxious gases present in the air, which is then read off automatically on the digital screen. The Gaseous parameters to be measured are Carbon monoxide (CO), Nitrogen dioxide (NO2), Sulphur dioxide (SO2), Hydrogen sulphide (H2S), Oxygen, Ammonia and Methane (CH4). Since air quality parameters and noise levels are dynamic, real-time values shall be obtained during the assessment reports to help mitigate potential risks and impacts during sub-activities as bulk transportation of meters to various DISCOs and project locations.

2.1.8 Biodiversity and Nature Protection

Nigeria is an important centre for biodiversity. It is widely believed that the areas surrounding Calabar in Cross River State contain the world's largest diversity of butterflies. The drill monkey is only found in the wild in Southeast Nigeria. The total number of higher plant species in Nigeria is 4,715 (of which 119 are threatened). For mammals, the total number of species is 274 (27 threatened), and for breeding birds the total known species is 286. Nigeria has over 1,000 protected areas (nature reserves, wilderness areas, national parks), covering a total 5.5 million ha. The total land area under protection represents 6% of the total land area. Under categories I and II (the highest level of protection) Nigeria has 2.5 million ha.

2.2 Social Baseline

2.2.1 Population and Demographics

Nigeria has the highest population in Africa. In 2024, its population amounted to over 227 million and was estimated to increase constantly in the next decades13. The largest city in Nigeria is Lagos, which is also the largest city in all of Sub-Saharan Africa. Abuja, the Capital City of Nigeria, had about 1.2 million inhabitants in 2022, ranking seventh among the largest cities in Nigeria. The youths dominate Nigeria's population. In 2030, the population's median age is forecast to reach 18.3 years, meaning that about half of the population will be under 18.5 years.

Nigeria, has more than 250 ethnic groups, the larger of which are the Hausa and Fulani who are predominantly from the Northern part of Nigeria and they represent approximately 29% of the population, the Yoruba, predominantly from the South (South West) and represent approximately 21% of the population and the Igbo, predominantly from the East represent about 18% of the population. The other large groups are the Ijaw with about 10%, the Kanuri with about 4%, the Ibibio with about 3.5% and the TIV with about 2.5%. Nigeria's Middle Belt region shows the greatest ethnic diversity, particularly in Adamawa, Taraba and Plateau States. English is the official language while the vast majority of the population conducts commercial activities in their ethnic language and "pidgin" English.

[13] https://www.statista.com/topics/6477/demographics-of-nigeria/#topicOverview

2.2.2 Economy

Nigeria is among the largest economies in Africa, with a gross domestic product (GDP) of approximately US$363 billion in 2023, but over 40 percent of its population live in poverty. Economic growth over the past decade has not maintained pace with population growth: income per capita in 2023 was US$1,621, lower than US$2,280 recorded in 2010. Nigeria's key development constraints include the high dependence on oil, insufficient economic diversification and inclusive growth, and a poor scorecard on governance and service delivery including investments in human capital.

2.4.3 Land Use [Pattern, Agricultural Production and Livelihoods

The estimated land area of Nigeria is 924,000 km2. Land use varies based on location and the needs of the community. However, the different uses of land revolve around agriculture, industry and social needs such as the provision of infrastructure. Recent data shows that between 50%- 60% of the land area of Nigeria is under various forms of intensive rainfed small holder agriculture (crop and animal) production and forest plantation.

Agriculture in Nigeria is largely subsistence and is characterized by intensive small holder rainfed and extensive grazing. Various schemes had been put in place to further boost agricultural production, these includes the Irrigation system, FADAMA projects, grazing zones/routes, and Agro-allied business such as fertilizer production. In addition to fish farming activity, some coastal/riverine communities also engage in fishing activities and other aquatic resources.

Agricultural produce in Nigeria vary from one region to the other. Major produce in the north are cereals ((such as millet, millet), rice, maize, beans, soya beans and vegetables. Irish potato, yam, potato are the main agricultural produce in the middle belt while cassava, cash crops such as cocoa, coffee, cola nuts and cashew nuts are grown in the south-western Nigeria, also, red oil production and cassava are exceptionally produced at the south-eastern region.

3 DESCRIPTION OF ADMINISTRATIVE, LEGAL AND POLICY FRAMEWORK

3.1 Federal Ministry of Environment and Guidelines

Environmental Impact Assessment (EIA) Act No. 86 of 1992.

The Federal Ministry of Environment is the apex policy making body responsible for addressing environmental issues in Nigeria. To fulfil this mandate, the main instruments in ensuring that environmental and social issues are mainstreamed into development projects is the Environmental Impact Assessment (EIA) Act No. 86 of 1992. With this Act, the FMEnv prohibits public and private sectors from embarking on major prospects or activities without due consideration, at early stages, of environmental and social risks and impacts. The act makes an EIA mandatory for any development project and prescribes the procedures for conducting and reporting EIA studies. As part of the effective utilization of the EIA tool, the Ministry has produced Sectoral Guidelines detailing the necessary requirements of the EIA process for each Sector. One of these Sectoral Guidelines that apply to the proposed project is the 'Sectoral Guidelines on Infrastructure Development.

Other relevant legal and regulatory frameworks on environment are described in Table 3.1.

Table 3.1: Other Legal and Regulatory Frameworks on Environment

S/N	Regulations	Year	Provisions
1	National Policy on the Environment	2016	Coordinates environmental protection and natural resources conservation for sustainable development
2	National Environmental Standards and Regulations Enforcement Agency (NESREA Act)	2007	Established to ensure compliance with environmental standards, guidelines and regulations.
3	National Environmental (Ozone Layer Protection) Regulations,	2009	Seeks to prohibit the import, manufacture, sale and the use of ozone depleting substances
4	National Environmental (Soil Erosion and Flood Control) regulations	2011	The overall object of the regulation is to check all earth disturbing activities, practices, development for non-agricultural. Commercial, industrial and residential purposes
5	National Guidelines on Environmental Audit	2011	These are designed to serve as a reference for compliance with the Environmental Audit requirements of the FMEnv. It states that it is mandatory for a company to carry out an audit every 3 years or at the discretion of the Hon. Minister of the FMEnv
5	National Environmental Protection (Management of Solid and Hazardous Wastes) Regulations.	1991	Regulates the collections, treatment and disposal of solid and hazardous wastes from municipal and industrial sources.
6	National Guideline and Standard for Environmental Pollution Control	1991	The regulations provide guidelines for management of pollution control measures.

S/N	Regulations	Year	Provisions
7	Workmen Compensation Act	1987	Occupational health and safety
8	Urban and Regional Planning Decree No. 88	1992	Planned development of urban areas (to include and manage waste sites)
9	State waste management laws	1991	Ensure proper disposal and clearing of wastes
10	National Environmental (Hazardous Chemicals and Pesticides Regulations)	2014	The objective of the regulation is to protect human health and the environment from the hazardous effects of chemicals and pesticides.
10	Public Health Law	2014	Covering public health matters
11	National Guidelines on Environmental Management Systems (EMS)	1999	Recognizes the value of EMS to EIA and sets out objectives and guideline on general scope and content of an EMS
12	National Guidelines and Standards for Water Quality	1999	It deals with the quality of water to be discharged into the environment, sets standards and discharge measures for a wide range of parameters in water discharged from various industries. It also sets out the minimum/maximum limits for param in drinking water
13	National Air Quality Standard Decree No. 59	1991	The World Health Organization (WHO) air quality standards were adopted by the then Federal Ministry of Environment (FMEnv) in 1991 as the national standards. These standards define the levels of air pollutants that should not be exceeded in order to protect public health.
14	National Policy on Flood and Erosion Control (FMEnv)	2006	This policy addresses the need to combat erosion in the country utilizing the procedures outlined in the National Action Plan for Flood and Erosion Control and Technical Guidelines, developed by the WIC Environmental Committee which was set up to plan an operational platform for these issues
15	National Environmental (Energy Sector) Regulations, S. I. No 63	2014	The purpose of these Regulations is to prevent or minimize pollution and encourage energy efficiency in all operations and ancillary activities of the energy sector in achieving sustainable economic development in Nigeria

Other relevant statutes and laws related to Environmental and Social Management include:

- Consumer Protection Council Act 66 (1992)
- Federal Solid and Hazardous Waste Management Regulations (1991)
- Harmful Waste (Special Criminal Provisions) Act (2004)
- Land Use Act (1978)
- National Environmental Protection (Effluent Limitation) Regulations, (1991)
- National Environmental Protection (Management of Solid and Hazardous Wastes) Regulations, (1991)

- National Environmental Protection (Pollution Abatement in Industries and Facilities Generating Wastes) Regulation, (1991)
- National Gender Policy (2008)
- National Guidelines on Environmental Management Systems (EMS) (1999)
- Nigeria Labour Law (2004)
- Occupational, Health and Safety Act (OSHA), 2007
- Penal Code Act (cap.63)
- Public Health Act (Cap. 242)
- Rehabilitation, Reconstruction and Development Act, 1990
- Social Development Act (1974)
- Standard Organization of Nigeria (SON) Act – Retained as Cap 412
- The Child Rights Act (2003)
- The Factories Acts 1990 being implemented by the Factories Inspectorate Division of Federal Ministry of Labour and Productivity (FMLP).
- Employee Compensation Act (2010)

3.2 Administrative Structure of Environmental Regulatory Bodies and Agencies in Nigeria

Besides the Federal Ministry of Environment, several other agencies are involved in enforcing environmental compliance in Nigeria, and are relevant to DISREP. These include:

National Environmental Standards and Regulations Enforcement Agency (NESREA) - is an environmental agency of the Federal Government of Nigeria that was established by law in 2007 to "ensure a cleaner and healthier environment for Nigerians". The agency functions as a parastatal of the Federal Ministry of Environment and is headed by a Director General who is also the chief executive officer. NESREA has recorded several achievements in the area of environmental compliance monitoring and enforcement since its establishment, including the enactment of several regulations pertaining to environmental protection, monitoring environmental compliance and enforcement actions. NESREA has established the application of the extended producer responsibility principle in e-waste management especially.

State Environmental Protection Agencies (SEPAs) – The SEPAs enforce environmental regulatory compliance at the state levels respectively. They are mainly responsible for ensuring the overall protection of various aspects of the built, physical and biological environment by ensuring limits set by the FMEnv are not exceeded during development works, also ensuring that building constructions meets environmental requirements, proper siting of factories, air, noise, water quality monitoring etc. In some cases, they may be directly involved in waste management activities or allow the responsibility for wate management to be handled by the State Waste Management Agencies (SWMAs).

State Waste Management Agencies (SWMAs) – Generally at the state level, the SWMAs undertake the task of providing guidelines or enforcing proper waste management procedures. In some instances, the SWMAs may have designated dumpsites for specific types of waste and guide the process for waste conveyance to the dumpsites by waste generators or procure the services of licenced waste collection vendors to carry out the services of waste collection, treatment and final disposal.

3.3 International Treaties/Agreements/Conventions Applicable to the Sub-projects

These include:

- Bamako Convention on Ban on the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa (1991)
- Basel Convention on the control of Transboundary Movement of Hazardous Wastes and their Disposal (1991)
- Convention on Oil Pollution Preparedness, Response, and Co-operation (1990)
- International Energy Charter (2015)
- Protocol on Water and Health (1999)

Relevant International Labour Organization (ILO) Instruments

- Convention concerning Safety in the use of Chemicals at Work (Entry into force: 04 Nov 1993) Adoption: Geneva, 77th ILC session (25 Jun 1990) - Status: Up-to-date instrument (Technical Convention)
- ILO Convention on the Safety of Chemicals at the Workplace, 1990 (No.170)
- Occupational Health Services Convention, 1985 (No.161)
- Occupational Safety and Health Convention (1981) and its Protocol of 2002
- Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187)

3.4 Gender Based Violence – Relevance, Legal and Policy Importance in Nigeria

Nigeria's national government has taken steps to penalize and address GBV and SEA, although a clear leadership with the leverage to garner multi sectoral support to address this complex problem seems absent. The institutional champion of women's and children's rights and GBV issues within the government is the Federal Ministry of Women Affairs and Social Development (FMWASD). But it has limited influence on sectoral ministries who need to enforce policy, insufficient budgetary resources[14] and insufficient institutional capacity to enact its mandate.

The regulatory framework to address GBV, SEA and VAC is uneven because the Nigerian legal system is plural, and different legal systems co-exist, namely, the statutory law, Sharia law in the northern regions, and customary law in rural areas. The simultaneous application of this three-tier system creates differentiated degrees of protection to women's and children's rights[15] which varies in every state and its enforcement is weak. There is a lack of clear mandates regarding which institutions oversee child protection and the design and implementation of violence prevention strategies and the provision of services. Insufficient budget allocation both at national and state levels, coupled with inadequately trained and staffed structures to provide social welfare, justice, education and health services that are women, child and survivor centred. While efforts to provide GBV survivors with basic response services are concentrated in the NE by international non-governmental organizations or the UN system, there are very limited government or non-governmental services in the rest of the country, those that exist are for

[14] UN Women data from 2011.
[15] UN CEDAW 2017.

the most part unregulated, uncoordinated and unpredictable.[16] This is aggravated by a generalized lack of trust of citizens, particularly women, in the criminal justice system to enforce the existing laws. Moreover, lack of awareness of laws and knowledge of rights, amidst a context dominated by social norms that legitimate the perpetration of abuse, stigma and underreporting, results in the consequent impunity of perpetrators, possible re-victimization of survivors and the reproduction of the cycle of violence.

Two key national laws address GBV, the Child Rights Act **(CRA, 2003), and the** Violence Against Persons Prohibition Act **(VAPP, 2015) which have been passed by the Federal Capital Territory (FCT) but not by many of the 36 states, making them inapplicable in those States that have not adopted them**. While CRA has been passed in 25 states, VAPP has been passed in 4 states in addition to the FCT. Where laws are domesticated, implementation remains weak as institutional capacities are weak (social welfare, police, family courts). In practice, the legal and judicial systems provide women and children with little protection against violence, and timely and adequate support services are scarce and often ill-equipped to respond to survivors' needs.

Nigeria has ratified or acceded to the core international human rights treaties and is a party to the major regional human rights instrument which obliged States to respect, protect and fulfil human rights of all persons within the territory and subject to the jurisdiction of the State, without discrimination. Rape may violate several human rights obligations enshrined in the instruments ratified by Nigeria and is also a form of gender-based violence and a brutal manifestation of violence against women, children and men. Also, bias and unfairness towards certain genders with regards employment; promotion, privacy in using bathrooms or restrooms and granting of work-related benefits, may also communicate gender-based violence. As a State party to the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa (the "Maputo Protocol"), Nigeria has made legally binding commitments to exercise due diligence to combat gender-based violence and discrimination and has signed international treaties as such. These include:

- Convention concerning the Prohibition and Immediate Action for the Elimination of the worst forms of Child Labour (2002)
- Discrimination (Employment and Occupation) Convention
- Equality of Treatment (Accident Compensation) Convention (1925)
- International Convention on the Elimination of All Forms of Racial Discrimination (1976)
- Optional Protocol to the Convention on the Rights of Persons with Disabilities (2007)
- The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (1985),
- The Convention on the Rights of Persons with Disabilities (CRPD) (2012)
- The International Covenant on Civil and Political Rights (ICCPR) (2004);
- The International Covenant on Economic, Social and Cultural Rights (ICESCR) (2004)

Regional Treaties Relevant to GBV, SEA, VAC and People Living with Disabilities

- Abolition of Forced Labour Convention (1957)

[16] UNICEF 2018.

- Convention Against Torture & other Cruel, Inhuman or Degrading Treatment or Punishment (CAT) 2001
- Convention on the Rights of Persons with Disabilities (2007)
- The Convention on the Rights of the Child (CRC) (1990),
- The National Action Plan for the Implementation of United Nations Security Council Resolution 1325 (2009);
- The Protocol to the ACHPR on the Rights of Women in Africa (the "Maputo Protocol") (2007).

Besides, Nigeria also has obligations to protect the environment through various commitments to the African Union, the Economic Community of West African States and the Commonwealth. It is also committed through relations with the European Community under the Lome IV Convention

3.5 World Bank Environmental and Social Standards (ESS)

The World Bank's Environmental and Social Framework (ESF) requires the Bank and Borrowers to better manage environmental and social risks and impacts of projects and to improve development outcomes. BRIDGE is therefore subject to the World Bank ESF requirement. 9 of the 10 Environmental and Social Standards (ESSs) apply to the project. The ESS applicable to the project are

3.5.1 ESS1: Assessment and Management of Environmental and Social Risks and Impacts

Client's responsibilities for assessing, managing and monitoring environmental and social risks and impacts associated with each stage of a project supported by the Bank through Investment Project Financing, in order to achieve environmental and social outcomes consistent with the Environmental and Social Standards (ESSs).

In order to meet this requirement, the borrower will: (a) Conduct an environmental and social assessment of the proposed project, including stakeholder engagement; (b) Undertake stakeholder engagement and disclose appropriate information in accordance with ESS10; (c) Develop an ESCP, and implement all measures and actions set out in the legal agreement including the ESCP; and (d) Conduct monitoring and reporting on the environmental and social performance of the project against the ESSs

The project ESCP has committed the government to prepare safeguard instruments with specific measures and actions over a specified timeframe to avoid, minimize, reduce or mitigate specific risks and impacts of the project. The government will not carry out any activities in relation to the project that may cause material adverse environmental or social risks or impacts until the relevant plans, measures or actions have been completed in accordance with the ESCP.

Further, the Bank has classified the proposed project as "Substantial Risk" project in consideration on the type of project, location, sensitivity, and scale of the project and the nature and magnitude of its potential environmental impacts associated with Environmental risks are primarily linked to a) alteration

of terrestrial and aquatic habitats which could have adverse impacts especially if linear digital infrastructure may pass through critical habitats or biodiversity hotspots during construction periods and possibly during maintenance

The World Bank's ESS 1. Provides for the Environmental and Social Screening for each sub-activity under the project. These screening forms are to be filled and reviewed by an environmental and social safeguards expert under the PIU

3.5.2 ESS2: Labour and Working Conditions

ESS2 recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. Borrowers can promote sound worker-management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions. ESS2 applies to project workers including fulltime, part-time, temporary, seasonal and migrant workers.

The Borrower will develop and implement written labor management procedures applicable to the project. These procedures will set out the way in which project workers will be managed, in accordance with the requirements of national law and this ESS. The procedures will address the way in which this ESS will apply to different categories of project workers including direct workers, and the way in which the Borrower will require third parties to manage their workers in accordance with ESS2. ESS2 requires also a grievance redress system which allows workers to raise their grievances. The project Labour Management Plan has been prepared.

3.5.3 ESS 3: Resource Efficiency and Pollution Prevention and Management

ESS3 recognizes that economic activity and urbanization often generate pollution to air, water, and land, and consume finite resources that may threaten people, ecosystem services and the environment at the local, regional, and global levels. The current and projected atmospheric concentration of greenhouse gases (GHG) threatens the welfare of current and future generations. At the same time, more efficient and effective resource use, pollution prevention and GHG emission avoidance, and mitigation technologies and practices have become more accessible and achievable. This ESS sets out the requirements to address resource efficiency and pollution1 prevention and management throughout the project life cycle

There are potential ESS 3 related risks with project activities under localized greenhouse gas emissions, Construction activities may also account for an increased demand for resources including water, energy and raw materials that may generate hazardous wastes and increase demand for water and energy. The ESMF should include sections on resource efficiency and pollution prevention and management. Assessment of risks and impacts and proposed mitigation measures related to relevant requirements of ESS3, including raw materials, water use, air pollution, hazardous materials, and hazardous waste are included within scope of the ESMF, and ESMPs as relevant.

3.5.4 ESS4: Community Health and Safety

ESS4 addresses the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of Borrowers to avoid or minimize such risks and impacts, with particular attention to people who, because of their particular circumstances, may be vulnerable. The project is expected to result in health and safety impacts to the community in the project area, such as impacts associated to exposure to dust, noise and vibration, e waste hazards

ESS4 addresses the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of Borrowers to avoid or minimize such risks and impacts, with particular attention to people who, because of their particular circumstances, may be vulnerable. While not explicitly mentioned, prevention and mitigation of different forms of gender-based violence, specifically Sexual Exploitation and Abuse, is being covered by ESS4.

The project may engage international contractors and experts as well as establishment of contractor's camp in the project area during construction activities. While it is expected that the contractor comes with a team of skilled personnel to carry out the specialized tasks such as laying out the digital infrastructure, local contractors, service providers, unskilled or semi- skilled workers may be required. This labor influx is expected to subside after the completion of the civil works. Nevertheless, labor influx associated with disposable income may increase the risk of exposing the communities to transmissible infections, GBV/SEAH cases, HIV/AIDS and COVID 19.

The project will not sanction any use of force by direct or contracted workers in providing security except when used for preventive and defensive purposes in proportion to the nature and extent of the threat. Due diligence will be done to ensure the hires security firm are (i) not implicated in past abuses; (ii) adequately trained (or determine that they are properly trained) in the use of force (and where applicable, firearms), and appropriate conduct toward workers and affected communities; and (iii) compliance with the applicable law and any requirements set out in the ESCP.

3.5.5 ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

The overall objectives of the World Bank's ESS 5 are to avoid land acquisition and involuntary resettlement where feasible, or to minimize resettlement while exploring all viable alternatives. Where it is not possible to avoid resettlement, activities will be conceived and executed as sustainable development programs, providing sufficient investment to enable the persons displaced by the project to share in the project benefits.

The project activities will lead to potential land acquisition of land and potentially physical and/or economic resettlement which may differentially affect vulnerable groups, ESS7 communities, those with smaller land plots or informal rights to land use due to deployment of digital infrastructure. The project may need to manage legacy around unsettled/multiple claims to land and assets proposed for sub

project level investments inside or outside the existing facilities occupied by private or public service providers.

3.5.6 ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources,

ESS6 recognizes that protecting and conserving biodiversity and sustainably managing living natural resources are fundamental to sustainable development. ESS6 recognizes the importance of maintaining core ecological functions of habitats, including forests, and the biodiversity they support. This ESS also addresses sustainable management of primary production and harvesting of living natural resources. ESS6 recognizes the need to consider the livelihood of project-affected parties, including Indigenous Peoples, who's access to, or use of, biodiversity or living natural resources may be affected by a project.

The installation of fixed line components, including shore approaches for long distance fiber optic cables, and access roads to transmission towers and other fixed infrastructure, may require construction of corridors crossing aquatic habitats with the potential to disrupt watercourses, wetlands, coral reefs, and riparian vegetation to be restricted to urban areas where there are major load centers, existing road, energy corridors or Way Leave/ROW and within mini grids existing footprint and therefore impacts on natural and sensitive habitats is expected to be limited.

ESS6 recognizes the importance of maintaining core ecological functions of habitats, including forests, and the biodiversity they support. Habitat is defined as a terrestrial, freshwater, or marine geographical unit or airway that supports assemblages of living organisms and their interactions with the non-living environment. All habitats support complexities of living organisms and vary in terms of species diversity abundance and importance.

This ESS also addresses sustainable management of primary production and harvesting of living natural resources. ESS6 recognizes the need to consider the livelihood of project-affected parties, including Indigenous Peoples, who's access to, or use of, biodiversity or living natural resources may be affected by a project. The potential, positive role of project affected parties, including Indigenous Peoples, in biodiversity conservation and sustainable management of living natural resources is also considered.

3.5.7 ESS7 Sub-Saharan Historically Underserved Traditional Local Communities

This ESS applies to a distinct social and cultural group identified in accordance with paragraphs 8 and 9 of this ESS. There are no communities identified so far meeting the requirements of ESS7 in Nigeria, however the application of ESS7 will be analysed (included in the ESMP) and a commitment to consult experts and potentially affected groups and to prepare an IPPF. IPPF will be prepared if there is a likelihood that SSAHUTLCs can be found in, or have collective attachment to, project areas or nearby. At this stage, the individual subprojects and project areas are not known. The application of ESS7 will also be analysed further through a bank led due diligence led by experts and consultation with potentially affected groups during project implementation phase. The finding of this due diligence will form part of

ESMP scope. A commitment to consult experts and potentially affected groups and to prepare an IPPF if needed is included in the ESCP.

3.5.8 ESS8: Cultural Heritage

This ESS recognizes that cultural heritage, in its many manifestations, is important as a sourced of valuable scientific and historical information, as an economic and social asset for development, and as an integral part of people‘s cultural identity and practice. The objective of this ESS is to protect cultural heritage from the adverse risks and impacts of project activities and to promote meaningful consultations with stakeholders regarding cultural heritage. The Borrower will implement globally recognized practices for field-based study, documentation and protection of cultural heritage in connection with the project, including by contractors and other third parties.

A chance finds procedure is a project-specific procedure which will be followed if previously unknown cultural heritage is encountered during project activities. It will be included in all contracts relating to construction of the project, including excavations, demolition, movement of earth, flooding or other changes in the physical environment. The chance finds procedure will set out how chance finds associated with the project will be managed.

The procedure will include a requirement to notify relevant authorities of found objects or sites by cultural heritage experts; to fence-off the area of finds or sites to avoid further disturbance; to conduct an assessment of found objects or sites by cultural heritage experts; to identify and implement actions consistent with the requirements of this ESS and national law; and to train project personnel and project workers on chance find procedures. This ESMF also includes a set of Guidelines for the Protection of Cultural Heritage Sites that covers ‘known sites’, and ‘unknown sites’ plus procedures for ‘chance finds’, as can be found in Annex II.

3.5.9 ESS10: Stakeholder Engagement and Information Disclosure

ESS 10 applies as it addresses the importance of open and transparent stakeholder engagement, which is essential in improving the environmental and social sustainability of the project. Stakeholder engagement must be a socially inclusive process conducted throughout the project life cycle.

Where properly designed and implemented, it supports the development of strong, constructive responsive relationships that are important for the successful management of a project’s environmental and social risks. Construction and rehabilitation of electricity infrastructure will impact the social and economic life of people and their environment. For any such project to be sustainable, stakeholder engagement has to be conducted throughout the life cycle of the project.

Stakeholder engagement is an inclusive process conducted throughout the project life cycle. Where properly designed and implemented, it supports the development of strong, constructive and responsive relationships that are important for successful management of a project’s environmental and social risks.

Stakeholder engagement is most effective when initiated at an early stage of the project development process, and is an integral part of early project decisions and the assessment, management and monitoring of the project's environmental and social risks and impacts.

In consultation with the Bank, the Borrower has developed and will implement a Stakeholder Engagement Plan (SEP) proportionate to the nature and scale of the project and its potential risks and impacts. The SEP also outlines the establishment of a functioning grievance redress mechanism.

3.5.10 Legal Gap Analysis

The Environmental Impact Assessment Act CAP E12 LFN 2004 requires that development projects be screened for their potential impact. Based on the screening, a full, partial, or no Environmental impact assessment may be required. Projects are classified under any of the three categories as follows: According to the provisions of this act, , the IPF component is a Category II.

- Category I projects will require a full Environmental Impact Assessment (EIA).
- Category II projects may require only a partial EIA, which will focus on mitigation and Environmental planning measures, unless the project is located near an environmentally sensitive area--in which case a full EIA is required.
- Category III projects are considered to have "essentially beneficial impacts" on the environment, for which the Federal Ministry of the Environment will prepare an Environmental Impact Statement.

Whereas based on the ESF, the Bank will require the Borrower to carry out appropriate environmental and social assessment of subprojects, and prepare and implement such subprojects, as follows:

a) **High Risk** subprojects, in accordance with the ESSs;
b) **Substantial Risk, Moderate Risk and Low Risk** subprojects, in accordance with national law and any requirement of the ESSs that the Bank deems relevant to such subprojects. The environmental and social assessment will be proportionate to the risks and impacts of the project. It will inform the design of the project and be used to identify mitigation measures and actions and to improve decision making.

The Bank will review the risk classification assigned to the project on a regular basis, including during implementation, and will change the classification where necessary, to ensure that it continues to be appropriate. Any change to the classification will be disclosed on the Bank's website. It is noteworthy to state that If the Bank is not satisfied that adequate capacity exists on the part of the Borrower, all High Risk and, as appropriate, Substantial Risk subprojects will be subject to prior review and approval by the Bank until it is established that adequate capacity exists.

Use of borrower's environmental and social framework

When a project is proposed for Bank support, the Borrower and the Bank will consider whether to use all, or part, of the Borrower's ES Framework in the assessment, development and implementation of a project. Such use may be proposed provided this will to address the risks and impacts of the project and enable the project to achieve objectives materially consistent with the ESSs. See table 4 below for comparison between Nigeria environmental laws and the ESSs. **Table 3-2** summarizes a comparison focusing on the World Bank Environment and Social Standards relevant to the project and gaps identified in existing Nigeria laws and regulation

Table 3-2: GAP analysis for WB and Federal Government of Nigeria Polices, Laws & regulations relevant to this ESMF

Key Element	Nigerian Provisions	WB ESF	Comparison
ESMF for Programs involving multiple but still unidentified sub-projects.	Not a national requirement	ESS 1: Assessment and Management of Environmental and Social Risks and Impacts	No comparison
Screening	EIA Act Cap E12 LFN 2004	ESS 1: Assessment and Management of Environmental and Social Risks and Impacts	This law sets out the general principles, procedures and methods of environmental impact assessment in various sectors; similarly, to ESS1, it mandates that development sub-projects or activities be screened in order to ascertain their eligibility for environmental and assessment by the proponent prior to their implementation
Scoping	EIA Act Cap E12 LFN 2004	ESS 1: Assessment and Management of Environmental and Social Risks and Impacts	Similarly, to ESS1, it mandates that the nature, scope, environment and preliminary impacts of screened development sub-projects or activities be established so that they guide the preparation of the Terms of Reference for the environmental and social assessment
Environmental (and Social) Impact Assessment Guideline	EIA Procedural Guidelines, 1995 EIA Sectoral Guidelines for Power Sector, 2013	ESS 1: Assessment and Management of Environmental and Social Risks and Impacts	The sectoral guidelines serve as stringent provisions for considerations in EIAs across various sectors of the economy. These compare to the Banks ESS 1 requirement and the World Bank Group Environmental, Health and Safety Guidelines (EHSGs), which provide provisions to support the ESSs
Environmental Categorization	EIA Procedural Guidelines, 1995 Categories I, II & III	Environmental and Social Risk Classification	The guidelines propose the categorization for projects eligible for EIA mainly on the extent of the potential impacts, their magnitude, spread, range and irreversibility. This however varies from the Environmental and Social Risk Classification of the Bank, which rather follows a risk-based approach
Environmental and Social Assessment	EIA Act Cap E12 LFN 2004	ESS 1: Assessment and Management of Environmental and Social Risks and Impacts	Sets out the general principles, procedures and methods of environmental impact assessment in various sectors; it mandates that development sub-projects or activities undertaken by public and private sector establishments with the potential to impact adversely on the environment must undergo Environmental Impact Assessment following their categorization (category I or II)
Environmental and Social	EIA Act Cap E12 LFN	ESS 1: Assessment and	Its provisions mandate that an Environmental

Key Element	Nigerian Provisions	WB ESF	Comparison
Management Plan	2004	Management of Environmental and Social Risks and Impacts	Management Plan (similar to the Environmental and Social Management Plan – ESMP) for Bank funded projects be part and included in the EIA report
Consultation and Participation	EIA Act Cap E12 LFN 2004	ESS 1: Assessment and Management of Environmental and Social Risks and Impacts ESS 10: Stakeholder Engagement and Information Disclosure	The law mandates that stakeholder consultations be conducted during the EIA process and continuously during project implementation. This is consistent with the requirements of ESS 10 of the. ESS 10 recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of good international practice, and must be read in conjunction with ESS1.
Pollution Prevention and Control	National Environmental Protection (Pollution Abatement in Industries and Facilities Generating Wastes) Regulations, 1991; and National Environmental (Surface & Groundwater Quality Control) Regulations 2011	ESS 3: Resource Efficiency and Pollution Prevention and Management	Sets out clauses and guidelines to be followed and complied with as regards air, water and land pollution. Additionally, it addresses waste generation and management in a consistent way as to ESS 3 which recognizes that economic activity and urbanization often generate pollution to air, water, and land, and consume finite resources that may threaten people, ecosystem services and the environment at the local, regional, and global levels.
Waste and Hazardous Materials	National Environmental Protection (Management of Solid and Hazardous Wastes) Regulations, 1991	ESS 3: Resource Efficiency and Pollution Prevention and Management	Same as above
Labour Conditions	Employee Compensation Act, 2010 Labour Act, 1990	ESS 2: Labour and Working Conditions	Provides comprehensive legislation on conditions of work and employment. Part I sets out general provisions relating to wages, contracts and terms of employment. Part II regulates recruiting, including the licensing of recruiters, and the right to be accompanied by family Part III relates to special classes of workers, including apprentices, women and young persons. This could be consistent with ESS 2 which requires that the Borrower will develop and implement written labour management procedures applicable to the project.
Health and Safety	Factories Act (CAP F1), 2004	ESS 2: Labour and Working Conditions	Same as above

Key Element	Nigerian Provisions	WB ESF	Comparison
		ESS 4: Community Health and Safety	
Gender	National Gender Policy 2010	World Bank, Good Practice Note, Addressing Gender Based Violence in Investment Project Financing involving Major Civil Works, 28 September 2018,	Brings a gender perspective into all aspects of planning policy, developing legislation and transformation activities in Nigeria. The gender policy addresses the systematic inequalities between women and men in society without ignoring the fundamental differences between them. The WB GPN compliments the Policy in the above, and also in providing actual steps in GBV risk assessment and mapping of GBV services which when applied in projects in-country, help to achieve the same objectives of the National Gender Policy
Environmental Monitoring	EIA Act Cap E12 LFN 2004	ESS 1: Assessment and Management of Environmental and Social Risks and Impacts	Similar to the provisions in the ESF for the Borrower to monitor the environmental and social performance of the project(s) in accordance with the legal agreement, and likewise in the ESMP (as part of the ESIA or as a stand-alone document) which identifies monitoring objectives; this law requires the same for EIAs prepared for sub-projects.
Disclosure and Access to Information	EIA Act Cap E12 LFN 2004	ESS 1: Assessment and Management of Environmental and Social Risks and Impacts ESS 10: Stakeholder Engagement and Information Disclosure	The law emphasizes that EIAs be publicly disclosed to the public for a period of 21 days for the purpose of access to information. The requirements of ESS 1 and ESS 10 likewise are consistent with information disclosure for environmental and social assessments to stakeholders (Interested parties and Project Affected Persons)

Table 3.3: Summary of Required E&S Clearances, Permits, and No Objection Certificates (NoCs)

Activity	Required Clearance/Permit/NoC	Responsible Agency(ies)	Process Steps	Indicative Timeline
Laying fiber optic cables (underground/aerial), construction of corridors, installation of equipment at network nodes	Environmental Impact Assessment (EIA) & Environmental and Social Management Plan (ESMP)	Federal Ministry of Environment (FMEnv), State Environmental Protection Agencies (SEPAs), PIU, SPV, World Bank	1. Screening by PIU 2. Scoping 3. Preparation of ESIA/ESMP 4. Review by PIU, SEPAs, FMEnv, World Bank 5. Disclosure	2-6 months (varies by scope)
Pre-construction activities, deployment planning	Construction Permit	Local/State Authorities (e.g., State Ministries of Works & Transport, Physical Planning)	1. Prepare deployment plan 2. Apply for permit 3. Review and approval by relevant authority	1-2 months
Generation and disposal of construction/electronic waste	Waste Management Clearance	State Waste Management Agencies (SWMAs), NESREA	1. Identify waste streams 2. Apply for clearance/guidelines 3. Designate disposal sites 4. Compliance monitoring	1-2 months
Deployment of fiber optic cables along identified routes	Right-of-Way (ROW) Clearance	State Ministries of Works & Transport, Physical Planning, Federal Government, SPV	1. Identify ROW 2. Apply for clearance/fee waiver 3. Approval by state/federal agencies	

Process Outline:

- Screening and scoping are initiated by the PIU once sub-project locations are known.
- Preparation of safeguard instruments (ESIA, ESMP, RAP, e-waste plan, etc.) follows, with review and approval by relevant agencies and the World Bank.
- Disclosure of cleared documents is required before commencement of activities.
- All clearances must be obtained and integrated into bid documents and contracts prior to implementation.

Note: Timelines are indicative and may vary depending on project complexity, agency responsiveness, and site-specific factors. No activities causing material adverse E&S risks may commence until all relevant plans and measures are completed and approved.

4 POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS AND MITIGATION MEASURES

4.1 Identification of Potential Environmental and Social Risks and Impacts

Positive Impacts

The objective of this section is to aid PIUs and other institutions responsible for implementing this ESMF, to identify, evaluate and manage the environmental and social risks and impacts of the project and consequent activities in a manner consistent with the applicable ESSs. The impact identification and assessment are based on potential impacts from anticipated project activities. Site specific project impacts would be detailed for each sub project environment and social assessment, before the commencement of activities as part of the Environmental and Social Management Plan (ESMP) implementation to be prepared by PIUs; through procurement of professional environmental and social safeguards services from qualified and experienced Consultant's.

The potential positive impacts include but not limited to the ones listed in **Table 4.1** below:

Table 4- 1: Project Positive Impacts

Components	Positive Impacts / Outputs
Component 1: Resilient Digital Infrastructure	● Increased population covered by 3G network ● Additional fibre optic cables deployed ● Additional internet access points established including borderland areas (connected government offices, refugee camps, schools, hospitals, agriculture cooperatives) ● Guidelines for greening digital infrastructure including leveraging renewable energy resources and e waste management adopted ● Private sector resources mobilised under the Project ● Provide temporary and permanent employments on both short- and long-term bases ● Reduce gender disparities in Nigeria's digital space and economic development. ● Enhance climate change, Risk and Disaster management activities

Adverse Risks

The potential adverse environmental and social Risks of BRIDGE activities are envisaged to be localized to some extent in spatial extent, short in duration and can be manageable through the implementation of appropriate mitigation measures, for example, dust emission, labour influx at the temporal camp site, among others. However, some of the potential impacts and risks particularly related to pollution, biodiversity impacts, and land acquisition, could be significant long-term and/or permanent including risks related to labor influx and GBV. Impact identification and assessment start with scoping and continue through a structured impact assessment process.

ESMF includes a negative list of the environmental and social screening form (See Annex I) as well as potential impacts and risks of physical interventions which will help in identification of such impacts and

risks to ensure that potential adverse impacts and risks are prevented and/or mitigated appropriately, and positive impacts are enhanced. Aside from the above-mentioned risks and impacts, insecurity is a major community concerns about the project activities.

The mitigation measures outlined below are not intended to be exhaustive in content but rather to indicate in general to the scope of ESIAs and ESMPs. It is entirely possible that additional impacts will be identified during impact assessment studies or audit preparation and will require additional mitigation measures. In the ESIAs and ESMPs, impacts shall be categorized according to project phase (planning, construction, operation, and decommissioning) and for all project types.

The environmental management program should be carried out as an integrated part of the project planning and execution. It must not be seen merely as an activity limited to monitoring and regulating activities against a pre- determined checklist of required actions. Rather it must interact dynamically as a subproject implementation proceeds, dealing flexibly with environmental impacts, both expected and unexpected. For all subprojects to be implemented under BRIDGE, the ESMP should be a part of the Contract Document.

4.2 Project Components: General Environment and Social Risks

This sub-section identifies generic potential environmental and social risks and impacts associated with the implementation of the BRIDGE project and provides mitigation measures in line with the mitigation hierarchy provided in the ESF. The potential for the occurrence of the identified impacts must be ascertained during further stages of project design, construction and implementation. **Table 4-2** gives the details of the subcomponent activities to highlight the potential environmental and social risks associated with the project.

Table 4- 2: Details of the Project Component 1 and Potential Environment and Social Risks

Component	Risks
Component 1: **Resilient Digital Infrastructure**	**Environment**
infrastructure investments towards deploying such climate-resilient and low-carbon infrastructure that involves of 90,000 km of fiber infrastructure Specifically, these activities will be undertaken when deploying fiber network infrastructure at different phases (further explained in the text below): - Pre-construction phase: confirming deployment plans for sub-projects, preparation and applying for construction permits, procurement of network equipment and materials, the landing of procured commodities for BRIDGE at shipping docks/yards and international airports in Nigeria, and their temporary storage at these	a. Alteration of terrestrial and aquatic habitats, which could have adverse impacts, especially if linear digital infrastructure passes through critical habitats or biodiversity hotspots during construction periods and possibly during maintenance, including the destruction of breeding grounds of critically endangered fauna b. Soil pollution following the route site preparation works, site development and deforestation and clearing; opening of access roads (earthworks); earth compaction, creation of ruts by the repeated passing of machinery and workers during the works preparation phase; spillage of oil, gasoline or other pollutants that could impact soil quality. c. The installation of fixed line components, including shore approaches for long distance fiber optic cables, and access roads to transmission towers and other fixed infrastructure, may require construction of corridors crossing aquatic habitats with the potential to disrupt watercourses, wetlands, coral reefs, and riparian vegetation

Component	Risks
facilities prior to supply/transportation to selected warehouses. - Construction phase: laying fiber along identified routes through trenching and backfilling as needed, aerial installations are also possible based on detailed technical design and implementation approach. Installation of equipment at network nodes. Downstream telecommunications companies will then in turn invest in construction of last-mile networks expanding their subscribers base and expanding network coverage	d. Construction and electronic wastes generated from general construction activities and installations, including air pollution risks e. Construction activities may also account for an increased demand for resources, including water, energy and raw materials. Deterioration of the quality of surface water, which could be caused by accidental spillage of fuel and oils from machinery during the works phase and disruption of the hydraulic systems of water courses. f. Occupational health and safety issues to workers and the community installing the fiber and last-mile connectivity cables. **Social** a. The project activities are not expected to lead to land acquisition however there might be displacement of encroachers within the Right-of-Way of transport and utility corridors. There might also be short-term restriction of access to business premises close to work areas. These potential physical and/or economic resettlement may differentially affect vulnerable groups, those with smaller land plots or informal rights to land use due to deployment of fibre cables b. Construction of infrastructure resulting in labour influx which may impact community health and safety including transmission of diseases (including STIs), conflict between workers and the community as well as risks associated with sexual exploitation and abuse, sexual harassment (SEA/SH) and GBV related issues. c. Risks to project workers, and the rising of using of security personnel on work sites **d.** Risks to labour including the potential use of child or forced labour by contractors or in the supply chain
Component 2: Project Management and Implementation Support The PIU will be responsible for project management and implementation of project-related activities, including procurement, financial management (FM), monitoring and evaluation (M&E), project communications, as well as environmental and social safeguards and citizen engagement	EHS and Security risks to workers who will be involved in technical assistance activities under the project **Social** a. Risks of data security given investments in data infrastructure (IXPs, data centers, others b. Data protection risk, especially pertaining to rights of vulnerable groups and ESS7 communities to ensure inclusion and maintain that data c. EHS risks due to technical assistance activities to be financed by the project such as legal, policy and regulatory frameworks

Pre-construction Phase:

The risks associated with the proposed infrastructure include the potential land issues and resettlement, security issues, underlying social tensions, marginalization of certain groups in access to digital infrastructure, and societal GBV risks. This phase also involves the landing of procured commodities for

BRIDGE at shipping docks/yards and international airports in Nigeria, and their temporary storage at these facilities prior to supply/transportation to selected warehouses. The safeguards team at the PIU and PIU at large will be responsible for managing the E&S risks alongside the line ministries. **Table 4-3 shows the** Potential Environmental and Social Risks and Impacts Associated with Pre-Construction Phase

Table 4- 3: Pre-Construction Phase Risks: Component 1 and 2

Impact / Risks	Mitigation Measure
Social risks	
Land Acquisition and resettlement resulting in Loss of accruing benefits of owning land, including potential loss of livelihoods	**As provided by ESS5** ● Compensation in cash at full replacement value in line with the RAP developed and livelihood assistance, also, in in-kind compensation, will be accepted. ● Be provided with similar property that is equal in value and size to the said property, ● Where land use is partially affected or with temporary losses, the replacement value will be determined for 'loss of use of land' and for temporary losses in line with the project RAP, ● Stakeholder engagement of the PAPs, and Timely disclosure of project information.
Delays in compensation for land take due to land tenure and clan dynamics	**As provided by ESS5,** ● Follow provisions of the RPF and RAPs prepared for the project ● Engagement with the parties involved in the conflict, ● Opening an ESCROW account and depositing the compensation money, as the dispute is being solved,
Forced displacement of IDPs by the government to provide land for the sub-projects; many IDPs are temporarily occupying public or communally used land within the main cities and towns	**As provided by ESS5** ● Follow provisions of the RPF and RAPs prepared for the project ● Compensation in cash at full replacement value for Assets in line with the RAP, ● Compensation for the replacement value for 'loss of use of land' and for temporary losses in line with the project RAP, and ● Setting additional measures relating to livelihood improvement or restoration.
Social exclusion of marginalized and minority groups, access to digital services provided under the BRIDGE	**As provided by ESS10 and ESS 7** ● Selection of the site in line with the approved design and or target criteria, ● Stakeholder engagement to cater for the needs of the larger stakeholders, ● Timely disclosure of project information
Discrimination against vulnerable and disadvantaged groups, including IDPs, unemployed youth, women, minority clans and ethnic minorities.	**As provided by ESS10 and ESS 7** ● The employment of project workers should be based on the principle of equal opportunity and fair treatment. ● Inclusive consultations and focus groups, particularly to ensure participation of women and other vulnerable groups. ● No discrimination with respect to any aspects of the employment relationship. ● Hold sensitization meetings on resource planning and conflict resolution mechanisms; and ● The contracts with third parties should include non-exclusion

	requirements as part of the monitoring system. ● Stakeholder engagement to cater for the needs of the larger stakeholders especially the marginalized / minority clans
Heightened expectation due to underlying social tensions, due to lack of information, as well as negative influence about the project	**As provided by ESS10** ● Timely disclosure of project information.
Security threats include the risk of looting, security breaching, and unauthorized access to the sites. Security issues i.e. attack from terror groups, looting, vandalism, security breaching and unauthorized access to the sites.	**As provided by ESS4** ● PIU shall work closely with relevant security agencies, including the Police, Civil Defence Corps, the Military and the Department of State Security to ensure the security of the workers, Project teams shall seek security approval and clearances form the project coordinator. ● Project teams shall be periodically subjected to security awareness campaigns. ● Project teams should have alternative communication devices, such as two-way radios or satellite phones in areas with limited or no cellular network coverage. ● Use local leaders as part of the project implementation committee members,
GBV risks especially SEA and SH perpetrated by project workers	**As provided by ESS2** ● GBV/SEA and SH) risk assessment and mapping of GBV services. ● The GBV (SEA and SH) management plans, which include Codes of Conduct for project workers, ● Sensitization campaigns and awareness creation on GBV. ● Application of WB GBV Guidance Notes in work procedures and interactions, especially those addressing social aspects.
Child labor and Safety Risks	**As provided by ESS2** ● Enforcement of all Cadres of CoCs etc. ● The minimum age of project workers for the project is set at 18 years and above. ● All contracts shall have contractual provisions to comply with the minimum age requirements, including penalties for non-compliance in-line with the relevant national laws
Grievances from contractual workers engaged to do heavy lifting and offloading or community members. This could result from delay in payment of wages, uncomfortable working conditions, work areas and work design	**As provided by ESS 2 & 10** ● The PIU is required to maintain labor registry of all workers with age verification. ● Subproject environmental and social management plans should clearly forbid the use of child labor. ● Grievance Redress Mechanism (GRM) should be prepared to address grievances. Specifically, the environmental and social assessment report for the sub-project should contain a chapter on Grievance Redress at the sub-project level.
Environment Risks	
The release of fugitive dusts. The release of fugitive dusts, offloading and challenges of storage at warehouses of construction materials	**As provided by ESS1 and ESS 3** ● Measures should be targeted at avoiding forceful lifting and dropping down, as this will reduce the chances of fugitive dust and fibrils from being released. Additionally, storage or holding areas should be cleaned and wetted, and ventilated to avoid

	conditions that could escalate dust release. ● If any of the materials to be delivered and stored are hazardous, safe storage must be provided to prevent environmental and health and safety impacts. If fuel is to be stored, tanks must be surrounded by secondary containment.

Construction Phase:

Table 4-4 below identifies the potential environmental and social risks and impacts describes the mitigation and enhancement measures that could be applied to the subprojects under BRIDGE during the operation stage. The safeguards team for the contractor, with supervision of the PIU safeguards team will be responsible for managing of the E & S risks and impacts.

Table 4- 4: **Construction Phase Environment Risks: Component 1 and 2**

Environmental Impact	Mitigation Measures
Impacts on Soil Resources within areas near the fiber routes and sites for digital masts Project activities related to laying of deployment of new fiber along prioritized routes, plant and equipment could interfere with soil structure and soil microbial biomass communities, making soil resources susceptible to erosion and losing their fertility. Further plant and equipment could pollute soil resources.	**As provided by ESS3** ● Where possible, avoid clearing of vegetation, particularly of indigenous vegetation colonies; ● Ensure appropriate siting of infrastructure and confine excavation activities within the immediate project site area. ● Where clearing is done, compact loose soil on excavated areas, land should be landscaped and reclaimed by planting more trees and other vegetation; ● Where erosion may occur due to vegetation loss, erosion control measures will be put in place like re-vegetation, stone bunds; ● Vegetation clearing and topsoil disturbance will be minimized where possible; ● Avoid moving heavy machineries and other equipment unnecessarily and away from designated transport routes; ● Reclaim and re-vegetate the site once work is completed to reduce run-off ● Contouring temporary and permanent access roads / lay-down areas to minimize surface water run-off and erosion ● Sheet and rill erosion of soil shall be prevented where necessary through the use of sandbags, diversion berms, culverts, or other physical means ● Topsoil shall be stockpiled separately from subsoil. Stockpiles shall not exceed 2 m height, shall be located away from drainage lines, shall be protected from rain and wind erosion, and shall not be contaminated. ● Wherever possible, construction work will take place during the dry season. ● Topsoil shall be evenly spread across the cleared areas when reinstated. ● Accelerated erosion from storm events during construction shall be minimized through managing storm water run-off (e.g. velocity control measures). ● Soil backfilled into excavations shall be replaced in the order of removal in order to preserve the soil profile. ● Mulch generated from indigenous cleared vegetation shall be spread across exposed soils after construction

Environmental Impact	Mitigation Measures
Impact on Water Resources in within areas near the fiber routes and sites for digital masts Alteration of terrestrial and aquatic habitats which could have adverse impacts especially if linear digital infrastructure may pass through critical habitats or biodiversity hotspots during construction periods and possibly during maintenance	**As provided by ESS3** ● Discharge of grey water or uncontrolled discharges from the site/working areas (including wash down areas) to adjacent rivers shall not be permitted; ● Contractor should sensitize workers on water conservation and put strict measures to avoid wastage of water, ● Ensure proper handling, storage and disposal of waste oil, lubricants, oil filters and fuel from vehicles. Hazardous waste should be contained and properly disposed of by licensed hazardous waste handlers. ● Water containing pollutants such as cements, concrete, lime, chemicals and fuels shall be discharged into a conservancy tank for planned removal from site ● Works that are likely to generate silt-laden runoff, such as excavations, will be undertaken preferentially during the drier months of the year (December-March). ● The drainage system will be developed to prevent silt-laden run-off from entering surface water drains and streams without treatment (e.g. earth bunds, silt fences, straw bales, or proprietary treatment) under any circumstances ● Where possible an 8m buffer strip of existing vegetation will be maintained within the project site. ● Earth stockpiles will be seeded as soon as possible, covered with geotextile mats or surrounded by a bund to minimize the risk of sediment-rich run-off ● Tools and plant will be cleaned in designated areas within the site where run-off can be isolated for treatment before discharge to the river or nearby water resources; ● Debris and other material will be prevented from entering watercourses; Construction sites (such as settlement lagoons or other temporary attenuation) to be used during construction if necessary; Diversion of minor watercourses will be carefully managed to prevent suspension of silt (or contamination by other pollutants) ● Discharge into watercourses and water bodies will only be carried out under consent of the relevant governing bodies ● All wastewater which may be contaminated with oily substances must be managed in accordance with an appropriate Waste Management Plan (WMP) ● Hydrocarbon-contaminated water shall not be discharged into the environment; ● At construction stage, the contractor will prepare the Specific Construction Environment and Social Management Plan (C-ESMP) which included among others: Spoil Management Control Plan, health and safety management plan and Waste Management Plan.
Impacts on Air Quality to Communities and workers Impact to the health of Communities and Workers working on infrastructure projects **under components 1 and 2**	**As provided by ESS4** ● Develop and implement a Dust Management Plan (DMP) and undertake inspections to ensure compliance with the Dust Management Plan; ● Contractors to use dust screens/nets as necessary when dusty construction activities are occurring; ● Provide appropriate PPE (dust masks) to workers & enforce use; ● Record all dust and air quality complaints, identify cause(s), take appropriate action;

Environmental Impact	Mitigation Measures
	● Undertake monitoring close to dusty activities, noting that this may be daily visual inspections, or passive/active monitoring as parameter ● Remove dusty materials from site as soon as possible if not being reused. If being re-used, cover or vegetate if possible; ● Impose speed limits on haul routes and in construction compounds to reduce dust generation; ● Construction trucks delivering materials to site should be covered with tarpaulins to minimize spread of dust/fugitive emissions to the surrounding areas and prohibit unnecessary idling of construction related vehicles ● Undertake watering to attenuate dust near sensitive receptors. The duration and frequency of this should be set out in the Dust Management Plan and will consider water availability and any stakeholder grievances; and ● Re-vegetate exposed areas as soon as feasible; ● Re-vegetate or cover stockpiles if feasible; ● Expose the minimum area required for the works, and undertake; and exposure on a staged basis to minimise dust blow.
Noise and Vibrations Impacts to Communities and workers	**As provided by ESS4** ● Siting noisy plant and equipment as far away as possible from classrooms and use of barriers (e.g. site huts, acoustic sheds or partitions) to reduce the level of construction noise at receptors wherever practicable; ● Construction workers should be aware of the sensitive nature of work places where they are operating in & advised to limit verbal / other form of noise; ● Undertake regular maintenance of the construction equipment/ vehicles as per the operational manual ● Where practicable noisy equipment will be orientated to face away from the nearest classroom and other receptors; ● Working hours for significant noise generating construction work will be on daytime only and preferably during the school holidays ● Alternatives to diesel and petrol engines and pneumatic units, such as hydraulic or electric-controlled units, will be used, where practicable; ● Where practicable, stationary equipment will be located in an acoustically treated enclosure; ● For machines with fitted enclosures, doors and door seals will be checked to ensure they are in good working order; also that the doors close properly against the seals; ● Throttle settings will be reduced and equipment and plant turned off, when not being used; ● Equipment will be regularly inspected and maintained to ensure it is in good working order. The condition of mufflers will also be checked; and fitting of mufflers or silencers of the type recommended by manufacturers.
Impact on Flora and Fauna on critical habitats and sensitive receptors such as the mangrove at the coastline	**As provided by ESS6** ● Ensure proper demarcation and delineation of the project area to be affected by construction works; ● Where possible, avoid clearing the vegetation; ● It is recommended that indigenous trees or other fast-growing trees be planted in strategic locations where the vegetation cover will be cleared as part of landscaping initiatives;

Environmental Impact	Mitigation Measures
	● Identify and restrict movement of vehicles to areas of disturbance. ● Compensatory planting of trees i.e. plants at least twice the number of trees ● Staged vegetation clearance is also recommended so as not to clear the entire corridor all at once. ● The use of existing cleared or disturbed areas for the Contractor's Camp, stockpiling of materials etc. shall be encouraged. ● Whenever possible, all damaged areas shall be reinstated and rehabilitated upon completion of the contract to as near pre-construction conditions as possible. ● Reinstatement of temporary construction sites, spoil dumping areas and pioneer camps (if present) should be done as swiftly as possible and always with suitable native grasses and other plants

Table 4- 5: **Construction Phase Occupational Health and Safety Risks**

Social Impact / Health and Safety Impacts	Proposed Mitigation Measures
Risk of Accidents and Occupational Safety and Health Concerns during civil works under the BRIDGE	**As provided by ESS4** To reduce on the workers accidents and hazards, Contractor will develop and monitor implementation of an occupation Health and Safety Management Plan (OHSMP) which will include the following measures: ● Contractor shall restrict access to active construction sites, including establishment of a fence to hoard the area under construction, ● Workers will be provided with suitable PPE including: to avoid cuts on the feet, hands and head during the course of duty. This includes helmets, gloves, safety boots overalls, face masks and ear plugs in dusty and noise activities; ● Provision of adequate sanitary facilities to workers separate for either gender. ● Train all workers on Safety Health and Environment (SHE) with an aim of improving awareness; ● The workers or their representatives will be trained on first aid and provided with first aid kits; ● Ensure all vehicles, equipment and machines are inspected, repaired and maintained before use, and machine operators are trained on machine use and safety; ● Ensure all the electrical and other specialised works are carried out by trained professionals; ● Implement a workers grievance redress mechanism to allow workers raise safety issues and propose improvements on site; ● Trenches will be secured against accidental entry by workers and the public using barriers and warning tapes. ● The contractor will install appropriate safety signage at the work areas to warn learners/staff from coming close to the construction site, ● Emergencies: the workers should be provided with emergency telephone numbers to request for assistance at any time of accident ● Where construction activities interfere with the movement of traffic, appropriate signage will be installed and controlled by trained flagmen/flag women and lit by night. ● Provision of serviceable fire extinguishers on site and well-equipped first aid kit

Social Impact / Health and Safety Impacts	Proposed Mitigation Measures
	● Public awareness/Training for first aid providers
Community health and safety risks resulting from during civil works under the BRIDGE	**As provided by ESS4** ● To reduce on the community accidents and hazards, contractor will develop and monitor implementation of a Community Health and Safety Management Plan (CHSMP) ● Notify the public of ongoing works through appropriate publicly accessible sites ● Sensitize the communities on the health and safety risks and mitigation measures related to the construction activities, ● Contractors should work closely with the school administration to find ways to minimize temporal disruption of services ● Restrict access to active construction sites including screening off/ barricading the active work area, ● Educate and sensitize workers and the local community on STI, HIV /AID's and other communicable diseases; ● Create awareness on project grievance redress mechanism.
Traffic related accidents and associated emissions as a result of implementing during civil works under the BRIDGE	**As provided by ESS4** ● The contractor shall prepare a traffic safety plan through segregating traffic safety, equipment operation and walking areas to reduce on conflicts and possible injuries; ● Schools along the corridor of civil work shall be sensitized about the BRIDGE project and the construction activity in particular before construction commences; ● Contractor shall avoid school learning peak hours for the transport of construction materials and equipment; ● Warning signs shall be provided to the access roads to warn the communities during transportation of construction materials; ● Contractor shall emphasize safety aspects among project drivers, especially speed limits to the communities; ● Whenever dust suppression along access roads will be necessary, water will be sprayed; ● Contractors should regularly inspect vehicles safety and employ trained drivers to minimize potential traffic related accidents.
Solid Waste Generation	● As provided by ESS 3 and 4 ● The contractor should prepare a construction waste management plan that they should follow as they undertake the works; ● Encourage the use of an integrated solid waste management system through hierarchy of options that is source reduction, re-use, recycling and composting; ● Sensitize construction workers on appropriate waste handling and disposal of all construction-related waste in designated areas; ● Provide appropriate waste receptacles on site; ● Restrict open burning of solid waste generated at sites; ● Contractor will keep records of waste disposal as proof for proper management of waste as designed;
E-wastes Management from constructions site	● Segregation of Waste at source and avoid mixing with other wastes ● Collection: Establish collection centers who can be individually or jointly or as registered society. They could also be owned by a designated agency, a company or an association to undertake collection operations of E-waste; ● Transportation: Once general waste is collected at designated places, the contracted service providers collect and take it to dumping sites and recycling facilities for processing ● Recycling: identify both formal and informal recycling activities in the Nigeria

Social Impact / Health and Safety Impacts	Proposed Mitigation Measures
	market where the wastes can be recycled ● Refurbishment: identify licensed entrepreneurs and organized groups which are refurbishing E-waste in the country with the intent of increasing product lifespan ● Take back: identify manufactures who have introduced take-back programmes in the Nigeria and collaborate with them for uptake of the wastes.

Table 4- 6: **Construction Phase Social Risks**

Social Impact / Health and Safety Impacts	Proposed Mitigation Measures
Labor Influx Impacts triggered during implementation of civil works under the BRIDGE Project	**As provided by ESS 2** ● Reduce labor influx by tapping into the local workforce. Depending on the size and the skill level of the local workforce, a share of the workers required for the project may be recruited locally. This may be easier for unskilled workmen. Specialized workmen may be hired from elsewhere. Local workers may also be trained especially if they are required for the operation of the project. ● C-ESMP should mandate that the contractor prepare a Labor Management Plan (LMP) that includes mandatory requirement to procure all unskilled (and as much as possible, semi-skilled) labor as well as locally available materials from the local community while ensuring equal pay for equal work for men, women and people with disability ● The contractor will ensure effective community engagement and strong grievance mechanisms on matters related to labor with a discrete mechanism for safely and confidentially reporting issues of SEA and GBV at the community level triggered by the Project ● Effective contractual obligations for the contractor to adhere to the mitigation of risks against labor influx, the contractor should engage a local community liaison person ● The contractor will ensure proper records of labor force on site while avoiding child and forced labor ● The works contractor should be required, under its contract, to prepare and enforce a No Sexual Harassment and Non-Discrimination Policy, in accordance with national law as well as to the World Bank Code of Conduct guidelines where applicable. ● The contractor will develop and implement a children Protection Strategy, this strategy will ensure that no child under the legal age of 18years in employed to the Project.
Gender Based violence and Sexual Harassment during implementation of civil works under the BRIDGE	**As provided by ESS 2** ● The existing community structures headed by location chiefs should be involved in local labor hire, emphasize the requirement of hiring women, youth and people with disability and VMGs ● Protecting Human Risk Areas Associated with, Disadvantaged Groups, Interfering with Participation Rights and interfering with Labor Rights: ● Treat women and children (persons under the age of 18) with respect regardless of race, color, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status. ● Do not use language or behavior towards women or children that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally

Social Impact / Health and Safety Impacts	Proposed Mitigation Measures
	inappropriate. ● Sexual activity with children under 18—including through digital media is prohibited. Mistaken belief regarding the age of a child and consent from the child is not a defense. ● Exchange of money, employment, goods, or services for sex, including sexual favors or other forms of humiliating, degrading or exploitative behavior is prohibited. ● Sexual interactions between contractor's and consultant's employees at any level and member of the communities surrounding the workplace that are not agreed to with full consent by all parties involved in the sexual act are prohibited. This includes relationships involving the withholding, promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex – such sexual activity is considered "non-consensual" within the scope of this Code. ● Where an employee develops concerns or suspicions regarding acts of GBV by a fellow worker, whether in the same contracting firm or not, he or she must report such concerns in accordance with Standard Reporting Procedures. ● All employees are required to attend an induction-training course prior to commencing work on site to ensure they are familiar with the GBV Code of Conduct. ● All employees must attend a mandatory training course once a month for the duration of the contract starting from the first induction training prior to commencement of work to reinforce the understanding of the institutional GBV Code of Conduct.
Children Protection from engaging in labor and protection from Violence under the BRIDGE	**As provided by ESS 2** ● The contractor will develop and implement a Children Protection Strategy that will ensure minors are protected against negative impacts associated by the Project including SEA. ● All staff of the contractor must sign, committing themselves towards protecting children, which clearly defines what is and is not acceptable behaviors ● Wherever possible, ensure that another adult is present when working in the proximity of children. ● Not invite unaccompanied children to workers home, unless they are at immediate risk of injury or in physical danger. ● Refrain from physical punishment or discipline of children ● Refrain from hiring children for domestic or other labor, which is inappropriate given their age, or developmental stage, which interferes with their time available for education and recreational activities, or which places them at significant risk of injury.
Sexual Exploitation and Abuse (SEA) triggered by workers on community members and fellow workers at project implementation stage	**As provided by ESS 2** ● Develop and implement a SEA action plan with an Accountability and Response Framework as part of the C-ESMP. The SEA action plan will follow guidance on the World Bank's Good Practice Note for Addressing Gender-based Violence in Investment Project Financing involving Major Civil Works (Sept 2018). ● Prevention of SEA: including CoCs and ongoing sensitization of staff on responsibilities related to the CoC and consequences of non-compliance; project-level IEC materials; ● Engagement with the community: including development of confidential community-based complaints mechanisms discrete from the standard GRM; main-streaming of Sexual Exploitation and Abuse (SEA) awareness-raising in all

Social Impact / Health and Safety Impacts	Proposed Mitigation Measures
	community engagement activities; community-level IEC materials; regular community outreach to women and girls about social risks and their SEA-related rights; ● Management and Coordination: including integration of SEA in job descriptions, employments contracts, performance appraisal systems, etc.; development of contract policies related to SEA, including whistle-blower protection and investigation and disciplinary procedures; training for all project management; management of coordination mechanism for case oversight, investigations and disciplinary procedures; supervision of dedicated PSEA focal points in the project and trained community liaison officers.
Spread HIV/AIDs due to large numbers of workers both local and international working on sub projects	**As provided by ESS 2 and ESS4** ● Education and sensitization of workers and the local communities on STIs including provision of condoms to the project team and the public; ● Institute HIV/AIDS awareness and prevention campaign amongst workers for the duration of the contract e.g. erect and maintain HIV/AIDS information posters at prominent locations as specified by the Resident Engineer; ● Procure and distribute Condoms among staff and community members ● Sensitize workers and the surrounding communities on awareness, prevention and management of HIV/AIDS and sexual health and rights through staff training, awareness campaigns, multimedia and workshops or during community Barazas. ● Use existing clinics to provide VCT services to construction crew and provision of ARVs for vulnerable community members
Conflicts associated with the Project during construction phase	**As provided by ESS 10** ● The community will be constantly sensitized on available Grievance Redress Mechanism established by PIU Teams. The mechanisms emphasizes resolution of disputes at Common Interest Group (CIG) level, which is the lowest community structure. ● In consultation with the benefiting communities and develop means to ensure equitable sharing of resources

Operation Phase:

Apart from regular operation and maintenance, a number of issues would require special attention for reducing/avoiding possible adverse environmental impacts. The main component of adverse risks will be from IT apparatus which generate **e-wastes upon malfunctioning, e- wastes have been known to affect people's health due to lead and mercury poisoning**. The nature of e- wastes generated will be from below listed apparatus

List of E- Wastes

E- wastes will be from malfunctioned gadgets, including once listed below

- Centralized data processing:
  - ✔ Mainframes
  - ✔ Minicomputers c. Servers
  - ✔ Printer units
- Personal computing:
- Personal computers (CPU, mouse, screen and keyboard included) Laptop computers (CPU, mouse, screen and keyboard included) Notebook computers
- Notepad computers

● Copying equipment ● Electrical and electronic typewriters ● Pocket and desk calculators and other products and equipment for the collection, storage, processing, presentation or communication of information by electronic means ● User terminals and systems ● Facsimile Telex Telephones ● Pay telephones Cordless telephones Cellular telephones ● Answering systems and other products Broadcasting equipment for transmitting sound, images or other information by telecommunications

The ecological, economic and social consequences resulting from poor handling and management of E-waste are shown in table 4.7.

Table 4- 7: **Consequences resulting from poor handling and management of E-waste**

Consequences of E-wastes	Risks associated with e-wastes
Environmental consequences	● Air pollution, especially when E-waste is burnt ● Waste management problem of non-biodegradable equipment ● Toxicity and radioactive nature of E-waste degrades the environment ● Blockage of water runoff channels
Economic consequences	● Substantial public spending on health care ● Investments in complex and expensive environment remediation technologies ● Loss / waste of resources that can be recycled for re-use ● Opportunities for recycling industries and employment lost ● Ozone depletion has led to unpredictable weather conditions.
Social consequences	● E-waste affects people's health (e.g. lead and mercury poisoning). ● Growth of informal waste disposal centers in the neighborhood ● Informal trade and management of E-waste ● Loss of appreciation for ICT

Table 4-8 below provide a snapshot of mitigation measures during operation phase of the projects

Table 4- 8: **Operational Phase Environment and Social Risks**

Environment and Social Risks	Mitigation
e- wastes management	**Applicable to ESS 3** ● Segregation of Waste at source and avoid mixing with other wastes ● Collection: Establish collection centers who can be individually or jointly or as registered society involved. They could also be owned by a designated agency, a company or an association to undertake collection operations of E-waste; ● Transportation: Once general waste is collected at designated places, the contracted service providers collect and take it to dumping sites and recycling facilities for processing ● Recycling: identify both formal and informal recycling activities in the Nigeria market where the wastes can be recycled ● Refurbishment: identify licensed entrepreneurs and organized groups which are refurbishing E-waste in the country with the intent of increasing product lifespan ● Take back: identify manufactures who have introduced take-back programs in the Nigeria and collaborate with them for uptake of the wastes. ● Raise public awareness about E-waste and its management. ● Develop and disseminate simplified version of strategy, guidelines,

	regulations and standards ● Disseminate the simplified version national E-waste management strategy, guidelines, regulations and standards ● Participate in regional and international fora on best practices in E-waste management. ● Develop and disseminate brochures, fliers, pamphlets, advertisements etc. on E- waste management. ● Develop education curriculum at all levels of education and encourage research and development on E-waste. ● Develop a system of collection of reliable, accurate and up to date data on Electrical and Electronic Equipment (EEE) and generated Waste Electrical and Electronic Equipment (WEEE) in the country.
Security risks, attack by militia groups.	**Applicable to ESS 3** ● Ensuring security of installation in collaboration with law enforcement agencies, ● Keeping complain book at installations for recording of people's complaints, and ● Comply with the Security Management Plan for the project, ● PIU shall work closely with the relevant security agencies to ensure the security of the workers, Project teams shall seek security approval and clearances form the project coordinator. ● Project teams shall be periodically subjected to security awareness campaigns. ● Project teams should have alternative communication devices, such as two-way radios or satellite phones in areas with limited or no cellular network coverage. ● Use local leaders as part of the project implementation committee members,

Risks Associated with Working at Heights

Table 4- 9: **Risks Associated with Working at Heights**

ESS5	Type of Risk
Community Health and Safety (ESS4)	Identifying high voltage hazards • severe injury or death from electric shock (which may be received by direct or indirect contact, tracking through or across a medium, or by arcing) • burns from arcing, explosion or fire • illness or death from toxic gases released by burning and arcing • injury or death caused by violent muscle contractions leading to loss of balance and a fall. • Working at heights on poles or towers increases the risk of falls, especially when dealing with equipment or in adverse weather conditions. • Contact with high-voltage electricity can cause severe burns, including deep tissue damage and scarring.

Cyber Security Risks

Table 4- 10: **Cyber Security Risks**

ESS5	**Type of Risk**
Community Health and Safety (ESS4)	Cybersecurity risks are threats to digital systems that can result in financial loss, operational disruption, or reputational damage. These risks can stem from various sources, including external attackers, internal errors, software vulnerabilities, supply chain issues, and even human error. Common examples include malware, phishing attacks, ransomware, and social engineering

5 PROCEDURES FOR PREPARATION, REVIEW, CLEARANCE, AND IMPLEMENTATION OF ENVIRONMENT AND SOCIAL SAFEGUARDS INSTRUMENTS

5.1 Environment and Social Assessment

In consistence with the requirements of ESS 1, The Environment and Social Safeguards Teams under the BRIDGET PIU will carry out environmental and social assessments of project sub-components or activities to assess the environmental and social risks and impacts. The assessment to be carried should be proportionate to the potential risks and impacts of the sub-project, and will assess, in an integrated way, all relevant direct, indirect and cumulative environmental and social risks and impacts throughout the project life cycle, including those specifically identified in ESSs 2–10.

5.2 Environment and Social Assessment Screening

Environmental and Social pre-screening is designed to identify and appraise the type and scale of any adverse environmental and social impacts or risks that may arise from a planned sub-project or site-specific activity.

These measures aim to achieve the avoidance, minimization or mitigation, including offset or compensation, of adverse environmental and social impacts of the Project and to ensure compliance with the national laws and regulations. The first step in the screening process is the determination of the' environmental and social aspects of activities as detailed under the project components, this is done so as to ascertain the type of environmental and social assessment required (if any) in accordance with ESS 1 and consistent with the ESSs.

The objectives of screening are to:

- Screen the environmental and social risks and impacts of a subproject
- Determine the type/s of mitigation measures, assessment, specific plan(s) or safeguard instrument(s) to be prepared based on the outcomes of the screening.
- The screening process could also be used to identify ineligible project activities that will not be supported by the project. This is done by analysing the proposed activities in relation to their environmental & social context (area of influence) using a checklist approach.

An Environmental and Social Screening Checklist is provided in **Annex I**. The project (BRIDGE) has been classified overall as Substantial Risk. Nonetheless, the screening process of the project components activities will inform decision makers and the project management of the nature and extent of potential environmental and social risks and impacts of each sub-project which may have a different and lower risk rating. Based upon the screening result, the appropriate E&S instruments will be prepared.

The environmental and social safeguard screening will occur during the sub-project preparation stage as soon as the fairly accurate site location(s) is (are) known for the sub-project(s). This sub-section sets out the

procedures for identifying, preparing and implementing the sub-project environmental and social screening; preparation of required E&S plans; consultation on such plans; review and approval; and implementation.

5.3 Environment and Social Assessment Scoping

The process of Environment and Social Impacts (ESIA) preparation starts with a scoping assessment. The assessment informs the level of Environment and Social Impact Assessment (ESIA) required for the proposed project components as indicated below:

- Determination of applicable national and international policy provisions and legal statutes relevant to the project
- Relevant stakeholders to be meaningfully consulted and engaged during the ESIA stage
- Determination of the scope and geographical extend of Environment and Social Impacts to be analyzed further at ESIA stage.

The scoping procedure will be undertaken through; Literature Review, Field Assessment, Data collection, Site Surveys, Secondary and Primary Data. The Scoping assessment presents aspects as summarized below:

- Description of project background
- Determination of project area of influence (Geographical, Social and Stakeholders)
- Consideration of all project-relevant physical, biological, socio-economic, cultural aspects & risks
- Analysis of alternatives
- Impact identification (Direct, Indirect, Induced, & Cumulative)
- Preliminary mitigation measures
- Definition of assessment methods for ESIA & personnel required.

Key Considerations for Proposed Environmental and Social Assessments is summarized in the box below.

- The environmental and social assessment should be based on current information (which can be obtained through literature reviews, field studies, stakeholder engagement, etc.), including an accurate description and delineation of sub-projects and any associated aspects.
- It should include collection, collation, analysis and interpretation of environmental and social baseline data at an appropriate level of detail sufficient to inform characterization and identification of risks and impacts and mitigation measures.
- The assessment should evaluate the project component activities' i) Potential environmental and social risks and impacts; ii) Examine project alternatives; iii) Identify ways of improving project selection, siting, planning, design and implementation in order to apply the mitigation hierarchy for adverse environmental and social impacts and seek opportunities to enhance the positive impacts of the project.
- The environmental and social assessment will include stakeholder engagement as an integral part of the assessment, in accordance with ESS 10.
- The environmental and social assessment should be an adequate, accurate, and objective evaluation and presentation of the risks and impacts, prepared by qualified and experienced persons.
- Project Implementation Units responsible for will procure qualified and experienced professionals

and also retain independent specialists to carry out the environmental and social assessment.

5.4 Preparation of Environment and Social Instruments

E&S Specialist would recommend the type of assessment after reviewing the screening and Scoping reports. The PIU would review and approve the recommendation of the E&S Specialist and submit the screening and scoping report to the Bank for Bank review and clearance to undertake Environment and Social Assessment commensurate to the potential risks and impacts of the project. The PIU shall thereafter engage the services of ESIA consultants to prepare the detailed assessment.

Environmental and Social Management Plan (ESMP) – Based on screening and scoping outcomes, the ESMP will be prepared as a stand-alone document when the scoping report suggests that impacts will be site specific and manageable (the activities will involve limited adverse social or environmental impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures). For site-specific projects and likewise, site-specific environmental and social risks and impacts, the most suitable instrument may be an ESMP. The ESMP will identify the environmental and social impacts of the proposed activities and define the roles and responsibilities of all critical stakeholders throughout the life cycle of project activities in order to ensure that mitigation measures, including cost estimates, are implemented and overall sustainability is assured. Importantly, the mitigation measures for which the Contractor is responsible must be included in the bidding documents.

Submission of Proposals to respective State Ministry of Environment (SMEnv) for onward forwarding to the Federal Ministry of Environment (FMEnv)

The respective Ministry of Environment of the state in which the project will be implemented will be review and clear the sub-projects from an environmental and social standpoint only, (or as best guided (by the FMEnv) by ensuring sub project designs have identified environmental and social impacts (through scoping), and included in the Terms of Reference to be submitted to the SMEnv and/or FMEnv . This is to ensure that activities in their state(s), meet environmental and social requirements of the state and national and federal level, and that they are consistent with the Bank's ESS 1 requirement and other ESSs; including guidelines provided in this ESMF Report. If, however the sub-project proposal unsatisfactorily addresses these issues it will be sent back to the PICU for re-design and re-screening and then it must be re-submitted to the SMEnv for re-review.

The revised design will be reviewed again by the respective SMEnv, and if acceptable, will be cleared for onward forwarding to the FMEnv and World Bank for final review and approval. Any proposed sub-project(s) that does not comply with the federal, state and local requirements of the Environmental Laws of Nigeria and Social requirement guidelines of this project, and the requirements of the World Bank ESF and ESSs specifically, may/will not be cleared.

This process is designed to ensure that the environmental and social assessment process is part of, and conducted during the project activities' design process thereby ensuring that activities are environmentally and socially acceptable and sustainable. The process will be guided by the generic potential adverse environmental and social impacts often associated with BRIDGE Project.

Approval for Funding.

Approval for funding will be given only when the SMEnv/FMEnv have given environmental and social clearance of the sub-projects. However, this will be subject to the FMEnv and Bank's review and approvals of the ESIAs/ESMPs and cleared by World Bank.

Costs of Preparing ESIAs/ESMPs/HRAs

The number of ESIAs/ESMP will be concluded by PIU in consultation with the Bank's Environmental and Social Development Specialists.

The PIUs Safeguards Specialist's duties include backstopping the sub-projects implementing teams to comply with the relevant National Environmental and Social requirements and the World Bank's ESF requirements. This includes reviewing, screening, approving, monitoring and reporting on the progress of the sub-projects. The Technical persons hired by the ministries (Environment and Social Consultancy Firm) should guide the formulation and development of the sub-project-specific ESMPs for the project, and periodically (quarterly) review and improve capacity to manage safeguards compliance amongst local stakeholders.

5.5 Public Consultations and Disclosure

In carrying out the ESIA or ESMP and RAPs, supporting evidence of comprehensive public consultation shall be required, such as signed minutes of consultation meetings, attendance lists and filled questionnaires. Public consultations shall take place during the environmental and social screening process and during the validation of the ESIA and RAP report. The results of public consultation shall be incorporated and or influence the design of mitigation and monitoring measures. ESIA study reports or ESMPs for the subproject shall be disclosed in-country by the client (Federal Ministry of Communication, Innovation and Digital Economy (FMCIDE) in formats that are accessible to all project stakeholders and on the World Bank external website. Public consultations should be conducted in a manner accessible to all project stakeholders, and taking into account the guidance set out in the project Stakeholder Engagement Plan and any other relevant guidance.

ESMF Disclosures

After the ESMF review and clearance by the World Bank, the following describes the process of disclosure as shown in Table 5.1.

Table 5- 1:: ESMF Disclosure Procedure

S/N	Action	Remarks
1	Disclosure in 2 National newspapers	The BRIDGE PIU will disclose the ESMF as required by the Nigeria EIA public notice and review procedures
2	Disclosure in 2 state newspapers	The BRIDGE PIU will disclose the ESMF as required by the Nigeria EIA public notice and review procedures
3	Disclosure in 2 local newspapers	The BRIDGE PIU will disclose the ESMF as required by the Nigeria EIA public notice and review procedures
4	Disclosure at the FMEnv office and the SMEnvs	The BRIDGE PIU will disclose the ESMP as required by the Nigeria EIA public notice and review procedures

5	Disclosure at the FMCIDE office	The PIU will disclose the ESMP as required by the Nigeria EIA public notice and review procedures
6	Disclosure at the Local Government Office where Business Units are Located	The purpose will be to inform stakeholders about the program's activities; environmental and social impacts anticipated and proposed environmental and social mitigation measures.
7	Disclosure on the World Bank external website	The ESMF will be disclosed according to the World Bank Disclosure Policy- OP/BP 17.50

5.6 Environmental and Social Provisions in the Tender Documents

To ensure effective management of environmental and social risks during project implementation, all relevant E&S requirements will be systematically integrated into bidding documents and contracts for civil works and fiber optic deployment. This approach is consistent with World Bank Environmental and Social Framework (ESF) standards and aligns with practices from other World Bank-financed projects. The C-ESMPs will inform the actions expected from the respective contractors and others and the monitoring of their performance through the implementing schools. The ESHS topics identified during the Environmental and Social Impact Assessment of the project will be included in specifications of tenders for construction of infrastructure as presented in **Table 5-2** below,

Key provisions include:

- **Mandatory Preparation of Contractor's Environmental and Social Management Plan (C-ESMP)**: All contractors shall be required, as a condition of contract award, to prepare and submit a site-specific Construction Environmental and Social Management Plan (C-ESMP) and Health and Safety Plan prior to commencement of works. The C-ESMP must address all relevant risks identified in the project ESMP/ESIA, including occupational health and safety, waste management (including e-waste), community health and safety, labor management, and chance finds procedures. The C-ESMP will be reviewed and approved by the Project Implementation Unit (PIU) and, where required, by the State Ministry of Environment (SMEnv), Federal Ministry of Environment (FMEnv), and the World Bank.

- **Inclusion of E&S Clauses in Bidding Documents**: The bidding documents will include detailed E&S specifications, referencing the project ESMP/ESIA and relevant World Bank standards. These specifications will cover:

    - ESHS resources and facilities, and ESHS monitoring organization
    - Management of project areas (base camps, storage areas, waste disposal sites)
    - Health and safety requirements for work-sites
    - Community engagement and grievance redress mechanisms
    - Requirements for e-waste management and safe disposal of fiber optic cable waste
    - Labor management and prevention of SEA/SH risks

- **Contractual Obligations and Performance Monitoring**: Contractors will be contractually obligated to implement the approved C-ESMP and comply with all E&S requirements throughout the project lifecycle. The PIU will monitor contractor performance against the C-ESMP, with provisions for corrective actions and penalties for non-compliance.

- **Reference to Other World Bank Projects**: This approach draws on lessons learned and templates from other World Bank projects, such as the Nigeria Electrification Project and Ethiopia Digital Foundations Project, where mandatory C-ESMPs and robust E&S integration in contracts have proven effective in managing risks.

- **Continuous Improvement**: The E&S provisions in contracts will be updated as needed to reflect evolving best practices and lessons learned during implementation.

Table 5- 2: Inclusion of Environment and Social Provisions in Tender Documents

Environment and Social Provisions in Tender Documents	*Yes/no*
ESHS resources and facilities and ESHS monitoring organization	*[select:]* YES / NO
Project Areas management (base camps and borrow pits, water sources, storage areas)	*[select:]* YES / NO
Health & Safety on work-sites	*[select:]* YES / NO
Management of SEA-SH, GBV, VAC and Child Labor, safeguarding VMG& IP and PLWD	*[select:]* YES / NO
Local recruitment and ESHS trainings of local staff (capacity building), ESHS trainings of sub-contractors and local partners (transfer of knowledge)	*[select:]* YES / NO
Relations with stakeholders, information and consultation of local communities and authorities	*[select:]* YES / NO
Traffic management	*[select:]* YES / NO
Hazardous materials and oil products management	*[select:]* YES / NO
Waste-water (effluents) Management	*[select:]* YES / NO
Protection of water resources	*[select:]* YES / NO
Atmospheric emissions, noise and vibrations	*[select:]* YES / NO
Solid Waste management including e-wastes	*[select:]* YES / NO
Biodiversity: protection of fauna and flora	*[select:]* YES / NO
Site rehabilitation and re-vegetation	*[select:]* YES / NO
Erosion and sedimentation	*[select:]* YES / NO
Control of infectious and communicable diseases (COVID 19, HIV/AIDS, malaria, etc.)	*[select:]* YES / NO
Grievance Management	*[select:]*

	YES / NO

5.7 Construction Stage

The PIU will recruit qualified consultant firm/Owner's Engineer will support in supervisory work. The PIU will also have a dedicated Environment, Social, Health, and Safety officer to monitor C-ESMP implementation, labour management and occupational health and safety risks. The PIU will ensure the C-ESMP are prepared with minimum provisions listed below.

C-ESMP

a) Project Background Information *b) General Information* *c) Contractors Environment,Social , Health and safety Policies* *d) Licenses and Permits to be acquired* *e) Personal Protective Equipment/welfare requirements* *f) Scope of ESMP and HSMP* *g) Objectives of the ESMP and HSMP* *h) Project Description and Baseline Information* *i) Site and Work Activities* *j) Analysis of Legal Provisions* *k) Resource Roles and Responsibilities of Workforce on site* *l) Competence and awareness training* *m) Standard Operating Procedures* *n) Stakeholder engagement and Grievance Management* *o) Environment, Social Health and Safety Management Plan for Specific site activities* p) *Environment Social Health and Safety Monitoring Plan*	*q) Noise and Vibration Management Plan* *r) Hazardous Prevention and Control Plan* *s) Solid and liquid Waste Management Plan* *t) Health and Safety Management Plan* *u) Gender Based Violence, Sexual Exploitation Prevention and Response Plan* *v) Program Induced Labor Influx* *w) Workers Accommodation Plan* *x) COVID-19, HIV/AIDS and Drug Abuse Prevention* *y) Security Plans* *z) Employees and Employers Code of Conduct* *aa) Logistic Risks Management Plan* *ab) Grievance Redress Mechanism* *ac) Traffic Management Plan* *ad) Emergency Preparedness and Response Plan* *ae) Material Borrow pits/Quarry Management Plan* *af) Biodiversity Management Plan* *Erosion and Sediment Control Plan*

5.8 Labour Management

The ESIA prepared for the sub projects will provide that at project implementation stage the contractor will prepare a Labor Management Plan (LMP) that includes mandatory requirement to procure all unskilled (and as much as possible, semi-skilled) labor as well as locally available materials from the local community while ensuring equal pay for equal work for men, women and people with disability. Measures listed below will be implemented:

- The contractors will reduce labor influx by tapping into the local workforce. Depending on the size and the skill level of the local workforce, a share of the workers required for the project may be recruited locally. This may be easier for unskilled workmen. Specialized workmen may be hired from elsewhere. Local workers may also be trained especially if they are required for the operation of the project.
- The contractor will ensure effective community engagement and strong grievance mechanisms on matters related to labor with a discrete mechanism for safely and confidentially reporting issues of SEA and GBV at the community level triggered by the Sub Project
- Effective contractual obligations for the contractor to adhere to the mitigation of risks against labor influx, the contractor should engage a local community liaison person

- The contractor will ensure proper records of labor force on site while avoiding child and forced labor
- The works contractor should be required, under its contract, to prepare and enforce a No Sexual Harassment and Non-Discrimination Policy, in accordance with national law as well as to the World Bank Code of Conduct guidelines where applicable.
- The contractor will develop and implement a children Protection Strategy, this strategy will ensure that no child under the legal age of 18years is employed to the Project.
- The contractor will ensure SEA is addressed in all employment contracts and a COC is signed by all workers;
- The contractors will develop training and sensitization of workers on SEA and ensure specific signage on SEA zero tolerance in all work sites;

5.9 Implementation Monitoring and Supervision

All the activities to be financed under the project will follow the ESF, environment and social standards and the provisions described and agreed in ESCP prepared to ensure proper management of environment, social, safety and health requirements. PIU will make sure that all bid documents and contracts include the ESMP and require compliance with it. Environmental and social monitoring seeks to check the effectiveness and relevance of mitigation measures through the implementation/operation phase. The PIUs Environment and Social focal points shall monitor project activities.

6 ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN, INCLUDING THE INSTITUTIONAL ARRANGEMENTS FOR THE PROJECT IMPLEMENTATION AND SUPERVISION

6.1 Implementation Arrangements of ESMP

This Chapter describes a generic Environmental and Social Management Plan ESMP for ESMF implementation. The ESMP brings to synergy and alignment the implementation of mitigations measures to address risks and impacts, and the responsibilities for mitigation and monitoring. The costs for mitigation and monitoring cannot be determined at this point as specific details are unknown. Nonetheless, a site-specific ESMP to be prepared for interventions detailed under each sub component under Components 1 and 2. For sub-projects which may require environmental and social assessment, the mitigation measures assigned to contractors and their associated cost estimates should be included in the bidding documents to be prepared by the Procurement Specialist(s) at the PIUs.

Table 6-1: Environment and Social Impacts Mitigation Plan – Pre Construction

Impact / Risks Social risks	Mitigation Measure	Monitoring Indicator	Frequency	Monitoring Responsibility	Budget
Land Acquisition and resettlement resulting in Loss of accruing benefits of owning land, including potential loss of livelihoods	**As provided by ESS5** ● Compensation in cash at full replacement value in line with the RAP developed and livelihood assistance, ● Be provided with similar property that is equal in value and size to the said property, ● Where land use is partially affected or with temporary losses, the replacement value will be determined for 'loss of use of land' and for temporary losses in line with the project RAP, ● Stakeholder engagement of the PAPs, and Timely disclosure of project information.	RAP report prepared and implemented for the project	Monthly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	To be included in specific RAPs
Delay in compensation for land take due to land tenure and clan dynamics	**As provided by ESS5** ● Engagement with the parties involved in the conflict, ● Opening an ESCROW account and depositing the compensation money, as dispute is being solved,				
Forced displacement of IDPs by the government to provide land for the sub-projects; many IDPs are temporarily occupying government land within the main cities and towns	**As provided by ESS5** ● Compensation in cash at full replacement value for Assets in line with the RAP, ● Compensation for the replacement value for 'loss of use of land' and for temporary losses in line with the project RAP, and ● Setting additional measures relating to livelihood improvement or restoration.				
Social exclusion of Marginalization of certain groups, access to digital services provided	**As provided by ESS10** ● Selection of the site in line with the approved design and or target criteria, ● Stakeholder engagement to cater for the needs of the larger stakeholders,	Number of Marginalized groups consulted	Monthly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	TBD

Impact / Risks Social risks	Mitigation Measure	Monitoring Indicator	Frequency	Monitoring Responsibility	Budget
under the BRIDGE	• Timely disclosure of project information				
Discrimination against vulnerable and disadvantaged groups, including IDPs, unemployed youth, women, minority clans and ethnic minorities.	**As provided by ESS10** • The employment of project workers should be based on the principle of equal opportunity and fair treatment; • Inclusive consultations and focus groups particularly to ensure participation of women and other vulnerable groups; • No discrimination with respect to any aspects of the employment relationship; • Hold sensitization meetings on resources planning and conflict resolution mechanisms; and • The contracts with third parties should include non-exclusion requirements as part of the monitoring system.	Number of VMG engaged under the sub projects Number of consultations with VMGs held	Monthly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	TBD
Heightened expectation due to underlying social tensions, due to lack of information as well as negative influence about the project	**As provided by ESS10** • Stakeholder engagement to cater for the needs of the larger stakeholders especially the • marginalized / minority clans, • Timely disclosure of project information.	Number of consultations with VMGs held	Monthly	*PIU s (Safeguards Specialists); Supervising Consultant*	TBD
Security threats including the risk of looting, security breaching, and unauthorized access to the sites. Security issues i.e. attack from militants and bandits, looting, vandalism, security breaching and unauthorized access to the sites.	**As provided by ESS4** • PIU shall work closely with the relevant security agencies to ensure the security of the workers, Project teams shall seek security approval and clearances form the project coordinator. • Project teams shall be periodically subjected to security awareness campaigns. • Project teams should have alternative communication devices, such as two-way radios or satellite phones in areas with limited or no cellular network coverage. • Use local leaders as part of the project implementation committee members, • Contractors should incorporate local vigilantes into the security architecture of the site and work activities	Number of recorded cases of insecurity, Record of security campaign**s,**	Daily	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	To be included in the Local Security Management Plans

Impact / Risks Social risks	Mitigation Measure	Monitoring Indicator	Frequency	Monitoring Responsibility	Budget
GBV risks, especially SEA and SH perpetrated by project workers	**As provided by ESS2** ● GBV/SEA and SH) risk assessment and mapping of GBV services. ● The GBV (SEA and SH) management plans, which include Codes of Conduct for project workers, ● Sensitization campaigns and awareness creation on GBV. ● Application of WB GBV Guidance Notes in work procedures and interactions, especially those addressing social aspects.	Working GRM mechanism Rate of grievance Resolution	Weekly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	TBD
Child labor and Safety Risks	**As provided by ESS2** ● Enforcement of all Cadres of CoCs etc. ● Minimum age of project workers for the project is set at 18 years and above. ● All contracts shall have contractual provisions to comply with the minimum age requirements including penalties for non-compliance in-line with the relevant national laws	Rate of illicit child safety behaviours	Weekly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	TBD
Grievances from contractual workers engaged to do heavy lifting and offloading. This could result from delay in payment of wages, uncomfortable working conditions, work areas and work design	**As provided by ESS 2 & 10** ● The PIU is required to maintain labor registry of all workers with age verification. ● Subproject environmental and social management plans should forbid the use of child labor. ● Grievance Redress Mechanism (GRM) should be prepared to address grievances. Specially, the environmental and social assessment report for sub-project should contain a chapter on Grievance Redress at the sub-project level.	GRM structures in place	Weekly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	TBD
Environment Risks					
The release of particulate matter, including dusts. The release of fugitive dusts, offloading	**As provided by ESS1** ● Measures should be targeted at avoiding forceful lifting and dropping down, as this will reduce chances of fugitive dust and fibrils from being released. Additionally, storage or holding areas should be cleaned and wetted,	● Compliance level Dust Management Plan ● Services and	Weekly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	To be included in specific ESIAs

Impact / Risks Social risks	Mitigation Measure	Monitoring Indicator	Frequency	Monitoring Responsibility	Budget
and challenges of storage at warehouses of construction materials	and ventilated to avoid conditions that could escalate dust release. ● If any of the materials to be delivered and stored are hazardous, safe storage must be provided to prevent environmental and health and safety impacts. If fuel is to be stored, tanks must be surrounded by secondary containment.	inspection reports of plant and equipment ● Air quality monitoring report findings Number of complaints from community related to dust menace			

Table 6-2: Environment and Social Impacts Mitigation Plan –Construction Stage

Environmental Impact	Mitigation Measures	Monitoring Indicator	Frequency of monitoring	Monitoring Responsibility	Budget
Impacts on Soil Resources within areas near the fiber routes and sites for digital masts Project activities related to laying of deployment of new fiber along prioritized routes, plant and equipment could interfere with soil structure making soil resources susceptible to erosion, further plant and equipment could pollute soil resources	**As provided by ESS3** ● Where possible, avoid clearing of vegetation, particularly of indigenous vegetation colonies; ● Ensure appropriate siting of infrastructure and confine excavation activities within the immediate project site area, ● Where clearing is done, compact loose soil on excavated areas, land should be landscaped and reclaimed by planting more trees and other vegetation; ● Where erosion may occur due to vegetation loss, erosion control measures will be put in place like re-vegetation, stone bunds; ● Vegetation clearing and topsoil disturbance will be minimized where possible; ● Avoid moving heavy machineries and other equipment unnecessarily and away from designated transport routes; ● Reclaim and re-vegetate the site once work is completed to reduce run-off ● Contouring temporary and permanent access roads / lay-down areas to minimize surface water run-off and erosion ● Sheet and rill erosion of soil shall be prevented where necessary through the use of sandbags, diversion berms, culverts, or other physical means ● Topsoil shall be stockpiled separately from subsoil. Stockpiles shall not exceed 2 m height, shall be located away from drainage lines, shall be protected from rain and wind erosion, and shall not be contaminated. ● Wherever possible construction work will take place during the dry season. ● Topsoil shall be evenly spread across the cleared	● Soil quality and level of contamination ● Availability of soil analysis reports ● State of habitats and other sensitive receptors traversed by the fibre cables	Quarterly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	To be included in specific ESIAs

Environmental Impact	Mitigation Measures	Monitoring Indicator	Frequency of monitoring	Monitoring Responsibility	Budget
	areas when reinstated. ● Accelerated erosion from storm events during construction shall be minimized through managing storm water run-off (e.g. velocity control measures). ● Soil backfilled into excavations shall be replaced in the order of removal in order to preserve the soil profile. ● Mulch generated from indigenous cleared vegetation shall be spread across exposed soils after construction				
Impact on Water Resources in within areas near the fiber routes and sites for digital masts Alteration of terrestrial and aquatic habitats which could have adverse impacts especially if linear digital infrastructure may pass through critical habitats or biodiversity hotspots during construction periods and possibly during maintenance	**As provided by ESS3** ● Discharge of grey water or uncontrolled discharges from the site/working areas (including wash down areas) to adjacent rivers shall not be permitted; ● Contractor should sensitize workers on water conservation and put strict measures to avoid wastage of water, ● Ensure proper handling, storage and disposal of waste oil, lubricants, oil filters and fuel from vehicles. Hazardous waste should be contained and properly disposed by licensed hazardous waste handlers. ● Water containing pollutants such as cements, concrete, lime, chemicals and fuels shall be discharged into a conservancy tank for planned removal from site ● Works that are likely to generate silt-laden runoff such as excavations, will be undertaken preferentially during the drier months of the year, (December-March). ● The drainage system will be developed to prevent silt-laden run-off from entering surface water drains and streams without treatment (e.g. earth bunds, silt fences, straw bales, or proprietary treatment) under any circumstances	● State of natural storm water drainage channels ● Quality of water flowing within laggas and other water bodies ● State of habitats and other sensitive receptors traversed by the fibre cables	Quarterly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	To be included in specific ESIAs

Environmental Impact	Mitigation Measures	Monitoring Indicator	Frequency of monitoring	Monitoring Responsibility	Budget
	● Where possible an 8m buffer strip of existing vegetation will be maintained within the project site. ● Earth stockpiles will be seeded as soon as possible, covered with geotextile mats or surrounded by a bund to minimize the risk of sediment-rich run-off ● Tools and plant will be cleaned in designated areas within the site where run-off can be isolated for treatment before discharge to the river or nearby water resources; ● Debris and other material will be prevented from entering watercourses; Construction sites (such as settlement lagoons or other temporary attenuation) to be used during construction if necessary; Diversion of minor watercourses will be carefully managed to prevent suspension of silt (or contamination by other pollutants) ● Discharge into watercourses and water bodies will only be carried out under consent of the relevant governing bodies such as WRA ● All wastewater which may be contaminated with oily substances must be managed in accordance with an appropriate Waste Management Plan (WMP) ● Hydrocarbon-contaminated water shall not be discharged into the environment; ● At operation stage, the sewer infrastructure if present in some communities will be constantly inspected and blockages repaired ● At construction stage, the contractor will prepare Specific Construction Environment and Social Management Plan (C-ESMP) which included among others: Spoil Management Control Plan, health and safety management plan and Waste Management Plan.				

Environmental Impact	Mitigation Measures	Monitoring Indicator	Frequency of monitoring	Monitoring Responsibility	Budget
Impacts on Air Quality to Communities and workers Impact to health of Communities and Workers working on infrastructure projects **under component 1 and 2**	**As provided by ESS4** ● Develop and implement a Dust Management Plan (DMP) and Undertake inspections to ensure compliance with the Dust Management Plan; ● Contractors to use dust screens/nets as necessary when dusty construction activities are occurring; ● Provide appropriate PPE (dust masks) to workers & enforce use; ● Record all dust and air quality complaints, identify cause(s), take appropriate action; ● Undertake monitoring close to dusty activities, noting that this may be daily visual inspections, or passive/active monitoring as parameter ● Remove dusty materials form site as soon as possible if not being re-used. If being re-used, cover or vegetate if possible; ● Impose speed limits on haul routes and in construction compounds to reduce dust generation; ● Construction trucks delivering materials to site should be covered with tarpaulins in order to minimize spread of dust/fugitive emissions to the surrounding areas and prohibit unnecessary idling of construction related vehicles ● Undertake watering to attenuate dust near sensitive receptors. The duration and frequency of this should be set out in the Dust Management Plan and will consider water availability and any stakeholder grievances; and ● Re-vegetate exposed areas as soon as feasible; ● Re-vegetate or cover stockpiles if feasible; ● Expose the minimum area required for the works, and undertake; and exposure on a staged basis to minimise dust blow.	• Level of Compliance level Dust Management Plan • Services and inspection reports of plant and equipment • Air quality monitoring report findings • Number of complaints from community related to dust menace	Monthly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	To be included in specific ESIAs

Environmental Impact	Mitigation Measures	Monitoring Indicator	Frequency of monitoring	Monitoring Responsibility	Budget
Noise and Vibrations Impacts to Communities and workers	**As provided by ESS4** ● Siting noisy plant and equipment as far away as possible from built areas and use of barriers (e.g. site huts, acoustic sheds or partitions) to reduce the level of construction noise at receptors wherever practicable; ● Construction workers should be aware of the sensitive nature of work places where they are operating in & advised to limit verbal / other form of noise; ● Undertake regular maintenance of the construction equipment/ vehicles as per the operational manual ● Where practicable noisy equipment will be orientated to face away from the nearest classroom and other receptors; ● Working hours for significant noise generating construction work will be on daytime only and preferably during the school holidays ● Alternatives to diesel and petrol engines and pneumatic units, such as hydraulic or electric-controlled units, will be used, where practicable; ● Where practicable, stationary equipment will be located in an acoustically treated enclosure; ● For machines with fitted enclosures, doors and door seals will be checked to ensure they are in good working order; also that the doors close properly against the seals; ● Throttle settings will be reduced and equipment and plant turned off, when not being used; ● Equipment will be regularly inspected and maintained to ensure it is in good working order. The condition of mufflers will also be checked; and fitting of mufflers or silencers of the type recommended by manufacturers.	Serviced plant and equipment to manufacturers specification	Monthly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	To be included in specific ESIAs

Environmental Impact	Mitigation Measures	Monitoring Indicator	Frequency of monitoring	Monitoring Responsibility	Budget
Impact on Flora and Fauna on critical habitats and sensitive receptors such as the mangrove at the coastline	**As provided by ESS6** ● Ensure proper demarcation and delineation of the project area to be affected by construction works; ● Where possible, avoid clearing the vegetation; ● It is recommended that indigenous trees or other fast-growing trees be planted in strategic locations where the vegetation cover will be cleared as part of landscaping initiatives; ● Identify and restrict movement of vehicles to areas of disturbance. ● Compensatory planting of trees i.e. plants at least twice the number of trees ● Staged vegetation clearance is also recommended so as not to clear the entire corridor all at once. ● The use of existing cleared or disturbed areas for the Contractor's Camp, stockpiling of materials etc. shall be encouraged. ● Whenever possible, all damaged areas shall be reinstated and rehabilitated upon completion of the contract to as near pre-construction conditions as possible. ● Reinstatement of temporary construction sites, spoil dumping areas and pioneer camps (if present) should be done as swiftly as possible and always with suitable native grasses and other plants	• Number of trees replanted as compensatory trees • Status of reinstatement of completed sites • State of habitats and other sensitive receptors traversed by the fibre cables	Monthly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	To be included in specific ESIAs

Social Impact / Health and Safety Impacts	Proposed Mitigation Measures	Monitoring Indicator	Frequency of monitoring	Monitoring Responsibility	Budget
Labor Influx Impacts triggered during implementation of civil works under the BRIDGE	**As provided by ESS 2** ● Reduce labor influx by tapping into the local workforce. Depending on the size and the skill level of the local workforce, a share of the workers required for the project may be recruited locally. This may be easier for unskilled workmen. Specialized workmen may be hired from elsewhere. Local workers may also be trained especially if they are required for the operation of the project. ● C-ESMP that contractor to prepare a Labor Management Plan (LMP) that included mandatory requirement to procure all unskilled (and as much as possible, semi-skilled) labor as well as locally available materials from the local community while ensuring equal pay for equal work for men, women and people with disability ● The contractor will ensure effective community engagement and strong grievance mechanisms on matters related to labor with a discrete mechanism for safely and confidentially reporting issues of SEA and GBV at the community level triggered by the Project ● Effective contractual obligations for the contractor to adhere to the mitigation of risks against labor influx, the contractor should engage a local community liaison person ● The contractor will ensure proper records of labor force on site while avoiding child and forced labor ● The works contractor should be required, under its contract, to prepare and enforce a No Sexual Harassment and Non-Discrimination Policy, in accordance with national law as well as to the	Project Compliance to labor provisions Frequency of Stakeholder Engagements Code of conducts signed	Monthly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	To be included in specific LMP

Social Impact / Health and Safety Impacts	Proposed Mitigation Measures	Monitoring Indicator	Frequency of monitoring	Monitoring Responsibility	Budget
	World Bank Code of Conduct guidelines where applicable. ● The contractor will ensure comply to provisions of Work Place Injuries and Benefits Act (WIBA) 2007 ● The contractor will develop and implement a children Protection Strategy, this strategy will ensure that no child under the legal age of 18years in employed to the Project.				
Gender Based violence and Sexual Harassment during implementation of civil works under the BRIDGE	**As provided by ESS 2** ● The existing community structures headed by location chiefs should be involved in local labor hire, emphasize the requirement of hiring women, youth and people with disability and VMGs ● Protecting Human Risk Areas Associated with, Disadvantaged Groups, Interfering with Participation Rights and interfering with Labor Rights: ● Treat women and children (persons under the age of 18) with respect regardless of race, color, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status. ● Do not use language or behavior towards women or children that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate. ● Sexual activity with children under 18—including through digital media is prohibited. Mistaken belief regarding the age of a child and consent from the child is not a defense. ● Exchange of money, employment, goods, or services for sex, including sexual favors or other	● Mitigation plan for GBV occurring at the community level as a result of project implementation ● Number of GBV cases happening at the community level that receive survivor-centered referral and care	Monthly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	To be included in specific GBV/SEAH Prevention and Response Plans

Social Impact / Health and Safety Impacts	Proposed Mitigation Measures	Monitoring Indicator	Frequency of monitoring	Monitoring Responsibility	Budget
	forms of humiliating, degrading or exploitative behavior is prohibited. ● Sexual interactions between contractor's and consultant's employees at any level and member of the communities surrounding the workplace that are not agreed to with full consent by all parties involved in the sexual act are prohibited. This includes relationships involving the withholding, promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex – such sexual activity is considered "non-consensual" within the scope of this Code. ● Where an employee develops concerns or suspicions regarding acts of GBV by a fellow worker, whether in the same contracting firm or not, he or she must report such concerns in accordance with Standard Reporting Procedures. ● All employees are required to attend an induction-training course prior to commencing work on site to ensure they are familiar with the GBV Code of Conduct. ● All employees must attend a mandatory training course once a month for the duration of the contract starting from the first induction training prior to commencement of work to reinforce the understanding of the institutional GBV Code of Conduct.				
Children Protection from engaging in labor and protection from Violence under the BRIDGE	**As provided by ESS 2** ● The contractor will develop and implement a Children Protection Strategy that will ensures minors are protected against negative impacts associated by the Project including SEA. ● All staff of the contractor must sign, committing	Number of cases reported involving abuse of children	Monthly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	To be included in specific GBV/SEAH Prevention and Response Plans

Social Impact / Health and Safety Impacts	Proposed Mitigation Measures	Monitoring Indicator	Frequency of monitoring	Monitoring Responsibility	Budget
	themselves towards protecting children, which clearly defines what is and is not acceptable behaviour ● Wherever possible, ensure that another adult is present when working in the proximity of children. ● Not invite unaccompanied children to workers home, unless they are at immediate risk of injury or in physical danger. ● Refrain from physical punishment or discipline of children ● Refrain from hiring children for domestic or other labor, which is inappropriate given their age, or developmental stage, which interferes with their time available for education and recreational activities, or which places them at significant risk of injury.				
Sexual Exploitation and Abuse (SEA) triggered by workers on community members and fellow workers at project implementation stage	**As provided by ESS 2** ● Develop and implement a SEA action plan with an Accountability and Response Framework as part of the C-ESMP. The SEA action plan will follow guidance on the World Bank's Good Practice Note for Addressing Gender-based Violence in Investment Project Financing involving Major Civil Works (Sept 2018). ● Prevention of SEA: including COCs and ongoing sensitization of staff on responsibilities related to the COC and consequences of non-compliance; project-level IEC materials; ● Engagement with the community: including development of confidential community-based complaints mechanisms discrete from the standard GRM; main-streaming of Sexual Exploitation and Abuse (SEA) awareness-raising	● SEA Action Plan ● Code of Conduct ● Number of staff trainings ● SEA FP ● Community Liaison trained in PSEA ● IEC materials for workers sites and community ● Discrete SEA reporting pathway ● Relevant policies, e.g., investigations and discipline and whistle blower protection ● Monthly minutes from	Monthly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	To be included in specific GBV/SEAH Prevention and Response Plans

Social Impact / Health and Safety Impacts	Proposed Mitigation Measures	Monitoring Indicator	Frequency of monitoring	Monitoring Responsibility	Budget
	in all community engagement activities; community-level IEC materials; regular community outreach to women and girls about social risks and their SEA-related rights; ● Management and Coordination: including integration of SEA in job descriptions, employments contracts, performance appraisal systems, etc.; development of contract policies related to SEA, including whistle-blower protection and investigation and disciplinary procedures; training for all project management; management of coordination mechanism for case oversight, investigations and disciplinary procedures; supervision of dedicated PSEA focal points in the project and trained community liaison officers.	SEA coordination meetings			
Spread HIV/AIDs due to large numbers of workers both local and international working on sub projects	**As provided by ESS 2 and ESS4** ● Education and sensitization of workers and the local communities on STIs including provision of condoms to the project team and the public; ● Institute HIV/AIDS awareness and prevention campaign amongst workers for the duration of the contract e.g. erect and maintain HIV/AIDS information posters at prominent locations as specified by the Resident Engineer; ● Procure and distribute Condoms among staff and community members ● Sensitize workers and the surrounding communities on awareness, prevention and management of HIV/AIDS and sexual health and rights through staff training, awareness campaigns, multimedia and workshops or during community Barazas. ● Use existing clinics to provide VCT services to construction crew and provision of ARVs for	● Number of cases of diseases reported ● Rate of absenteeism due to diseases ● No of workers trained on HIV/ AIDS ● Number of gender-disaggregated toilets constructed	Monthly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	To be included in specific ESIAs

Social Impact / Health and Safety Impacts	Proposed Mitigation Measures	Monitoring Indicator	Frequency of monitoring	Monitoring Responsibility	Budget
	vulnerable community members				
Conflicts associated with the Project during construction phase	**As provided by ESS 10** ● The community will be constantly sensitized on available Grievance Redress Mechanism established by PIU Teams. The mechanisms emphasizes resolution of disputes at Common Interest Group (CIG) level, which is the lowest community structure. ● In consultation with the benefiting communities and develop means to ensure equitable sharing of resources	GRM structures in place	Weekly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	To be included in specific ESIAs

Table 6-3: Environment and Social Impacts Mitigation Plan – Operation Stage

Social Impact / Health and Safety Impacts	Proposed Mitigation Measures	Monitoring Indicator	Frequency of monitoring	Monitoring Responsibility	Budget
Risk of Accidents and Occupational Safety and Health Concerns during civil works under the BRIDGE Project	**As provided by ESS4** ● To reduce on the workers accidents and hazards, Contractor will develop and monitor implementation of an occupation Health and Safety Management Plan (OHSMP) which will include the following measures: ● Contractor shall restrict access to active construction sites, including establishment of a fence to hoard the area under construction, ● Workers will be provided with suitable PPE including: to avoid cuts on the feet, hands and head during the course of duty. This includes helmets, gloves, safety boots overalls, face masks and ear plugs in dusty and noise activities; ● Provision of adequate sanitary facilities to workers separate for either gender. ● Train all workers on Safety Health and Environment (SHE) with an aim of improving awareness; ● The workers or their representatives will be trained on first aid and provided with first aid kits; ● Ensure all vehicles, equipment and machines are inspected, repaired and maintained before use, and machine operators are trained on machine use and safety; ● Ensure all the electrical works are carried out by trained professionals;	• Number of incidences recorded on site and within workers • Workers satisfactory reports with regards to health and safety • Reported and addressed grievances on site and from workers Signed code of conduct	Weekly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	To be included in specific Health and Safety Management Plans (HSMP)

Social Impact / Health and Safety Impacts	Proposed Mitigation Measures	Monitoring Indicator	Frequency of monitoring	Monitoring Responsibility	Budget
	● Implement a workers grievance redress mechanism to allow workers raise safety issues and propose improvements on site; ● Trenches over 1.5m deep will be secured against accidental entry by workers and the public using barriers and warning tapes. ● The contractor will install appropriate safety signage at the work areas to warn learners/staff from coming close to the construction site, ● Emergencies: the workers should be provided with emergency telephone numbers to request for assistance at any time of accident ● Where construction activities interfere with the movement of traffic, appropriate signage will be installed and controlled by trained flagmen/flag women and lit by night. ● Provision of serviceable fire extinguishers on site and well-equipped first aid kit ● Public awareness/Training for first aid providers				
Community health and safety risks resulting from during civil works under the BRIDGE Project	**As provided by ESS4** ● To reduce on the community accidents and hazards, contractor will develop and monitor implementation of a Community Health and Safety Management Plan (CHSMP) ● Notify the public on ongoing works through appropriate publicly accessible sites at the school	• Number of incidences recorded on site and within communities • Community satisfactory reports with	Weekly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	To be included in specific Health and Safety Management Plans (HSMP)

Social Impact / Health and Safety Impacts	Proposed Mitigation Measures	Monitoring Indicator	Frequency of monitoring	Monitoring Responsibility	Budget
	● Sensitize the learners on the health and safety risks and mitigation measures related to the construction activities, ● Contractors should work closely with the school administration to find ways to minimize temporal disruption of services ● Restrict access to active construction sites including screening off/ barricading the active work area, ● Educate and sensitize workers and the local community on STI, HIV /AID's and other communicable diseases; ● Create awareness on project grievance redress mechanism.	regards to health and safety ● Reported and addressed grievances on site and from communities			
Traffic related accidents and associated emissions as a result of implementing during civil works under the BRIDGE Project	**As provided by ESS4** ● The contractor shall prepare a traffic safety plan through segregating traffic safety, equipment operation and walking areas to reduce on conflicts and possible injuries; ● Contractor shall avoid school learning peak hours for transport of construction materials and equipment; ● Warning signs shall be provided to the access roads to warn school community during transportation of construction materials; ● Contractor shall emphasize safety aspects among project drivers, especially speed limits to the school; ● Whenever dust suppression along access roads will be necessary, water will be sprayed; ● Contractors should regularly inspect	Traffic Management Plans prepared and implemented Number of accidents recorded	Weekly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	To be included in specific Traffic Management Plans)

Social Impact / Health and Safety Impacts	Proposed Mitigation Measures	Monitoring Indicator	Frequency of monitoring	Monitoring Responsibility	Budget
	vehicles safety and employ trained drivers to minimize potential traffic-related accidents.				
Solid Waste Generation	**As provided by ESS 3 and 4** ● The contractor should prepare construction waste management plan that they should follow as they undertake the works; ● Encourage the use of integrated solid waste management system through hierarchy of options that is source reduction, re-use, recycling and composting; ● Sensitize construction workers on appropriate waste handling and disposal of all construction-related waste in designated areas; ● Provide appropriate waste receptacles on site; ● Restrict open burning of solid waste generated at sites; ● Plan for regular removal and transport of solid waste to designated waste disposal areas using registered waste handlers; ● Contractor will keep records of waste disposal as proof for proper management of waste as designed.	Solid Waste Management Plan prepared and implemented	Weekly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	To be included in specific Waste Management Plans)
E-wastes Management from constructions site	● Segregation of Waste at source and avoid mixing with other wastes ● Collection: Establish collection centers that can be individually or jointly or as a registered society. They could also be owned by a designated agency, a company or an association to undertake collection operations of E-waste;	E-Waste Management Plan prepared and implemented	Weekly	*BRIDGE PIUs (Safeguards Specialists); Supervising Consultant*	To be included in specific Waste Management Plans)

Social Impact / Health and Safety Impacts	Proposed Mitigation Measures	Monitoring Indicator	Frequency of monitoring	Monitoring Responsibility	Budget
	● Transportation: Once general waste is collected at designated places, the contracted service providers collect and take it to dumping sites and recycling facilities for processing ● Recycling: identify both formal and informal recycling activities in the Nigeria market where the wastes can be recycled ● Refurbishment: identify licensed entrepreneurs and organized groups which are refurbishing E-waste in the country with the intent of increasing product lifespan ● Take back: identify manufactures who have introduced take-back programmes in the Nigeria and collaborate with them for uptake of the wastes.				

7 INSTITUTIONAL ARRANGEMENTS FOR ESMF IMPLEMENTATION

7.1 Institutional Arrangement

The institutional arrangements for the wider and broader BRIDGE project take into note the importance and relevance of all critical and major stakeholders concerned with project implementation. However, considering that this ESMF is prepared based on fulfilment of the Bank's Environmental and Social Framework, the institutional arrangement herein described will address only roles and responsibilities as concerns the implementation of the ESMF.

Additionally, A dedicated PIU will be established and maintained within Federal Ministry of Communication, Innovation and Digital Economy (FMCIDE. The PIU will include a Project Coordinator, one FM Specialist, one Procurement Specialist, one M&E Specialist, Environment Specialists, Social Specialist and Technical Specialists. The role of specific institutions relevant to implementation of ESMF provisions is summarized below in Table 7-1.

Table 7-1: Institutions and Entities Relevant in ESMF Implementation

Institution / Entity	Role
Federal Ministry of Environment (FMENv)	The FMENv will assist PIUs in the screening and approval of subprojects. FMENv will also provide guidance on scoping and necessary additions or modifications to the Terms of Reference of selected environmental and social assessment instruments to be prepared for sub-projects. FMEnv will also give the approval for environmental and asocial assessment and work in collaboration with the PIUs and World Bank in disclosing the environmental and social assessment instruments in-country. The FMENv will also aid the PIUs in coordinating with the FMENv's Ministries Departments and Agencies (MDAs) on monitoring responsibilities as regards this ESMF and other program instruments
BRIDGE PIU	The PIUs will comprise Engineers, Project Engineers, Procurement Specialists, Environmental and Social Safeguards Specialists, Monitoring and Evaluation Specialists etc. who will provide expert technical guidance on the matters concerning the sub-projects. Specifically, the Units Safeguards Specialists will provide Technical Assistance on the aspect of implementing the provisions of this ESMF at their respective areas; mainly in the screening and scoping of sub-projects and in the selection of appropriate environmental and social assessment instruments. It will collaborate with other state departments accordingly and liaise directly with the Bank on issues concerning ESF compliance and ESSs applicability relevance on project activities. PIUs will be directly responsible for disclosure of all environmental and social assessment instruments prepared in fulfilment of Bank requirements.
State Ministry of Environment (SMEnv),	Will play a vital role in environmental and social assessment and waste management at the States coverage area levels respectively. Their responsibilities will surface around, guidelines, approvals and permits.
Supervisory Consultants	Supervisory Consultants will supervise the activities of Contractors engaged to implement the main activities. With regards to environmental and social performance, their responsibilities will include monitoring the implementation of mitigation measures contained in the Contract Agreement of Contractors and in the implementation of the C-ESMP. Supervise the contractors' obligation with regard to the Environmental, Social, Health and Safety (ESHS) clauses included in tender documents and in respective

	contracts.
The World Bank	The World Bank has overall responsibility to ensure that ESF's ESSs are complied with. In addition, the Bank will be responsible for the final review and clearance of environmental and social assessment instruments; as well as reviews and the giving of a "no objection" to the Terms of Reference for instruments (ESIAs, ESMPs, ESAPs, etc.). Conduct regular supervision missions to check on the performance of BRIDGE and assess its compliance to agreed grant covenants; and Recommend measures for improving the performance.

7.2 Capacity Development for Environmental and Social Management and Monitoring

The ESMF provision on capacity enhancement of the environmental and Social Standards skills and competencies of the project's PIU has been built into the project design under component 2 which targets Project Management and Implementation Support. A project level capacity building support on E&S including setting up an E&S risk & impact management system, enhancing the E&S capacity through staffing and training on the ESF requirements based on a robust capacity building plan to be implemented. This will be complimented by institutional strengthening and capacity assessment in participating member states to roll out capacity building Plan accordingly. **Table 7-2** lists some of the proposed training topic which will help building the capacity for smooth implementation of the Project.

Table 7-2: Capacity Building and Training Plan

Objectives	Issues for engagement	Method of engagement	Stakeholders/Target population and area	Responsible person	Time frame
ESMF	Training of all Technical Leads in the ESMF, World Bank Safeguards Awareness, Training of Environmental and Social Standards, Citizen Engagement (Events and workshops for community awareness in the Project areas).	Training	Technical Leads / relevant staff responsible for the implementation of E&S instruments. Private sector, CBO, and other interested stakeholders	PIU	Prior to commencement of activities
ESIAs, ESMPs, ESAPs	Training of all Technical Leads in the Environment and Social Safeguards Instruments, World Bank Safeguards Awareness and Training of Environmental and Social Standards	Training	Technical Leads / relevant staff responsible for the implementation of E&S instruments. Hired Ministry ESIA Consultants	PIU	Prior to commencement of activities
GBV Action Plan	Training of all Technical Leads in the GBV Action Plan	Training	Technical Leads / relevant staff responsible for the implementation of E&S instruments.	PIU	Prior to commencement of activities
GBV Procedures for Reporting and Prevention	Training and monitoring during project implementation to prevent GBV and support reporting of cases	Training, monitoring,	Community members / vulnerable groups	(Lead of GBV sub cluster)	Prior to commencement of activities
Mitigate impact of workers on local communities (LMP & GBV Action Plan)	Implement training of contracted Project Workers designed to heighten awareness of risks and to mitigate impacts on local communities and on their rights	Training	Contracted workers in Project locations	All Technical leads	Prior to deployment
GBV	Response to domestic issues in a non-gender biased manner.	Training	Local leaders (as detailed in the GBV Action Plan)	PIU and Technical Leads	Prior to commencement of activities
Project GRM	Consultation on different GRMS	Consultations	Technical Leads / relevant staff	PIU	Prior to

	mechanisms in place, development of overall GRM, and Training with all Technical Leads Set up Grievance Redress Mechanism and functioning in the Energy sector	and Training	responsible for the implementation of E&S instruments.		commencement of activities
OHS standards	H&S Standards for workers, Monitoring Occupational Health and Safety (OHS) Leadership, Management Safety performance assessment Hazard Analysis and Control Hazard Communication. Program Effective Accident Investigation, Conducting Health and Safety Audits Job Hazard Analysis, Occupational Health Risk Assessment Work Stress Risk, Assessment Electrical Safety Fire Safety, Fall Protection Plan and Fleet Safety Management	Training	Contracted workers in Project locations	Technical leads	Prior to deployment
Create awareness of LMP and H&S Standards for workers	LMP and H&S Standards	Training	Contracted workers in Project locations	Technical leads	Prior to deployment
Support Emergency Response Measures	Communication of Emergency Response Measure (ERM) to communities	Information, training	Communities in Project areas	PIU	Prior to commencement of activities
Community Health & Safety	Road Safety Awareness	Training	Communities in Project areas, with particular focus on vulnerable communities	PIU and Technical Leads	Prior to commencement of activities
Community	Communicable diseases	Training	Communities in Project areas	PIU and	Prior to

Health & Safety				technical leads	commencement of activities
Community Health & Safety	GBV, as per Action Plan	Training and awareness raising	All Communities in Project areas	PIU and technical leads	Prior to commencement of activities
GRM	Project GRM as described in the SEP	Information disclosure and training	Communities in Project areas, with particular focus on vulnerable communities	PIU and Technical Leads	Prior to commencement of activities
Geo-Information Application to support project activities and track project PDO/KPI	Training and monitoring during the project implementation trajectory in unserved and underserved areas	Training	Technical Leads / relevant staff responsible for the implementation of E&S instruments.	PIU Leads of Environmental and Social Safeguards	During project activities, Implementation

7.3 Monitoring and Reporting

The PIUs will be responsible for monitoring and reporting, which will be achieved through collecting, verifying, and collating information, integrating the M&E reports, and submitting to the World Bank both the quarterly and annual progress reports. The PIUs shall establish a database for each component of the project to periodically monitor the evolution of implementation, outputs, and results, with systems for regular data gathering and processing of information required to monitor the main performance indicators and intermediary indicators as defined in the results framework. The PIUs shall collect and compile data to provide basis for a compressive mid-term review. All data will be georeferenced and BRIDGE will deploy Geographic Information System (GIS) in data capturing, storage, analysis, display and presentation.

The PIUs will be responsible for overall implementation and management of awarded contracts in accordance with the agreed contractual obligations. This ESMF has identified preliminary potential environmental and social issues and risks related to the project activities and have proposed subsequent mitigation measures. To ensure effective implementation of measures, the following monitoring and reporting system which include both internal monitoring and reporting and external monitoring and evaluation. This will be enhanced further in the ESMF to be developed prior to conceptual design of project components

The significance of monitoring stems from the fact that the inputs will go into the project design and planning, including mitigation measures, are based largely on “predictions”. It is essential that the basis for the choices, options and decisions made in formulating or designing the project and other environmental and social safeguard measures are verified for adequacy and appropriateness. Monitoring verifies the effectiveness of impact management, including the extent to which mitigation measures are successfully implemented. Monitoring specifically helps to:

- Improve environmental and social management practices.
- Check the efficiency and quality of the EA processes;
- Establish the reliability and credibility of the EA for the project (as well as the quality of experts providing EA consultancy services
- .Provide the opportunity to report the results on safeguards and impacts and proposed mitigation measures implementation.

7.3.1 Internal Monitoring and Reporting

Internal Monitoring shall begin once E&S project documents are approved and disclosed, and the project implementation has commenced. The PIU (and other implementing agencies, as appropriate) commence monitoring as an important feedback mechanism. This ensures that the environmental and social mitigation measures:

- Identified in the planning phase (contained in the ESIA reports), and incorporated in the project design and cost, are being implemented.

- Are maintained throughout the construction phase, and where applicable in the operation phase, and to the decommissioning of sites, facilities and equipment;
- Where inadequate, additional remedial actions are identified (including corrective measures or re-design of mitigation measures).

The monitoring by BRIDGE PIUs shall actively and effectively monitor the contractors engaged in the implementation of the subproject and cover other areas such as adherence to the environmental and social clauses and principles. The ESMPs and RAPs that are prepared and/or the other mitigation provisions that are made as components or part of the project ESA will also be monitored.

The monitoring results will be analyzed, and the monitored information and recommended actions will be compiled for the attention and action of the respective implementing agencies. The monitoring report will be formalized with the agency's agreed action and timeframes and submitted as the respective implementation agency's , and the Bank.

The project monitoring framework shall develop standard reporting forms which shall provide for quarterly and yearly reports. This will include:

- List of consultations held, including locations and dates, name of participants and designations.
- Main points arising from consultations, including any agreements reached.
- A record of grievance applications and grievance redress.
- RAP implementation Progress Report
- Construction supervision reports that include assessment of the contractor's compliance with safeguards;
- Progress report on technical, Environmental and Social studies, designs E&S instruments
- Progress report on the Capacity Building plan
- Safeguards staff at the regional level will prepare consolidated quarterly monitoring reports on respective sub-projects
- Mid-Term and Project end environmental and social audit.

7.3.2 External Monitoring and Reporting

The project shall incorporate external monitors. The PIU shall share project monitoring reports with the Bank and these reports will be assessed to ascertain ESF compliance using site-specific ESMPs/ESIAs if prepared. The ESF compliance assessment will assess whether:

- The ESMF, RPF and other relevant Framework processes are being correctly adhered to;
- Relevant mitigation measures have been identified and implemented effectively, and whether these need to be adjusted to reflect changing circumstances and;
- The extent to which all stakeholder groups are involved in sub-project implementation.

The PIU Environmental and Social Specialists will assess the compliance of all implementers' activities against the ESMF and their subsequent ESMPs and will report possible non-compliance to the Project

Coordinator of the PIU. Indicators are identified in both documents, and used as a baseline for assessing progress on implementation. The PIU will also independently conduct its own monitoring, verification and inspection of the activities of all implementers to ensure they are in compliance with this ESMF. Monitoring indicators will depend on specific activity contexts. Performance will be integrated into quarterly reports to the WB.

The World Bank will equally supervise and assess the environmental and social performance through review of the biannual monitoring reports and through regular site visits. The GRM will further help track complaints and effectiveness of interventions, including those with environmental and social impacts. Furthermore, Third Party Monitoring Agents (TPMA) will be deployed to monitor overall project implementation, including the implementation of E&S Risk Mitigation Measures. The TPMA will report non-compliance to the PIU and directly to the World Bank

Upon completion of the Project, the PIU shall undertake an assessment of the success of the ESHS instruments and include relevant information in the Implementation Completion Report (ICR). This ICR will be followed by the Bank's own ICR. If either of these assessments reveals that any key objectives of the ESHS instruments were not achieved, follow-up measures shall be developed to remedy the situation. This is also applicable for site-specific ESMPs, RAPs and other action plans

7.4 Bank's Supervision

The Bank will provide the second line of monitoring compliance and commitments made in the ESCP through implementation support missions albeit in a less frequent manner and detail as compared to the first line of monitoring that will be undertaken by the PIU. The Bank will further undertake monitoring during its scheduled biannual implementation support missions. Specifically, for each year that the agreement is in effect, sub project contractors will be required to submit to the monthly, quarterly monitoring reports to the PIU will consolidate and summarize these reports and submit to the Bank as part of its reporting to the Bank and the Bank supervision missions will review these reports and provide feedback.

7.5 Resource and Budget

This sub-section presents a consolidated budget estimate for the implementation of the overall Environmental and Social Management Framework. The budget components include: implementing agency safeguards capacity development activities; a training program for all relevant entities to implement their E&S responsibilities. Resettlement Policy Framework, Security Management Framework (SMF), Updated Stakeholder Engagement Plan, Labor Management Procedures, and GBV Action, subproject ESIAs, ESMPs, RAPs, etc.; and annual reviews. Table 7-3 gives the cost estimate (budget) of implementing this ESMF including the preparation of sub-projects, monitoring and supervision and capacity building only:

Table 7-3: Resource and Budget

	Required Resources	Estimated Costs in USD
PIU – Monitoring of ESMF		
	Human Resources: 1 Environmental, 1 Social Specialist (48 months x 2 x 7500 USD)	720,000
	1 GBV Specialist (48 months x1x 7500 USD)	360,000
	1 OHS consultant (48 months x1x 7500 USD)	360,000
	1 Security Specialist (48 months x1x 7500 USD)	360,000
	Logistics / Travel (Lumpsum)	300,000
Grievance Redress Mechanism hotline		
	Hotline and other mechanisms (Lumpsum)	500,000
	GBV/SEAH reporting mechanisms (Lumpsum)	150,000
Implementation of Risk Mitigation Measures PI		
	Monitoring and SEP implementation (SEP has a separate budget	Separate budget in SEP
	Implementation of GBV Action Plan / GBV Service Provider	650,000
	Capacity Development and Training	600,000
	Total	**4,160,000**

8 GRIEVANCE REDRESS MECHANISMS

8.1 Grievances Process

The World Bank ESSs require that Bank-supported projects facilitate mechanisms that address concerns and grievances that arise in connection with a project[17]. One of the key objectives of ESS 10 (Stakeholder Engagement and Information Disclosure) is 'to provide project-affected parties with accessible and inclusive means to raise issues and grievances, and allow borrowers to respond and manage such grievances. The Project GRM should facilitate the Project to respond to concerns and grievances of the project-affected parties related to the environmental and social performance of the project.

The GRM aims to address concerns in a timely and transparent manner and effectively. It is readily accessible for all project-affected parties. It does not prevent access to judicial and administrative remedies. It is designed in a culturally appropriate way and is able to respond to all needs and concerns of project-affected parties.

8.2 GRM Core Principles

The GRM is based on six core principles

- **Fairness**: Grievances are treated confidentially, assessed impartially, and handled transparently.
- **Objectiveness and independence**: The GRM operates independently of all interested parties in order to guarantee fair, objective, and impartial treatment in each case. GRM officials have adequate means and powers to investigate grievances (e.g., interview witnesses, access records).
- **Simplicity and accessibility**: Procedures to file grievances and seek action are simple enough that stakeholders can easily understand them. Project stakeholders have a range of contact options including, at a minimum, a telephone number. The GRM is accessible to all stakeholders, irrespective of the remoteness of the area they live in, and their level of education or income. The GRM does not use complex processes that create confusion or anxiety.
- **Responsiveness and efficiency**: The GRM is designed to be responsive to the needs of all complainants. Accordingly, staff handling grievances are trained to take effective action, and respond quickly to grievances and suggestions.
- **Speed and proportionality:** All grievances, simple or complex, are addressed and resolved as quickly as possible. The action taken is swift, decisive, and constructive.

[17] Under ESS 2 (Labour and Working Conditions), a grievance mechanism for all direct or contracted workers is prescribed, which will be laid out in a separate Labour Management Plan (LMP). The World Bank's Good Practice Note on 'Addressing Gender Based Violence in Investment Project Financing involving Major Civil Works' spells out requirements for a GBV grievance redress mechanisms, which will be defined in a separate GBV/SEA and Child Protection Risks Action Plan.

- **Participation and social inclusion:** A wide range of stakeholders are encouraged to bring grievances and comments to the attention of the Project staff. Special attention is given to ensure that marginalized or vulnerable groups, including those with special needs, are able to access the GRM.

8.3 GRM Value Chain

Step 1: Grievance Uptake: Multiple channels must be available for stakeholders to file their complaint, grievance, or feedback. The stakeholder must be able to select the most efficient institution, the most accessible means of filing a grievance, and must be able to circumvent partial stakeholders in the Project, which may be implicated in the complaint. He or she must further be able to bypass some grievance channels that are perceived as potentially not responsive or biased.

Means of Filing a Grievance
There are four distinct means, at least two of which must be made available at the sub-project locality for people to file a grievance (see complaints log, complaints form and grievance register,

1. **A phone number for a hotline operator**: The phone number of a grievance hotline operator must be widely disseminated among project stakeholders. The Hotline Operator should be available from 8.00 am to 5.00 pm every day. The hotline operator is set up and managed by the PIU. Any concerned party can call the hotline number and file a grievance with the Project.

2. **A help desk** will be set up during the implementation of sub-project activities in a specific locality, especially where construction activities are undertaken. It should be manned by the implementing staff, in close coordination with local authorities. At the help desk, stakeholders can inquire about information in regard to project activities, or they can file a grievance directly with the person manning the desk.
3. **Relevant assigned personnel** available in each project site will be required to accept grievances and ensure that avenues for lodging grievances are accessible to the public. The first point of contact for all potential grievances from community members may be the contractor or a local government official. Such personnel will be required to accept formal grievances; or they can point out the Hotline Operator's number, the Help Desk or Suggestion Box. If no reasonable other modality of filing a grievance is available for the respective complainant, the staff has to accept and register the grievance.
4. **A suggestion box** will be installed at the nearest sub-project site. Suggestion boxes provide a more anonymous way of filing a grievance or for providing feedback. Grievances or feedback submitted to the suggestion box must be expressed in writing.

9 Informing Parties on Levels and Channels of Grievance Uptake

There will be three levels at which aggrieved PAP or grievant can channel his/her complaints for redress. These shall include 1) the project site level, 2) the project management unit level and 3) the Special

Purpose Vehicle (SPV)/Special Purpose Company (SPC). It is, however, the right of the PAP or grievant to take a matter to the court of law as the final arbiter if he/she feel dissatisfied with the judgments obtained from the grievance redress committees set up by this project.

PAPs or grievant shall be communicated early during public consultation and census about the existence of the GRM, and sufficient information provided to them on the grievance uptake channels. The BRIDGE PAD and RPF require that the Federal Ministry of Communications Innovation and Digital Economy (FMCIDE) and the Special Purpose Vehicle (SPV)/Special Purpose Company (SPC) clearly indicate in the RAP/ARAP/ESIA/ESMP report how PAPs or grievant were informed about the channels of grievance redress uptake.

Subject to site peculiarity, during RAP/ARAP/ESIA/ESMP stage, the Federal Ministry of Communications Innovation and Digital Economy is to set up grievance redress mechanisms at the following levels

- Site/Community Level;
- Project Implementation Unit/SPV Level;
- FMCIDE level:

8.7 Setting up a Grievance Redress Mechanism

During the time of development of sub-projects ARAP/RAP/ESIA/ESMP, the PIU shall establish a Grievance Redress Mechanism that incorporates the use of existing local grievance redress mechanisms available in the community, existing GRM at the national and state levels and based on experience from previous World Bank-assisted projects. It will be effective and result-oriented to work with existing and functional local structures of dispute resolution than to design an entirely new one, which may be alien to the people. However, field survey to be conducted by the PIU through the independent RAP/ARAP/ESIA/ESMP consultant will, among other things, ascertain the strength of the existing local grievance redress structure and, where necessary; the existing GRM can be restructured and strengthened for adaptation to this project context.

Structure of Grievance Redress Mechanism

- *Tier 1:* SPV Project Community GRC. The Community Liaison Officer is the secretary of the GRC
- *Tier 2:* SPV Headquarters Complaints Desk
- *Tier 3:* BRIDGE PIU Grievance Redress Committee (GRC)
- *Tier 4:* FMCIDE Servicom Desk

Grievance Uptake

Grievances can be submitted via the following channels

- **Channel 1:** Verbal reports to Community Liason Officers stationed at Broadband Network route communities
- **Channel 2:** Letter to complaint boxes placed in Broadband Network route communities

- **Channel 3:** Toll-free telephone hotline / Short Message Service (SMS) line to SPV complaints desk
- **Channel 4:** E-mail to SPV complaints desk
- **Channel 5:** Complaint form filled on SPV website

Sorting & Processing of Complaints

Any complaint received from the five channels will be handled as follows;

- **Channel 1:** Details of complaint and complainant will be logged on the complaints app by the CLO
- **Channel 2:** Details of complaint and complainant will be logged on the complaints app by the CLO
- **Channel 3:** Complaint received via SMS and toll-free line will be automatically registered on the complaints app.
- **Channel 4:** Complaint received via email will be manually registered on the complaints app
- **Channel 5:** Complaint received via web complaints form will be automatically registered on the complaints database and dashboard

All complaints will be categorized according to the schedule shown in Annex 1 of the SEP. Where complaints are brought to the attention of staff of contractors or consultants, such complaints MUST be referred to their appointed Community Liason Officer (CLO).

5.1. Description of GM

GM Element	**Description of process**	**Timeframe**	**Responsibility**
GM Management structure	*Tier 4:* FMCIDE Servicom Desk *Tier 3:* BRIDGE PIU Grievance Redress Committee (GRC) *Tier 2:* SPV Headquarters Complaints Desk *Tier 1:* SPV Project Community GRC. The CLO is the secretary of the GRC	NA	**NA**
Grievance uptake	Grievances can be submitted via the following channels • **Channel 1:** Verbal reports to Community Liaison Officers stationed at Broadband Network route communities • **Channel 2:** Letter to complaint boxes placed in Broadband Network route communities • **Channel 3:** Toll-free telephone hotline / Short Message Service (SMS) line to SPV complaints desk • **Channel 4:** E-mail to SPV complaints desk	NA	**NA**

	• **Channel 5:** Complaint form filled on SPV website		
Sorting, processing	Any complaint received from the five channels will be handled as follows. • **Channel 1:** Details of complaint and complainant will be logged on the complaint's app by the CLO • **Channel 2:** Details of complaint and complainant will be logged on the complaint's app by the CLO • **Channel 3:** Complaint received via SMS and toll-free line will be automatically registered on the complaints app. • **Channel 4:** Complaint received via email will be manually registered on the complaints app • **Channel 5:** Complaint received via web complaints form will be automatically registered on the complaints database and dashboard All complaints will be categorized according to the schedule shown in Annex 1 of this SEP. Where complaints are brought to the attention of staff of contractors or consultants, such complaints MUST be referred to the	Upon receipt of complaint	• **Channels 1 & 2: CLO** • **Channels 3, 4 & 5: SPV Complaints Desk Executive**
Acknowledgement and follow-up	Receipt of the grievance is acknowledged to the complainant by • the CLO (Channel 1 & 2) and • the SPV Complaints Desk Executive (Channel 3, 4 & 5)	Within 24 hours receipt	**CLO & Complaints Desk Executive**
Verification, investigation, action	• Investigation of the complaint related to specific communities and locations led by the CLO while those of a general nature are investigated by SPV Complaints Desk Executive. Where necessary, the CLO will support the SPV Complaints Desk Executive to investigate complaints • Depending on the location, a	Within 10 working days	

	proposed resolution is made by CLO or the SPV Complaints Desk Executive • Communicated to the complainant by SPV Complaints Desk Executive Details of the resolution reached and agreed to are logged on the SPV complaints app		
Monitoring and evaluation	Data on complaints are collected in the project monthly reports by the Complaints Desk Executive of the SPV and reported to the E&S officer of the PIU	Monthly	**SPV Complaints Desk Executive**
Provision of feedback	Feedback from complainants regarding their satisfaction with complaint resolution is collected [*insert*],	Within 72 hours of resolution of complaint	**SPV Complaints Desk Executive**
Training	Training needs for staff/consultants in the PIU, SPV Contractors and Supervision Consultants are 1. Grievance Screening & Sorting 2. Alternative Dispute Resolution (ADR) techniques 3. Grievance logging and tracking using SPV complaints App	Within 3 months of project effectiveness	PIU Project Coordinator

Appeals: The GM provides a 4-tier hierarchy to facilitate an appeal process in cases where complainants are not satisfied with the proposed resolution of the complaint. Once all possible means to resolve the complaint have been proposed and if the complainant is still not satisfied then they should be advised of their right to legal recourse.

SEA/SH Complaints: Whenever they occur, the project will have other measures in place to handle sensitive and confidential complaints, including those related to Sexual Exploitation and Abuse/Harassment (SEA/SH) in line with the WB ESF Good Practice Note on SEA/SH.

A specialized Worker's GRM will be described in detail in the Labor Management Procedures which is been prepared for the BRIDGE project.

Resettlement Related Grievances: Typical grievances related to resettlement may include community or individual's dissatisfaction with: (a) the eligibility criteria, (b) the amount of compensation or assistance measures; (c) unexpected and unaddressed resettlement impacts; and (d) implementation or timing of such measures. The overall process of grievance handling is as follows:

- Compensation committees, including representatives of PAPs, will establish the compensation rates.
- During the initial stages of the valuation process, the affected persons are given copies of grievance procedures as a guide
- Compensation will be paid to individual PAPs only after the written consent of the PAPs is received, including both husband and wife (and children where relevant). Should a PAP decline the compensation suggested, he/she will have the option to register grievances to the CLO.

- A Compensation Committee (CC) and the grievance committee at the district level will first review his/her case.

When these have failed to resolve the grievance, the individual PAP has the right to take his case to appeal the next level GRM (municipality/state level or federal levels, depending on the municipality) or the civil courts for litigation

9.1 WB's Grievance Redress Service (GRS)

Communities and individuals who believe that they are adversely affected by a World Bank supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress- service. For service. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org

10 STAKEHOLDER ENGAGEMENT / CONSULTATION AND DISCLOSURE

10.1 Overview

Stakeholder engagement is an inclusive process conducted throughout the project life cycle. Where properly designed and implemented, it supports the development of strong, constructive and responsive relationships that are important for successful management of a project's environmental and social risks. For this reason, stakeholders' engagement must be started early in the project cycle because it guarantees the 'social license to operate' by signaling to communities and other local stakeholders that their views and well-being are considered important.

In this section, consultations with key stakeholders with regards BRIDGE project and the implementation of project components is documented as presented the SEP. A Stakeholder Engagement Process was developed in order to achieve proper stakeholder identification and mapping. The process is further detailed in the stand-alone SEP. The objectives focused on obtaining the views of relevant stakeholders on subject matter relating to proposed activities

10.2 Stakeholder Inventory

Table 9-1 below summarizes the potential role, interests, and influence for each of the stakeholder groups for the project. There are several categories of persons and institutions that will need to be consulted and engaged in the project activities across all regions where project activities are conducted

Table 9-1: Stakeholders Inventory

Groups of Affected Parties	Description of Affected Parties	Issues of Interest or Concern	Project Stage
Right-Of-Way occupants, property owners, businesses to be displaced in the ROW	Land users and non-titleholders such as street-vendors along the right of way (RoW)	Properties or incomes may be temporarily impacted due to trenching activities for laying down fibre optic cable	Planning, implementation, and operation
Project Workers	Staff of the project company (SPV) to be established under the BRIDGE project Employees of contractors and consultants who will be engaged to lay the fibreoptic cables and other broadband	Occupational health concerns and other working conditions such as work hours, salaries and wages unionisation and opportunities for escalating work-related complaints.	Planning, implementation, and operation

	network infrastructure.		
Host Communities	Broadband infrastructure will transverse several communities across the 36 states of Nigeria and the FCT.	Community members may be affected by temporary inconveniences by construction works while carrying out installation of fibre optic cables and other linear infrastructure. Tangible and intangible culturally sensitive sites under the custodianship of traditional authorities may also be affected by Broadband Infrastructure works. Community members along the broadband network route will have access to employment opportunities and other economic and livelihood transactions	Planning, implementation, and operation
Mobile Network Operators & Internet Service Providers)	Leading and emerging telecommunications companies who will retail broadband internet services across Nigeria	These companies will leverage the backbone and backhaul infrastructure to deliver broadband services to more markets and hence improve profitability of their businesses	Planning, implementation, and operation

Other interested parties

The projects' stakeholders also include parties other than the directly affected communities, including:

1. **Federal Government Ministries, Departments & Agencies:** These are agencies across several sectors who have the following stakes
    - Regulatory oversight for Broadband Internet technology and markets – FMCIDE, Nigeria Communications Commission (NCC).
    - Environmental and Social Risk Management issues – Federal Ministry of Works, Federal Ministry of Environment, Federal Ministry of Labour, Women Affairs, National Orientation Agency, SERVICOM
    - Consumption of Broadband Internet within different sectors - Education, Health, Electricity, Finance, Planning, and Youth Affairs.
2. **Subnational Government Ministries, Departments & Agencies:** BRIDGE will be implemented at the Federal level of Government in

Nigeria. However, the project activities will generate a lot of interest at sub-national level. The areas of interest at state level include

- ROW use fees charged by states on broadband internet companies: State Ministries of Physical Planning, State Ministries of Works & Transport
- Expansion of broadband internet services for both government and general public use: State Departments or Bureau of Information & Communication Technology
- Management of Environmental and Social risks *(including but not limited to movable and immovable properties during Right-of-Way Acquisition*): State Ministries of Physical Planning, State Ministries of Works & Transport, State Environmental Protection Agencies (SEPAs), State Ministries of Environment

3. **Security Agencies:** Due to the emerging and re-emerging conflicts in various parts on Nigeria, security agencies like the Nigerian Police, Nigeria security and Civil Defence Corps, Regional Security Outfits (Amotekun, Ebube Agwu) will be needed to mobilize protection services for the operations of all entities involved in the implementation of BRIDGE including but not limited to the PIU at FMCIDE and the SPV. These institutions are mandatorily and statutorily tasked with securing lives and property hence the project will leverage on their availability particularly in security-sensitive locations.
4. **Other Financing Institutions:** The BRIDGE project has an unguaranteed Commercial Financing Gap of USD 1.1 billion expected to be sourced from various markets. The operators of commercial funds are therefore interested parties in the operation as they can explore the business lines made available. At the time of developing this SEP, a few market sounding events have been conducted but no firm commitments have been made, hence a list of specific finance market operators will be drawn up during the implementation of BRIDGE.
5. **Informal or traditional community institutions**: These include leaders of entities such as host communities, community groups and associations, religious bodies, women self-help groups, youth groups, etc.
6. **Formal Civil Society Organizations:** NGOs and CBOs working in the project areas. Partnership for Amplified Voices (PAV) described further in section 2.5, is a veritable platform to identify and engage these organizations.
7. **Broadband Internet Consumers:** All users of broadband services on account of improvements in affordability and reliability. The Nigeria Communication Commission (NCC) convenes a Telecoms Consumer Parliament, a platform for consumer education and protection, where consumer voices can be heard.
8. **Mass media groups and academia:** The media in Nigeria is constitutionally recognized to report of government activities across Nigeria. These include several print, traditional broadcast and digital (or new) media platforms which are active across the country.

Disadvantaged / vulnerable individuals or groups1

Within the Project, the vulnerable or disadvantaged groups include persons with the following characteristics;

1. *Elderly people (60 years and above);*
2. *Persons with disabilities and their caretakers;*
3. *Women-headed households.*

4. *The unemployed;*
5. *Child-Headed Household:*

Vulnerable groups within the communities affected by the project will be further confirmed and consulted through dedicated means, as appropriate. Description of the methods of engagement that will be undertaken by the project is provided in section 3.

Partnership for Amplified Voices (PAV)

PAV is a dialogue platform in Nigeria portfolio between CSOs and the World Bank with respect to those projects and programmes that the WB is financing. The platform is a coalition of leading CSOs in Nigeria that collaborates to work on diverse thematic areas and mobilizes efforts in all the states with uniformity and alignment of purpose. It influences an increase in community participation by helping create, across project areas, sustainable platforms for citizen engagement to mobilize interests and lead advocacy for community buy-in for the project. Additionally, PAV helps improve outcomes in the monitoring of projects through CSO networks that have eyes and ears in sub-national communities.

10.3 Consultation

9.3.1. Summary of stakeholder engagement done during project preparation

During project preparation, the following public consultation meetings were held as mentioned below:

Event	Date	Venue	Participants	Summary of Concerns Raised	Response
Public Consultation on BRIGDE for the Stakeholder Engagement Plan (SEP), Environmental and Social Commitment Plan (ESCP), Resettlement Policy Framework (RPF) and Environmental and Social Management Framework (ESMF)	25 July 2025	World Bank Office and Microsoft Team (Hybrid)	World Bank, IFC, FMCIDE PMO Team, NIMC ID4D PIU, Nigeria Communications Commission (NCC), U.S. Trade and Development Agency (USTDA), African Development Bank (AfDB), Africa Finance Corporation (AFC), Initiative for Community and Human Development in Taraba (ICHD), Connected Development (CODE), BudgIT, Global Centre for Human Empowerment and Entrepreneurship Development (GLOCHEED-MSMEs), Centre for Accountability and Inclusive Development (CAAID), Partnership for Amplified Voices	**Stakeholder Engagement and Inclusivity:** Participants raised concerns about the inclusion of small-scale operators, right-of-way issues, and the involvement of local communities and people with disabilities. **Grievance Redress Mechanism:** Participants	The FMCIDE assured stakeholders that the project aims for inclusive growth and continuous stakeholder engagement. - Small-Scale Operators: FMCIDE assured that the project aims to democratize connectivity, allowing local ISPs to thrive. - Right of Way: Participants raised concerns about right of way issues. FMCIDE acknowledged the challenge and mentioned ongoing engagements with state governments through the Nigeria Governors Forum (NGF) to address it. - Local Communities: Participants emphasized the need to engage local communities. FMCIDE mentioned that the project would involve

			(PAV), Nigeria for Women Program Scale Up Project (NFWP-SU). (55 participants, 18 females, 37 male)	emphasized the importance of an effective grievance redress mechanism. **World Bank Environmental and Social Framework:** The World Bank team explained the Environmental and Social Framework (ESF) and its importance in ensuring that projects do not harm people or the environment. They discussed the various environmental and social standards applicable to Project BRIDGE. **Project Implementation and Monitoring:** The World Bank team emphasized the importance of continuous monitoring, stakeholder engagement, and adaptive management in the implementation of Project Bridge. They highlighted the need for capacity building and compliance with regulatory requirements.	local stakeholders at every stage. FMCIDE explained that the project will have a community liaison officer in each state to address grievances and ensure 100% resolution. To do so, the three-tier grievance redress system will be considered, which includes community, state, and federal levels to ensure comprehensive coverage. - It was agreed that specific consultations will be conducted with the association of people living with disabilities.

Stakeholder Alignment on Environmental and Social Framework for BRIDGE	16 May 2025	Virtual – Microsoft Team	FMCIDE PMO Team, AfDB, World Bank, European Bank for Reconstruction and Development - EBRD	The primary objective of the meeting was to ensure coherence between the environmental and social policies, instruments, and approaches of the World Bank, AfDB & EBRD. The teams discussed the need to avoid duplicative efforts and streamline documentation and compliance processes. AfDB led the discussion on their framework and emphasized the importance of access to detailed project information, the terms of reference for the feasibility study, and alignment on environmental and social due diligence. The World Bank team presented their existing and planned ESF instruments. They also noted that a quality review process is ongoing and confirmed that many of these documents would be publicly disclosed. The discussion also touched on the sequencing of project preparation, feasibility outputs, and the development of safeguards instruments. The meeting concluded with a clear commitment to continue collaboration,	- **Centralize documentation** – Set up a shared document folder for all ESF instruments and project ToRs. - **Align timelines** – Develop a shared milestone tracker with AfDB, World Bank, and PIU to manage deliverables leading to government deadlines. - **Clarify E&S staffing needs** – Finalize and circulate ToR for E&S specialist; begin recruitment or secondment process.

				maintain open channels of communication, and coordinate more closely in the coming weeks.	
World Bank Digital Transformation (DT) Vice President's (VP's) Private Sector Roundtable - Broadband Access, Affordability & Quality	28-Feb-25	WB, Abuja Room	21st Century, 9 Mobile, Airtel, BCN, Equinix, Globacom, IPnX, MTN, Phase 3 Telecom, Tizeti, West Indian Ocean Cable Company (WIOCC).	Priority actions to: (i) close Nigeria's digital infrastructure and data infrastructure gap through greater private sector investment and participation in the digital/ ICT sector; (ii) find strategies to improve digital skills and productivity to close the gaps and increase digital jobs; and (iii) increase penetration and use of digitally enabled services, including digital ID, financial services, etc.	Stakeholders agreed on the shared vision for the project, as a government backed SPV, to be led by the private sector as guaranteed model to build fibre infrastructure that can provide affordability and quality A shared sense of the broad objectives, to ensure broadband to low and non-consumption clusters, and ideas on models to facilitate affordability.
Fibre Forward: FINANCING OF 90,000KM FIBRE OPTIC BACKBONE INFRASTRUCTURE ACROSS NIGERIA	25-Jun-24	Fraser Suites	FMCIDE, African Development bank (AFDB), World Bank (WB), European Union (EU), Open Access Data Centres, United States Trade and Development Agency (USTDA), Phase 3, Nigeria Sovereign Investment Authority (NSIA), WIOCC, Ministry of Finance	During various events focused on broadband infrastructure in Nigeria, including the Fibre Forward event on June 25, 2024, the Broadband For All Workshop on February 13, 2024, and the Country Private Sector Diagnostic (CPSD) consultations in May 2024, several concerns were consistently raised. Participants highlighted excessive right of way (ROW) fees and opaque	FMCIDE presented plans and traction to achieve affordable or zero-rated ROW cost and provided updates of engagements with State Governments in Nigeria, with at least ten states negotiating zero rated cost. Updates were also presented on the Implementation of Critical National Infrastructure (CNI) Order which was issued prior to the session. The implication and

			Incorporated (MOFI), Nigeria Communications Commission (NCC), International Finance Corporation (IFC), Islamic Development Bank (IsDB), Oodua Infraco, Modular open Source Identity Platform (MOSIP), State House, Federal Ministry of Finance (FMoF), Africa Finance Corporation (AFC),	processes for obtaining ROW approvals as significant barriers to the deployment of fiber optic infrastructure. The high cost of broadband services and underdeveloped national fixed-line infrastructure were also identified as major challenges. Vandalism of fiber optic installations was a recurring issue, leading to increased maintenance costs and service disruptions. Stakeholders emphasized the need for better coordination and transparency among government agencies, enhanced security measures, and community engagement to protect infrastructure. Additionally, providing fiscal and monetary incentives to attract private sector investment was recommended to reduce the financial burden on investors and facilitate infrastructure deployment. Overall, these events underscored the necessity for coordinated efforts to address ROW limitations, reduce fees, improve transparency, and enhance security measures to encourage private sector	enforcement of CNI will improve security of Infrastructure and provide a platform for coordination. The CNI order will institutionalize security, information sharing and surveillance of telecoms infrastructure as a National Priority. It was also agreed that the proposed structure of the project as a PPP will guarantee affordability and affordability for stakeholders.
Country Private Sector Diagnostic (CPSD) Consultation	9-May-24	Transcorp Hilton	NCC, FMCIDE, Galaxy Backbone (GBB), National Data Protection Commission (NDPC), National Information Technology Development Agency (NITDA), Office of National Security Advisor (ONSA), State House/The Presidency		Private sector agreed that backbone and backhaul infrastructure is patchy and not sufficient to support last mile investment 2There is no business case to invest into last mile and to extend backbone either without Government's support
Country Private Sector Diagnostic (CPSD) Consultation	May 6 - 8, 2024 and May 10, 2024 (Virtual)	IFC Office, Lagos	American Tower Company, Association of Telecommunications Companies of Nigeria (ATCON), Backbone Connectivity Network (BCN), iHS, INQ Digital, Main		

			One, Ericsson, Suburban Telecommunication, Cisco, IPNX, Merit Telecommunications, Microsoft, Raenna, VDT Communications, Medallion, Liquid Tech	investment in broadband deployment across Nigeria.	
Broadband For All Workshop – Realizing a Nigerian Vision of Broadband for All	13-Feb-24	Transcorp Hilton	NITDA, NCC, MainOne, ITX Telecoms, Central Bank of Nigeria (CBN), Ericsson, IHS, NAPET, Phase 3 Telecom, Global System for Mobile Communications Association (GSMA), Nigeria Communications Satellite (NIGCOMSAT), NITDA, American Tower Corporation (ATC), FMCIDE, BCN, Paradigm Initiative, Johnson and Wilmer, AFDB, Oodua Infraco, Merit, Nigerian Television Authority (NTA), Google, 21st Century, Suburban, Hamu Legal		Stakeholders agreed on the need to catalyze investments and broadband access to support National development. The session also addressed models to address non-consumption such as subsidies and bulk purchases to improve access. Stakeholders also aligned infrastructure sharing models to enable optimization and reduce duplicity in developing infrastructure.

Stakeholder Consultation Form and Outreach	22nd April 2025	Online	20 local and international Finance Houses, DFI's, Telecommunication Companies	Need for guarantees/comfort mechanisms	Will be considered in SPV structuring phase
Stakeholder focused meetings	14-16 April 2025	Hybrid-Online and Physical	Finance Houses, DFI's, Telecommunication Companies	Models for the SPV's Operational Model Stimulation of Demand The need for a single, consolidated feasibility study to underpin technical, financial, and regulatory structuring. Alignment on the strategic relevance Geographic scope	A hybrid model combining both expansion and competitive market strengthening will be deployed Implementation of initiatives to boost device access and digital adoption Efforts are being made to use a single feasibility plan that is acceptable to partners Engagement and stakeholder feedback is vital in shaping the project and outcomes The approach will be balanced and blended to ensure expansion into underserved areas and commercially active regions
Workshop on Structural Options to Accelerate Fiber Deployment in Nigeria	15-16 June 2022	Physical Transcorp Hilton Hotel Abuja	123 people: World Bank, FMCIDE, BCN, NITDA, IHS Towers, NCC, Broadband Implementation Steering Committee (BISC), Federal Competition and Consumer Protection Commission (FCCPC), Galaxy	Way forward for expanding fiber networks in Nigeria. World Bank presented options to expand wholesale fiber networks in Nigeria including a SPV model (for consolidating various assets and rights of ways). The workshop discussed example business and deployment models in other countries, SPV	The workshop was well received by various stakeholders.

			Backbone (GBB), Federal Ministry of Transportation (FMOT), WIOCC, MTN Nigeria, Airtel, Phase 3 Telecom, Nigeria Police Force (NPF), Glo, Globacom, Alliance for Affordable Internet (A4AI), Jos Electricity Distribution (JED Plc), Universal Service Provision Fund (USPF), MainOne, Meta, ATCON, ALTON, Space X, Academia in IT Profession (AITP), 9mobile, Hamu Legal, ONSA, Ministry of Petroleum Resource (MPR), United Nations World Food Programme (UNWFP), IFC, United Nations High Commissioner for Refugees (UNHCR), Transmission Company of Nigeria (TCN), Medallion Data Centre, Eko Electricity Company, Federal Ministry of Works and Housing (FMWH), Ikeja Electric, Kaduna Electric, Yola	ownership options, legal and regulatory aspects, etc.	

			Electricity Distribution Company (YEDC), Afrinvest, Federal Ministry of Budget and Economic Planning (FMFBNP), INQ Digital Nigeria		

9.3.2. Summary of project stakeholder needs and methods, tools and techniques for stakeholder engagement

Different engagement methods are proposed to cover the various needs of the stakeholders, as stated Table 9.3. The meeting will be held in different formats, including physical, virtual and hybrid formats, depending on the context of the audience involved in the engagement.

Table 9.3: Project stakeholder needs and methods, tools and techniques for stakeholder engagement

Organisational Level	Target stakeholders	Engagement Needs	Method of Engagement
Community Level	Project Community Leaders	• Overview of BRIDGE project • Right-of-Way of project • Information on project benefits and opportunities • Potential E&S impacts on various receptors – *community* health, security, conflicts et. cetera • Grievance Redress Procedures • Regular updates on Project development	• One-on-One interviews • Focus Group Meetings
	Informal or traditional community institutions and Community-Based Organisations	• Overview of the BRIDGE project • Right-of-Way of project • Information on project benefits and opportunities • Potential E&S impacts on various receptors • Grievance Redress Procedures • Regular updates on Project development -	• Community Consultations • Town Hall Meetings • Focus Group Meetings
	ROW occupants, property owners, businesses to be displaced	• Selected routes for fibreoptic cables • Nature of displacement impacts along the route • Measures for managing displacement impacts • Grievance Redress Procedures • Regular updates on Project development	• Community Consultations • Focus Group Meetings
	Unemployed persons	• Employment opportunities in BRIDGE interventions (permanent & ad-hoc)	• Project Frequently Asked Questions (FAQs) sheet

			• Project Website
Project Level (BRIDGE PIU and SPV)	Project Workers	• Occupational health risks and hazards • Available remedies for injuries and other occupational risks • Employee Grievance Redress Procedure;	• Focus Group Meetings • Workers' Dialogue
	Interested Bidders	• Opportunities for engagement to carry out civil works • E&S provisions in bidding documents	• Business Outreach Events • Surveys
Private Sector	Mobile Network Operators	• Opportunities for last-mile connectivity to broadband backbone	• Business Sounding Events • Focused Surveys
	Internet Service Providers	• Opportunities for last-mile connectivity to broadband backbone	• Business Sounding Events • Focused Surveys
	Finance & Investment Organisations	• Opportunities for equity investment in SPV when established	• Business Sounding Events • Focused Surveys
Federal Government Institutions	Regulatory Bodies – FMCIDE, Nigeria Communications Commission	• Policy and Operational compliance of project company (SPV) and related entities with regulatory standards related to technology deployment and business operations • Regular updates on Project development	• Formal meetings • Formal letters or memoranda
	Environmental and Social Risk Management Mandate MDAs – Federal Ministry of Works, Federal Ministry of Environment, Federal Ministry of Labour, Women and Child Development, National Orientation Agency, SERVICOM	• Compliance with environmental and social regulatory standards • Monitoring of impact footprint on E&S receptors as attributable to project activities	• Consultation Meetings • Expert Panel Review Workshops • Formal letters or memoranda
	Other FGN MDAs in Education, Health, Electricity, Finance, Planning, and Youth Affairs.	• Interest in improving access for broadband internet services for underserved and unserved demographic groups or persons who might be financially excluded from accessing services.	• Formal meetings • Formal letters or Memoranda
Subnational Government Ministries, Departments & Agencies	State ROW management bodies: *State Ministries of Physical Planning, State Ministries of Works & Transport*	• Enforcement of approved ROW to remove encroachers • Provision of information on ROW routes • Advise on alternative route in locations where approved ROW has been encroached or is congested	• Formal meetings • Formal letters or Memoranda
	Utilisation of Broadband internet services: *State Departments or Bureau of Information & Communication Technology*	• Interest in improving access for broadband internet services for underserved and unserved demographic groups or persons who might be financially excluded from accessing services.	• Formal meetings • Formal letters or Memoranda
	Management of Environmental and Social risks: *State Ministries of Physical Planning, State Ministries of Works & Transport, State Environmental*	• Compliance with environmental and social regulatory standards • Monitoring of impact footprint on E&S receptors as attributable to project activities	• Consultation Meetings • Expert Panel Review Workshops • Formal letters

	Protection Agencies (SEPAs), State Ministries of Environment		
Other Financing Institutions	Multilateral Development Banks	• Additional Investment commitments • Use of common approach to manage E&S risks of the project	• Formal meetings
Formal Civil Society Organizations	1. Partnership for Amplified Voices (PAV) 2. Other CSOs and coalitions on Telecoms issues	• Representation of traditionally underserved demographic groups in the distribution of project benefits • Third-party monitoring of implementation of E&S commitments	• Town Hall Meetings • Focus Group Meetings
Vulnerable Persons	1. Elderly people (60 years and above); 2. Persons with disabilities and their caretakers. 3. Women-headed households. 4. The unemployed;	• Measures to avoid discrimination in access to project benefits and opportunities • Affirmative action arrangements to promote participation of vulnerable groups in project design and implementation	• Focus Group Meetings • One-on-One Interviews with Key Informants
Broadband Internet Consumers	Members of the public in unserved and underserved areas	• Benefits of broadband internet technology and the BRIDGE project.	• Town Hall Meetings (at regional and senatorial district levels) • NCC Telecoms Consumer Parliament sessions
Media Organisations	• TV stations • Radio Stations • Bloggers	• Project design and overview • Project Implementation Progress reports	Project Newsletter

9.3.3: Stakeholder engagement plan

The BRIDGE project has been assigned a SUBSTANTIAL environmental & social risk classification at the appraisal stage, hence, the plan for engagement of stakeholders would include (i) several formal points of engagement, and (ii) ongoing information dissemination throughout the project cycle. Engagement of stakeholders is planned to happen during the project phases (Table 9.4);

1. Preparation Phase: The project life cycle starts with the identification of proposed project activities. It also includes the design and development of the project, the economic, financial, and environmental, and social assessment activities
2. Implementation Phase: This includes the implementation of actual project activities as designed, including the establishment of the SPV and all works – trenching, duct installation, and aerial fiber deployment - involved in the broadband cable laying.
3. Operations & Maintenance Phase: After the completion of civil work activities, the SPV will continue to operate the Broadband Internet Network Infrastructure to deliver services.

Table 9.4: The Stakeholders' engagement plan during the preparation, implementation and operations phases

Project stage	Topic of Consultation/Message	Method used	Target stakeholders	Responsibilities
Preparation	Project Concept & Design + Opportunities for Private Sector Participation	• Formal Meetings • Business Sounding Events • Proj. Newsletter • Digital Media	Regulatory Bodies (FMCIDE, Nigeria Communications Commission), Mobile Network Operators, Internet Service Providers, Finance & Investment Organizations	BRIDGE PIU E&S Officer BRIDGE PIU Communication Officer
	Environmental & Social Risks Associated with the Project – livelihoods, occupational health, e-Waste Mgt, GBV/SEA, Conflict, Cultural Heritage	• Community Consultations (for site-specific E&S documents) • Town Hall Meetings (at Geo-Political Zone level)	FMEnv, NESREA, State Environmental Protection Agencies, Community leaders along ROW routes, Formal CSOs, Other CBOs, Vulnerable Persons, Telecoms Consumer Parliament	BRIDGE PIU E&S Officer
	E&S Risk Management Instruments of the Project – ESCP, ESMF, RPF, SEP and sub-plans (OHS Mgt Plan, LMP, e-Waste Mgt Plan, Chance Finds Procedure, SEA/SH Action Plan, Security Risk Assessment and Mgt Plan			BRIDGE PIU E&S Officer
	Feedback and Complaints process in BRIDGE project implementation and Awareness-raising on the GM		FMCIDE Servicom Unit, Community leaders along ROW routes, Formal CSOs, Other CBOs, Vulnerable Persons, Telecoms Consumer Parliament	BRIDGE PIU E&S Officer BRIDGE PIU Communication Officer FMCIDE Servicom Desk
	Management of Physical & Economic displacement		Federal & State Agencies Managing ROW, Community leaders along ROW routes, Formal CSOs, Other CBOs, Project-Affected People along the ROW	BRIDGE PIU E&S Officer
	Disclosure of findings of E&S studies – ESCP, ESMF, RPF, SEP etc	• Website • Government Offices • Designated offices at state level	FMEnv, NESREA, State Environmental Protection Agencies, Community leaders along ROW routes, Formal CSOs, Other CBOs, Vulnerable Persons, Telecoms Consumer Parliament	BRIDGE PIU E&S Officer
	Inclusion and participation of vulnerable and disadvantaged persons in BRIDGE project activities	Focus Group Meetings	Identified Vulnerable Groups, Formal CSOs	BRIDGE PIU E&S Officer
	Business & Investment opportunities in BRIDGE	• Business Sounding Events • Proj. Newsletter	Mobile Network Operators, Internet Service Providers, Finance & Investment Organizations	BRIDGE PIU E&S Officer BRIDGE PIU Communication Officer

Project stage	Topic of Consultation/Message	Method used	Target stakeholders	Responsibilities
Implementation	Project Kick-Off Expectations from Community Stakeholders	• Town Hall Meetings (at State level)	Regulatory Bodies (FMCIDE, Nigeria Communications Commission), Mobile Network Operators, Internet Service Providers, Finance & Investment Organizations	SPV E&S Officer SPV Communication Team
	Relocation outside Right-of-Way in encroached areas	• Community Consultations • Focus Group Meetings	Federal & State Agencies Managing ROW, Community leaders along ROW routes, Formal CSOs, Other CBOs, Project-Affected People along the ROW	SPV E&S Officer
	Implementation of specific ESMPs and associated Subplans such as Waste Management Plans among others	• Project Monthly Site Meeting • Community Consultations	FMEnv, NESREA, State Environmental Protection Agencies,	BRIDGE PIU E&S Officer
	Project Implementation Progress review	• Proj. Newsletter • Beneficiary Survey	All identified stakeholders	SPV E&S Officer SPV Communication Team BRIDGE PIU E&S Officer BRIDGE PIU Communication Officer FMCIDE Servicom Desk
	Feedback on Complaints received from the project locations	• Focus Group Meetings • One-on-One interviews • Dedicated Telephone & Email for feedback • Feedback & Suggestion Box • Information repositories accompanied by a feedback mechanism, • Surveys, Interviews and Questionnaires	Project Community Leaders, Informal or traditional community institutions and Community-Based Organizations, ROW occupants, property owners, businesses to be displaced, CSOs	SPV E&S Officer SPV Communication Team
tions & Maint enanc	Last-mile connection for unserved communities leveraging Broadband backbone	• Telecom Consumer Parliament • SPV Complaint Form on Website	Nigeria Communication Commission SPV Management, Mobile Network Operators, Internet Service Providers	SPV E&S Officer SPV Communication Team
	Complaints about services		Nigeria Communication Commission SPV Management, Mobile Network Operators,	SPV E&S Officer SPV Communication Team

Project stage	Topic of Consultation/Message	Method used	Target stakeholders	Responsibilities
			Internet Service Providers	

9.3.4. Proposed strategy to incorporate the views of vulnerable groups

The project will carry out targeted stakeholder engagement with vulnerable groups to understand concerns/needs in terms of accessing information, facilities and services and other challenges they face at home, at workplaces and in their communities. Special attention will be paid to engage with women. The details of strategies that will be adopted to effectively engage and communicate with the vulnerable group will be considered during project implementation. At the minimum, the plan will consider the entire strategies listed below to ensure effective engagement of such groups.

1. Facilitate broad participation of disadvantaged and vulnerable individuals and groups with adequate gender and generational representation
2. Provide the disadvantaged and vulnerable individuals and groups with all relevant information about the Project, including on potential adverse impacts;
3. Ensure communication methods are appropriate given communication challenges for such groups;
4. Organize and conduct the consultations in forms that ensure free expression of their views and preferences;
5. Document details of all consultation meetings with disadvantaged and vulnerable individuals and groups on their perceptions towards the Project activities and the associated impacts, especially the adverse ones.

9.3.5. Reporting back to stakeholders

Stakeholders will be kept informed as the project develops, including reporting on project environmental and social performance and implementation of the stakeholder engagement plan and grievance mechanism, and on the project's overall implementation progress.

APPENDICES

APPENDIX 1:
ENVIRONMENTAL AND SOCIAL RISK CATEGORIES AND SCREENING TEMPLATES

Risk Category

Risk Category	Nature of Risk and Impact	Examples
Category D: Low Risk	Activities that do not have a physical footprint. These will not require E&S instruments preparation, however, E&S clauses in the contract are recommended (to be prepared by the PIU prior to bidding process)	Foot paths; Purchase of furniture for existing health clinics, haffirs for animal and human consumption; communication and translations; Small training and workshops; management of funds and grants; management of social protection activities
Category C: Moderate Risk	Activities that have low to medium E&S risks and impacts, including that are site specific, temporal and reversible in nature. In addition to the E&S clauses in the contract, these activities may require an ESIA that will collate findings into a detailed ESMP. Contractors will also be required to prepare C-ESMPs. Furthermore activities may require risk mitigation measures laid out in the GBV Action Plan, Security Management Plan, Labor Management Procedures, Pest Management Plan, etc (see screening template)	Construction or repair of non-motorized hand-pumps and boreholes (boreholes will be improvements or change to an existing water scheme); tanks; dug wells; provision or repair of latrines for public use; construction of flood protection infrastructure; repair of flood protection infrastructure; repair of small-scale community irrigation schemes; repair of small- scale irrigation schemes; rehabilitation of local roads; repair of local roads; culverts; bridges; repair or extension of existing health clinics; general buildings with local materials; markets; livestock dips; activities with security implication for all project workers and project-affected parties; activities with a risk of diversion of funds; activities that may spark conflict over allocation of resources; activities leading to involuntary resettlement, land acquisition and restrictions to land use; etc
Category B: Substantial	Activities that have substantial E&S risks and impacts, including those that are not as complex as high risk projects, more temporary in nature and more predictable and reversible. This category includes risks of limited degrees of social conflict, and impacts on human security; impacts that are medium in magnitude, medium to low probability of serious adverse effects to human health and/or environment.	Activities that include potential security risks, such as delivery of goods to insecure areas; activities that could lead to GBV (e.g. labor influx)
Category A: High Risk	Subprojects that contain significant environmental and social risks impacts. These subprojects would require a full ESIA and a detailed ESMP. They would also require an ARAP or a RAP depending on the number of Project Affected	dams; power stations; industrial installations (refineries, chemical installations); long distance roads, transmission lines (water, power); waste treatment and disposal installations; large water and wastewater treatment plants;

	Persons (PAPs) and resettlement impact anticipated. UNOPS and IOM will avoid these projects and include them in the exclusion list.	river basin or land development; large-scale irrigation ; projects in critical habitat and protected areas; projects involving significant quantities of hazardous substances; industrial installations (refineries, chemical installations)

E&S SCREENING TEMPLATE

Potential Environmental/Social Risks (Specific to Fiber Optic Deployment)	Yes	No	I don't know	If 'Yes', refer to: (Action/Instrument)	Comments
Physical Environment Impacts:					
- Alteration of terrestrial/aquatic habitats (e.g., watercourses, wetlands, riparian vegetation) due to trenching/aerial laying?				ESMP (Site-specific mitigation measures)	
- Soil pollution (e.g., from accidental spills, waste, or machinery) during construction?				ESMP (Waste Management Plan, Spill Prevention Plan)	
- Increased demand for resources (water, energy, raw materials) during construction?				ESMP (Resource Efficiency Plan)	
- Generation of construction/electronic waste (e-waste) from equipment installation/malfunction?				ESMP (Waste Management Plan, E-waste Management Plan)	
- Air quality degradation (e.g., dust, emissions) or noise/vibration from construction activities?				ESMP (Air Quality & Noise Management Plan)	
Social Impacts:					
- Land acquisition or involuntary resettlement (physical/economic displacement) due to Right-of-Way (RoW) or access restrictions?				RAP (Resettlement Action Plan)	
- Labor influx impacting community health/safety, or leading to conflict/SEA/SH?				LMP (Labor Management Plan), GBV/SEAH Action Plan	
- Occupational Health and Safety (OHS) risks for workers (e.g., micro-shard injuries, electrical hazards)?				LMP (OHS Plan)	
- Impact on cultural heritage (known or chance finds) during excavation?				ESMP (Chance Finds Procedure)	

- Disruption of community services or access (e.g., roads, utilities) during construction?				ESMP (Traffic Management Plan, Community Engagement Plan)	
- Risks to vulnerable groups (e.g., PLWD, women, youth) due to project activities?				SEP (Stakeholder Engagement Plan), GBV/SEAH Action Plan	
- Security risks (e.g., looting, vandalism, unauthorized access) or need for security personnel?				SMP (Security Management Plan)	
- Grievances from project-affected parties?				GRM (Grievance Redress Mechanism)	

ESMP Preparation Process (When ESIA is Not Required)

- If the screening indicates that sub-project activities involve limited adverse impacts that are site-specific, reversible, and manageable, a standalone ESMP is prepared instead of a full ESIA.
- The ESMP identifies impacts and defines roles/responsibilities for mitigation, including cost estimates.
- The PIU prepares the ESMP (with support from E&S specialists or consultants as needed).
- The ESMP is reviewed and approved by the PIU, then submitted to the State Ministry of Environment (SMEnv), Federal Ministry of Environment (FMEnv), and World Bank for final review and approval.
- Mitigation measures for which the Contractor is responsible must be included in bidding documents.
- No works commence until the ESMP is approved.

Decision Tree / Flowchart for Screening and ESMP/ESIA Process

A[Project Activity Proposed] --> B{E&S Screening Conducted by PIU}

B --> C{Potential Risks & Impacts Identified?}

C -- No/Low Risk --> D[No further ES Assessment required]

D --> E[Implement with E&S clauses in contract]

C -- Moderate Risk --> F{Impacts Site-Specific, Reversible, Manageable?}

F -- Yes --> G[Prepare Standalone ESMP]

G --> H[PIU Reviews & Approves ESMP]

H --> I[SMEnv/FMEnv/World Bank Review & Approval]

I --> J[Implement Project with Approved ESMP]

F -- No (Substantial/High Risk) --> K[Prepare Full ESIA]

K --> L[PIU Reviews & Approves ESIA]

L --> M[SMEnv/FMEnv/World Bank Review & Approval]

M --> N[Implement Project with Approved ESIA/ESMP]

APPENDIX 2:
CULTURAL AND CHANCE FIND PROCEDURES

This procedure was developed in accordance with the World Bank's ESS 8 (to protect cultural heritage from the impacts of project activities and support its preservation, to address cultural heritage as an integral aspect of sustainable development, to promote meaningful consultation with stakeholders regarding cultural heritage. To promote the equitable sharing of benefits from the cultural heritage).

This procedure is included as a standard provision in the implementation of civil activities under BRIDGE contracts to ensure the protection of cultural heritage (Archaeological and Historical Sites). All implementers / contractors will be required to observe this procedure as documented hereafter.

Excavation in sites of known archaeological interest should be avoided. Where this is unavoidable, prior discussions must be held with the PIU and the World Bank in order to undertake pre-construction excavation or assign an archaeologist to log discoveries as construction proceeds. Where historical remains, antiquity or any other object of cultural or archaeological importance are unexpectedly discovered during construction in an area not previously known for its archaeological interest, the following procedures should be applied.

- Stop construction activities;
- Delineate the discovered site area;
- Secure the site to prevent any damage or loss of removable objects. In case of removable antiquities or sensitive remains, a full-time guard should be present until the responsible authority takes over;
- Notify the responsible foreman/archaeologist, who in turn should notify the PIU and the World
- Bank and local authorities (within less than 24 hours);
- The significance and importance of the findings will be assessed according to various criteria relevant to cultural heritage including aesthetic, historic, scientific or research, social and economic values;
- Decision on how to handle the finding will be reached based on the above assessment and could include changes in the project layout (in case of finding an irrevocable remain of cultural or archaeological importance), conservation, preservation, restoration or salvage;
- Implementation of the decision concerning the management of the finding;
- Construction work can resume only when permission is given from the respective authorities, PIU
- and World Bank after the decision concerning the safeguard of the heritage is fully executed;
- In case of delay incurred in direct relation to archaeological findings not stipulated in the contract (and affecting the overall schedule of works), the contractor may apply for an extension of time. However, the contractor will not be entitled for any kind of compensation or claim other than what is directly related to the execution of the archaeological findings works and protections.

ANNEX 3:
GBV/SEAH PREVENTION AND RESPONSE ACTION PLAN

(Presented as Separate Plan)

ANNEX 4:

PROCEDURES FOR MANAGING CONTRACTORS DURING PROJECT IMPLEMENTATION STAGE

Managing Contractors during Project Implementation Stage

This procedure was developed consistent with the World Bank Group ESHS Guideline which incorporates the IFC ESHS Guidelines, under the "Good Practice Note: Managing Contractors' Environmental and Social Performance". This is to remind the borrower's responsibility to comply with the ESHS Guidelines, loan agreement commitments, ESIA, local laws and regulations, and permits and standards, ensuring that any contractor providing services of any kind to the implementing entity duly follows these requirements throughout the duration of the contract, including any activity or services performed by subcontractors or third parties undertaking a contract from the contractor.

The PIU may not have direct control over subcontractor performance, although it may have some influence over selection and will supervise their E&S performance. Therefore, the PIU must use their direct control over their contractors to ensure that E&S requirements are being met by subcontractors. To achieve this commitment, the implementing entity should require contractors to include in subcontracts the requirement to comply with all the relevant World Bank Safeguards standards and all E&S requirements that are appropriate for the works being subcontracted and consistent with the implementing entity's and the contractor's E&S management programs.

Understanding Implementation Responsibilities

The roles of the PIU and implementing partners / contractors in meeting E&S requirements are usually intertwined and must be worked out at the project level. Some actions described below as being the responsibility of the client or the contractor may be reversed or shared on some projects. In some cases, such as stakeholder engagement, both PIU and contractors will have certain obligations and limits and will need to coordinate their efforts. In others, such as monitoring, each party will monitor E&S performance, but at different frequencies and levels of detail. In all cases, the PIU remains ultimately responsible to World Bank for ensuring E&S requirements are met, with the responsibilities of the contractor defined in the contract. For design-build (or design-build-operate) contractors, the design standards and requirements (and operation standards) will also be set out in the terms of reference to the contract. For public-private partnership (PPP) projects the administration may also have roles and responsibilities (to the Bank) which may be additional to their usual regulatory functions.

Contractor Oversight

The PIU will monitor contractor and subcontractor E&S performance and ensure the contractor monitors its own and all subcontractors' E&S performance throughout construction, including mobilization, the main construction phase, and demobilization. Clear responsibilities and reporting lines are essential to avoid duplication of effort or, conversely, gaps in monitoring. If operations are carried out under contract, or some work is performed by contractors, the PIU and contractor will monitor E&S performance during operations as well. Overall, the client will require that all contractors engaged on the project operate in a manner consistent with the requirements of the ESSs, including the specific requirements set out in the Environmental and Social Commitment Plan (ESCP).

The PIU should require contractors to report on an agreed frequency their E&S performance and metrics (which shall include relevant information and data from subcontractors, as applicable). Timely reporting of E&S performance and results enables the client to identify opportunities for improvement, prevent poor performance issues, and assist contractors if remedial action is to be taken.

E&S Performance Meetings

Regular meetings are essential to ensure contractor performance is satisfactory and that project specifications are being met. Experience has shown that the PIU may share performance-monitoring results at weekly meetings with all contractors to effectively drive improved performance by introducing a competitive element, sometimes with small incentives. The authority of monitoring staff who control contractor performance also needs to be clarified and understood by contractors (for example, who gives instructions to stop work or proceed but with modifying the approach, scope, equipment, and so forth).

The PIU should ensure that contractors employ qualified E&S personnel to oversee E&S performance, and that contractor staffing and resources are commensurate with the magnitude and timing of work and potential E&S risks. The PIU should also approve documentation, including for training programs, to ensure all staff are aware of E&S commitments and their part in meeting them.

Review and Approval of Contractor Site-Specific E&S plans

The PIU is responsible for its contractors, meeting all of the project's E&S requirements, it is essential for them to review and approve project E&S management plans and procedures. These might include such plans as working within boundaries (footprint management), protection of biodiversity, land clearing and erosion control, traffic management, labor sources and methods of recruitment of workers, worker accommodation, noise and dust control, and possibly others. Where an E&S Management Plan has not been approved, no works will commence in the area.

Kickoff Meeting

Prior to early work activities, the PIU should hold a kickoff meeting with each of the contractors prior to arriving at the site. Timing of mobilization based on logistical issues, resources, customs delays, and so forth should be considered in the planning. The PIU and contractor project managers and major subcontractors should participate in these meetings. The purpose is to review planned activities and schedules, review E&S requirements (among others), review the roles of the various parties in implementing and monitoring mitigation measures, and agree on project-specific induction and training content. These meetings should include a discussion about control of access to the site, use of security forces if applicable, and how to best coordinate the PIU's security management system and E&S activities at both the base camp (accommodation site) and any remote construction sites. Both client and contractor E&S representatives should be present to reiterate all E&S commitments and establish initial compliance points and coordination requirements during site establishment.

E&S Induction and Training

A general E&S site induction should be mandatory for all workers, with specialized technical E&S training delivered to staff. The degree of training should be based on the project's E&S risks, on the tasks that will be performed, the CoC, including the SEP, and SMP, and on the general E&S provisions that are applicable for all personnel, including contractors and subcontractors. All workers should be made aware of the worker GRM and Project GRM and how to access them. In particular, security contractors should be given detailed training on community engagement and the grievance mechanism, as complaints may be brought

to their attention in the first instance, and as contractors are not often included in employee training. Contractors should develop and implement SEA and GBV awareness training for staff at all levels, from contract management to day laborers. Additional training may be needed for staff that will be responsible for implementing, monitoring, and reporting E&S performance. Once the general E&S induction is defined, a series of specific trainings may be required in order to ensure that the requirements, controls, and mitigation measures are well communicated and understood.

PIU Monitoring of Activities

The monitoring of contractor E&S performance by the PIU must be the practice throughout construction, from mobilization through demobilization. This should involve both visits to work locations and reviews of records kept by the contractor and of reports submitted by the contractor. The frequency of site visits should be commensurate with the magnitude of the E&S risks of the activities being carried out and permanence of potential impacts that could result from ongoing activities. Monitoring may be conducted by PIU E&S staff.

The PIU environmental and social officers should review one or more recent inspection reports and the contractor's previous month's E&S progress report prior to visiting the site to monitor the contactor's E&S performance. They should do the same before participating in meetings where the contractor's E&S performance is to be discussed. The PIU will review contractor reports and follow up as needed to ensure timely resolution of issues of noncompliance with E&S requirements. This may include additional visits to the contractor's site or offices, further communications with contractor E&S personnel, issuance of notices of deficiency or warnings to the contractor, and other actions as needed.

At any stage of construction or other work, if the contractor has not taken appropriate action to achieve compliance with E&S requirements after repeated notices of violation and warnings of noncompliance, and significant E&S impacts are occurring or imminent, the PIU should order the contractor to stop work until E&S performance is brought under control and up to acceptable standards.

Contractor Monitoring and Reporting

The PIU should require contractors to monitor and keep records on E&S performance in accordance with the E&S management plans. This may include monitoring of E&S matters, scheduled and unscheduled inspections to work locations, observations made during routine activities, desk reviews, drills, and any other monitoring protocols implemented by the contractor to ensure E&S compliance. The PIU must be familiar with the contractor's monitoring and record keeping system so this aspect of the contractor's performance can itself be monitored.

Responsibilities for monitoring need to be clear between the client and contractor, and results (if client and contractor are both collecting data) must be comparable, for example, collected using the same methodologies, analyzed at the same labs, and using similar equipment, and so forth[18].

[18] To improve efficiency, responsibilities should be defined early regarding who collects what data. In relation to the data collected by the contractor, the owner should be comfortable with what is being collected and how it is being collected, analyzed, reported, and so forth. This is usually done through the sign-off by the owner on the proposed monitoring plan of the contractor

The PIU should require contractors to report on E&S performance on at least a monthly basis throughout the construction phase, including mobilization, construction, and demobilization. This could be more frequent for more sensitive E&S projects. It can be part of the overall technical progress report or a stand-alone E&S report. The table below shows the E&S parameters considered in the reporting of E&S performance.

Parameters to consider for E&S reporting by Contractor at least on a monthly basis

Item	Parameter	Description
1	*Safety*:	Hours worked, recordable incidents and corresponding Root Cause Analysis (lost time incidents, medical treatment cases), first aid cases, high potential near misses, and remedial and preventive activities required (for example, revised job safety analysis, new or different equipment, skills training, and so forth).
2	*Environmental incidents and near misses*:	Environmental incidents and high potential near misses and how they have been addressed, what is outstanding, and lessons learned.
3	*Major works*:	Those undertaken and completed, progress against project schedule, and key work fronts (work areas).
4	*E&S staffing*:	New hires and departures, and listing of current staff and titles.
5	*E&S requirements*:	Noncompliance incidents with permits and national law (legal noncompliance), project commitments, or other E&S requirements.
6	*E&S inspections and audits*:	by contractor, engineer, or others, including authorities—to include date, inspector or auditor name,
7	*Workers*:	Sites visited and records reviewed, major findings, and actions taken, number of workers, indication of origin (expatriate, local, nonlocal nationals), gender, and skill level (unskilled, skilled, supervisory, professional, management).
8	*Training on E&S issues*:	including dates, number of trainees, and topics
9	*Footprint management*:	Details of any work outside boundaries or major off-site impacts caused by ongoing construction—to include date, location, impacts, and actions taken.
10	*External stakeholder*	highlights, including formal and informal meetings, and information disclosure and dissemination—to include a
	engagement:	Breakdown of women and men consulted and themes coming from various stakeholder groups, including vulnerable groups (e.g., disabled, elderly, children, etc.).
11	*Details of any security risks*:	Details of risks the contractor may be exposed to while performing its work—the threats may come from third parties external to the project or from inappropriate conduct from security forces employed either by the client or public security forces.
12	*Worker grievances*:	Details including occurrence date, grievance, and date submitted; actions taken and dates; resolution (if any) and date; and follow-up yet to be taken—grievances listed should include those received since the preceding report and those that were unresolved at the time of that report.
13	*External stakeholder grievances*:	Grievance and date submitted, action(s) taken and date(s), resolution (if any) and date, and follow-up yet to be taken—grievances listed should include those received since the preceding report and those that were unresolved at the time of that report. Grievance data should be gender-disaggregated. Particular sensitivity may be needed around SEA or GBV issues raised.
14	*Major E&S changes*:	to E&S management, or E&S practices (most often done by the Project Implementing Entity)
15	*Deficiency andn performance management*:	actions taken in response to previous notices of deficiency or observations regarding E&S performance and/or
		Plans for actions to be taken—these should continue to be reported until the client determines the issue is resolved satisfactorily.

E&S Review of Contractor Invoices

The PIU should be part of the process for signing off on all payments to contractors, even if the payment is not for work that is explicitly related to E&S mitigation and performance. E&S staff shall work closely with the project manager (PIU or engineer's project manager, depending on who employs the E&S personnel) to determine if there are any outstanding E&S items and whether including that full or partial payment under specific line items of the bill of quantities should be withheld, either temporarily or permanently, or that there should be some combination of temporary and permanent withholding. This right should be exercised as follows;

- Temporary withholdings should be recommended in case of repeated minor violations of E&S requirements that are not leading to significant impacts on workers, external parties, or environmental resources; minor violations that are not corrected after repeated warnings; or first-time major violations that can be corrected easily and that have not led to permanent E&S impacts. The withheld amounts should be paid upon contractor correction of the deficiency to the client's satisfaction.
- Permanent withholdings should be recommended for minor violations that are not corrected after repeated warnings and that could result in significant impacts; or for any violations that have resulted in significant impacts, including permanent impacts. Some portion of such withholdings may be released upon satisfactory resolution of the issue, but some significant portion must be permanently withheld as a penalty to discourage repeated incidents.
- Payments that are withheld either temporarily or permanently will be all or part of the payment specified for a line item in the bill of quantities, which in turn will be the payment due for a discrete portion of the total works. The PIU should work with the project manager and others as needed to arrive at the amount to be withheld. This amount should not be based directly on the cost of compliance but rather should be somewhat higher than this amount, and based on a specific percentage of the line item in question.
- The contractor should be notified of the specific actions that must be taken in order to receive further payments for the works in question, or to receive payment that has been temporarily withheld.

If the contractor does not take timely action to reach compliance with E&S requirements, the PIU and the project manager should continue to take appropriate action to encourage compliance, which could include orders to stop work, withholding of further payments, and/or escalation of the issue to higher management. If significant impacts are occurring or imminent, the client may notify the contractor that another party will be brought in to deal with the issue and the payment to the contractor will be reduced by the amount paid to the other party, as would be specified in the contract.

ANNEX 5:
LABOR MANAGEMENT PROCEDURES
(Submitted as a Separate Plan)

ANNEX 6:
GENERAL QUARTERLY AND ANNUAL E&S REPORTING FORMAT

Summary of Key E&S Aspects during the Reporting Period

Project Status, E&S Incidents, E&S Changes, E&S Initiatives

Project Status

Provide a brief description of any new developments in relation to operations and facilities over the reporting period.

E&S Incidents

Please provide a summary of all the notifiable E&S incidents, Please expand or collapse the table where needed.

Date	Incident description	Class	Reports sent to lenders	Corrective actions / Remedial plan

E&S Changes

Please provide a summary of all the notifiable E&S changes. Please expand or collapse the table where needed.

Date	Change description	Reports sent to lenders	Implementation status

Improvements/initiatives regarding E&S performance

Briefly describe improvements/initiatives implemented during the reporting period on management of &S aspects (e.g. energy/water savings, sustainability reports, waste minimization, etc.)

ESS1: Assessment and Management of Environmental and Social Risks and Impacts

E&S Impact / Risk Assessment

Have any supplemental environmental, social, health and safety impact/risk studies been conducted during the reporting period? (Please provide copies)

Compliance with Environmental and Social Management Plans

The status of the ESMP implementation should be described and any issues that remain outstanding should be detailed.

ESS2. Labor and Working Conditions

Human Resources Management

Have implementers and contractors changed/updated their Human Resource (HR) policy and procedures, Hr manual, and Health & Safety procedures, during the reporting period?

☐ Yes ☐ No……

If yes, please provide details.

	# community workers	# direct workers	# Female direct workers	Turnover	# Contracted workers[192]
Previous year					
Reporting year					

Provide the following information regarding the workforce:

List the worker-related court cases and describe their status.

Occupational Health and Safety

Describe the main changes implemented in terms of Occupational Health and Safety (OHS) during the reporting period, e.g. revision of the OHS management procedures, action plans for technical improvements, leading/lagging indicators used/introduced, identification of hazards, new controls, etc.

Please attach Health & Safety audit reports available for the reporting period.

☐ Copies attached with this report ☐ Copies available upon request ☐ Not Available

Accident Statistics Monitoring

Report TOTAL numbers for each parameter	This reporting period			Last reporting period (not cumulative)[19]		
	Community workers	Direct workers	Contracted workers	Community workers	Direct workers	Contracted workers
Total number of workers						
Total man- hours worked annual						
Total number of lost time occupational injuries[20]						
Total number of lost workdays[21] due to injuries						
Lost time injury frequency[22]						
Fatalities						

[19] To be provided after the project has been operational for at least two consecutive years.

[20] *A lost-time injury* (LTIs) is the incapacity to work for at least one full workday beyond the day on which the accident or illness

[21] *Lost workdays* are the number of workdays (consecutive or not) beyond the date of injury or onset of illness that the employee was away from work or limited to restricted work activity because of an occupational injury or illness.

[22] The number of *lost time injuries* (LTIs) recorded for Project workers per million man-hours worked by them. LTI Frequency Rate = injuries per million hours worked = # of lost time accidents x 1,000,000 hours / total man-hours worked).

Vehicle collisions[23]						

Provide details for the non-fatal lost time injuries during this reporting period.

UNOPS/IOM / contractor/ Subcontractor employees?	Total workdays lost	Description of injury	Cause of accident	Corrective measures to prevent reoccurrence

Provide details for fatal accidents during this reporting period, if any, (and provide copies of accident investigation and respective corrective plan).

Date of Accident	Type of Accident	Description of Accident	# of Fatalities	Preventive measures taken after the incident

OHS Training

Describe Health and Safety training programs carried out in the reporting period.

Type of Training	Number of Persons attended	Time Training Held	Topics Trained

Workplace Monitoring

Please provide copy of any Workplace Monitoring reports developed for the reporting period.

ESS3. Resource Efficiency and Pollution Prevention

Environmental Monitoring

Provide copy of environmental monitoring data reports for this reporting period, collected consistent with the

ESMPs for the sub-projects.

Briefly describe environmental mitigation measures implemented during the reporting period to comply with E&S requirements

Resources Efficiency: Energy and Water

Provide data on energy and water consumption during the reporting period. If the data requested are available in another format, they can be submitted instead.

Describe the Concessionaires' resources efficiency measures/efforts being implemented to minimize fuel, energy, and water consumption.

[23] Vehicle Collision: When a vehicle (device used to transport people or things) collides (comes together with violent force) with another vehicle or inanimate or animate object(s) and results in injury (other than the need for First Aid) or death

Hazardous and non-Hazardous Waste[24]

Erosion Control, Slope Stability and Reinstatement

Please describe status and actions implemented in terms of erosion control, slope stability, and reinstatement within the project's footprint and area of influence.

ESS4 Community Health, Safety and Security

Community Health and Safety

Please list and describe any initiatives implemented in relation to community health and safety during the reporting period.

Please provide the list and description of the actions, the expected or actual dates of implementation, Progress/status, results obtained. You can use a tabular format (as below) or provide the information as an attachment of the report.

During the reporting period, have any emergency drills been conducted with participation of the local authorities, public emergency organizations, local communities? Are the communities aware of the emergency response plans?

Accident Reporting

Provide details for the non-fatal casualties, involving third parties, during this reporting period.

Date of Accident	Type of Accident	Description of the Accident	Number of people	Preventive measures taken

Provide details for fatal accidents during this reporting period (and provide copies of accident investigation and respective corrective plan).

Date of Accident	Type of Accident	Description of the Accident	Number of people	Preventive measures taken

GBV/SEA Action Plan

Please provide an update on the status and progress of the actions as defined in the GBV/SEA Action Plan. You may attach relevant monitoring reports.

ESS5 Land Acquisition and Involuntary Resettlement

Report any activities that have been required involuntary resettlement

[24] Waste types include but are not limited to: chemical containers, chemical sludge, containers/pallets, dewatered sludge, domestic waste, ferrous and non-ferrous scrap, hospital waste, laboratory waste, liquids, off-specification raw materials, paint waste, sludge, solids, truck and auto tires, waste fuel hydrocarbons, waste hydraulic fluids, waste lubricating hydrocarbons, waste solvents, waste treatment sludge, contaminated soil, creosote sleepers, etc

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

Biodiversity Management

Please report on the mitigation measures included in the ESMF and ESMPs

As needed, using the table below describe any new activities or expansions that have increased the project footprint into new areas of habitat during the reporting period.

New Activity / Expansion	Total Area covered	Type of Habitat

ESS8 Cultural Heritage

Report if chance find procedures have been applied if not, please indicate Not Relevant.

ESS 10 Stakeholder Engagement and Information Disclosure

Stakeholder Engagement, Public Consultation and Disclosure

List any stakeholder engagement events, including public hearing, consultation and disclosure, liaison with non-governmental organizations, civil society, local communities on E&S.

Date	Participant(s)	Formats of Interaction	Issues Discussed	UNOPS response/ Agreement reached (attach minutes if any)	Actions Taken (if any)/ Remarks

Grievance Mechanism and Court Cases

Report the number and type of requests and/or grievances received from project affected people / local communities / local organizations

How many have been resolved and how many are pending? (Please attach a log of the grievance redress registry.

Report the number and type of court cases on E&S grounds, if any (Please attach a log of all court cases and their status)

Indicative

- Relatively minor and small-scale localized incident that negatively impacts a samll geographical areas or small number of people
- Does not result in significant or irreparable harm
- Failure to implement agreed E&S measures with limited immediate impacts

Serious

- An incident that caused or may potentially cause significant harm to the environment, workers, communities, or natural or cultural resources
- Failure to implement E&S measures with significant impacts or repeated non-compliance with E&S policies incidents
- Failure to remedy Indicative non-compliance that may potentially cause significant impacts
- Is complex and/or costly to reverse
- May result in some level of lasting damage or injury
- Requires an urgent response
- Could pose a significant reputational risk for the Bank.

Severe

- Any fatality
- Incidents that caused or may cause great harm to to the environment, workers, communities, or natural or cultural resources
- Failure to remedy serious non-compliance that may potentially cause significant impacts that cannot be reversed
- Failure to remedy Serious non-compliance that may potentially cause severe impactsIs complex and/or costly to reverse
- May result in high levels of lasting damage or injury
- Requires an urgent and immediate response
- Poses a significant reputational risk to the Bank.

ANNEX 8
INCIDENT REPORTING GUIDANCE

An incident report should contain the following information:

Incident Report Form

Please report any incident2 within 24 hours to the PIU

Implementing Partner	
Subproject / Activity	
Report Date	
Reported By (Name and Title)	

Details of Incident

Incident Date	
Incident Time	
Incident Place	

Identification of Type of Incident and Immediate Cause

Select the type of the incident from the list below. An incident can be classified at the same time as H&S/environmental/social.

Type of Incidence		
Health and Safety	**Social**	**Environment**
Moving Machinery/vehicles at project site	Damage to Cultural Heritage	Chemical/Oil Spill withimpact on population and/or environment
Hand Tools	Occurrence of infringement of labor rights	Improper Disposal Waste
Animals or insects	Occurrence of infringement of human rights	Disasters (Earthquake, Flood, etc)
Fire or Explosion at project site	Strike, demonstration	Water Pollution/ Sedimentation
Trips & smaller falls	Other (please specify)	Damage to ecosystems (e.g. damage to flora/fauna)
Drowning	Dust, Fumes, Vapours that impact the population and/or environment	Odor air Emissions
Borrow-pit Management		Dust, Fumes, Vapors, Air pollution with impact on population and/or environment
Noise		Other (please specify)
Temperature or heat		
Overexertion		
Structural Failure		

Chemical/biological		
Stress		
Other (please specify)		

For each type of incident, select the relevant descriptor(s) from the list. You can select up to 5 descriptors for each type of incident. If a descriptor is not listed below, please type in short descriptor in "Other". Add more rows as necessary.

Incident Type	Descriptor 1	Descriptor 2	Descriptor 3	Descriptor 4	Descriptor 5	Other
H&S						
Social						
Environmental						

Provide a description of the immediate cause of the incident:

Description of the Incident

Record all facts prior to and including the incident, if it was a planned activity, describe/list material, ecosystem and property damaged, etc:

Root Cause Analysis

Select the root cause(s) of the incident from the list below. If 'Other', please specify

Root Cause	Yes	No
Improper Planning		
Poor Maintenance		
Poor Supervision		
Poor Quality of Equipment		
No rules, standards, or procedures		
Lack of knowledge or skills		
Improper motivation or attitude		
Failure to comply with rules		
Other		

Additional Questions:

- Is the incident still ongoing or is it contained?
- Is loss of life or severe harm involved?
- What measures have been or are being implemented by the Implementer?

ANNEX 9
TERMS OF REFERENCE FOR ESIA

- **Information and scope of the consultancy**
- **Profile required**: consultants, with specialized expertise in Environmental and Social Impact
- Assessment of community infrastructure projects (hereinafter referred to as the "EIA team").
- **Location of works:** Nigeria
- **Duration of appointment**: xxx
- **Background**: xx details of activity xxx

Description of Work
Under the authority of the IP (name), and under the direct supervision of the state-PIU and the federal PIU the team will: Perform an analysis of the Environmental and Social Impacts of the activity and develop a management plan to avoid or mitigate the adverse impacts.

The objectives of the ESIA include:

- Source and present baseline information on the environment in the project areas, including the physical, biological and socio-economic conditions;

  - ✔ Assessment issues related to the determination of biodiversity conservation and sustainable management of living natural resources
  - ✔ Assess the overall environmental context as a baseline
  - ✔ Assessment of existing environmental / agricultural arrangements as relevant to the Project
  - ✔ Develop provisions for management of resource efficiency and pollution prevention

- Analyze and assess in detail the environmental and social impacts of the project in the areas of implementation;
  - ✔ Social assessment to better identify vulnerable groups, and social inequities
  - ✔ Conduct SGBV and Gender Equality and Social Inclusion Analysis and produce
  - ✔ GBV Action Plan
- Identify and refine the Environmental and Social Management Frameworks (ESMF) for the mitigation of the environmental impacts
- Identify requirements to the Labor Management Plan and further Health & Safety risks and refine ESMF accordingly
- Conduct legal analysis to ensure legal requirements for the Project are fully understood and the LMP and other provisions comply with Nigeria laws and World Bank ESS.
- Develop activity- or site specific ESMP.

Proposed methodology:

- Desk review of existing literature and studies
- Filed assessment
- Stakeholder consultations
- Data analysis
- Report writing (draft)
- Validation workshop
- Production of final report

Proposed scope and activities:

Activity 1: Context of the project:

- Describe, if any, environmental planning and management already been included in the project;
- Undertake a review of policies, legislation and regulations that will affect the EIA and the environmental management of the proposed works;

Activity 2: Description and baseline of the Environment in the project area

- Present the areas subject to the study and assessment (areas of influence of the project);
- Collect and analyze baseline data of environmental elements in the area of influence of the project. Environmental elements to be covered include but are not limited to, the following:
    - ✔ Physical elements: geology, topography, soils, climate, air quality, drainage patterns, surface water, groundwater, water quality, soil erosion, etc.
    - ✔ Biological elements: flora and fauna, habitats, rare and endangered species, protected areas and other areas classified as vulnerable, trends in fauna and flora, etc.
    - ✔ Socio-economic elements: demographic characteristics, population density, land- use, agricultural and economic activities, modes of transport, road networks and their usage, administrative structures, employment, presence and magnitude of waterborne diseases and HIV/AIDS, sites of natural or cultural value, etc.

Activity 3: Detailed assessment of the environmental and social impacts of the project

The EIA team will identify, analyze and assess environmental impacts of the proposed works. The study will investigate in detail the potential for the following impacts arising from the proposed works (not limited to these):

Direct impacts on the environment

- Direct impact on the environment and biodiversity (e.g. destruction or defragmentation of habitats, destruction or degradation of protected or vulnerable areas, ecosystems, species, poaching, [temporary] settlements, etc)
- Direct impacts on surface water and catchment areas: water flow, erosion, water quality, etc.;
- Direct impacts on groundwater systems and quality, related to changes in surface water flows ;
- Direct impact on landscape : topography, land use, erosion, drainage, quarries, camps, etc ;
- Direct impact on natural resources : project requirements in water, wood, energy, and other resources;
- Direct pollution from the project (routine, non-routine, accidental): solid waste, toxic and hazardous waste, effluents and discharges, leakages, spills, run-off, noise and air.
- Direct impact on natural disaster risks: landslides, flooding, erosion, etc. Indirect impacts on the **Environment**
    - ✔ Increase in deforestation (e.g. logging, land clearing, slash and burn, etc) ;
    - ✔ Increase and facilitation in forest resource exploitation (industrial and local);
    - ✔ Increase in poaching and harvesting of non-timber forest products ;

Socio-economic impacts

- ✔ Impacts on health and security of the population (GBV, disease transmission, particularly HIV/AIDS and waterborne diseases, access to medical treatments, accident risk, noise and air pollution, etc.);
- ✔ Impacts on vulnerable groups
- ✔ Impacts on the local population, economic activities, creation of employment, loss of agricultural and residential lands, destruction of properties, relocation of infrastructures, threats to cultural and historical sites ;

Characteristics of the impact assessment

Environmental impacts will be analyzed in terms of the following and any other relevant characteristics:

- ✔ Positive (beneficial); Negative (adverse)
- ✔ Direct, indirect, cumulative
- ✔ Magnitude
- ✔ Spatial coverage

- ✔ Stages of the project at which they occur
- ✔ Duration (intermittent, continuous, short-term, long-term)
- ✔ Reversibility, irreversibility
- ✔ Likelihood of occurrence

Wherever possible, the above and any other impact characteristics shall be analyzed quantitatively and the cost of each impact will be indicated. The significance of impact of the proposed works will be assessed, and the basis of this assessment specified. The EIA team will take into consideration any national and international environmental standards, legislation, treaties, and conventions that may affect the significance of identified impacts. The team will use the most up-to-date data and methods of analyzing and assessing environmental impacts (considering the local context). Uncertainties concerning any impacts will be indicated.

Activity 4: Environmental Management Plan, EMP

The EIA team will suggest cost-effective measures to minimize, mitigate, or eliminate adverse impacts of the proposed works. Measures to enhance beneficial impacts will also be recommended.

The Environmental Management Plan will include, but will not be limited to, the following:

- ✔ Mitigation measures for potential environmental and social impacts identified ;
- ✔ Monitoring plan for the implementation of the mitigation measures;
- ✔ The estimated cost of implementation of the mitigation and monitoring measures ;
- ✔ Institutional arrangements necessary for implementing the environmental management plan;
- ✔ Activities for strengthening of institutions, project staff and local population capacities;

In the context of the EMP, the EIA team will define the magnitude and level of responsibilities that are attributable to the project in the modification and impacts to the environment (in relation also to other initiatives and developments foreseen or ongoing). The EIA team will also take into consideration in its EMP, other mitigating initiatives, such as for instance the strengthening of forest governance. Finally, the EIA team will also present the EMP so that it enables the project to comply with conditions of project approval, ensures that mitigation measures are effective, and provide data that will be used during environmental audits.

Activity 5: GBV Action Plan:

The EIA team will suggest efficient measures to prevent and counter the occurrence of SGBV in the Project areas; and suggest methods to ensure equality in the project activities related to direct beneficiaries, in alignment with the GBV Action Plan. The GBV will include, but not be limited to, the following:

- ✔ GBV procedures,
- ✔ GBV-related training and monitoring activities (pre-deployment and during project implementation) – for communities and construction workers, aid workers going into communities, etc…

The duration of the appointment is of xxx the start date for the appointment is foreseen for xxxx.

The appointment will take place in the activity location, for all relevant and necessary field data collection, and home-based for all desk reviews, analyses, drafting and editing of reports.

IV. Expected results and outputs

Output

The EIA Team will produce a report which can be easily understood by the public. The report will include the following:

- ✔ Executive summary;
- ✔ Note on the methodology used throughout the study and assessment;
- ✔ Description of the context of the project including identification of the relevant laws and regulations (see activity 1);
- ✔ Description and baseline of the Environment in the project area (see activity 2);

- ✔ Detailed assessment of the environmental and social impacts of the project (see activity 3);
- ✔ Suggestions for the refinement of the ESMF for the mitigation of the environmental impacts of the project (see activity 4);
- ✔ Environmental Management Plan, including mitigation and monitoring(see activity 5) ;
- ✔ GBV and Gender Equality Action Plan (see activity 6).

Annexes will include: list of meetings and consultations, composition of the EIA team, and any other relevant information. All collected data will be presented in both hard copies and digital forms.

The draft reports, including in particular the detailed assessment of environmental and social impacts, and the management plans required, will be submitted to the IP 5 weeks into the appointment. Comments of project stakeholders, following consultations on the conclusions of the assessment and plans, will be provided to the EIA team 1 weeks after submission of the draft report. The final report, including all annexes and incorporating comments, will be available on xxx in digital format.

The report and annexes will be provided in English.

Expected impacts

- ✔ Positive contribution to the overall success of the BRIDGE;
- ✔ Significant mitigation or elimination of adverse environmental and social impacts, due to the implementation of project activities;
- ✔ Effective ownership of mitigation and monitoring measures by project staff and concerned populations.

V. Profile of the team

Profile of the EIA team

- ✔ Minimum experience of five 5 years in Environmental Impact Assessments. Specific experience on EIA for community infrastructure and in Nigeria is an asset ;
- ✔ Having successfully performed at least two (2) similar assessments of which one (1) financed by World Bank.
- ✔ Team composed of experts and staff with the following profiles (as a minimum):

Expert in Environmental Impact Assessments – team leader

PhD or Master's degree in environmental science, natural resource management or equivalent;
Fifteen (15) years of relevant professional experience:

- ✔ Experience as multi-disciplinary team leader for Environmental and Social Impact Assessments;
- ✔ Proven experience in biodiversity conservation and landuse planning;
- ✔ Excellent knowledge of methodologies necessary of Environmental and Social Impact Assessment in the context of community infrastructure;
- ✔ Sound knowledge of environmental mitigation and monitoring plans
- ✔ Sound knowledge of legislation and donor policies that will affect the environmental management of the project;
- ✔ Experience in disaster-affected contexts is an asset;
- ✔ Fluency in English.

Expert in Social Science and Socio-economics

PhD or Master's Degree in social sciences or equivalent; ten (10) years of professional experience:

- ✔ Excellent analytical skills in analysis of social impacts in community infrastructure or related projects
- ✔ Experience in data collection and analysis, from secondary sources such as governmental statistics, sampling, etc.;

- ✔ Sound knowledge of legislation and donor policies that will affect social management of the project;
- ✔ Experience in Gender Equality and Women's Empowerment;
- ✔ Fluency in English.

Expert in Terrestrial Ecology or Biological Sciences

PhD or Master's Degree in Environmental Science, Biological Science, Ecology or equivalent; ten

- ✔ (10) years of professional experience:
- ✔ Proven experience in biodiversity conservation, management of natural resources, and/or management of protected areas;
- ✔ Experience on the assessment of terrestrial and aquatic ecosystems;
- ✔ Experience on the evaluation of environmental impacts of development projects.
- ✔ Sound knowledge of the environmental issues in community infrastructure-related issues;
- ✔ Knowledge of the procedures for EIA on protected or classified areas;
- ✔ Fluency in English

ANNEX 10
RESETTLEMENT ACTION PLAN OUTLINE (RAP)

The RAP report will contain the below listed contents

Introduction

- It briefly describes the project.
- Lists project components including associated facilities (if any).
- Describes project components requiring land acquisition and resettlement; give overall estimates of land acquisition and resettlement.

Minimizing Resettlement

- Describes efforts made to minimize displacement.
- Describes the results of these efforts.
- Describes mechanisms used to minimize displacement during implementation.

Census and Socio-economic Surveys

- Provides the results of the census, assets inventories, natural resource assessments, and socioeconomic surveys.
- Identifies all categories of impacts and people affected.
- Summarizes consultations on the results of the various surveys with affected people.
- Describes need for updates to census, assets inventories, resource assessments, and socio economic surveys, if necessary, as part of RAP monitoring and evaluation.

Legal Framework

- Describes all relevant local laws and customs that apply to resettlement.
- Identifies gaps between local laws and World Bank Group policies, and describe project-specific mechanisms to address conflicts.
- Describes entitlement policies for each category of impact and specify that resettlement implementation will be based on specific provisions of agreed RAP.
- Describes method of valuation used for affected structures, land, trees, and other assets.
- Prepares entitlement matrix.

Resettlement Sites

- Describes the specific process of involving affected populations in identifying potential housing sites, assessing advantages and disadvantages, and selecting sites.
- Describes the feasibility studies conducted to determine the suitability of the proposed sites, including natural resource assessments (soils and land use capability, vegetation and livestock carrying capacity, water resource surveys) and environmental and social impact assessments of the sites.
- Demonstrates that the land quality and area are adequate for allocation to all of the people eligible for allocation of agricultural land.
- Provides data on land quality and capability, productive potential, and quantity.
- Give calculations relating to site requirements and availability.
- Describes mechanisms for: 1) procuring, 2) developing and 3) allotting resettlement sites, including the awarding of title or use rights to allotted lands.
- Provides detailed description of the arrangements for site development for agriculture, including funding of development costs.
- Have the host communities been consulted about the RAP? Have they participated in the identification of likely impacts on their communities, appropriate mitigation measures, and preparation of the RAP?
- Do the host communities have a share of the resettlement benefits?

Income Restoration

- Describes if there are compensation entitlements sufficient to restore income streams for each category of impact?
- Describes additional economic rehabilitation measures are necessary?
- Briefly spell out the restoration strategies for each category of impact and describe their institutional, financial, and technical aspects.
- Describes the process of consultation with affected populations and their participation in finalizing strategies for income restoration.
- Explains if income restoration requires change in livelihoods, development of alternative farmlands or some other activities that require a substantial amount of training, time for preparation, and implementation?
- Describes how the risks of impoverishment are to be addressed?
- Describes the main institutional and other risks for the smooth implementation of the resettlement programs?
- Describes the process for monitoring the effectiveness of the income restoration measures.
- Describes any social or community development programs currently operating in or around the project area.
- If programs exist, do they meet the development priorities of their target communities? Are there opportunities for the project proponent to support new program or expand existing programs to meet the development priorities of communities in the project area?

Institutional Arrangements

- Describes the institution(s) responsible for delivery of each item/activity in the entitlement policy
- Describes the Implementation of income restoration programs; and coordination of the activities associated with and described in the resettlement action plan.
- States how coordination issues will be addressed in cases where resettlement is spread over a number of jurisdictions or where resettlement will be implemented in stages over a long period of time.
- Identifies the agency that will coordinate all implementing agencies. Does it have the necessary mandate and resources?
- Describes the external (non-project) institutions involved in the process of income restoration (land development, land allocation, credit, and training) and the mechanisms to ensure adequate performance of these institutions.
- Discusses institutional capacity for and commitment to resettlement.
- Describes mechanisms for ensuring independent monitoring, evaluation, and financial audit of the RAP and for ensuring that corrective measures are carried out in a timely manner.

Implementation Schedule

- Lists the chronological steps in implementation of the RAP, including identification of agencies responsible for each activity and with a brief explanation of each activity.
- Prepares a month-by-month implementation schedule of activities to be undertaken as part of resettlement implementation.
- Describes the linkage between resettlement implementation and initiation of civil works for each of the project components.

Participation and Consultation

- Describes the various stakeholders.
- Describes the process of promoting consultation/participation of affected populations and stakeholders in resettlement preparation and planning.
- Describes the process of involving affected populations and other stakeholders in implementation and monitoring.
- Describes the plan for disseminating RAP information to affected populations and stakeholders, including information about compensation for lost assets, eligibility for compensation, resettlement assistance, and grievance redress.

Grievance Redress

- Describes the step-by-step process for registering and addressing grievances and provide specific details regarding a cost-free process for registering complaints, response time, and communication methods.
- Describes the mechanism for appeal.
- Describes the provisions for approaching civil courts if other options fail.

Monitoring and Evaluation

- Describes the internal/performance monitoring process.
- Defines key monitoring indicators derived from baseline survey. Provide a list of monitoring indicators that will be used for internal monitoring.
- Describes institutional (including financial) arrangements.
- Describes frequency of reporting and content for internal monitoring.
- Describes process for integrating feedback from internal monitoring into implementation.
- Defines methodology for external monitoring.
- Defines key indicators for external monitoring.
- Describes frequency of reporting and content for external monitoring.
- Describes process for integrating feedback from external monitoring into implementation.
- Describes arrangements for final external evaluation.

Costs and Budgets

- Provides a clear statement of financial responsibility and authority.
- Lists the sources of funds for resettlement and describe the flow of funds.
- Ensures that the budget for resettlement is sufficient and included in the overall project budget.
- Identifies resettlement costs, if any, to be funded by the government and the mechanisms that will be established to ensure coordination of disbursements with the RAP and the project schedule.
- Prepares an estimated budget, by cost and by item, for all resettlement costs including planning and implementation, management and administration, monitoring and evaluation, and contingencies.
- Describes the specific mechanisms to adjust cost estimates and compensation payments for inflation and currency fluctuations.
- Describes the provisions to account for physical and price contingencies.
- Describes the financial arrangements for external monitoring and evaluation including the process for awarding and maintenance of contracts for the entire duration of resettlement.

Annexes

- Copies of census and survey instruments, interview formats, and any other research tools.
- Information on all public consultation including announcements and schedules of public meetings,
- Meeting minutes, and lists of attendees.

Required Personnel; Sociologist, Land Valuer **and** Land Surveyor

ANNEX 11

DETAILED ESHS TO INCLUDE IN THE SPECIFICATIONS OF TENDER DOCUMENTS AND SAMPLE ENVIRONMENT AND SOCIAL MANAGEMENT PLAN (ESMP)

1. Environmental policy

- Declaration of ESHS policy signed by the managing director of the Contractor and clearly defining the commitment of the Contractor in terms of (i) ESHS management for its construction sites and (ii) compliance with the ESHS Specifications of the Contract.

2. Worksite-ESMP

- Target and content of the contractors Environmental and Social Management Plan (C-ESMP)
- Preparation and updating schedule
- Quality assurance and validation

3. ESHS resources

- Human resources:
  - ESHS Manager
  - ESHS Supervisors
  - Person in charge of relations with stakeholders
  - Medical personnel
- Logistics & communications:
  - ESHS vehicles
  - In situ noise, air and water measuring equipment
- Reporting:
  - Weekly inspections
  - Monthly
  - Accident / Incident

4. ESHS regulations

- Definition of standards for the applicable national ESHS regulations applicable to the execution of works:
  - Discharge standards
  - Minimum wage
  - Day and/or night traffic restrictions
- Definition of ESHS standards for the industry applied

5. ESHS operational inspection resources

- Site tracking procedure:
  - Frequency
  - Personnel
  - Assessment criteria
- Non-conformity handling and detection procedure:
  - Distribution information
  - Notification depending on the level of importance allocated to non-conformities
  - Tracking of the closing of the non-conformities
- Management of data on tracking and non-conformities:
  - Archiving
  - Use as a performance indicator

7.	**Health and Safety Plan**	Identification and characterization of health and safety risks, including the exposure of personnel to chemicals, ➢ Description of working methods to minimize hazards and control risks ➢ List of the types of work for which a work permit is required. ➢ Personal protection equipment. ➢ Evacuation procedure for medical emergencies. ➢ Description of the internal organisation and action to be taken in the event of an accident or incident.
8.	**Training plan**	➢ Basic training for non-qualified staff ➢ Health & safety training
9.	**Labor Conditions**	➢ Description of Human Resource Policy for construction works of direct and indirect workers
10.	**Local recruitment**	➢ Local labor requirements: − Job descriptions and the levels of qualifications required − Recruitment procedure and deployment schedule − Initial training to be provided by the Contractor for each job description ➢ Location and management of the local recruitment office(s)
11.	**Traffic Management Plan**	➢ Deployment (Project Area & schedule) and maintenance sites for each vehicle and machine ➢ Mapping of itineraries, travel times, and areas where speeds are limited ➢ Dust suppression: − Mapping or road sections where dust reduction initiatives apply − Water points identified or to be created for refueling tanker trucks − Capacity of the tanker trucks used and calculation of the number of trucks required − Width of the track to determine if one watering run or equivalent is adequate (narrow track) or if two runs are required (wide track) − Number of watering or equivalent operations proposed per day depending on the climate
12.	**Effluents**	➢ Characterization of effluents discharged to the receiving environment ➢ Facilities for the treatment or pre-treatment of effluents ➢ Measures for reducing the sediment content of rainwater runoff ➢ Measures for monitoring the efficiency and performance of facilities for reducing sediment content of rainwater runoff ➢ Resources and methods for monitoring effluent and rainwater runoff quality
13.	**Noise and vibrations**	➢ Estimation of the frequencies, duration, days of the week and noise levels per Project Area
14.	**Waste**	➢ Inventory of waste per Project Area and per period ➢ Collection, intermediate storage, handling and treatment methods for ordinary or inert waste ➢ Storage and handling methods for hazardous waste

15.	**Clearing and re-vegetation**	➢ Methods & schedule for clearing vegetation ➢ Methods, species and schedule for the re-vegetation of Project Areas disturbed by the Works
16.	**Prevention of erosion**	➢ Location of zones suffering from erosion ➢ Methods and schedule for the implementation of anti-erosive actions, including topsoil storage
18.	**Documentation on the Project Area condition**	➢ List and cover of viewpoints ➢ Imaging method ???? ➢ Archiving photographs
19.	**Rehabilitation**	➢ Method and schedule for Project Area rehabilitation

ANNEX 11
SAMPLE ENVIRONMENTAL POLICY

Xxxxx Company is committed to minimizing significant environmental impacts of our activities, processes and products. T**he following Environmental Policy Statement:**

- We are committed to comply with all the relevant Nigeria National legislations and regulations related to environment.
- Continual improvement in environmental performance incorporating sustainable measurement and monitoring mechanisms;
- We will ensure the responsible use of natural resources, especially energy, raw materials and water in an efficient manner
- We will implement construction mitigation measures, monitoring and audit programs as specified.
- We will minimize the release of any pollutant or effluent that may cause environmental damage to the air, water or soil.
- We will control pollution through adoption of innovative cleaner production technologies;
- We will use environmentally safe and sustainable energy sources to meet our needs, and invest in improved energy efficient technologies where available. Energy efficient management practices will be developed.
- We will minimize the environmental, health and safety risks to the employees and communities in which we operate by employing safe technologies and operating procedures, training the employees and by being constantly prepared for emergencies.
- We will commit management resources to implement this environmental policy; all employees will be made aware of their individual responsibilities for acting in accordance with the Program Environmental Policy.
- We will seek to be good neighbors, improve the aesthetic appearance of the site(s), develop a system for handling complaints, resolving and make great effort to provide an efficient and friendly channel of communication.
- We will conduct annual self-evaluation of our environmental performance and compliance with requirements.
- We will work towards the timely creation of independent annual environment audit procedures to which we will adhere to.

MANAGING DIRECTOR: ……
SIGNATURE: …….
STAMP: ……

ANNEX 12
SAMPLE HEALTH AND SAFETY POLICY

Xxxxxx Company recognizes and adopts the Occupational Safety Health provisions at work place, all other applicable legislation and is therefore committed to ensuring the Health, Safety and Welfare of all employees and any others who could be affected by acts or omissions of **Xxxxxx Company**. Furthermore, **Xxxxxx Company** is committed to continuous improvement in respect of Health and Safety Performance and supporting Management Plan.

We will, so far as is reasonably practicable:

i. Provide adequate resources to maintain health and safety within the sub-project sites.
ii. Provide and maintain systems of work which are safe and without risk to workers and school communityhealth.
iii. Establish arrangements for the use, handling, storage and transportation of articles and substances provided for use at work, which are safe and without risks to health.
iv. Provide employees with such information, instruction, training and supervision as is necessary to ensure their safety and health at work and that of others who may be affected by their activities.
v. Ensure that all machinery, plant and equipment are maintained in an efficient and safe working condition.
vi. Make adequate provision and arrangements for welfare facilities (sanitation facilities, water) at work.
vii. Keep the workplace safe and ensure that all access and egress points are safe and without risk.
viii. Monitor health and safety performance to maintain agreed standards.
ix. Maintain effective communication on the health and safety policy to employees and their representatives.
x. Provide information and assistance to public on community health and safety issues arising from our operations
xi. Review our health and safety objectives regularly for continual improvement

The duties of employees are to:

i. Take reasonable care of their own health and safety, and that of others who may be affected by their acts or omissions at work.
ii. Not interfere with, misuse or willfully damage anything provided in the company.
iii. Comply with the company's health and safety policy

MANAGING DIRECTOR: ……
SIGNATURE: ……. .
STAMP: …….

Operating Procedures

The GRM is implemented as per the standard operational procedures summarized below in terms of detailed list allowable practices (DO's) and disallowed practices (DON'Ts). This will be provided to all EA_RDIP PIU and beneficiaries. Where need be, the SOPs will be translated into the respective VMGs languages. The SoPs are presented below.

GRM Standard Operating Procedures

Dos	Stage	Don't
• Build capacity for staff involved in the complaints handling process; • Establish multiple channels for communication and reporting; • Use user friendly channel; • Assign responsibility for uptake and response; • Create awareness on the GRM; • Encourage communication/ feedback from the public; • Spread uptake points across the project management levels and project operational areas • Acknowledge receipt for each complaint made • Encourage anonymous complaints	**Uptake**	• Create unnecessary restrictions, obstruct grievance process • Create scary conditions/environment for potential complainant • Use unfriendly language, tone, expression, cues, etc. • Forget to take measures to ensure that vulnerable groups are able to access GRM • Create barriers to complaining by making uptake processes time consuming or complicated • Charge complainants • Make judgements prematurely • Unduly focus on the identity and profiling of the complainant at the expense of issue submitted
• Indicate who is responsible for handling the different types of complaints, including reliable contacts and location; • Establish clear procedures for the grievance redress process • Assign each complaint a unique ID reference number	**Sort and Process**	• Develop a GRM that does not differentiate between different types of complaints • Leave any ambiguity about how complaints are supposed to be routed
• Inform users about steps in the complaints handling process • Stick to agreed schedules/guidelines for responding to users • Use simple and clear language	**acknowledge and follow-up**	• Divulge complainant's identity and profile to others • Treat GRM users as if their complaints is an inconvenience • Belittle, dismiss, and ignore complaints
• Objectively evaluate the complaints merits on the basis of facts • Ensure that investigators are neutral • Take action that is proportional to the comment or complaint • Strategically plan for the investigation	**Verify, Investigate and act**	• Appoint investigators that are biased • Breach confidentiality • Expect complainants to prove that they are right • Forget to update complainant on the status of their complain
• Build capacity for GRM - M&E • Indicate importance of grievances Establish a tracking system to record, classify, and assess grievances • Analyze grievance redress data and make improvements	**Monitor and evaluate**	• Miss the opportunity to integrate the GRM into the Project's Management Information System • View the resolution of complaints as an end in itself

• Provide timely feedback • Contact users to explain how their grievances will be resolved and how/where they can appeal (if need be)	**Provide feedback**	• Neglect to follow up with users • Keep complaint results as private matter

Grievance Mechanism Forms

GRM_GRIEVANCE HANDLING REGISTER TEMPLATE

No.	Date Received	Name of Complainant/Rep	Complaint Issue	Complaint Channel	Date Acknowledged	Action Taken	Complaint Status

GRM_ACCESS TO INFORMATION REGISTER TEMPLATE

No.	Date Received	Name of Requester	Type of information Requested	Requisition Channel	Request Status

GRM_COMPLAINT INVESTIGATION TEMPLATE

No.	Nature of Complaint	Officer/Department complained Against	Cause of Complaint	Corrective/Preventive Action Taken

GRM_GRIEVANCE LODGING FORM

Ref. No. …….
SECTION A: Personal Information (*Provision of information in this section is voluntary)*

Complainant's Name: ……
ID Number: ……
Postal Address: ……
Mobile No. ……
Email (where applicable) ……
Village/Ward/Sub-County: ……
Age: ……

SECTION B: Complaint Lodge

ITEM	DETAILS
Which public official/office are you complaining about?	
Name/Department/Sub-county/Ward/Agency	
Have you reported this matter to any other county official/office? YES/NO	
If YES, which one?	
Has this matter been the subject of court proceedings? YES/NO	
If NO, please give a brief summary of your complaint and attach all supporting documents (Indicate all the particulars of what happened, where it happened, when it happened and by whom)	
Action Taken	

_____ _____

_____

Place of Submission Signature of Complainant Date

GRM. ACCESS TO INFORMATION REQUEST FORM

Ref. No. …….

SECTION A: PERSONAL DETAILS

Name:…….. (Dr/Mr/Mrs /Ms)
ID Number:……..
Postal Address: ……
Mobile Phone No. ……
Email (where applicable): ……
Villag: ……
Age: ……
Gender: Male/Female / Other (specify): …….

SECTION B: DESCRIPTION OF INFORMATION REQUESTED

ITEM	DESCRIPTION
I would like to *(tick all that apply)*	*( )* Inspect the record *( )* Listen to the record *( )* Have a copy of the record availed to me
Delivery Method *(tick where applicable)*	*( )* Collection in person *( )* By email *( )* By mail
Does the information requested concern the life or liberty of any person?	*( )* No *( )* Yes *(explain)*
Is the request being made on behalf of another person or group of persons?	*( )* s *( )* Yes *(explain)* *( )* No *( )* Yes *(explain)*
Action taken	

Official Use Only

_____	_____	_____
Place of Submission	Signature of Complainant	Date

GRIEVANCE MANAGEMENT AND ACCESS TO INFORMATION INFRASTRUCTURE

No.	INDICATORS	DETAILS OF IMPLEMENTATION
1	Physical location: Provide the contact and physical address	Include the details of all GRM offices.
2	**a.** Provide names, contact details(Official telephone & e-mail address) and designation of officers in-charge of Grievance handling **b.** Provide names, contact details and designation of the Information access officers	Include details for all the GRM offices.
3	Communication channels: a. Complaint desk email(s) b. Dedicated telephone line(s) c. Official email address of the county d. County website (Links/portals to access information and grievance handling information e. Official e-mail address of the County Secretary	
4	Updated service delivery charters that include GRM	Include the service charters for all the departments and agencies
5	**a.** Complaints Register **b.** Access To Information Register	Include the registers of all GRM offices but for internal purposes only
6	GRM Policy and Procedures	
7	Legislation, Policy and Procedures	
8	a. Grievance Handling Committee members: appointment letters & minutes of meetings held b. Designation letters for all GRM & Information officers	

GRM_ M&E TOOL

Name of County: _____

OUTCOME: Services rendered by county government

INDICATOR: Percentage change in the complaints resolved in a year

No. of complaints received	Mode of compl aint lodge	No. of complaints pending	No. of complaints resolved	Duration taken to resolve complaint	Recommendation for system improvement

_____ _____ _____

Compiled by Signature Date

_____ _____ _____

Approved by Signature Date

GRM _ SUMMARY COMPLAINTS' REPORTING FORM

Name of County: _____

Reporting Period: Monthly/Quarterly/Annually _____

OUTCOME: Services rendered by county government improved ***INDICATOR: Percentage change in the complaints resolved in a year (to be reported once per year)***								
Sector	Administrative Unit	No. of Complaints Received	Resolved complaints		Pending complaints		Modes of complaint lodge	Average duration taken to resolve complaint
			No.	%	No.	%		

_____ _____ _____

Compiled by Signature Date

_____ _____ _____

Approved by Signature Date

[1] It is particularly important to understand whether project impacts may disproportionately fall on disadvantaged or vulnerable individuals or groups, who often do not have a voice to express their concerns or understand the impacts of a project and to ensure that awareness raising and stakeholder engagement with disadvantaged or vulnerable individuals or groups on infectious diseases and medical treatments in particular, be adapted to take into account such groups or individuals particular sensitivities, concerns and cultural sensitivities and to ensure a full understanding of project activities and benefits. The vulnerability may stem from person's origin, gender, age, health condition, economic deficiency and financial insecurity, disadvantaged status in the community (e.g. minorities or fringe groups), dependence on other individuals or natural resources, etc. Engagement with the vulnerable groups and individuals often requires the application of specific measures and assistance aimed at the facilitation of their participation in the project-related decision making so that their awareness of and input to the overall process are commensurate to those of the other stakeholders.