

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK



FEDERAL MINISTRY OF POWER



Nigeria Distribution Sector Recovery Program (DISREP)

Environmental and Social Management
Framework (ESMF)

Final Report

January, 2021

DISREP

Nigeria Distribution
Sector Recovery
Program

EXECUTIVE SUMMARY

ES 1: Introduction - Project Background

The World Bank has proposed a large integrated programmatic engagement to support the FGN's comprehensive reform effort starting with financing, through a PSRP Programs for Results (PforR). The programmatic engagement will involve a series of integrated operations under two streams – i) Power Sector Recovery (PSR) PforRs and ii) Distribution PforRs, to holistically address the sector issues.

Distribution PforRs - Specifically, to address power sector recovery for the distribution sub-sector, the World Bank has developed the Distribution Sector Recovery Program (DISREP). The proposed DISREP involves financing and supporting the key elements of the FGN's PSRP program of activities through the on-lending by the Bureau of Public Enterprises (BPE) to a selected number of majority private DISCOs. PforR financing is identified as the most relevant instrument for the proposed DISREP. The financing will be for implementation of a wide variety of DISCO-led activities and expenditures across the distribution sub-sector. The DISREP will be combining Program for Results (PforR), Investment Project Finance (IPF) and Technical Assistance (TA) components targeted at supporting improvement of DISCOs in their operational performance, service delivery and governance.

This Environmental and Social Management Framework (ESMF) addresses the IPF and TA components of the Program.

ES 2: Need for the project

DISREP is targeted at increasing access to electricity across Nigeria through new connections and investments that bridge the supply-demand gap. Also, investments in infrastructure rehabilitation and customer metering will improve the quality and quantity of electricity supply to those already connected as well as improve customer experience through improvements in billing accuracy for currently unmetered customers. Through the provision of new and improved connections to the power network, DISREP will contribute to reducing the current reliance on alternative, carbon-intensive energy sources such as diesel/petrol-based generators, kerosene, or firewood, which are expensive and are associated with significant health and environmental impacts, including climate impacts. The DISREP boundary will be limited to the distribution sub-sector elements of the PSRP and only those investments and interventions detailed in the NERC approved PIPs.

ES 3: Project locations

The locations where the IPF component of DISREP will support, are the eleven (11) distribution zones, overseen by the 11 privately owned distribution companies in Nigeria. The distribution companies are responsible for electricity supply in Nigeria; where their services span across the entire nation. They include the following:

S/N	Registered Name with the Corporate Affairs Commission (CAC)	Common Name	Distribution Zone
1.	Abuja Electricity Distribution Company	Abuja DISCO	Abuja Distribution Zone
2.	Benin Electricity Distribution Company	Benin DISCO	Benin Distribution Zone
3.	Enugu Electricity Distribution Company	Enugu DISCO	Enugu Distribution Zone
4.	Eko Electricity Distribution Company	Eko DISCO	Eko Distribution Zone
5.	Ibadan Electricity Distribution Company	Ibadan DISCO	Ibadan Distribution Zone
6.	Ikeja Electricity Distribution Company	Ikeja DISCO	Ikeja Distribution Zone
7.	Jos Electricity Distribution Company	Jos DISCO	Jos Distribution Zone
8.	Kaduna Electricity Distribution Company	Kaduna DISCO	Kaduna Distribution Zone
9.	Kano Electricity Distribution Company	Kano DISCO	Kano Distribution Zone
10.	Port Harcourt Electricity Distribution Company	Port Harcourt DISCO	Port Harcourt Distribution Zone
11.	Yola Electricity Distribution Company	Yola DISCO	Yola Distribution Zone

ES 4: Project Description

DISREP is a hybrid operation, combining **Program for Results (PforR), Investment Project Finance (IPF) and Technical Assistance (TA) components** targeted at supporting the improvement of DISCOs in their operational performance, service delivery and governance. While the PforR component is expressively described in the PAD, and will be implemented by BPE, the IPF and TA components for which this ESMF addresses, are elaborately described in Chapter 3 of this ESMF report. The Transmission Company of Nigeria (TCN) will be the Implementing Agency for the IPF component of the DISREP. TCN has extensive in-house capacity and experience in undertaking procurement using World Bank funds. TCN will receive World Bank funds and undertake all procurement associated with the IPF component of the program as well as the TA component. The IPF component of the Program will involve the bulk procurement and distribution of meters to DISCOs warehouses and the procurement of a DAP for NERC. The proposed operation would involve two IPF components for: 1) the NERC DAP, and 2) the bulk procurement of meters for DISCOs.

IPF Component 1 (IPF1): NERC Data Aggregation Platform. To support NERC in addressing problems of inadequate data availability, inconsistent data quality, and irregular reporting of the sector operators, that impact their ability to monitor sector performance.

IPF Component 2 (IPF2): Bulk procurement of customer/retail meters for DISCOs to support DISCOs' implementation of metering as part of their PIPs.

Technical Assistance (TA) Component: The proposed operation would involve three TA components for: 1) PforR implementation support, 2) capacity building for DISCOs, and 3) the design of a social protection fund.

ES 5: Rationale for the ESMF

The ESMF is used when a project consists of a program and/or series of subprojects, where the entire range of environmental and social safeguard issues involved are not fully known. It involves the use of management plans that spell out mitigation and monitoring actions and responsibilities necessary to ensure safe and sound environmental and social sustainability of the project, during its implementation course. The main justification for the ESMF is embedded on the basis that the World Bank Environmental and Social Policy for IPF sets out the requirements which the Bank must follow regarding projects it supports through IPF. The ESMF serves as a statement of the policy, principles, institutional arrangements and procedures that high-level decision makers and stakeholders at the project management level will follow in implementing each sub-project so as to effectively and satisfactorily address environmental and social issues.

Objectives/Scope of the ESMF – The ESMF will provide the Transmission Company of Nigeria (TCN) and its implementing partners with an environmental and social screening process that will enable streamlined identification, assessment and mitigation of potential environmental and social risks and impacts associated with the DISREP IPF/TA components. The ESMF will be useful at all stages of the project, such as in the identification and screening of proposed activities (i) bulk procurement and transportation to DISCO warehouses; ii) procurement and installation of the DAP) , including their implementation and operation stages as well as to guide and inform decision makers on how the applicability of the Environmental and Social Standard (ESSs) are established during the implementation of sub-projects.

ESMF Methodology - This ESMF was prepared in accordance with 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

ES 6: Environmental and Social Baseline

Environmental Baseline: 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 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.

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. 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.

Fauna: 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 maybe 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 involves various rivers that merge into the Yobe River, which then flows along the border with Niger and empties into Lake Chad.

Social Baseline: Nigeria has the highest population in Africa. In 2019, its population amounts to over 200 million people and was estimated to constantly increase in the next decades. By 2050, this figure could double and reach 400 million people. In fact, in the last 50 years, Nigeria's population grew at a very high rate. The largest city of Nigeria is Lagos, which is also the largest city in all of Sub-Saharan Africa. Abuja, the Capital City of Nigeria, counted about half a million inhabitants in 2020, ranking 15th among the largest cities in Nigeria

Energy Consumption- 80% of the total electricity demand and consumption are from residential and commercial sectors. The rest is covered by the Industrial, Street Lighting and Special Tariff sectors. The share of large consumers, such as industry or large commercial areas, only represented 1% of the total electricity consumption. Electricity distribution rates vary substantially amongst the states in Nigeria. For instance, according to the projections of the Japanese International Cooperation Agency (JICA), Taraba State had the lowest electrification rate in 2010 with 21% and Lagos the highest with 96%. Out of the 13 states that registered the lowest electrification rates, 10 were located in the North-West and North-East. The 8 states with the highest electrification rates were located in the South-West or South-South.

ES 7: Public Consultations and Concerns

Stakeholder Engagement was held on the 5th and 6th of October, 2020. The consultations fulfil the requirement of ESS 10: Stakeholder Engagement and Information Disclosure. The need was to engage with critical players such as the DISCOs, NERC and TCN. A stand-alone Stakeholder Engagement Plan (SEP) has been prepared for the IPF and TA components of DISREP. A detailed summary of the consultations is provided in Chapter 9 of this report

ES 8: Risk Assessment and Impacts of the project

The ESMF describes a risk assessment methodology for identifying environmental and social risks and impacts. Some of the potential adverse environmental and social risks and impacts associated with the bulk supply and distribution of meters to DISCO warehouses; and the procurement of the DAP for NERC are identified as follows:

IPF 1: Procurement and Installation of Data Aggregation Platform

- Procurement of DAP
- DAP receiving, collection and temporary storage at shipping yards or airports
- DAP sorting and inventory
- Transportation of DAP to NERC
- Unpacking at NERC headquarters

- Installation of DAP at NERC
- Recording of data

Potential impacts include:

- OHS risks: Workers could suffer, falls and traumatic injuries
- Noise impacts are envisaged during the movement of meters and DAP equipment and materials (if the DAP will include the transportation of DAP hardware and materials) to warehouses
- Risk of Musculoskeletal Disorders (MSDs)
- Waste Generation: Unpacking of meters at DISCO headquarters or warehouses may result in generation of solid wastes from packaging materials and casings; likewise, for the DAP at NERC (if the DAP will include DAP hardware and materials). In the case of the DAP at NERC, the impacts will be minimal. The impacts qualification for this aspect only applies to the bulk supply of meters.
- Violence and Theft: In holding areas where equipment is kept, unscrupulous attitudes and behaviour could be displayed as forms of physical harassment, theft and thuggery in holding areas could occur if unauthorized or authorized personnel seek to tamper with commodities. Fist-fights are likely and other violent acts.

IPF 2: Bulk Procurement and Supply of Meters

- Procurement of Meters
- Meters receiving, collection and temporary storage at shipping yards or airports
- Meters sorting and inventory
- Transport of Meters to DISCO warehouses
- Unpacking and Storage of meters at DISCO headquarters or warehouses

Potential impacts include:

- Air Pollution: The impacts on air may arise only from fugitive dusts and carbon emissions from exhaust fumes as meters are transported to DISCOs and in the case of NERC, if the DAP will include the transportation of DAP hardware and materials
- Soil Pollution: Leakages from (oil, vehicle fuel, hydraulic fluids) may occur when vehicles are transporting meters and DAP (if the DAP will include the transportation of DAP hardware and materials) from temporary holding or storage areas to DISCOs and NERC respectively. If this occurs in areas or roads covered by earth, the possibility of oil seeping-through into the soil may occur.
- Traffic increases and travel delay: Traffic impacts may occur when heavy duty vehicles are conveying meters and DAP (if the DAP will include the transportation of DAP hardware and materials) to and from the respective DISCOs and NERC. This is likely to occur along major inter-state highways, community/town/city routes needed to be plied during supply/delivery
- Grievances, Complaints, Disruption of activities and Vandalism: Grievances from PAPs within the program area of influence. This could be with regards to traffic delay during transportation of commodities, temporary or prolonged power outages during meter supply; or poor labour and working conditions
- Labour Influx: Conflicts of interests may arise among and between workforce
- GBV/SH/SEA: Women and girls may be exposed to sexual harassment, exploitation, abuse and violence as a result of interactions with workers and possibly followers. Illicit Behaviours: Increased risk of illicit behaviour and crime (such as theft and substance abuse) attributable to labour influx. Additionally, there may be increase in unprotected sexual intercourse due to labour influx
- Community Health and Safety: Considering that supply and transportation of meters especially to DISCO warehouses will involve cross-country movement, through densely and non-densely populated areas etc, Community Health and Safety risks are very likely

ES 9: Environmental and Social Mitigation Measures

Environmental and Social Mitigation Measures are described in Chapter 5 of this ESMF report. The mitigation measures are SMART-simple, measurable, achievable and can be accomplished in a timely manner. They are designed based on the Mitigation Hierarchy described in the World Bank Environmental and Social Framework (ESF) and are assigned responsibilities for mitigation implementation and monitoring.

ES 10: Institutional Arrangements

S/N	Institution	ESMF Roles and Responsibilities
1.	FMEnv	The FMEnv will assist TCN (Through its WB-TCN PMU) in the screening and approval of subprojects/activities. 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 social assessment and work in collaboration with the TCN PMU and World Bank in disclosing the environmental and social assessment instruments in-country. The FMEnv will also aid the TCN PMU in coordinating with the FMEnv's Ministries Departments and Agencies (MDAs) on monitoring responsibilities as regards this ESMF and other program instruments.
2.	FMoP	The FMoP will be responsible for the IPF component of DISREP through TCN, and will indirectly play an oversight and supervisory role as the apex ministry by overseeing TCN's roles and responsibilities under DISREP, including implementation of the IPF component specifically, in disclosure of instruments and other requisite clearances or functions.
4.	TCN	TCN will be the implementing Agency for the IPF component and will operate its Environmental and Social Standards' responsibilities for DISREP through its WB-TCN PMU. At a national level, the disclosure of the ESMF will be undertaken by TCN and issues concerning the implementation of the IPF and TA components in whole; and environmental and social management aspects of the IPF activities specifically, will be communicated by TCN to the DISREP Technical Committee, chaired by the FMoP. Additionally, TCN will be responsible for the bulk procurement of meters for supply to the DISCOs warehouses; and will provide and coordinate ESS oversight to DISCOs through its WB-TCN PMU.
5.	TCN PMU	The TCN PMU is an established Unit, experienced in the implementation of Bank funded projects and programs in the power/energy sector. The TCN PMU consists of Engineers, Project Engineers, Procurement Specialists, Environmental and Social Safeguards Specialist, Monitoring and Evaluation Specialists etc. who will provide expert technical guidance on the matters concerning the IPF component and its sub-projects. Specifically, the Units Safeguards Specialists will provide Technical Assistance on the aspect of implementing the provisions of this ESMF at the level of the DISCOs; mainly in the screening and scoping of sub-projects and in the selection of appropriate environmental and social assessment instruments. It will collaborate with SMEnvs and the FMEnv accordingly, and liaise directly with the Bank on issues concerning ESF compliance and ESSs applicability relevance on IPF activities. TCN will be directly responsible for disclosure of all environmental and social assessment instruments prepared in fulfilment of IPF requirements.
6.	Chemical Resettlement and Environment Division of the HSE Dept.	The unit will provide technical support to the TCN-PMU as when necessary or required. Essentially, it will also provide guidance and advisory in the management of e-wastes.
7.	DISCOs HSE Departments	The DISCOs will ensure the proper and safe storage of meters in their respective warehouses, as well as the management of wastes generated from removed packaging. Specifically, as concerns the implementation of the ESMF and execution of environmental and social management responsibilities at the level of their DISCOs; the Health Safety and Environment Departments of each DISCO headquarters will nominate a senior manager/officer (of the HSE Department) to oversee and communicate environmental and social matters directly to the Safeguards Specialists in the TCN PMU. The Manager/Officer will work with Independent Consultants during the environmental and social assessment undertaken for their DISCO/distribution zone.
	Business Unit Managers/Environmental and Social Desk Officers	For the IPF component, the Business Unit Managers or nominated officers from each Business Unit will serve as Environmental and Social Desk Officers. These will liaise directly with the Manager (HSE Department at the DISCO headquarters) on environmental and social matters at the Business Unit Level.
8.	NERC	NERC will implement the installation of the DAP (Data Centre or Cloud-based system). Specifically, as concerns the implementation of the ESMF and execution of environmental and social management responsibilities at the level of NERC; the Health and Safety Unit of the Engineering, Performance and Monitoring Department at NERC offices will nominate a senior manager/officer to oversee and communicate environmental and social matters directly to the Safeguards Specialists in the WB-TCN PMU. The Manager/Officer will work with Independent Consultants during the environmental and social assessment undertaken for NERC.
9.	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 of the implementation of mitigation measures contained in the Contract Agreement of Contractors and in the implementation of the C-ESMP.
10.	Independent Consultants	Independent Consultant(s) will be procured by the TCN PMU to undertake required environmental and social assessment(s); and likewise prepare the requisite reports. They will liaise with the Safeguards Specialists at the TCN PMU, HSE Managers at the DISCOs and Business Unit Managers/Environmental and Social Desk Officers.

S/N	Institution	ESMF Roles and Responsibilities
11.	SMEEnv, SWMAs and SEPA	Will play a vital role in environmental and social assessment and waste management at the States and DISCOs' coverage area-levels respectively. Their responsibilities will surface around, guidelines, approvals and permits.
12.	CSOs	CSOs will assist the TCN PMU and DISCOs in strategizing and developing practicable and sustainable community driven approaches for bulk metering operations and activities, specifically. At a national level, the TCN PMU and DISCO Chief Executives could suggest participatory mechanisms that allow CSOs drive proactive electricity consumer sensitization and awareness programs to aid in screening and scoping (from a social perspective) and in mitigating the social impacts associated with proposed sub-projects.
13.	Other Interested Parties	Depending how implementation progresses in the course of the implementation of the IPF component; other interested parties may be identified, and may be essential in the provision of guidance, technical, regulatory or implementation functions associated with this ESMF and other levels of environmental and social management and monitoring.
14.	The World Bank	The World Bank has overall responsibility to ensure that its ESF and 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, HRAs, etc.).

ES 11: Safeguards Responsibilities and Accountabilities

TCN: Overall safeguard roles and responsibilities for TCN on DISREP, will be undertaken by the TCN PMU through the PMU's Environmental and Social Safeguards Specialists. The safeguard responsibilities will also extend to supervisory and oversight functions during procurement, transportation and storage of meters and DAP respectively, and also in the management of e-wastes generated from metering activities of the DISCOs.

The Bank is only funding supply and not installation works for meters. However, TCN will provide supervisory functions and oversight of procurement, transportation and storage of meters, similarly for the DAP, inclusive of its installation at NERC; and management of e-wastes generated in the course of carrying out these activities. This is because TCN (as implementing partner) is jointly liable for environmental and social risks and impacts that may arise from sub-projects or activities involving transportation, storage etc, of meters and DAP which it has procured for the DISCOs and NERC respectively through Bank funds. The TCN PMU will fund ESMPs for meters procurement, transportation and storage; and DAP installations respectively. The potential social risks and impacts specifically, during installation of meters are addressed in the ESSA prepared by the Bank, and are handled under the PforR component.

NERC and DISCOs: For NERC, the roles and responsibilities to ensure safeguards and the applicability of the ESSs throughout the supply and operation phases will be with the DISCOs HSE departments and NERC HSE Unit respectively. At the Business Unit Level, this responsibility will be performed by the Business Unit Manager or nominated Environmental and Social Desk officer from the Business Units of the respective DISCO(s).

ES 12: Training Programs

A robust training program is proposed for the ESMF implementation (Chapter 7). The training program will cover modules on the Nigeria EIA law, WB ESF, Environmental and Social Standards (ESSs) etc. Participants will include TCN, DISCO health and safety Dept.; Business Unit Managers, SMEEnv, FMEEnv and other institutions responsible for the ESMF implementation. The budget for capacity building is estimated at **NGN 38,000,000.00(USD 100,000.00)**, and will cater for i) Resource persons ii) participants per diems, hotel accommodation, feeding, transportation, ii) venue hiring, iv) local and international travels, v) training materials etc.

ES 13: Labor influx and child labor

Risks and impacts attributed to Labour Influx are discussed in the ESMF report, and suitable mitigation measures proffered and costed in the ESMP. A stand-alone Labour Management Procedures (LMP) instrument has been prepared for the IPF component of DISREP and addresses in detail issues of labour influx and child labour.

ES 14: Grievance Redress Mechanism

A program-level GRM will be prepared as required. The GRM must take into cognizance the program components being implemented by TCN; in terms of activities and the traditional and conventional peculiarities of the distribution zones and the communities they service. The mechanism will assume responsibility for occurrences and issues that have direct relation to or bearing on the activities that are being carried out for achieving the expected outcomes of the IPF component. The overall responsibility for the coordination of the DISREP GRM will lie within TCN (WB-TCM PMU). The PMU level will be responsible for the collection of grievances of higher severity that may come directly to the PMU office based on the procedure and grievance classification adopted. But the uptake of grievances and recording will be at different levels from the service areas and Business Units to the top. The following processes should be part of the GRM – Registration of complaints, verification, processing, implementation and closing date, feed-back.

ES 15: Budget

The total estimated cost for the ESMF implementation and monitoring for all project locations is estimated at One Hundred and Sixty-Five Thousand United States Dollars Only. **USD 165,000.00** This is equivalent to Sixty-Two Million, Seven Hundred Thousand Naira Only **62,700,000 NGN**.

S/N	Item	Responsibility	Estimated Cost (NGN)	Estimated Cost (US\$)
1.	Mitigation	Contractors and other parties involved in mitigation	TBD	TBD
2.	Monitoring	TCN PMU; FMEEnv; etc SMEnv; SEPA; DISCO Mgt, NERC Mgt	TBD	TBD
Sub-total			Nil	Nil
3.	Capacity Building	TCN PMU, Other relevant MDAs	38,000,000.00	100,000.00
4.	ESMP Preparation	TCN-PMU	19,000,000.00	50,000.00
5.	Sub - Total		57,000,000.00	150,000.00
6.	Contingency	10% of Sub-Total	5,700,000.00	15,000.00
TOTAL			62,700,000.00	165,000

Note: USD to Naira exchange rates as at 30th November, 2020 (1 USD = 380 Naira) was applied and figures rounded up.

ES 16: Disclosure

The disclosure process for the ESMF, will follow review and clearance by the World Bank. The describes the process of disclosure is described below

S/N	Action	Remarks
1	Disclosure in 2 National newspapers	The TCN PMU will disclose the ESMF as required by the Nigeria EIA public notice and review procedures
2	Disclosure in 2 state newspapers	The TCN PMU will disclose the ESMF as required by the Nigeria EIA public notice and review procedures
3	Disclosure in 2 local newspapers	The PIU will disclose the ESMF as required by the Nigeria EIA public notice and review procedures
4	Disclosure at the DISCOs, NERC, BPE, FMOF, FMEEnv office and the SMEnvs in all the Distribution Zones/States	The PIU will disclose the ESMP as required by the Nigeria EIA public notice and review procedures
5	Disclosure at the TCN office	The PIU will disclose the ESMP as required by the Nigeria EIA public notice and review procedures

S/N	Action	Remarks
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 and InfoShop.	The ESMF will be disclosed according to the World Bank Disclosure Policy- OP/BP 17.50