WEST AFRICAN POWER POOL

SYSTÈME D'ÉCHANGES D'ÉNERGIE ÉLECTRIQUE OUEST AFRICAIN

Regional Emergency Solar Power Intervention Project (P179267)

Final

SIMPLIFIED ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

November 2024

SUMMARY

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LIST OF ABBREVIATIONS AND ACRONYMS

SEA/SH	Sexual Exploitation and Abuse / Sexual Harassment
ERERA	ECOWAS Regional Electricity Regulatory Authority
ECOWAS	Economic Community of West African States
CEREEC	Centre pour les Energies Renouvelables et l'Efficacité Energétique de la CEDEAO
ESF	Environmental and Social Framework
WAPP	West African Power Pool
ECREEE	ECOWAS Centre for Renewable Energy and Energy Efficiency
ESIA	Environmental and social Impact Assessment
ESS	Environmental and Social Standard
IDA	International Development Association
MCHPP	Mount Coffee Hydro Power Plant
LEC	Liberia Electricity Company
PAD	Project Appraisal Document
ESCP	Environmental and Social Commitment Plan
WMP	Workforce Management Plan
PHSSE	Plan d'Hygiène, Santé, Sécurité, Environnement
PIM	Project Implementation Manual
PIU	Project Implementation Unit
SEP	Stakeholder Mobilization Plan
PoE	Panel of Experts
PSVR	Parc Solaire à Vocation Régionale
PV	Photovoltaic
RESPITE	Regional Emergency Solar Power Intervention Project
TA	Technical Assistance
IUCN	International Union for Conservation of Nature
WAPP	West African Power Pool

NO-TECHNICAL SUMMARY

This document constitutes the simplified Environmental and Social Management Plan (ESMP) drawn up by the West African Power Pool (WAPP) as part of the implementation of the Regional Emergency Response Project in the Solar Energy Sector (RESPITE), which concerns several countries in the sub-region, namely Liberia, Sierra Leone, Togo and Chad.

This ESMP is said to be simplified because it covers, on the one hand, the environmental and social management of the activities of sub-component 4A of the RESPITE project and, on the other hand, only the preparation/feasibility phase of said activities.

This simplified Environmental and Social Management Plan (ESMP) is one of the environmental and social instruments to be drawn up in accordance with the promoter's Environmental and Social Commitment Plan. It covers the environmental management of all the activities to be implemented by WAPP in this phase of preparation of the studies of the sub-components of the RESPITE project, in this case those of sub-component 4A.

This ESMP complies with the World Bank's Environmental and Social Framework and the national legislation applicable to the project's activities.

The methodology for carrying out the ESMP is based primarily on the review of project preparation documents, namely the project implementation manual, the approved financing agreement document, the use of primary and secondary data, the review of other instruments prepared for this project, the World Bank's ESF, national legislation, the consultation of all stakeholders, including institutional actors, communities, people affected by the project, NGOs and interest groups.

Description of the RESPITE project

The Regional Emergency Solar Power Intervention project (RESPITE) is part of the World Bank Group's (WBG) response to the energy crisis in the West African sub-region. Instead of offering assistance with the purchase of petroleum products, as has been done in the past, the WBG aims to support countries that no longer want heavy fuel oil and diesel to generate electricity, by taking a different approach: increasing renewable energy production and improving energy marketing capacity in the future. The Bank, through the RESPITE project, is supporting public procurement for emergency renewable power generation, which can help set a benchmark for greater deployment of renewables by the private sector in the future. At the same time, the project supports related investments in transmission and distribution infrastructure needed to utilize the new generation capacity, as well as technical assistance to further facilitate regional energy trade in the future.

The description of the RESPITE project shows that it comprises four (4) major components, broken down into sub-components, activities and sub-activities. The project comprises the following components.

Component 1: Construction of solar photovoltaic power plants with battery storage (SSEB) and grid connections (equivalent to $184 million IDA).

Component 2: Expansion of the Mt Coffee hydropower plant and improvement of dam safety ($61 million IDA equivalent).

Component 3: Distribution expansion and transmission optimization ($15.5 million IDA equivalent).

Component 4: Regional coordination, institutional capacity building, implementation support and technical assistance ($50.5 million IDA equivalent).

- Sub-component 4A: Regional Integration and Technical Assistance (RITA) to WAPP (US$ 20 million)
- Sub-component 4B: Regional coordination and institutional capacity building ($5 million)
- Sub-component 4C: Implementation support within national PIUs (US$ 19.5 million)
- Subcomponent 4D: Technical assistance for the creation of a river basin management agency and the preparation of new hydropower projects in Liberia ($6 million)
- Sub-component 4A "Regional Integration and Technical Assistance (RITA)" comprises the following activities and sub-activities:

This ESMP mainly covers sub-component 4A 'Regional integration and technical assistance (RITA)'. This sub-component includes the following activities and sub-activities:

- the finalization and operationalization of the legal, regulatory and technical frameworks to enable efficient regional trade between the countries of the WAPP system, including the countries involved in the CLSG interconnection and the North Core interconnection.
- technical integration of the WAPP network by improving the synchronous operation and reliability of interconnections.
- preparation of regional priority generation and transmission projects in line with the WAPP System Master Plan 2018; including preparatory studies for the Mt Coffee Island solar photovoltaic project (sub-component 1A) and the Mt Coffee hydropower plant expansion (component 2), the Saint Paul 2 hydropower plant, the WAPP Ghana-Burkina-Mali interconnector and the WAPP Mid Interconnector.
- and strengthening the institutional and technical capacity of the WAPP Secretariat General (SG) to fulfil its regional mandate.

Given that this is a World Bank Technical Assistance project dedicated to the preparation of a number of projects in different countries, it is important to ensure compliance with requirements and procedures, in particular the Bank's environmental and social framework with regard to the analysis and management of risks and impacts. Without being exhaustive, at this stage of the project, the risks and impacts are as follows:

Potential positive impacts:

The positive impacts of the RESPITE Component 4A sub-projects can be seen in terms of regulatory and legal harmonization, promotion of efficient trade in electrical energy in West Africa, improvement in the reliability of the electrical grid, enhancement of energy security, promotion of electrical interconnection between West African countries, development of human resources, increase in operational efficiency and improvement in governance and regional coordination.

Potential negative impacts

The potential negative impacts identified include risks of irregularities in the selection of consultants, risks of infringement of local customs and practices, grievances with communities (the studies may give rise to opposition from environmental groups, NGOs or local communities, which may harm public perception of the project), risks of disruption to

natural habitats and local biodiversity, risks of accidents during the conduct of field studies, risks of mutual dependency through the propagation of breakdowns, risks of energy dependency, risks of conflict linked to the choice of beneficiaries of capacity-building programme, problems of governance and conflicts of interest.

Mitigation and enhancement measures

The various measures to mitigate the negative impacts identified relate to the establishment, monitoring and compliance with consultant selection criteria and procedures; the drafting and signing of a code of good conduct by consultants; the implementation of the Stakeholder Engagement Plan and the Grievance Mechanism (GM); gender non-discrimination in the recruitment of local labor; the establishment of a method for cutting vegetation likely to encourage its regeneration; compliance with health, safety and traffic regulations; the establishment of technical rules for the management of interconnected networks to avoid economic hardship; and the implementation of a system for the management of the interconnected networks; Compliance with health and safety at work and traffic regulations; Establishment and dissemination of a schedule of power cuts to avoid economic inconvenience; Establishment of technical rules for the management of interconnected networks to prevent and avoid various types of breakdowns; Promotion and production of electrical energy in the region; Development of a plan and a rigorous procedure for capacity building of human resources.

Institutional framework, timetable and implementation costs

A capacity-building plan has been proposed, together with a suggested training program. This will ensure effective and efficient implementation of the ESMP. Finally, an institutional organization for the implementation of the ESMP was proposed, with a clarification of roles and responsibilities. A timetable for implementation of the ESMP was proposed. Resource requirements and implementation costs were also determined.

INTRODUCTION

1.1. Project background

The West African sub-region has one of the lowest electrification rates and highest electricity costs in sub-Saharan Africa. Countries faced with poor infrastructure, high losses and inadequate generation capacity have tried to meet demand through oil-based backup power plants, resulting in high electricity supply costs. Rising oil prices have further increased the liabilities of power companies, which are unable to pay for their electricity purchases and often turn to the government for additional assistance to maintain services. With very little budgetary leeway to cope with the sector's growing areas, countries are facing an acute electricity supply crisis that threatens to disrupt their economic growth. Participating countries face acute electricity supply crisis contributing to fiscal instability.

The Regional Emergency Solar Power Intervention (RESPITE) project is part of the World Bank Group's (WBG) response to the region's energy crisis.

The World Bank's support for the implementation of the project will enable WAPP, among other things, to continue with the preparation of regional integration and technical assistance projects that began under Component 2 of the APL4 Phase 1 Power Grid Rehabilitation Project, the finalization and operationalization of legal, regulatory and technical frameworks to enable efficient regional trade between WAPP countries. As such, it will help to i) reduce the impact of high oil prices in these countries, and thus provide fiscal space for these countries to address the food crisis also resulting from geopolitical developments in Ukraine; ii) increase the supply of affordable and clean energy on the grid to alleviate the current electricity supply crisis; and iii) help countries move away from costly and polluting heavy fuel oil and diesel production, thereby reducing GHG emissions.

1.2. Borrower presentation

The project is being implemented under the aegis of the West African Power Pool (WAPP). The WAPP is the ECOWAS institution in charge of integrating the regional energy system and creating a regional electricity market through the various public and private companies involved in the production, transmission and distribution of electricity in West Africa. It covers 14 of the 15 countries in the regional economic community.

This institution is supported by each of the electricity companies responsible for the production and/or transmission of electrical energy in the member countries concerned.

The WAPP has a structure enabling it to fulfil the functions entrusted to it, notably a General Secretariat, which is the administrative body responsible for the day-to-day management of WAPP activities. The General Secretariat has three departments, including the Planning, Investment Programming and Environmental Safeguard Department (PIPES), which is made up of a team of professionals responsible for carrying out the day-to-day tasks required to accomplish the environmental and social aspects of WAPP's mission.

As Borrower and in accordance with the Assistance Commitment and Negotiation Documents, WAPP shall prepare and implement the simplified ESMP for activities under Component 4A during the project preparation phase.

1.3. Description of the RESPITE project

The Regional Solar Emergency Response Project is the World Bank's response to the region's energy crisis. It aims to complement existing regional integration efforts by helping the WAPP promote an efficient regional electricity market and supporting investment in transmission and generation infrastructure to physically integrate markets.

1.3.1. Project Development Objective

The main development objective of the project is to rapidly increase grid-connected renewable energy capacity and strengthen integration between participating countries.

1.3.2. Specific objectives

The RESPITE project will finance i) the construction of a solar and hydropower generation and battery storage plant with short-term (approx. 3 years) operation and maintenance contracts for the supply of solar energy; ii) as required, the necessary grid connection infrastructure; iii) the modernization and upgrading of the grid to ensure efficient penetration of variable solar generation and iv) the expansion of distribution, v) capacity building of implementing agencies and technical assistance for greater regional integration..

1.4. Description of project sub-components

The RESPITE project is made up of several components and sub-components:

Component 1: Construction of solar photovoltaic power plants with battery storage (SSEB) and grid connections (IDA $184 million equivalent).

- Subcomponent 1A: Construction of a 20MWp/16 MWac solar photovoltaic power plant on Mount Coffee Island in Liberia (IDA equivalent of $21.5 million) will finance all of the project's costs.
- Subcomponent 1B: solar photovoltaic power plant and battery storage at two locations in Sierra Leone (equivalent to $63.5 million IDA)
- Subcomponent 1C: solar photovoltaic power and battery storage in Chad (equivalent to $54.5 million IDA)
- Subcomponent 1D: solar photovoltaic energy and battery storage in Togo (equivalent to $44.5 million IDA)

Component 2: Expansion of the Mt Coffee hydropower plant and improvement of dam safety ($61 million IDA equivalent).

- Subcomponent 2A: Expansion of the Mt Coffee hydroelectric plant with the installation of two new turbines (IDA equivalent of $58 million) will finance
- Subcomponent 2B: Improving dam safety at the Mt Coffee power plant ($3 million IDA equivalent).

Component 3: Distribution expansion and transmission optimization ($15.5 million IDA equivalent)

Component 4: Regional coordination, institutional capacity building, implementation support and technical assistance ($50.5 million IDA equivalent).

- Sub-component 4A: Regional Integration and Technical Assistance (RITA) to WAPP (US$ 20 million)
- Sub-component 4B: Regional coordination and institutional capacity building ($5 million)
- Sub-component 4C: Implementation support within national PIUs (US$ 19.5 million)
- Subcomponent 4D: Technical assistance for the creation of a river basin management agency and the preparation of new hydropower projects in Liberia ($6 million)

This ESMP mainly covers sub-component 4A 'Regional integration and technical assistance (RITA)'. This is a continuation of the successful implementation arrangements for Component 2 of the WAPP-CLSG Interconnector Project, which is implemented by a WAPP team, led by a coordinator. This sub-component includes the following activities and sub-activities:

- the finalization and operationalization of the legal, regulatory and technical frameworks to enable efficient regional trade between the countries of the WAPP system, including the countries involved in the CLSG interconnection and the North Core interconnection.
- technical integration of the WAPP network by improving the synchronous operation and reliability of interconnections.
- preparation of regional priority generation and transmission projects in line with the WAPP System Master Plan 2018; including preparatory studies for the Mt Coffee Island solar photovoltaic project (sub-component 1A) and the Mt Coffee hydropower plant expansion (component 2), the Saint Paul 2 hydropower plant, the WAPP Ghana-Burkina-Mali interconnector and the WAPP Mid Interconnector and,
- strengthening the institutional and technical capacity of the WAPP Secretariat General (SG) to fulfil its regional mandate.

1.5. Relevance of the simplified Environmental and Social Management Plan

The relevance of the ESMP stems from its usefulness and importance in protecting the environment. It is therefore worth recalling that the Environmental and Social Commitment Plan (ESCP) drawn up as part of the Financing Agreement with the World Bank, enshrined WAPP's commitment to produce a simplified Environmental and Social Management Plan for the project prior to implementation. It is expected to be drawn up in accordance with the Environmental and Social Framework (ESF) and in line with international best practices, and country's legislation relevant to the Project.

In line with the Bank's principles, the project will be implemented in accordance with the Environmental and Social Framework (ESF), which includes applicable environmental and social standards (ESS). Five (5) of the ten environmental and social standards have been deemed relevant to the project: ESS1 (environmental and social risk and impact assessment and management), ESS2 (working conditions), ESS3 (resource efficiency and pollution prevention and management), ESS4 (community health and safety) and ESS10 (stakeholder engagement and disclosure). In addition, the ESCP requirements will enable Sexual Exploitation and Abuse / Sexual Harassment (SEA/SH) risks to be better assessed during

implementation as part of the social assessment, and will include appropriate risk-related mitigation measures, which are aligned with the requirements outlined in the SEA/SH good practice note and will also be reflected in contractual obligations.

The conceptual approach of this ESMP is based on the World Bank's Environmental and Social Framework (ESF) and on the Environmental and Social Commitment Plan (ESCP) and Stakeholder Engagement Plan (SEP) drawn up during negotiations of the Financing Agreement with the West African Power Pool (WAPP), the project beneficiary.

1.6. Objectives and procedure for drawing up the simplified ESMP

1.6.1. Objectives

The main objective of the Environmental and Social Management Plan is to identify all the impacts and risks of the proposed works/interventions for which the Borrower is carrying out an ESMP in order to assess the environmental and social risks and impacts throughout the project life cycle. to the ESMP proposes appropriate measures for the prevention, mitigation, compensation and correction of the main negative impacts, and to monitor residual impacts and risks, giving priority to the consultation and participation of the project's stakeholders.

The purpose of the simplified ESMP is to ensure that project activities are undertaken in compliance with all legal and regulatory requirements, and to ensure that all measures to mitigate negative impacts and enhance positive impacts are carried out correctly and on schedule. It brings together all the measures and provisions for managing the project's environmental and social impacts and risks, the full implementation of which is the responsibility of the WAPP.

1.6.2. Brief description of the methodological approach

The methodological approach adopted for the preparation of the simplified ESMP is based on a participatory approach involving all stakeholders at different levels.

The methodology for producing the ESMP is therefore based mainly on a review of the project preparation documents, i.e. the project implementation manual, the financing agreement document approved by the World Bank, the use of primary and secondary data, a review of other instruments prepared for the RESPITE project, the World Bank's Environmental and Social Framework (ESF), national legislation, and consultation with stakeholders, including institutional actors. The main stages of this approach are as follows:

- framing the assignment with institutional stakeholders;
- document review and comparative analysis
- stakeholder identification;
- interviews with the various stakeholders
- data processing and analysis of results.

2. LEGAL AND INSTITUTIONAL CONTEXT

2.1. Legal framework

2.1.1. World Bank environmental and social requirements and standards

The World Bank adopted a new Environmental and Social Framework (ESF) on October 1, 2018. This ESC reaffirms the World Bank's commitment to sustainable development through ten Environmental and Social Standards (ESS), designed to help borrowers manage environmental and social risks.

For the preparation of the RESPITE project, five (5) standards are relevant, namely ESS 1; ESS 2; ESS 3; ESS 4 and ESS 10.

2.1.2. International legal framework

All ECOWAS countries have ratified or signed a large number of regional and international conventions and agreements aimed at protecting the environment by limiting pollution and protecting natural resources and biodiversity.

With regard to wildlife protection in particular, ECOWAS member countries are signatories to the 1971 Ramsar Convention on Wetlands of International Importance, the 1972 Paris Convention on the Protection of the World Cultural and Natural Heritage, the 1973 Washington Convention (CITES) on International Trade in Endangered Species of Wild Fauna and Flora, the 1979 Bonn Convention on Migratory Species of Wild Animals, the 1992 Rio de Janeiro Convention on Biodiversity and the 1994 Convention to Combat Desertification.

The table below shows the international conventions signed or ratified by the majority of ECOWAS member states, which they are obliged to respect and apply.

Table 1: Regional and international environmental conventions and agreements

Known as	Full title	Objective	Relevance to project activities
Ramsar Convention .	Convention on Wetlands of International Importance,1971	To halt the worldwide loss of wetlands and promote their conservation through wise use and management.	Facilities are provided for coastal regions hosting coastal RAMSAR sites
CITES or Washington Convention	Convention on International. trade in Endangered Species of Wild Fauna and Flora, 1973	Ensures that international trade in specimens of wild animals and plants does not threaten their survival	No trade in wild animals or plants is planned as part of the proposed activities.
CMS or Bonn Convention .	Convention on the Conservation of Migratory Species of Wild Animals, 1979	Concluded under the aegis of the United Nations Environment Program, it aims to conserve terrestrial, marine and avian migratory species that regularly cross international borders, including international waters. All cetacean and albatross species in the Southern Hemisphere are listed by CMS.	Several migratory species listed as present by the Convention are present in ECOWAS member states

Known as	Full title	Objective	Relevance to project activities
Vienna Convention Vienna	Convention for the Protection of the Ozone Layer, 1985; Montreal Protocol, 1987; London Amendment (1990)	This convention establishes a framework for cooperation and the formulation of agreed measures to protect human health and the environment against adverse effects resulting from modifications of the ozone layer by human activities. Specific obligations relating to the control and elimination of ozone-depleting substances (ODS) are set out in the Montreal Protocol on Substances that Deplete the Ozone Layer.	Within the scope of the proposed activities, no ozone-depleting substances are required; consequently, the relevance of this convention to the proposed activities is low.
Bamako Convention	Convention on the Ban of the Import into Africa of Hazardous Wastes and on the Control of their Transboundary Movement and Management in Africa (1991)	This convention prohibits the import of all hazardous and radioactive wastes into Africa for any reason and aims to minimize and control the transboundary movement of hazardous wastes into Africa. The Convention covers wastes other than those listed in the Basel Convention (to which Côte d'Ivoire subscribed on 12/01/1994) and considers any waste described by a characteristic hazardous element or listed constituent to be a hazardous waste.	This activity is not required for the proposed project, so the relevance of the convention is low.
CBD	Convention on Biological Diversity (1992).	Commitment to the conservation of biological diversity, the sustainable use of biological resources and the equitable sharing of the benefits arising out of the utilization of genetic resources	Several species are likely to be impacted by the proposed project. We will ensure that mitigation measures are in place to minimize the impact of our activities.
UNFCCC	United Nations Framework Convention on Climate Change 1994	This convention establishes a global framework agreement for intergovernmental efforts to meet the challenge of climate change. It recognizes that the climate system is a common resource whose stability may be affected by industrial and other emissions of carbon dioxide and other greenhouse gases. Côte d'Ivoire is not listed in Annex I of the Decree; consequently, some of the Convention's requirements do not apply.	The activities will lead to reductions in greenhouse gas emissions, and the company should register these.
Kyoto Protocol	International Agreement to the United Nations Framework Convention on Climate Change, 1997	Recognizing that developed countries are primarily responsible for current high levels of GHG emissions into the atmosphere, resulting from over 150 years of industrial activity, the Protocol places a heavier burden on developed nations, in line with the principle of "common but differentiated responsibilities." Under the Treaty, countries are required to meet their targets, mainly through domestic measures.	Activities will result in greenhouse gas emissions, and the company should register them.
Forced Labour Convention	21 Nov 1960	- Prohibition of the use of forced or compulsory labour in all its forms; - Not considered as forced labor:	Project preparation activities will entail compliance with this convention.

Known as	Full title	Objective	Relevance to project activities
		○ minor communal services of a nature which, being performed by the members of the community in the direct interest of the said community, provided that the members of the community or their direct representatives have the right to be consulted as to the necessity of such services; ○ any work or service required in an emergency (calamity or threat of calamity, fire, flood, invasion by harmful animals, insects or plants, in general any circumstance likely to endanger the existence or well-being of all or part of the population benefiting from the project); Sanctioning of forced labor as a criminal offense, and strict enforcement of said sanction.	
Convention on Freedom of Association and Protection of the Right to Organize	1948 November 21, 960	The right of workers and employers, without distinction of any kind, to establish and, subject only to the rules of the organization concerned, to join organizations of their own choosing without prior authorization; - The rights of workers' and employers' organizations to draw up their own statutes and regulations, to elect their representatives in complete freedom, to organize their administration and activities, to formulate their programs and to operate freely without interference by the authorities of the Project for the purpose of restricting the said rights or dissolving or suspending them; - Workers' organizations must comply with national laws and regulations.	Project preparation activities will entail compliance with this agreement.
Right to Organize and Collective Bargaining Convention	1949 05 May 1961	Adequate protection of workers against acts of anti-union discrimination in respect of their employment; - Adequate protection of workers' and employers' organizations against any act of interference in their establishment, operation and administration; Encouragement and promotion of the development and use of voluntary negotiation mechanisms between employers or employers' organizations and workers' organizations, with a view to regulating working and employment conditions by means of collective agreements.	Project preparation activities will result in compliance with this convention.
Convention on the Abolition of	May 05, 1961	Undertaking to suppress and to refrain from the use of any form of forced or compulsory labor as a means of coercion, education, punishment or labor	Project preparation activities will entail observance of this convention.

Known as	Full title	Objective	Relevance to project activities
Forced Labor1957		discipline, or as a method of mobilizing and utilizing manpower for economic development	
Convention concerning Discrimination (Employment and Occupation), 1958	May 05, 1961	- non-discriminatory, any distinction, exclusion or preference in respect of a particular employment based on the inherent requirements of that employment. Promotion, by methods adapted to national conditions and practices, of equality of opportunity and treatment in employment and occupation. .	Project preparation activities will result in compliance with this convention
Minimum Age Convention, 1973	07 Feb 2003	- Compliance of minimum age for employment with national laws and regulations; Admission to any type of employment or work which, by its nature or the circumstances in which it is carried out, is likely to jeopardize the health, safety or morals of persons aged 18 or over.	Project preparation activities will require compliance with this agreement
Worst Forms of Child Labor Convention, 1999	07 Feb 2003	Prohibition of the worst forms of child labor (forms of slavery or practices similar to slavery, work likely to harm health, safety or morals).	In force

Source : OIT.
https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11200:0::NO::P11200_COUNTRY_ID:103023
[Consulted June 2023]

In addition to the above-mentioned conventions, the beneficiary countries and members of ECOWAS are members of the main global organizations active in the fields of pollution control, conservation and development, namely the Food and Agriculture Organization (FAO), the World Health Organization (WHO) and the International Union for Conservation of Nature (IUCN). The IUCN assesses the conservation status of plant and animal species and assigns them a level of vulnerability. Lists of threatened species (IUCN Red Lists) are published for individual countries. Membership of the United Nations includes membership of all organizations under its aegis, the International Maritime Organization (IMO), the United Nations Cultural, Scientific and Educational Organization (UNESCO) and associated programs, such as the United Nations Environment Program (UNEP).

2.1.3. Regional commitments

- ☐ **Economic Community of West African States (ECOWAS)**

The Economic Community of West African States (ECOWAS) was created on May 28, 1975, by the Treaty of Lagos, with the aim of "promoting cooperation and integration with a view to an economic union in West Africa in order to raise the standard of living of its peoples, maintain and increase economic stability, strengthen relations between Member States and contribute to the progress and development of the African continent". ECOWAS, through the West African Power Pool (WAPP), promotes and develops power generation and transmission infrastructures in partnership with the national systems of member countries.

According to the Global Carbon Project, the ECOWAS region has a low level of CO2 emissions, estimated in 2018 at 192.9 Mt CO2, or 0.52% of the 36,573 Mt CO2 emitted by all countries on the planet. However, to promote better management of environmental pollution, ECOWAS has developed appropriate regional policies focusing on the development of renewable energies. Member states intend to increase the share of renewable energies in the region's overall electricity mix to 19% by 2030. Around 25% of ECOWAS's rural population should also benefit from connection via mini-grids and stand-alone systems by 2030.

Various institutions created by ECOWAS are involved in setting up an electricity exchange system in West Africa, regulating the regional electricity market (Regional Electricity Regulatory Authority (ARREC)), and promoting renewable energy (Center for Renewable Energy and Economic Efficiency (CEREEC)).

- **The West African Power Pool (WAPP)**

The West African Power Pool ("WAPP") is the ECOWAS institution created in 1999 by the Conference of Heads of State and Government of the Economic Community of West African States ("ECOWAS"). In 2006, the ECOWAS Conference of Heads of State and Government entrusted WAPP with the mission of promoting and developing infrastructures for the production and transmission of electrical energy, as well as coordinating the exchange of electrical energy between ECOWAS member states. It covers 14 of the 15 countries in the regional economic community.

WAPP has a structure enabling it to fulfill the functions entrusted to it, notably a General Secretariat, which is the administrative body responsible for the day-to-day management of WAPP's activities. The General Secretariat has three departments, including the Planning, Investment Programming and Environmental Safeguard Department (PIPES), which is made up of a team of professionals responsible for carrying out the day-to-day tasks required to accomplish the environmental and social aspects of the WAPP mission.

The West African Power Pool (WAPP) is the beneficiary of the IDA grant. WAPP has delegated the implementation of RESPITE to the WAPP Secretariat.

The WAPP RESPITE team comprises the following full-time or part-time staff: (i) project coordinator; (ii) technical staff coordinators (operational pilots) (5); (iii) financial management specialist; (iv) senior procurement specialist; (v) deputy procurement specialist; (vi) disbursement/accounting specialist; (vii) environmental specialist; (viii) social issues specialist; and (ix) gender-based violence specialist. Further details are provided in WAPP RESPITE's detailed budget.

The WAPP RESPITE Team Project Coordinator reports to the Secretary General of the WAPP Secretariat. All communication by the Project Coordinator with the World Bank must be approved by the Secretary General of the WAPP Secretariat.

Coordination with other RESPITE beneficiaries will be through the Regional Coordinate Unit (RCU) established by the EIPs of Chad, Liberia, Sierra Leone and Togo.

- **ECOWAS Protocol A/P4/1/03 on ENERGY, 2002**

The Protocol establishes a legal framework to promote long-term cooperation in the field of energy, based on complementarity and mutual benefits, with a view to increasing investment in the energy sector and developing energy trade in the West African region.

- **Guidelines for assessing the environmental and social impacts of power generation and transmission systems in West Africa, 2005**

As part of the implementation of its energy policy, the Economic Community of West African States (ECOWAS) created the West African Power Pool (WAPP) in 2000, whose main mission is to develop a regional system for the sustainable supply of electricity to promote economic growth in the region.

In addition, ECOWAS countries are becoming increasingly aware of the environmental degradation resulting from development activities, particularly in the electricity sector. Indeed, high-voltage transmission lines require environmental control measures because of the rights-of-way issues involved, and the impacts associated with electro-magnetic fields. In view of these observations and given the importance of the electricity sector for economic and social development, it was decided to draw up the ECOWAS EIA Guidelines for Electric Power Generation and Transmission.

The purpose of these Guidelines is to assist Member States, national utilities and other stakeholders in the preparation, conduct and assessment of the environmental impacts of power projects. These Guidelines contain eight (8) sections comprising the elements below:

- Section 1: ECOWAS EIA Guidelines for Electric Power Generation and Transmission
- Section 2: EIA Context
- Section 3: Environmental impact assessment procedures in ECOWAS Member States
- Section 4: The EIA process
- Section 5 : Specific EIA provisions for thermal power plants
- Section 6: Specific EIA provisions for hydroelectric power plants
- Section 7: Specific EIA provisions for transmission lines
- Section 8: EIA case studies.

More specifically, Section 7 of this project describes the specific EIA provisions for high-voltage (HV) transmission lines. This section identifies the main areas where transmission lines are likely to have significant impacts on the environment. The description is made in relation to project characteristics such as line length, tower size and spacing, ancillary infrastructure (access roads, power transformer stations, etc.) and the sensitivity of the environment in which the project is planned. Finally, the potential consequences of transmission line projects on the surrounding environment are analysed for both the construction and operating phases.

ECOWAS guideline on gender assessments in projects ... gender mainstreaming in ECOWAS energy projects

Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (1979): CEDAW was adopted by the ECOWAS Council of Ministers in 1979.

- **ECOWAS Environmental Policy, 2008**

Emphasizing regional integration and the strategic role of natural resources in the subregion's economic development, the overall aim of the Common Environmental Policy is to reverse the major trends in the degradation and reduction of natural resources, environments and living conditions, with a view to ensuring a healthy, liveable and productive environment in the subregion, thereby improving the living conditions of the populations of the subregion.

☐ The ECOWAS Regional Electricity Regulatory Authority (ARREC)

The commitment of ECOWAS member states to the creation of electricity interconnections for the pooling and optimal sharing of the region's energy resources has resulted in the adoption of a number of provisions designed to establish an institutional and legal environment appropriate to the development of the West African electricity sector.

In January 2008, within the framework of the West African Power Pool (WAPP), the ECOWAS Conference of Heads of State established the ECOWAS Regional Electricity Regulatory Authority (ARREC) as a specialized ECOWAS institution, by Additional Act A/SA.2/01/08.

ARREC's overall mission is to ensure the regulation of cross-border electricity exchanges between ECOWAS member states, while ensuring the implementation of conditions to ensure their rationalization and reliability and contributing to the establishment of a regulatory and economic environment conducive to the development of the regional market. The vision is to ensure the highest standards of regulation to achieve a sustainable and efficient regional electricity market in the ECOWAS region.

ARREC's missions are as follows:

- to regulate cross-border exchanges of electrical energy between ECOWAS member states, while ensuring that conditions are in place to ensure rationalization and reliability;
- contribute to the establishment of a regulatory and economic environment conducive to the development of the regional market
- ensure compliance with the principle of free transit of electrical energy, in accordance with the provisions of Article 7 of the Energy Protocol
- ensure the introduction of a clear, transparent and predictable pricing methodology for regional electricity exchanges.
- ensure the technical regulation of regional electricity exchanges and monitor the operation of the regional market.
- support the ECOWAS Commission in defining the strategic orientations of regional policy and in harmonizing national policies, legislation and regulations in the field of electrical energy
- establish and implement effective procedures for settling disputes between regional market players, and monitor their proper application
- maintain partnership relations with the national regulatory authorities of member states and provide them with technical assistance at their request.
- ensure effective communication between the various players in the sector.

☐ CEREEC: The ECOWAS Center for Renewable Energy and Energy Efficiency

In recent years, the ECOWAS Commission has progressively taken steps to integrate Renewable Energies (RE) and Energy Efficiency (EE) into its regional activities and policies. The experience of the European Union (EU) has demonstrated that regional integration can be a useful tool for the adoption and implementation of RE and EE policies and incentives at national level (e.g., the EU directive with binding renewable energy targets).

CEREEC was officially inaugurated at its headquarters in Praia, Cape Verde, on July 6, 2010. CEREEC's mandate is also perfectly aligned with the broader strategic objectives of the ECOWAS Vision 2020.

The mandate seeks to directly realize two of the components of this vision, namely: (1) "A region that anchors its development on sustainable development, including the development of agricultural and mining resources, and on planned agricultural and industrial strategies; a region that develops its infrastructures and makes services accessible to its citizens and businesses"(2) "A region that preserves its environment and resources, that promotes equitable and sustainable modes of development in the economic, social and environmental fields; a region that makes its full contribution to solving the problems and challenges facing the planet".

In 2003, the ECOWAS Energy Protocol envisaged the improvement of energy efficiency and the increased use of renewable energy sources. In 2006, ECOWAS / UEMOA adopted the White Paper on access to energy services for populations in rural and peri-urban areas. The White Paper states that at least 20% of new investment in electricity generation should come from locally available renewable resources, in order to ensure energy self-sufficiency, reduced vulnerability and sustainable environmental development.

Most WAPP and RESPITE beneficiary countries have basic laws dealing with environmental management. In most cases, they have developed and adopted policies aimed at protecting the environment. relevant national/international laws, regulations, policies and treaties.

2.1.4. Strategic provisions and sectoral policies

Various strategic documents (policies, plans and programs) frame the orientations of ECOWAS member countries with regard to the environment, energy and the social dimension. The table below shows the relevant documents from the policy frameworks of West African countries to be taken into account in the planning and implementation of the project.

Area	Relevant policies, plans and programs.
Environment	• National Climate Change Adaptation Plan • National Environnemental Protection Plan • National action program to combat desertification • National strategy to combat air pollution in urban areas • National Forestry Policy • National Adaptation Program of Action (PANA) • Strategic development guidelines • National Development Plan (NDP) • National Water Policy (PNE) • National Energy Policy • National Sanitation Policy (PNA) • National strategy and action plan for the conservation of biological diversity • National Agenda 21
Energy	• Strategic environmental assessment of the energy sector • Energy policy
Social	• National Gender Promotion Policy (PNPG) • National Community Health Policy • National Health Promotion Policy • National Employment Policy

2.1.5. National Legal Framework

The constitutions of all West African countries have laid down certain principles relating to the environment and citizens' living conditions. These principles can be found in various articles, which provide clear guidelines, such as:

- The State guarantees its citizens equal access to health, education, culture, information, vocational training and employment.
- Everyone has the right to own property. No one shall be deprived of his property except in the public interest and in return for just and prior compensation;
- Everyone has the right to a healthy, satisfactory and sustainable environment, and the duty to defend it. The State shall ensure the protection of the environment;
- The storage, handling and disposal of toxic or polluting waste are regulated by law;
- The transit, import, storage, burial or dumping of foreign toxic or polluting waste is a crime against the Nation;
- The establishment of fundamental principles for the protection of the environment and the conservation of natural resources.

In addition, West African countries have developed detailed legislative and regulatory frameworks for the protection of the environment and people's quality of life. The main legal documents concerning the environment, energy, resettlement and cultural resources exist in the form of laws and decrees.

Table 2: Main elements of the project's legal framework

Area	Relevant legal texts and main national standards
Environment and living environment	• Framework law on the environment • Public Hygiene Code Act • Climate Change Act • Water management law or code • Law regulating nature protection and hunting activities • Forest regime law • Law on territorial organization • Land and Property Code Act • Cultural Heritage Protection Act • Law governing wildlife • Act to protect and regulate international trade in endangered species of wild fauna and flora • Act to prevent and punish violence against women • Law or Labor Code • Law laying down the conditions and procedures for hiring and placing workers, and for terminating employment contracts • Law on the Children's Code • Decree organizing environmental and social assessment procedures • Decree on the powers, organization and operation of the Ministry in charge of the Environment • Decree on solid waste management • Decree on the management of used oils • Decree setting air quality standards

Area	Relevant legal texts and main national standards
	• Decree regulating noise • Decree setting wastewater quality standards • Decree setting drinking water quality standards
Access to information	• Decree on the organization of environmental and social assessment procedures
Involuntary population displacement and resettlement	• Country Constitutions • Law on the definition and development of rural development areas • Law n° 2013-01 on the Land and Property Code • Decree on the powers, organization and operation of the land compensation fund • Decree laying down the terms and conditions for occupying the public domain
	• Decree on the composition and standard operation of commodo et incommodo inquiry and compensation commissions in matters of expropriation for public utility purposes • Decree laying down the terms and conditions for exercising the right of pre-emption and lease-purchase of pre-empted or expropriated properties • Decree laying down the terms and conditions for occupying the public domain
Cultural resources	• Cultural Heritage Protection Act
Agriculture	• Law on the definition and development of rural development perimeters • Decree classifying roads of economic, tourist or strategic interest
Energy	• Law on the Electricity Code • Decree laying down procedures and standards applicable to, and conditions for, the inspection and technical control of electricity supply installations.

3. PROJECT DESCRIPTION

3.1. Description of the sub-componente 4A Regional integration and techninal assistance (RITA) to be implemented by WAPP

This sub-component will continue to support the activities begun under Component 2 of the WAPP APL4 Phase 1 Power Grid Rehabilitation Project - Côte d'Ivoire, Sierra Leone, Liberia and Guinea (WAPP-CLSG Project, P113266), when the financing of this project is completed, namely i) the finalization and operationalization of the legal, regulatory and technical frameworks to enable efficient regional trade between the WAPP countries, notably for the CLSG interconnection and the North Core interconnection ; ii) technical integration of the WAPP network by improving the synchronous operation and reliability of interconnections; iii) preparation of regional priority projects in line with the WAPP Master Plan 2018-28 , including preparatory studies for the Mt Coffee Island solar photovoltaic project (sub-component 1A) and the Mt Coffee hydropower plant expansion (component 2), the Saint Paul 2 hydropower plant, the WAPP Ghana-Burkina-Mali interconnector and the WAPP Mid Interconnector ; and iv) strengthening the institutional and technical capacity of the WAPP Secretariat to fulfil its regional mandate. Further regional integration of the WAPP power systems will increase the integration of renewable energies, reduce greenhouse gas emissions and provide more climate-proof decision-making options. This activity will be separated from the other project components, as it has its own implementing entity.

WAPP is responsible for implementing RESPITE's 4A subcomponents. The World Bank and other donors are financing the construction of sections of the regional infrastructure of transmission lines and substations completed or under construction in the WAPP region. It is preparing further investments in high-voltage transmission lines. Support is also being provided to establish the institutional, operational and commercial frameworks needed to enable regional trade and thus capitalize on the significant investments in physical infrastructure.

Description of sub-component 4A: Regional Integration and Technical Assistance (RITA)

The RESPITE project will support activities through:

- the finalization and operationalization of the legal, regulatory and technical frameworks to enable efficient regional trade between the countries of the WAPP system, including the countries concerned by the CLSG interconnector and the North Core interconnector;
- the technical integration of the WAPP network by improving the synchronous operation and reliability of interconnections;
- the preparation of regional priority generation and transmission projects in line with the WAPP System Master Plan 2018; including preparatory studies for the Mt Coffee Island Solar Photovoltaic Project (sub-component 1A) and the Mt Coffee Hydropower Plant Expansion (component 2), the Saint Paul 2 Hydropower Plant, the WAPP Ghana-Burkina-Mali Interconnector and the WAPP Median Interconnector;
- and strengthening the institutional and technical capacity of the WAPP Secretariat General (SG) to fulfil its regional mandate.

A breakdown of the sub-components yields the following activities.

Table 3: Description of activities under sub-component 4A (RITA)

N°	Programmed activities for subcomponent 4A
WP.1	**Finalization and operationalization of legal, regulatory and technical frameworks to enable efficient regional trade between WAPP countries.**
1.1	Support for the preparation of energy trade transactions**.**
1.2	Organization of regional workshops on energy transactions and meetings of the Northern Core Technical Committee for Trade Transactions (CTTC).
WP.2	**Integration and synchronization project**
2.1	Design, supply and installation of SVC, SPS and PIU (including DPL+ O&M+ SHD equipment replacement) -
2.2	PSS tuning, field testing, controller tuning changes and WAPP network synchronization - GE Contract
2.3	OEM support for power plant testing
2.4	Engineering consulting services for the synchronization project -
2.5	Post-synchronization study (series of thematic studies)
2.6	Technical assistance to technical working groups
2.7	Meetings of the Synchro task force and technical working groups
W.P.3	**Preparation of regional priority projects in line with the WAPP Master Plan**
3.1	**Ghana Burkina Mali Interco - Feasibility studies and ESIA**
3.1.1	Consultancy services for the preparation of feasibility studies and ESIAs
3.1.2	Workshops/meetings on deliverables (including contract contingencies, if any)
3.2	**Median Core (Nigeria, Benin, Togo, Ghana and Ivory Coast) - Feasibility study and ESIA**
3.2.1	Consultancy services for preparation of ESIA studies
3.2.2	Workshops/meetings on deliverables (including possible contract contingencies)
3.3	***Liberia: preparatory studies for priority hydro-solar generation investment projects:***
3.3.1	*Feasibility studies and ESIA for the priority hydropower project in St-Paul/*
3.3.2	*Rehabilitation of the access road for the SP2 project in Liberia*
3.3.3	*Geotechnical studies for the SP2 project in Liberia (AGTS-Senegal contract)*
3.3.4	*Strategic advice to support the development of hydroelectric projects*
3.3.5	*Technical assistance to focal point (phase 2)/*
3.3.6	*Counterpart consultant to the WAPP focal team in Liberia for the PIP _ Henry Joyson contract*
3.3.7	*Expenses for focal point, training and workshops for validation of deliverables + specific contingency for SP2 project*
WP.4	**Capacity and institution building**
4.1	Training of IPU staff, stakeholders, communities, project workers, consultants
4.2	Training of project workers on occupational health and safety, including emergency prevention and preparedness, and emergency preparedness in conflict and insecure areas.

Details of each work package are provided below.

WP1: Legal and regulatory support to enable efficient regional trade between WAPP countries.

Activities envisaged under WP1 include, but are not limited to, the following elements:

a. Support for the preparation of energy trade transactions. This involves recruiting legal, financial and technical consultants to assist the WAPP CLSG and the northern core

countries, and possibly other WAPP member countries, in preparing Power Purchase Agreements (PPAs) and Transactional Services Agreements (TSAs) for energy trade between the project countries within the framework of the regional electricity market.

b. Organization of meetings of the WAPP North Core Technical Committee for Trade (CTTC) as well as workshops/capacity building and knowledge transfer on legal, financial, technical or regulatory aspects of power purchase agreements, transaction service agreements and electricity market management.

WP2: Support for integration and synchronization

The activities envisaged under WP2 are as follows:

a. Design, supply and installation of SVC, SPS and PIUs (SVC Operation and Maintenance (O&M) support and replacement of synchronous digital hierarchy (SDH) equipment of some Utilities including the defects liability period);

b. PSS tuning, field testing and controller tuning change and WAPP synchronization: this includes testing (model validation, testing and/or re-testing of controllers and PSS) of the remaining key power plants (Egbin power plant, Manantali power plant, AZITO power plant and Kainji power plant) and synchronization testing between zones 1, 2 and 3, including WAMS data analysis and dynamic simulations and analysis.

c. OEM support for power plant testing;

d. Owner's engineer supervision of synchronization work (General Electric and NR Electric contracts);

e. Post-synchronization studies. These are a series of thematic studies to be carried out in order to guarantee efficient and stable synchronization;

f. Technical assistance to the technical working group for system reliability assessment, load frequency control and compliance monitoring, as well as system protection and coordination;

g. Meetings of the Synchronization Working Group and the Technical Working Groups.

WP3: Preparation of WAPP priority projects

The activities envisaged under WP3 are as follows:

a. Preparatory studies in Liberia for priority investment projects in hydro-solar production:

- Finalization of preparatory studies for the Solar PV and Mt Coffee Extension pilot projects in Liberia:
- Preparation of the E&S audit for the rehabilitation of the Mt Coffee hydroelectric plant.
- Completion of ESIA report for Solar PV project on Mt Coffee Island
- Completion of ESIA report for Mt Coffee power plant extension
- Completion of the work requirements to be included in the tender documents for the Mt Coffee hydroelectric plant extension.
- Preparation of FS and ESIA studies for the Saint Paul hydroelectric project in Liberia (SP2):
- Finalization of geotechnical studies
- Operation and maintenance of the SP2 access road and barges on the MEL and St Paul rivers to facilitate geotechnical survey work.
- Preparation of the SP2 HPP project feasibility study report (preliminary, interim and final reports).
- Preparation of SP2 HPP E&S deliverables reports.

- Technical assistance to the focal point for the development of the Liberia PIP (TA2)
- WAPP-Consultant counterpart to Liberia PIP Focal Team
- Engagement of International panel of experts
- Expenses for focal point, training and workshops for validation of deliverables.

b. Pre-investment studies for WAPP Ghana-Burkina-Mali interconnection:

- Preparation of line layout and interconnection line report.
- Preparation of ESIA reports (including RAP and ESMP for each of the 3 countries involved in the project).
- Preparation of technical and economic feasibility reports
- Workshops and training on deliverables.

c. Preparation of the ESIA studies for the WAPP Median Interconnection.

- Preparation of the line alignment report.
- Preparation of E&S reports for Nigeria, Benin, Togo, Ghana and Côte d'Ivoire (including RAP and ESMP for each of the 5 countries).
- Workshops and training on deliverables.

WP4: Institutional and capacity building

Although not included in the PDO or intermediate results indicators, capacity building of individuals and institutions in participating countries is an important aspect of RESPITE.

WP4 provides resources for capacity-building activities for WAPP Secretariat staff and capacity-building activities organized by the WAPP Secretariat for IPUs and others.

Activities envisaged under WP4 to build the capacity of WAPP Secretariat staff include: (I) individual training for WAPP Secretariat staff in Benin or outside Benin on topics relevant to RESPITE implementation; (ii) participation of WAPP Secretariat staff in workshops and conferences ; (iii) visits by WAPP Secretariat staff to relevant organizations and institutions; and (iv) the organization of tailor-made training courses for WAPP Secretariat staff (normally in Benin) (other selected trainees may also participate).

In particular, the capacities of individuals and institutions will be strengthened in the field through on-the-job learning under the supervision or mentoring of national or international experts. Individual capacity building is aimed in particular at PIU staff but may also involve others. Capacity building for institutions is achieved through consultancy contracts for national companies and institutions, and through formal training (conferences and workshops) for institutions responsible for aspects related to the implementation of renewable energy installations and associated transmission and distribution works.

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4. ANALYSIS AND ASSESSMENT OF MAIN POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

4.1. Identification of the project's risks and impacts

The activities of subcomponent 4A of the RESPITE project are broken down into sub-activities, which are the real sources of potential risks and impacts.

Table 3: Definition of sub-activities, sources of risks and impacts, and valued environmental and social components

Table 4: Identifyng activities that generate risks and potential impacts

Activities, sources of impact	Sub-activities	Environmental and social components valued	Risks and impacts
Preparation of pre-investment studies for the project	• Drawing up terms of reference • recruitment of consultants • recruitment of suppliers • monitoring of studies	Social environment	• Risk of discrimination and favoritism in appointments • Risk of exclusion, favoritism and discrimination in the selection and appointment of project team members Increased complaints, frustration and conflict Inadequate monitoring of studies-
Activities of consultants and suppliers	• Investigations and fieldwork • community consultations • production of deliverables	• Biophysical environment • Social environment	• Business opportunities in terms of studies and services • Risks of imprecision and inconsistency in terms of reference • Late changes in terms of reference or specifications • Risk of wrongly setting deadlines for studies • Risks of violating community customs and traditions
Mobility of consultants and their teams (travel and transport of consultants and/or suppliers for field visits)	• Travel • Field activities (consultations with institutions and communities)	• Health and safety of staff and communities • Quality of studies	• Risk of increased road traffic • Risk of traffic accidents with communities • Risk of dust emissions and exhaust pollution • Risk of insecurity in certain project areas • Risk of exclusion of some groups or communities
Field activities (consultations with institutions and communities)	• Land mobilisation for sub-project sites • Data collection and processing - Soil	• Biological environment • Human environment • Social cohesion	• Poorly organised and conducted consultations • Increased complaints, frustration and conflict • Risk of insecurity in certain project areas
Monitoring the execution of design work	• Evaluation of studies • Field missions • Recruitment of experts • Employment and labour	Employment and labor	• Risk of rejecting deliverables for poor quality • Risk of non-approval of deliverables for non-compliance with current norms, standards and procedures • Risk of not following the Project LMP
Monitoring training and institutional capacity-building activities	• Identification of training beneficiaries • Development of training programs	• WAPP and national electricity company staff • Training centre	• Risk of rejection of selected training programs • Risk of failure of training and capacity-building activities • Risk of wrong selection of trainees; • risk of training programs not meeting needs of trainees; • risk of not conducting training needs assessment.

4.2. Analysis and assessment of key risks and impacts

The activities of Subcomponent 4A (RITA) to be implemented by the WAPP/EEEOA consist mainly of technical assistance in the form of preparatory environmental and social instruments and feasibility studies. No physical work will be undertaken. The table below summarizes the environmental and social risks of the proposed project activities:

The analysis of risks and their distribution among project stakeholders is a fundamental aspect of project preparation. Risks must be identified in relation to the various stages of the project, and the players best placed to deal with them must be identified. A contractual mechanism must then be defined to reflect this distribution, and a financial mechanism must be set up to enable the various operators to commit themselves.

Risk analysis must lead to the construction of a matrix. At the study stage, and before actually entering into a contractualization phase, the risk matrix will remain relatively simple.

4.2.1. Potential positive impacts

4.2.1.1. Positive impacts on the socio-economic environment

- **Business opportunities in terms of studies and services resulting from network synchronization work**

Impact analysis

The positive impacts concern business opportunities for design offices and individual consultants. The sub-component of the project to be implemented by WAPP will enable intellectual service providers to benefit from contracts. Consultants, companies and suppliers will also need skilled and unskilled labor. At this stage of the project, the creation of business opportunities for consultancies is estimated to be low to moderate. Similarly, there will be job creation and business opportunities for SME/SMIs specializing in electrical, electromechanical, civil engineering and other trades, who will take charge of the teams' layout, construction and installation operations.

Impact assessment

Business opportunities for studies and services resulting from network synchronization work				
Nature of the impact	**Intensity**	**Duration**	**Extent**	**Consequence**
Positive	Low	Short-term	Regional	Medium

Bonus measures

The bonus measure consists of recommending respect for recruitment procedures, avoiding any possible discrimination and avoiding any political influence in the process.

❖ **Improving staff technical skills through capacity building**

Impact analysis

One of the positive impacts of sub-component 4A is the improved technical skills of WAPP staff and WAPP member actors through capacity building programs. This improvement in skills will help to ensure WAPP's interconnected and synchronized network for increased exchanges of electrical energy in the sub-region.

Impact assessment

Commercial opportunities for studies and services resulting from network synchronization work				
Nature of the impact	**Intensity**	**Duration**	**Extent**	**Consequence**
Positive	Low	Short-term	Regional	Medium

Bonus measures

The bonus measure consists in recommending compliance with recruitment procedures, avoiding any discrimination in the designation of beneficiaries, and avoiding any political influence in the process.

4.2.1.2. Potential negative impacts

❖ **Risk of conflicts due to irregularities in the selection of consultants and poor monitoring of study work**

Impact analysis

A procedure tainted by irregularities in the recruitment of consultants can lead to conflicts of all kinds, i.e. incompetence, shortcomings in the quality of products and deliverables, complaints and refusal to take into account observations and comments. All these problems can lead to possibly irreversible damage to the project, either in relation to technical aspects or to the management of impacts with communities**.**

Impact assessment

❖ Risk of conflicts due to irregularities in the selection of consultants and poor monitoring of study work				
Nature of the impact	**Intensity**	**Duration**	**Extend**	**Consequence**
Negative	Medium	Short term	Regional	Medium

Need to develop, adopt, disclose and implement the following instruments:

- the consultant selection procedure
- the Stakeholder Engagement Plan (SEP),
- the Grievance Mechanism (GM),
- the Workforce Management Plan (WMP),
- Labor Management Plan (LMP)

To avoid these kinds of conflicts between consultants/suppliers and WAPP, it is important to :

- avoid changing project sites or zones while services are in progress
- retain clear and precise terms of reference for the definition of tasks
- avoid changing experts in the consultant's team
- to retain consultants with a good command of both English and French.

The following WB environmental and social standards are covered:

- ESS 1 Assessment and management of environmental and social risks and impacts
- ESS 2 Employment and working conditions
- ESS 10: Stakeholder engagement and disclosure of information

❖ **Risks of exclusion, and discrimination in the selection and appointment of project team members and beneficiaries of capacity-building programs**

Impact analysis

When designating and appointing representatives and members of project teams at institutional level, it can happen that agents technically equipped for the project are not appointed to the detriment of others. These games of favoritism and discrimination under various influences can lead to conflicts and frustrations, as well as poor follow-up of studies and mediocre results in project management. These situations can also lead to debauchery and familiarity with the risk of contamination by sexually transmitted diseases and HIV/AIDS. The same phenomenon can be seen in the designation of beneficiaries of capacity-building programs. These are the causes of conflicts and frustrations that could lead to poor project results Impact assessment.

Risk of exclusion, and discrimination in the selection and appointment of project team members and beneficiaries of capacity-building programs				
Nature of the impact	**Intensity**	**Duration**	**Extent**	**Consequence**
Negative	Low	Short- term	Regional	Medium

Mitigation measures

Key actions include:

- Develop, adopt, disclose and implement a procedure for appointing representatives and members of project teams.
- Develop, adopt, disclose and implement a procedure for the fair and transparent selection of consultants
- Develop, adopt, disclose and implement a Grievance Mechanism (GM)
- Develop clear, precise and consistent terms of reference.

Follow WB CES standard 10

❖ **Risks of protest at temporary occupation of land for study investigations**

Impact analysis

It may happen that during studies and especially during field work, opposition arises from domain owners who would express their refusal to allow consultants to carry out geological or geotechnical investigations or analyzes on their domain. This unexpected situation, if a solution is not found, could undermine the quality of the studies.

Impact assessment

Risks of protest at temporary occupation of land for study investigations				
Nature of the impact	**Intensity**	**Duration**	**Extent**	**Consequence**
Negative	Low	Short term	Regional	Medium

Mitigation measures

- The main measures to be taken are to:
- Develop, adopt, disclose and implement a fair and transparent consultant selection procedure in a spirit of transparency
- Develop, adopt, disclose and implement a Complaints Management Mechanism (CMM)
- Develop clear, precise and consistent terms of reference,
- Undertake consultations and disseminate information on the purpose of the studies so that landowners do not fear losing their land or property.
- Disseminate information on the Complaints Management Mechanism that would be available to complainants in relation to project activities.

The following WB environmental and social standards are covered:

- ESS 1 Assessment and management of environmental and social risks and impacts
- Ess 10: Stakeholder engagement and disclosure of information

❖ **Risks of inaccurate specification of environmental and social impacts and poor quality of study results**

Impact analysis

The selection of inadequately qualified consultants and/or suppliers can lead to inaccurate specification of environmental and social impacts, and to unsatisfactory, unusable study results that can result in project failure. Imprecision and inconsistency in the terms of reference, negligence in drawing up specifications in tender documents, combined with poor communication and access to information due to insufficient information sharing, and unfamiliarity with the Bank's requirements and environmental and social framework (ESF) are all factors that can lead to unsatisfactory work of lower quality (sub-standards), or to deficient work that requires modifications and additional costs.

Impact assessment

Risks of inaccurate specification of environmental and social impacts and poor quality of study results				
Nature of the impact	**Intensity**	**Duration**	**Extent**	**Consequence**
Negative	Low	Short- term	Regional	Medium

Mitigation measures

The main measures to be taken are to:

- Develop, adopt, disclose and implement a fair and transparent consultant selection procedure in a spirit of transparency
- Develop, adopt, disclose and implement a Stakeholder Mobilization Plan (SEP)
- Develop, adopt, disclose and implement a Complaints Management Mechanism (CMM)
- Develop clear, precise and consistent terms of reference,

The following WB environmental and social standards are covered:

- ESS 1 Assessment and management of environmental and social risks and impacts
- ESS 10: Stakeholder engagement and disclosure of information.

❖ **Risk of marginalization of gender and vulnerable groups, including discrimination against women during public consultations**

Impact analysis

Gender and vulnerable groups (women, disabled people, migrant workers) may be underestimated in the public consultation process. This poses the problem of a lack of real, reliable sources of information in study reports. It can also lead to exclusion of a group in the communities whose views would not get reflected in the consultations.

These discriminatory attitudes, under various influences, can lead to conflict and frustration, as well as to poor monitoring of studies and mediocre results.

Impact assessment

❖ Risk of marginalization of gender and vulnerable groups, including discrimination against women during public consultations				
Nature of the impact	**Intensity**	**Duration**	**Extent**	**Consequence**
Negative	Medium	Short term	Regional	**Medium**

Mitigation measures

Need to develop, adopt, disclose and implement the following instruments:

- the Stakeholder Mobilization Plan (SEP),
- the Grievance Mechanism (GM),
- the Workforce Management Plan (WMP),
- Labor Management Plan (LMP)

Need to ensure all groups and their issues are reflected in all the Project instruments and there are no discriminatory practices against any group.

The following WB environmental and social standards are covered:

- ESS 1 Assessment and management of environmental and social risks and impacts
- ESS 2 Employment and working conditions
- ESS 10: Stakeholder engagement and information disclosure

❖ **Increased complaints, frustration and conflict**

Impact analysis

The early stages of project implementation can be marked by a lack of communication, leading to an upsurge in complaints, protests and frustrations. Added to this are complaints resulting from various irregularities and lack of impartiality in the recruitment process, abuse of power and authority, disruption of morals, delinquency, and so on.

Poor recruitment practices, characterized by non-compliance with legislation and labor standards, coupled with the risk of gender-based discrimination (against women, vulnerable individuals and groups, etc.), are likely to bring the project into disrepute and subsequently generate frustrations that can lead to stalled activities.

Impact assessment

Increased complaints, frustration and conflict				
Nature of the impact	**Intensity**	**Duration**	**Extent**	**Consequence**
Negative	Medium	Short- term	Regional	**Medium**

Mitigation measures

Need to develop, adopt, disclose and implement the following instruments:

- the Stakeholder Mobilization Plan (SEP),
- the Complaints Management Mechanism (CMM),
- the Workforce Management Plan (WMP),
- Labor Management Plan (LMP)

The following WB environmental and social standards are covered:

- ESS 1 Assessment and management of environmental and social risks and impacts * NES 2 Employment and working conditions
- ESS 2 Employment and working conditions
- ESS 10: Stakeholder engagement and information disclosure

❖ **Risk of disruption in the supply of electrical power that could affect businesses**

Impact analysis

Synchronization activities in substations will undoubtedly cause operating suspensions in the installations on which the work is being carried out. These suspensions will lead to interruptions in the supply of electricity to households and businesses. The impact of these power cuts is the interruption, for the duration of the technical interventions, of activities in general and economic activities in particular, with loss of earnings whose importance is linked to the duration of the interruptions.

Impact assessment

Risks of disruption in the supply of electrical power that could affect businesses				
Nature of the impact	**Intensity**	**Duration**	**Extent**	**Consequence**
Négative	Medium	Short- term	Regional	Medium

Mitigation measures

Need to develop, adopt, disclose and implement the following instruments:

- the Stakeholder Mobilization Plan (SEP),
- the Complaints Management Mechanism (CMM),
- the Workforce Management Plan (WMP),
- Labor Management Plan (LMP)

The following WB environmental and social standards are covered:

- ESS 1: Assessment and management of environmental and social risks and impacts
- ESS 2: Employment and working conditions
- ESS 10: Stakeholder engagement and information disclosure

❖ **Emission of waste and hazardous materials**

Impacts analysis

The activities involved in providing services to consultants and suppliers, as well as the work involved in installing equipment and materials in substations to finalize synchronization, can be sources of waste production. These include solid waste from singers, uncontrolled solid and liquid waste from construction sites, such as packaging waste, solid household waste produced by workers, wastewater from sanitary facilities, machine washing and site run-off, and other waste (rubble and spoil from site preparation, excavations, engine oil change, used oil).

All this waste can pollute the physical and natural environment through the generation of waste, or accidental oil or hydrocarbon spills through the generation of both solid and liquid waste, including hazardous and non-hazardous waste, with the risk of inappropriate waste disposal. In the absence of an adequate management system, this waste can become a source of unhealthiness, insecurity and disease.

Impact assessment

Emission of waste and hazardous materials				
Nature of the impact	**Intensity**	**Duration**	**Extent**	**Consequence**
Negatif	Low	Short- term	Regional	Medium

Mitigation measures

To ensure that appropriate impact mitigation measures are taken at this stage, it is recommended that the consultant in charge of the environmental and social impact study:

- Draw up, adopt and implement an Environmental and Social Management Plan (ESMP)
- Draw up, adopt, disclose and implement a management plan for residual and hazardous materials
- Develop, adopt, disclose and implement a rolling stock maintenance plan
- Drawing up, adopting, disclosing and implementing a Hygiene, Health and Environment plan.

The following WB environmental and social standards are covered:

- ESS 1: Assessment and management of environmental and social risks and impacts
- ESS 3: Resource efficiency and pollution prevention and management

❖ **Accident risks for workers during the preparation**

Impact analysis

During the implementation of sub-component 4A activities, accident risks can be summarized as traffic accidents, electrocution, handling accidents, fire, explosion, etc. These are accident risks that can lead to physical injury or even death. There are also risks of worker exposure to hazardous substances, notably paints and solvents, and of eye irritation. Health risks are not ignored in terms of contamination and the spread of STDs, including Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) in the event of risky sexual behavior. The frequency of incidents and accidents in the workplace depends on compliance with the hygiene, safety and health plan developed for the site. For this reason, the contractor must implement a Health, Safety and Security (HSS) plan to protect not only his workers, but also the local population. Once again, it all comes down to compliance with standards, which is why it is so important for companies to comply with specific environmental and social regulations.

Impact assessment

Accident risks for workers during the preparation				
Nature of the impact	**Intensity**	**Duration**	**Extent**	**Consequence**
Negative	Medium	Short term	Regional	**Strong**

Mitigation measures

Need to develop, adopt, disclose and implement the following instruments:

- the Traffic and Travel Management Plan
- Community Health and Safety Plan
- Hygiene, Health, Safety and Environment (HSSE) Plan
- the Stakeholder Mobilization Plan (SEP),
- the Complaints Management Mechanism (CMM),
- Workforce Management Plan (WMP),
- Labor Management Plan (LMP)

The following WB environmental and social standards are covered:

- ESS 1 Assessment and management of environmental and social risks and impacts
- ESS 2 Employment and working conditions
- ESS 4 Community Health and Safety
- ESS 10 Stakeholder engagement and information disclosure

❖ **Accident risks for populations during the preparation phase**

Impact analysis

The implementation of activities under sub-component 4A could result in accidents involving vulnerable populations who are not used to them. These include traffic accidents, exposure to hazardous substances such as paints and solvents, irritability, electrocution, handling accidents, fire, burns and explosions.

Impacts assessment

Accident risks for populations during the preparation phase				
Nature of the impact	**Intensity**	**Duration**	**Extent**	**Consequence**
Negative	Medium	Short term	Regional	**Strong**

Mitigation measures

Need to develop, adopt, disclose and implement the following instruments:

- the Traffic and Travel Management Plan
- Community Health and Safety Plan
- the Hygiene, Health, Safety and Environment Plan for the worksite
- the Stakeholder Mobilization Plan (SEP),
- the Complaints Management Mechanism (CMM),
- the Workforce Management Plan (WMP),
- Labor Management Plan (LMP)

The following WB environmental and social standards are covered:

- ESS 1 Assessment and management of environmental and social risks and impacts
- ESS 2 Employment and working conditions
- ESS 4 Community Health and Safety
- ESS 10: Stakeholder engagement and information disclosure.

❖ **Increased contamination and spread of STIs, HIV/AIDS and COVID-19**

Impact analysis

Lack of health education for personnel using sanitary facilities, and poor supervision and maintenance, can lead to hygiene problems, discomfort and the development of disease, all of which are associated with a variety of inconveniences. The installation of appropriate facilities from the outset of work, their ongoing monitoring and maintenance, and user awareness-raising, are the conditions that need to be met to ensure the well-being and health of staff and communities alike.

Furthermore, the high purchasing power of non-native workers involved in RESPITE project preparation activities could encourage them to develop deviant attitudes with or towards local communities, either by creating intimate relationships with under-age girls or married women, or by engaging in delinquent or criminal acts such as theft, rape, gangsterism and so on. This context could lead to the spread of sexually transmitted diseases (STDs), including HIV/AIDS.

Impact assessment

Increased contamination and spread of STIs, HIV/AIDS and COVID-19				
Nature of the impact	**Intensity**	**Duration**	**Extent**	**Consequence**
Negative	Medium	Short- term	Regional	**Strong**

Mitigation measures

Need to develop, adopt, disclose and implement the following instruments:

- the Stakeholder Mobilization Plan (SEP),
- the Health, Safety and Environment Plan (PHSSE)
- the Complaints Management Mechanism (CMM),
- Workforce Management Plan (WMP),
- Labor Management Plan (LMP)

The following WB environmental and social standards are covered:

- ESS 1: Assessment and management of environmental and social risks and impacts
- ESS 2: Employment and working conditions
- ESS 4: Health and safety of populations
- ESS 10: Stakeholder engagement and information disclosure.

❖ **Influx of workers seeking employment**

Impact analysis

The start-up of project preparation activities will attract everyone from shopkeepers to jobseekers. This influx of people becomes more significant as soon as the first recruitments take place, leading to an increase in the need for resources such as water, access to health care, electricity and so on. The massive arrival of these people in the social environment can be a source of social change, with the creation of intimate and/or conflictual relationships, especially if the natives were not warned in advance. In the absence of preventive communication and awareness-raising at the start of work, numerous conflicts could arise if the newcomers also fail to respect the prohibitions and customs established on the land.

Impact assessment

Influx of workers seeking employment				
Nature of the impact	**Intensity**	**Duration**	**Extent**	**Consequence**
Negative	Medium	Short- term	Regional	Medium

Mitigation measures

Need to develop, adopt, disclose and implement the following instruments:

- the Stakeholder Mobilization Plan (SEP),
- the Health, Safety and Environment Plan (PHSSE)
- the Complaints Management Mechanism (CMM),
- Workforce Management Plan (WMP),
- Labor Management Plan (LMP)

The following WB environmental and social standards are covered:

- ESS 1 Assessment and management of environmental and social risks and impacts
- ESS 2 Employment and working conditions
- ESS 4 : Health and safety of populations
- ESS 10: Stakeholder engagement and disclosure of information

❖ **Risks of undermining local structures guaranteeing "traditional rights" and disrupting social cohesion**

Impact analysis

The initial social cohesion could be put to the test with the massive arrival of foreigners. These individuals may refuse to respect existing prohibitions, creating an uncontrollable social climate. This cosmopolitanism leads to the erosion of the powers of customary authorities, the development of insubordinate attitudes on the part of citizens towards local and customary authorities, and to the depravation of morals. These attitudes, which effectively destroy existing social cohesion, end up disturbing the peace and quiet of the population. Complaints and conflicts could become numerous and recurrent as a result of the following situations:

- destabilization of households: adulterous situations, with the possibility of disturbances or even separation within households;
- the development of prostitution, with the possibility of transmission of STDs and HIV/AIDS
- the development of delinquency and insecurity;
- pressure on land and natural resources: due to the occupation of land by immigrants, increased competition for local natural resources through hunting, poaching and fishing, or the collection of firewood;
- the development of early pregnancy and juvenile delinquency in the area;
- Lead to cases of GBV/SH;
- Create opposition to the Project;
- an increase in inappropriate behavior on the part of immigrants towards patriarchs, heads of families, village chiefs and the general population.

Impact assessment

Risks of undermining local structures guaranteeing "traditional rights" and disrupting social cohesion				
Nature of the impact	**Intensity**	**Duration**	**Extent**	**Consequence**
Negative	Medium	Short-term	Regional	Medium

Mitigation measures

Need to develop, adopt, disclose and implement the following instruments:

- the Stakeholder Mobilization Plan (SEP),
- the Complaints Management Mechanism (CMM),
- the Workforce Management Plan (WMP),
- the Health, Safety and Environment Plan (PHSSE)
- Labor Management Plan (LMP)
- Code of conduct for all workers of the project.

The following WB environmental and social standards are covered:

- ESS 1: Assessment and management of environment
- ESS 2: Employment and working conditions
- ESS 4: Health and safety of populations
- ESS 10: Stakeholder engagement and information disclosure.

❖ **Risk of increased sexual exploitation, abuse and harassment (SEA/SH)**

Impact analysis

As the influx of people becomes ever greater, security arrangements are no longer able to contain the actions of one group or another. As a result, there is a general lack of respect for people's habits and customs, and for human relations in general. As a result, some individuals defy the rules and commit criminal acts, sometimes even gender related. These deviant behaviours include pimping, sexual harassment, sexual exploitation and abuse, sexual violence against women and men, pedophilia, all acts of pimping, sexual harassment, sexual abuse and exploitation, sexual violence and pedophilia. Life in communities is fraught with social problems, especially when people come from different backgrounds and do not respect established rules and customs.

Impact assessment

Risk of increased sexual exploitation, abuse and harassment (SEAH)				
Nature of the impact	**Intensity**	**Duration**	**Extent**	**Consequence**
Negative	Medium	Short- term	Regional	Medium

Mitigation measures

- Need to develop, adopt, disclose and implement the following instruments:
- the Stakeholder Mobilization Plan (SEP),
- the Complaints Management Mechanism (CMM),

- development of a grievance mechanism with referral pathways specifically for SEA/SH should be in the Project Grievance Mechansim.
- the Workforce Management Plan (WMP),
- the Health, Safety and Environment Plan (PHSSE)
- Labor Management Plan (LMP)

The following WB environmental and social standards are covered:

- ESS 1: Assessment and management of environmental and social risks and impacts
- ESS 2: Employment and working conditions
- ESS 4: Health and safety of populations
- ESS 10: Stakeholder engagement and information disclosure.

❖ **Risk of insecurity in certain project areas**

Impact analysis

Increasingly, there are pockets of violence and insecurity in certain regions of West Africa, notably the Sahelian zones. Communities live in constant insecurity. The same applies to everyone, including consultants and all those who will be involved in the preparatory studies for power interconnection line projects. In this context, it is necessary to take these situations of insecurity into account in order to envisage measures to protect the project's players.

Impact assessment

Risk of insecurity in certain project areas				
Nature of the impact	**Intensity**	**Duration**	**Extent**	**Consequence**
Negative	Medium	Long term	Regional	**High**

Mitigation measures

- Encouraging community involvement
- Work with Local Authorities
- Develop and implement the Security Risk Management Plan
- Implement physical security measures.

4.3. Summary of general impacts during the studies preparation phase

The potential impacts of project preparation are summarized as follows:

- ❖ Business opportunities in terms of studies and services
- ❖ Local economic development through the creation of small income-generating activities
- ❖ Improved technical skills of personnel through capacity building
- ❖ Risk of conflicts due to irregularities in the selection of consultants and poor monitoring of study work

- Risk of exclusion and discrimination in the selection and appointment of project team members and beneficiaries of capacity-building programs
- Risks of contestation during temporary occupation of land for study surveys
- Risks of marginalization of gender and vulnerable groups, including discrimination against women during public consultations
- Risks of disruption to power supply that could affect businesses
- Emission of waste and hazardous materials
- Accident risks for workers during preparation activities
- Risk of accidents to the public during the preparation phase
- Risk of weakening traditional local structures and disrupting social cohesion
- Risk of accentuating sexual exploitation and abuse and sexual harassment (SEA/SH)
- Risk of contamination and spread of STIs and HIV/AIDS
- Risk of insecurity in certain project zones.

In addition, mitigation measures for the main risks and potential impacts are summarized in the following table.

Table 5: Summary of impacts analysis and mitigation measures table

N°	**Risk of impact**	**Nature**	**Intensity**	**Duration**	**Extent**	**Importance**	**Mitigation or improvement measures**
1	Business opportunities in terms of studies and services resulting from network synchronization work	Positive	Low	Short-term	Regional	**Moderate**	Respect the application of recruitment procedures, avoid any possible discrimination and political influence in the process Draw up, adopt and implement a SEP
	Local economic development through the creation of small income-generating activities	Positive	Low	Short-term	Local	**Low**	Draw up, adopt and implement a SEP Technical and financial support for economic player
	Improving staff technical skills through capacity building	Positive	Medium	Medium	Regional	**Medium**	Designate beneficiaries transparently, avoiding any possible discrimination or influence in the process
4	Risk of conflicts due to irregularities in the selection of consultants and poor monitoring of study work	Negative	Forte	Medium	Regional	**High**	Establish, adopt and implement SEP, GM and LMP Monitor consultant selection procedures
5	Risk of exclusion and discrimination in the selection and appointment of project team members and beneficiaries of capacity-building programs.	Negative	Medium	Medium	Regional	**high**	Develop, adopt, disseminate and implement a code of good governance, a SEP and PMM and clear, precise and consistent terms of reference.
6	Risks of contestation during temporary occupation of land for study surveys	Negative	Medium	Short term	Regional	Medium	Develop, adopt and implement a SEP, GM, ESIA and RAP Undertake consultations and disseminate information on the purpose of the studies so that landowners do not fear losing their land or property. Disseminate information on the Complaints Management Mechanism that would be available to complainants in relation to project activities
7	Risks of marginalization of gender and vulnerable groups, including discrimination against women during public consultations	Negative	Medium	Short term	Regional	**Low**	Develop, adopt and implement a SEP, GM, ESIA and RAP
8	Risk of disturbance to wildlife and natural habitats	Negative	Low	Short term	Local	**Moderate**	Implement a method of cutting vegetation likely to encourage regeneration Draw up and adopt a SEP, ESIA and ESMP

9	Emission of waste and hazardous materials	Negative	Low	Short term	Local	**Low**	Draw up, adopt and implement SEP, GM, ESIA, waste management plan (WMP)
10	Accident risks for workers during preparation activities	Negative	Medium	Short term	Regional	**High**	Draw up, adopt and implement SEP, GM, ESIA, waste management plan (WMP) and a Hygiene, Environment, Health and Safety plan (PHESS)
11	Risk of accidents to the public during the preparation phase	Negative	Low	Short term	Regional	**High**	Draw up, adopt and implement SEP, GM, ESIA, waste management plan (WMP) and a Hygiene, Environment, Health and Safety plan (EHES)
12	Risk of weakening traditional local structures and disrupting social cohesion	Negative	Low	Short term	Regional	**Medium**	Develop, adopt and implement SEP, GM, ESIA, RAP and a Code of good conduct, ,
13	Risk of accentuating sexual exploitation and abuse and sexual harassment (SEA/SH)	Negative	Medium	Medium	Regional	**Medium**	Draw up, adopt and implement SEP, GM, ESIA, waste management plan (WMP) and a Hygiene, Environment, Health and Safety plan (EHES)
14	Risk of contamination and spread of STIs and HIV/AIDS	Negative	Medium	Moyenne	Regional	**Medium**	Draw up, adopt and implement SEP, GM, ESIA, waste management plan (WMP) and a Hygiene, Environment, Health and Safety plan (EHES)
15	Risk of insecurity in certain project areas	Negative	Medium	Long-term	Regional	**High**	Draw up, adopt and implement SEP, GM, ESIA Encouraging community involvement Work with local authorities Develop and implement security risk management plan Implement physical security measures

5. RISK MANAGEMENT AND EMERGENCY PLANNING

5.1. Objectives and expected results

Risk assessment is a regulatory document for facilities subject to authorization. As part of the implementation of the RESPITE project, which aims to ensure regional integration through the preparation of electrical interconnection projects and the finalization of synchronization activities in electrical substations, a technological risk analysis or hazard study (EDD) has been carried out.

The aim of this analysis is to identify the situations that could lead to an accident, and to analyse the associated safety barriers (prevention measures, means of protection and intervention).

Appropriate risk management requires the identification of accident or failure events or scenarios that could be associated with the project, as well as an assessment of the probability of these events occurring, and an evaluation of the consequences that could result.

The risk identification and management process aim to:

- identify the main sources of hazards that could cause an accident or breakdown. This leads to an analysis of the risks generated by the methods and tools used, through both an elementary and a functional study of the system (tools and operations used, equipment, etc.);
- assess the consequences of these accidents on the biophysical and human environment and, above all, report on the examination carried out to characterize, assess, prevent and reduce the risks associated with the implementation of the project, whether their causes are linked to the equipment and processes used, or due to the natural or human environment.
- indicate all risk control measures implemented. This involves identifying and implementing appropriate protection measures and response plans in the event of accidents or malfunctions; and
- reinforcing employee and public safety through awareness-raising measures.

This approach enables risks to be considered upstream of the project, so that preventive measures can be taken where necessary to reduce risks and prevent major accidents, or at least limit their consequences.

The study was carried out in accordance with the "Guide méthodologique d'étude de dangers". The hazards associated with this study have been identified to describe malfunctions that could give rise to a risk with significant consequences for the environment (natural and human), and to justify the measures taken to limit their effects. The principles underlying the management of projects, and the operation of structures and facilities are based on foresight, prevention and precaution.

5.2. Risks identification and management measures

Generally speaking, risks are of three main origins: risks from natural sources, risks from industrial sources (i.e. from factors internal to industrial facilities) and risks from occupational sources, i.e. from human activities (operating methods, equipment handling and facilities, utilities, etc.).

5.2.1. Natural hazards

Risks of natural origin are mainly associated with intense, even extreme, sudden and unpredictable meteorological events such as precipitation, flooding, lightning, tornadoes, etc. Some of these events will become more frequent and/or more severe in the future. As some of these events will become more frequent and/or more pronounced over the next few years, it is important to take the necessary measures to limit their effects and thus reduce the cost and magnitude of disasters, notably by adapting buildings and infrastructures. Risks of natural origin are taken into account in the legislation and standardization of transmission facilities (codes, norms and standards) and in the technical design of each project component (grounding cable, towers, foundations, adequate clearance zone, etc.).

Other sources of danger are mainly anthropogenic and technical, and are associated with:

- the use and storage of petroleum products, chemicals and other hazardous substances;
- the use of electrical transformers.

Natural hazards come from environmental sources and can affect not only people, but also facilities and structures. Risks were identified using the World Bank's "Think hazard" platform.

Table 6: Natural hazard assessment

Natural hazards	Risk level	Assessment	Prevention measure
Fire	High	During field operations for interconnection projects, flammable objects or poorly managed waste can cause fires. The risk can be high, given the weather conditions that favor the outbreak of a large-scale fire with the potential to cause death and damage.) In the project area, there is a risk of fire spreading within the site. An accidental fire on the site also carries the risk of spreading to the sparse surrounding plant cover, particularly in the dry season. This phenomenon is likely to be exacerbated by extreme situations brought about by climate change (intensity and recurrence of drought episodes).	Keeping the immediate periphery of high-ignition facilities perfectly clean Establishing a warning and risk management plan Installation of fire-fighting equipment
Ino flooding / Flooding	Low	This risk may arise when the facilities on which the activities are to be carried out are located on sites likely to be affected by a flood likely to cause damage or loss of life.	To be considered in infrastructure design criteria
Earthquake **Séisme**	Very weak	West Africa is not in a zone to be feared as a high seismic zone. There is less than a 2% probability of a damaging earthquake occurring in the next 50 years.	To be considered in infrastructure design criteria

Natural hazards	Risk level	Assessment	Prevention measure
Landslide	Very low	Very low The rainfall regime, soil characteristics and risk level for earthquake risk mean that this risk is not considered.	None
Lightning	Moderate	During the installation of equipment in substations as part of the RESPITE project, lightning can affect property or people directly or indirectly (via falling trees, fences/poles, etc.). What's more, the current can also be carried to a person via the ground, power lines or pipes. West Africa is not mentioned as an area specifically at risk from lightning.	To be considered in infrastructure design criteria
Sand wind erosion phenomenon	low	Erosion and the accumulation of dust or dirt generated by sandstorms (harmattan from November to March), which lead to locally observed deposits, significantly degrade installation supports. This phenomenon is likely to be exacerbated by extreme situations induced by climate change (intensity and recurrence of storms). Dust emissions may also be caused by traffic on unpaved village access roads near the facilities.	To be taken into account in plant operation criteria (appropriate cleaning, water-saving management).
Heat / humidity	High	Both heat and humidity are factors which contribute to the deterioration of parts used in the electronic assembly of installations. Electrical. Defects in these parts can lead to incidents or even accidents.	To be taken into account in the maintenance and upkeep of installations

5.2.2. Industrial risks

Industrial risks are based on the identification of the hazards posed by the project. The nature of the project, which involves activities in substations as part of synchronization and electrical interconnection, induces industrial risks of varying magnitude on the site. Industrial risks include.

- The risk of fire associated with the presence and use of electrical infrastructures;
- Storage of petroleum products and transformer coolants;
- Malicious acts in the conduct of operations.

Table 7: Industrial impacts assessment

Industrial risk	Potential sources	Prevention and mitigation measures
Fire and explosion	• Transformer and storage batteries: short-circuit, overheating, contaminated oils) • Design (undersizing) or assembly faults leading to panel overheating (diodes, poor contacts, cables, etc.) • Electric arc caused by a short-circuit in the panel (ageing) or by incorrect assembly of the panels during installation. • Hot-spot work • Mishandling (matches, cigarettes, etc.)	• Preventive maintenance of transformers, storage batteries and related equipment to prevent breakage and premature wear; • Lightning protection; • Industrial risk assessment prior to construction and commissioning of the solar power plant. • Regular inspection of equipment • Monitoring of waste storage areas • Restriction and control of the use of hydrocarbons • Smoking ban • Regular inspection of equipment
Accidental spillage of noxious products	Accidental leakage or spillage of fuel (site machinery, vehicles), oils (lubrication, insulation, transformers) and acids (batteries)	• Training and awareness-raising of workers on environmental protection issues • Design of equipment and retention tanks in compliance with regulations and standards; • Preventive maintenance of transformers and related equipment to prevent breakage and premature wear; • Lightning protection; • Completion of an industrial risk assessment prior to construction and commissioning of the solar power plant. • Regular inspection of equipment
Malevolence-	External	• Fencing and anti-intrusion devices (barbed wire, gate closures, video surveillance system) • Regular inspection of equipment to ensure site security.

5.2.3. Occupational Health and Safety risks

Occupational risks arise from the industrial risks identified, and concern plant construction and maintenance personnel. The construction phase also entails specific risks. Occupational risks can lead to;

- An occupational disease: an illness or condition linked to more or less prolonged exposure to;
- Injuries;
- A work-related accident.

This risk assessment is an iterative process, designed to be repeated and updated as the project is adapted/modified in all phases.

Table 8: Occupational risk assessment and associated measures

Activities	Risk to personnel	Prevention and mitigation measures
Synchronization finalization activity phase		
Field surveys for electrical interconnection projects Use of site machinery for unloading equipment	Jobs, recruitment and business opportunities • Mechanical risks: injuries, falls, collisions, crushing • Handling risks • Falling objects • Noise-related risks • Heat-related risks (dehydration) • Road risks)	• Machines equipped with audible warnings • Marking of access routes within the worksite • Spatial organization of worksite • Compliance with the Highway Code • Awareness and training of personnel in site organization and safety rules • Establishment and implementation of an occupational health and safety prevention plan by the contractor • Set-up of a first-aid infirmary
Welding work in substations	• Burns • fires • Poisoning caused by fumes	• Fire-fighting equipment present in all work areas • Personal protective equipment (PPE) • Awareness and training of personnel in site organization and safety rules • Contractor to draw up and implement a health and safety prevention plan for the workplace. • Set up a first-aid infirmary
Electrical equipment installation	• Burns • Fire hazards • Intoxications caused by fumes • Direct exposure to harmful products • Electrocutions	• Fire-fighting equipment present in all work areas • Personal protective equipment (PPE) • Awareness and training of personnel in site organization and safety rules • Contractor to draw up and implement a health and safety prevention plan for the workplace. • Set up a first-aid infirmary
Work on Substation installations	• Falls • Handling risks • Fire hazards • Poisoning caused by fumes • Direct exposure to harmful products • Electrocutions	• Fire-fighting equipment present in all work areas. • Personal protective equipment (PPE) in compliance with standards and adapted to each position and individual. • Regular training and awareness-raising of personnel in maintenance work and in the prevention, detection and management of leaks and fire and explosion risks. • Establishment and implementation of an occupational health and safety prevention plan by the contractor. • Set-up of a first-aid infirmary
	• Falls • Risks related to handling • Burns • Electrocutions	• Personal protective equipment (PPE) in compliance with standards and adapted to each position and individual. • Establishment and implementation of an occupational health and safety prevention plan by the contractor. • Set-up of a first-aid infirmary
	Potential conflicts with residents living near the facilities	• Develop and implement appropriate and safe working procedures • avoid any discrimination against vulnerable groups in the activities carried out • Inform and sensitize communities and households in the implementation zone about the dangers associated with the presence of the high-voltage line. • Develop good ongoing relations with communities living near the installations.
	Risk of disease and/or epidemics due to the arrival of large numbers of workers.	• Draw up and implement a Code of Conduct • Inform and raise awareness of communicable diseases and HIV/AIDS • take health measures and train staff

5.2.4. Regional security risks

Preparatory studies for electrical interconnection projects cross areas of certain ECOWAS countries where the geopolitical situation is a cause for concern. This situation, which also exposes existing industrial activities (e.g. mining), is likely to hamper project implementation and requires the adoption of appropriate measures by the stakeholders and the contractor.

The following WB environmental and social standards are covered:

- ESS 1: Assessment and management of environmental and social risks and impacts
- ESS 2: Working conditions and workforce
- ESS 4: Community health and safety
- ESS 10: Stakeholder engagement and information disclosure

5.3. Overview of the main risks and hazards of activities in the project preparation phase RESPITE

The main risks and hazards associated with this phase of project implementation include:

- the risk of accidents on the construction site, which could result in physical damage or injury, including collisions due to the increased movement of trucks and construction equipment, collapses and falling objects during installation and dismantling operations:

- risks of accidental spills leading to soil and water contamination;
- the risk of conflicts with local residents;
- risks of illness and/or epidemics due to the arrival of large numbers of workers.
- The prevention and management measures associated with these risks are as follows:
- compliance with specific environmental and social instructions for the companies responsible for carrying out the work, which are included in advance in the tender document, as well as monitoring and control by the consulting firm responsible for supervising the work;
- development and implementation of an environmental and social management plan for the project;
- the adoption of work methods that promote health, safety and environmental protection;
- the wearing of personal protective equipment, when required,
- raising awareness of the Highway Code among machine and truck drivers;
- erecting traffic signs at appropriate locations;
- developing and implementing appropriate, safe work procedures;
- the creation of a designated right-of-way for high-voltage lines for reasons of technical maintenance and public safety, including the initial relocation of infrastructure and households, and periodic maintenance of the right-of-way during the operating phase;

- informing and sensitizing communities and households in the siting area about the dangers associated with the presence of the high-voltage line, so that they do not use the pylons as stakes for creeping plants or as places to dry clothes;
- fair compensation and indemnification for those affected, in accordance with the servitudes suffered;
- the development of good, ongoing relations with communities living near the installations.

Electrical installations and substations will be exposed to a number of natural and man-made risks and hazards that could lead to accidents or malfunctions.

5.4. Electrical risks management

This section discusses the main man-made and technical risks and hazards associated with the project and specifies the risk management and prevention strategies incorporated into the project. More specifically, it addresses the risks associated with the storage and use of petroleum products and other hazardous substances, and those related to electrical transformers.

This section discusses the main risks and dangers from anthropogenic and technical sources linked to the project and specifies the risk management and prevention strategies integrated into the project. It addresses more specifically the risks linked to the storage and use of petroleum products and other dangerous substances and those linked to electrical transformers.

5.4.1. Use and storage of petroleum products and hazardous substances.

During construction and operation of the project, certain petroleum products and other hazardous substances will be used and stored. Details of product types, quantities and storage locations will be defined at the feasibility study stage. Typically, these products will include diesel, fuel oil, lubricating oils and greases.

The main hazards associated with the use of these products are:

- accidental spills;
- fires and explosions (to a lesser extent).

5.4.2. Accidental spills

Accidental spills of petroleum products or hazardous substances have the potential to affect the health and safety of workers, employees and communities and/or the quality of the environment.

The main causes of accidental spills of petroleum products or hazardous substances are typically corrosion and equipment failure, as well as human error.

As a matter of priority, it is important to ensure compliance with current regulations and best practices regarding the management, storage and use of products, as well as the containment and collection of any accidental spills.

In addition, the following prevention and response measures are incorporated into the project to reduce the risks and consequences of accidental spills:

- the design of equipment and tanks in compliance with applicable regulatory requirements, current standards, applicable codes and good industrial practice;
- the design of secondary containment systems of sufficient capacity to contain the probable worst-case spill scenario;
- worker training and awareness are also fundamental;
- training of workers and personnel involved in the construction and handling of bulk petroleum hydrocarbons;
- the development and implementation of appropriate and safe work procedures;
- the use of double-walled tanks and a secondary retention basin of sufficient capacity to contain the volume stored in the event of a leak;
- preventive maintenance of tanks and related equipment to prevent breakage and premature wear;
- risk assessment before carrying out any unusual task not covered by a work procedure;
- maintenance of an emergency response plan (ERP), including identification of sensitive elements in the vicinity of the substation and response procedures in the event of an incident involving petroleum hydrocarbons;
- the availability of spill response equipment closes to petroleum hydrocarbon handling points;
- a service agreement with a company specializing in spill recovery and industrial clean-up.

5.4.3. Fires and Explosions

The use or storage of petroleum products or other hazardous substances can, under specific conditions and circumstances, cause an explosion or fire. This type of incident could result in serious injury or even loss of life to a person located within the impact radius, as well as damage to nearby buildings and infrastructure, necessitating the interruption of operations and causing economic losses. Nonetheless, the probability of this type of incident occurring is fairly low, given the implementation of measures and best practices.

The following prevention and response measures are incorporated into the project to reduce risks and consequences:

- design of equipment and tanks in compliance with the requirements of applicable regulations, standards, codes and good industrial practice;
- preventive maintenance of tanks and related equipment to prevent breakage and premature wear;
- preventive and planned inspection of storage facilities and compliance assessment of bulk petroleum hydrocarbon storage tanks;
- maintenance of an Emergency Measures Plan (EMP), including procedures for responding to incidents involving petroleum hydrocarbons.

5.4.4. Risks specific to electrical transformers

This section deals with risks specific to electrical transformers inside substations. The main hazards associated with transformers that could lead to accidents are as follows:

- dielectric oil spills;

- fire and explosion involving an electrical transformer.

In terms of corrective action, the following safety measures should be recommended for electrical transformer substations:

- an appropriate grounding system;
- a transformer monitoring system to prevent fires and explosions;
- an appropriate waste oil management and transformer cooling system;
- a system of protection and safety devices, namely for short-circuits and current leakage.

5.4.4.1. Accidental spills

Oil spills from transformers could lead to contamination of surface water, groundwater and soil, as a result of equipment corrosion, breakdowns or human error.

The following prevention and response measures are incorporated into the project to reduce the risks and consequences of accidental spills:

- design of equipment and tanks in compliance with regulatory requirements and applicable codes, current standards and good industrial practice;
- training of workers and personnel assigned to workstations;
- development and implementation of appropriate, safe work procedures;
- the use of double-walled tanks and a secondary retention basin of sufficient capacity to contain the volume stored in the event of a leak;
- preventive maintenance of transformers and related equipment to prevent breakage and premature wear;
- maintenance of an EMO that includes procedures for responding to incidents involving petroleum hydrocarbons;
- the availability of spill response equipment near petroleum hydrocarbon handling points;
- a service agreement with a company specializing in spill recovery and industrial clean-up;

5.4.4.2. Fires and explosions

A fire in a transformer is a potential hazard. The usual causes are contaminated transformer oil, short-circuits and overheating.

The following preventive and intervention measures are incorporated into the project to reduce the risks and consequences in the event of explosion or fire:

- preventive maintenance of transformers and related equipment to prevent breakage and premature wear;
- lightning protection;
- carrying out a risk analysis before performing any unusual task not covered by a work procedure.
- the use of retention basins for transformers containing dielectric fluid;
- the availability of back-up transformers for production equipment in the event of breakdown, to avoid production stoppages.

5.5. Emergency Measures Plan (EMP)

The Emergency Measures Plan (EMP) contains all the resources and procedures required for rapid response by intervention teams in the event of an accident or malfunction (e.g. fire, explosion, spill, medical emergency, etc.).

A Project Implementation Unit (*PIU*) will be set up as part of the project to ensure that we can act with diligence, assurance and speed in the event of accidents during construction.

5.5.1. Objectives

The general objectives of the EMP are:

- to clearly establish the roles and responsibilities of those involved, both during construction and operations;
- to facilitate communication of the plan to those concerned, such as employees and the general public;
- serve as a reference document for alert, mobilization and response procedures.

More specifically, the EMP will:

- define the roles and responsibilities of the various stakeholders;
- coordinate response forces;
- reduce response times to minimize environmental impact.
- develop a mechanism for alerting the relevant stakeholders and organizations;

5.5.2. Roles and responsibilities

Emergency planning committee

An emergency planning committee will be set up at the utilities and also at the WAPP to plan response measures in the event of accidents or malfunctions. The committee's main role is to:

- develop, prepare, update and distribute the emergency plan,
- train employees and management through simulation or evacuation exercises;
- review and follow up on simulation results;
- develop partnerships with civil authorities.

Internal emergency response team

The internal emergency response team will include line and substation operations personnel and will be a front-line team in the emergency communications and deployment system. This team's role will be to receive emergency calls and give them priority attention. It will be responsible for communicating information without delay to management, to the appropriate emergency services and, if the situation requires it, for enlisting the help of external resources.

5.5.3. Emergency response

Procedure in the event of a spill of petroleum products or other hazardous substances.

Accidental spills of petroleum products or hazardous substances are likely to harm the health and safety of workers, employees and communities and/or affect the quality of the environment.

As a matter of priority, it is important to ensure compliance with current regulations and best practices regarding the management, storage and use of products, as well as the containment and collection of any accidental spills.

The WAPP, the national electricity companies concerned, and the consultants and service providers will ensure that containment and collection procedures are rapidly put in place, should any accidental spillage of petroleum products occur.

In general, intervention procedures call for:

- Wear appropriate personal protective clothing and equipment (e.g. safety glasses or goggles, resistant gloves, etc.);
- manage and control the spill (e.g., eliminate all sources of ignition, identify the product involved, if possible, stop the source of the spill by deactivating or shutting down equipment controlling the flow of the product);
- contain the spill (e.g., dike the spill to prevent it from migrating into a watercourse or sewer, and absorb with emergency kit items such as absorbents, dry sand, or other dry, non-combustible material);
- establish a safety perimeter (e.g., prohibit all traffic, unauthorized vehicles and personnel in the vicinity of the accident);
- evacuate if there is a fire or risk of fire;
- notify the appropriate authorities according to the alert procedure and follow the instructions of the emergency response team;
- recover contaminants and restore the contaminated area (in compliance with current regulations and good practices, and in such a way as to prevent any migration of contamination).

The Emergency response will include specific procedures established for each emergency situation. The persons and organizations to be notified for each situation will be identified in the final. In addition, the PMU will include a program for communicating risks to the public and a section on preventive measures. These elements will be incorporated into the final Emergency response at a later date. After each event, a report on the emergency situation will be produced in conjunction with those responsible, to evaluate the measures taken, identify possible improvements and make any necessary procedural changes.

- Generally speaking, intervention procedures recommend:
- wear appropriate personal protective clothing and equipment (e.g. safety glasses or goggles, resistant gloves, etc.);
- manage and control the leak (e.g.: eliminate any source of ignition, identify the product involved, stop the source of the spill, if possible, by deactivating or shutting down the equipment that controls the flow of the product);
- contain the spilled product (e.g.: contain the spilled product to prevent it from migrating into a watercourse or sewer, and absorb with the elements of the emergency kit such as absorbents, dry sand, or any other dry, non-combustible material);

- establish a security perimeter (e.g.: prohibit all traffic and all unauthorized vehicles and personnel near the accident);
- evacuate if there is a fire or risk of fire;
- notify the relevant managers according to the alert procedure and follow the instructions of the emergency response team.

recover the contaminants and restore the area affected by the contamination (in compliance with the regulations and good practices in force and in such a way as to prevent any migration of the contamination).

Training

Operating personnel will receive ongoing training to ensure an adequate level of knowledge and skill. On-duty personnel must master the procedures of the emergency response plan. Each employee will be trained in emergency alert and response EMP

Emergency response simulations

The Emergency response will be tested on a regular basis to verify its level of effectiveness. An exercise program will test the effectiveness of all aspects of response, equipment and resources identified in the EMP. The plan will outline the types of exercise to be carried out and their frequency. Each exercise will be evaluated to validate and/or improve the PMU's operational processes and will be the subject of a post-mortem report. In the event of a worker's death, the immediate steps to take are to inform the Bank within 24 or 48 hours, and to take the necessary administrative steps.

6. PUBLIC CONSULTATIONS AND DISCLOSURE OF INFORMATION

Public consultation is a form of stakeholder participation in the reflection and decision-making process. Public participation in the preparation of an ESMP or ESIA is specified in the regulatory texts governing environmental and social assessments in most ECOWAS countries, as well as in international requirements such as the World Bank's environmental and social standards, in this case NES No. 10 on the disclosure and dissemination of information.

Indeed, it is recognised that effective stakeholder engagement can improve the environmental and social sustainability of projects, strengthen project ownership and contribute significantly to successful project design and implementation.

The general aim of public consultations is to inform the public about the project and related activities, to offer local people the opportunity to express their views (positive and/or negative impacts of the project, fears, etc.) but also and above all to gather the most relevant recommendations and proposals resulting from these consultations with the various stakeholders targeted by the project (administrative and technical authorities, local authorities, NGOs, neighbourhood associations, etc.).

As the RESPITE project is in its design and preparation phase, no consultations were duly organised in the countries concerned.

However, working sessions were held with the heads of the central institutions, namely the ministers responsible for energy, the heads of the national electricity companies, the World Bank and the WAPP. These included the negotiation meeting with the Bank on 22 November 2022 and the project implementation meeting with all stakeholders on 3 March 2023.

It is worth mentioning that the Secretariat of the organised a meeting of the Synchronisation Working Group in Dakar from 31 May to 2 June 2023. Following the completion of the 1st synchronisation test of zones 2 and 3 in October 2022, which confirmed the possibility of operating these two zones synchronously, expectations within the sub-region with regard to this project have increased considerably.

The following companies attended the meeting:

- BUI Power Authority (BUI/Ghana);
- Compagnie Ivoirienne d'Electricité (CIE/Côte d'Ivoire);
- Compagnie Ivoirienne de Production d'Electricité (CIPREL/Côte d'Ivoire);
- Côte d'Ivoire Energies (CI-ENERGIES/Côte d'Ivoire);
- Communauté électrique du Bénin (CEB/Togo/Benin).

6.1. General objectives

In general, public information and consultation activities aim to:

- facilitate the prior and informed consultation of stakeholders (they will be inclusive of all groups and genders, particularly the vulnerable groups) at key stages of the ESIA and RAP in order to influence and improve the results and increase the credibility of the process;

- ensure that studies comply with national and international requirements, including those of the World Bank's ESF on consultation and public disclosure of information for major development projects;
- support WAPP's efforts to build sustainable relationships with affected communities and other stakeholders.

6.2. Targeted groups

The first step in the participation process is to identify the stakeholders who will be informed and consulted, and to organize them into key groups and sub-groups.

Stakeholders are defined as individuals or groups directly or indirectly affected by a project, as well as those likely to have an interest in a project and/or the ability to influence its outcome in a positive or negative way. Stakeholders may include locally affected communities or individuals and their formal and informal representatives, authorities, national or local governments, politicians, religious leaders, civil society organizations and special interest groups, academia and others (IFC, 2007).

Stakeholder groups targeted by the stakeholder information and consultation approach include:

- ministries in charge of energy
- WAPP member utilities involved in the project
- relevant national ministries and agencies
- regional and local authorities, and their technical staff;
- customary authorities;
- communities and households affected by the project;
- industrial and commercial players affected by the corridor under study;
- consultants and/or suppliers
- companies
- the donor, notably the World Bank
- NGOs and civil society organizations active in the study area in the fields of environment, development, gender, vulnerable people and human rights.

This list remains dynamic and may be updated in future stages to ensure that it includes all relevant stakeholders at each stage of the study.

6.3. Methodology adopted

At this stage of the RESPITE project, meetings, information letters and project descriptions were sent to all stakeholders well before the project was approved. Various methods were used to achieve the objectives assigned to the public consultation:

- privileged meetings were held between WAPP authorities, project coordinators and World Bank team members on the content of the RESPITE project;
- group work was organized to specify the WAPP's obligations through the elaboration of an Environmental and Social Commitment Plan (ESCP), proving the WAPP's obligations in the management of the project's environmental and social impacts in all phases of project preparation, execution, operation and decommissioning, and a Stakeholder Engagement Plan (SEP).

6.3.1. Negotiation meeting on November 22, 2022

This meeting, organized by videoconference, brought together all the World Bank's technical and financial experts and the WAPP's administrative and technical staff.

The purpose of the November 22, 20222 meeting was essentially to negotiate the approval of the RESPITE project. At this meeting, the project documents prepared by the Bank as well as those prepared by the WAPP in compliance with the environmental and social framework were approved.

As part of the negotiations, the draft financing agreement between the General Secretariat of the West African Power Pool (WAPP) and the International Development Association was discussed, as were the draft project appraisal document (PAD), the disbursement and financial information letter, the environmental and social commitment plan (ESCP), and the draft procurement plan.

The results of the meeting were positive in that the Financing Agreement was approved, as were the WAPP commitments in terms of the Environmental and Social Commitment Plan and the Stakeholder Engagement Plan.

6.3.2. Project implementation meeting on March 3, 2023

The official launch of RESPITE project activities was held in Monrovia, Liberia on March 3, 2023. It brought together representatives of the donor, WAPP member utilities and the West African Power Pool.

6.3.3. Meeting of the Synchronization Working Group from May 31 to June 2, 2023

The WAPP Secretariat organized a meeting of the Synchronization Working Group in Dakar from May 31 to June 2, 2023. Following the completion of the 1st synchronization test of Zones 2 and 3 in October 2022, which confirmed the possibility of operating these two zones synchronously, expectations within the sub-region in relation to this project have risen considerably.

The Secretary General encouraged all stakeholders to do their utmost to achieve the permanent objective of synchronizing Zones 2 and 3.

The meeting was an opportunity to recall the challenges faced by zone 1 (Nigeria-Niger and part of Benin) regarding frequency management, which should not be an obstacle to carrying out synchronization tests. He therefore recommended that the synchronization taskforce.

The results of this meeting can be summarized in terms of the Synchronization Working Group's recommendations:

- to carry out at least two synchronization tests between zones 2 and 3 and zone 1 before October 2023, in order to make progress towards the objective of integrating the systems electricity sector
- propose permanent synchronization between Zone 2 and Zone 3
- draw up a roadmap for synchronization between zone 1, zone 2 and zone 3.

The following utilities were present at the meeting:

- BUI Power Authority (BUI/Ghana);
- Compagnie Ivoirienne d'Electricité (CIE/Côte d'Ivoire);
- Compagnie Ivoirienne de Production d'Electricité (CIPREL/Côte d'Ivoire);
- Côte d'Ivoire Energies (CI-ENERGIES/Côte d'Ivoire);
- Communauté Electrique du Benin (CEB/Togo/Benin);
- Egbin Power PLC (Sahara Power Group/Nigeria) ;
- Energie du Mali (EDM-SA/Mali);
- Ghana Grid Company Limited (GRIDCo/Ghana);
- Société Nationale d'Electricité du Burkina (SONABEL/Burkina);
- Société Nationale d'Electricité du Sénégal (Senelec/Sénégal);
- Société Nigérienne d'Electricité (NIGELEC/Niger);
- Société de Gestion de l'Energie de Manantali (SOGEM/OMVS);
- Sunon Asogli Power Plant (Asogli/Ghana);
- Transcorp Power Ltd (Delta IV Power Plant/Nigeria);
- Volta River Authority (VRA/Ghana).
- Mainstream Energy Solutions Limited (MESL/Nigeria);
- Transmission Company of Nigeria (TCN/Nigeria);
- Representatives of the WAPP Secretariat.
- Representative of General Electric International Inc.
- Representatives of CESI s.p.a.

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7. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

This section of the document presents a summary of the Environmental and Social Management Plan (ESMP) for the preparation phase of the RESPITE project. Initially, the players involved are presented, along with the institutional arrangements required for effective implementation of the ESMP. Measures to avoid, mitigate, compensate or ameliorate impacts are then detailed. This chapter also sets out the monitoring and follow-up programs, as well as the capacity-building program, required for effective implementation of the ESMP. The Stakeholder Engagement Plan (SEP) for the operational phase is outlined, including the general objectives of the SEP, the target groups, and suggested communication methods. Finally, resource requirements and institutional organization for SEP implementation are discussed. The timetables and costs for implementing the ESMP can be found in the detailed report.

This section presents all the environmental and social management measures, including technological risk management, and describes the operational and organizational aspects of implementing the recommended environmental protection measures. These measures fall into two main groups: general measures and specific measures.

General measures are standard measures that apply to all project components and/or activities. Specific measures are aimed at certain specific impacts that have been identified and for which particular actions need to be implemented.

In addition, management measures include two types of measures: mitigation measures, which aim to minimize the effects of the project's negative impacts, and enhancement measures, which aim to increase the positive impacts.

All management measures will be presented in tabular form for each project phase, along with monitoring indicators, responsibilities, implementation periods and costs.

Presentation of the specific management plans

Specific thematic management plans are proposed and integrated into the ESMP according to the nature of the impacts identified at the ESIA stage for projects such as the 330 KV median backbone interconnection, the Ghana-Burkina-Mali interconnections, the dam project and the solar project on Lake Saint Paul in Liberia, etc. These specific themes concern:

- stakeholder engagement, including complaints management
- workforce management
- management of residual and hazardous materials
- traffic and travel management
- emergency preparedness and response
- Waste management
- Occupational Health and Safety
- Security
- community health and safety
- worker health and safety, including a code of conduct;
- management of workers' camps
- combating gender-based violence.

7.1. Stakeholders involved in implementing the simplified ESMP of component 4A which is essentially focused on the preparation of investment projects

The effective and efficient implementation of the Environmental and Social Management Plan (ESMP) requires an institutional arrangement to mobilize the players involved by clarifying the roles and responsibilities of each of them. All the stakeholders listed below will be involved in monitoring the implementation of the ESMP through consultation meetings and in the complaints management process.

7.1.1. The West African Power Pool (WAPP)

The West African Power Pool (WAPP) was created by Decision A/DEC.5/12/99 of the 22nd Summit of the ECOWAS Conference of Heads of State and Government. By Decision A/DEC.18/01/06, the 29th Summit of ECOWAS Heads of State and Government, held in Niamey, adopted the Convention on the organization and operation of the WAPP. At the same summit, the status of ECOWAS Specialized Institution was conferred on WAPP by Decision A/DEC.20/01/06. The General Assembly is the supreme decision-making body of the WAPP. It brings together all member companies. To date, the WAPP has 39 member companies. The Executive Council (EC) is responsible for implementing the decisions taken by the General Assembly. To this end, it is vested with the broadest powers to carry out the mission entrusted to it within the framework of achieving the WAPP's objectives. To date, the EC has 15 members.

The General Secretariat is the administrative and technical body responsible for the day-to-day management of WAPP activities. It comprises 3 departments: the Information and Coordination Centre, the Administration and Finance Department and the Planning, Investment Programming and Environmental Protection Department.

WAPP is a beneficiary of the World Bank's Financial Assistance and promoter of Subcomponent 4A "Regional Integration and Technical Assistance (RITA)" of the RESPITE project. All implementation activities will be carried out under the authority of WAPP.

7.1.2. The Department of Planning, Investment Programming and Environmental Protection (D/PIPES)

The Department of Planning, Investment Programming and Environmental Protection (D/PIPES) is responsible for implementing the project's ESMP during the project preparation phase.

The D/PIPES has a team of experts in technical monitoring and environmental and social monitoring of projects. The WAPP RESPITE team comprises the following full-time or part-time staff: (i) project coordinator; (ii) technical staff coordinators (operational pilots) (5); (iii) financial management specialist; (iv) senior procurement specialist; (v) deputy procurement specialist; (vi) disbursement/accounting specialist; (vii) environmental specialist; (viii) social issues specialist; and (ixvii) gender-based violence specialist. Further details are provided in WAPP RESPITE's detailed budget.

In terms of roles and responsibilities, the project team, with the support of the environmental, social and gender consultants, coordinates and monitors all project activities, in particular those of the consultants in charge of carrying out pre-investment studies. The team reports on the progress of project activities to the Department Director and to the World Bank at all project monitoring meetings.

7.1.3. Project Implementation Unit (PIU) (PIU-WAPP)

The project implementation unit at WAPP is housed in the Investment Planning and Programming and Environmental Safeguarding department to monitor the project on a day-to-day basis. This unit is made up of the RESPITE project coordinator, an expert environmental consultant, a social consultant and a part-time gender consultant. The latter are responsible for monitoring the preparation of E&S instruments (ESIA, ESMP, ESCP, SEP, WMP, MG, HSSE, etc.), public consultations and management of the complaints management mechanism.), public consultations and management of the complaints management mechanism. They control the quality of the content of E&S documents.

Similar team exist in each of the countries concerned to monitor the REPSITE project.

7.1.4. Ministries in charge of energy

The ministries in charge of energy in ECOWAS member countries ensure the proper execution of projects in their sector. In this respect, they are responsible for providing guidance to avoid certain difficulties. These ministries have set up Technical Departments to represent the ministry in the environmental and social management plan follow-up coordination activities carried out by environmental institutions. As such, they participate in field activities.

7.1.5. Other ministries involved

The Ministries of Finance, Agriculture, Construction, Estates and Urban Planning are involved in the development and implementation of ESMPs as required. They will undoubtedly be involved to one extent or another. The Ministry of Agriculture, for example, is involved in defining the price scale for compensating agricultural losses.

7.1.6. National electricity companies concerned and members of the WAPP

National electricity companies are first and foremost project owners in their own country. They appoint their own management, departments, technical study services, environmental services and focal points to coordinate and monitor the implementation of project activities.

Within the framework of the RESPITE project, the Electricity Companies of the WAPP member states that will benefit from the Bank's support are the following:

- Benin: Communauté électrique du Bénin (CEB) and Société béninoise d'énergie électrique (SBEE).
- Togo: Compagnie Energie Electrique du Togo (CEET)
- Ghana: Ghana Grid Company (GRIDCo)
- Nigeria: Transmission Company of Nigeria (Nigeria-TCN)
- Côte d'Ivoire: CI Energie (CI)
- Burkina Faso: Société Nationale d'électricité du Burkina Faso (Burkina Sonabel)

- Mali: Energie du Mali (EDM)
- Niger: Société Nigérienne d'Electricité (NIGELEC)
- Senegal: Société Nationale d'Electricité du Sénégal (SENELEC)

7.1.7. Project management units (PIUs in the countries concerned)

Like the WAPP PMU, the PMUs at national level are made up of teams of technical managers appointed by their superiors to monitor project activities and suggest recommendations for timely implementation.

They own facilities that will undergo interventions as part of the finalization of synchronization. As owners of these facilities, they will not only be consulted by the consultants in charge of the project preparation studies but will also participate in the implementation of certain provisions during this phase.

7.1.8. Environment agencies

Environmental agencies in all ECOWAS member countries have been set up as a special agency or administration, usually responsible for environmental management. These administrations or Competent Agencies are responsible for approving project impact studies. They give their opinion to the Ministries of the Environment before issuing the certificate or permit of conformity and coordinate the monitoring of the Environmental and Social Management Plan. In this capacity, they monitor the proper implementation of mitigation and enhancement measures. They may also mobilize local state representatives in charge of environmental and resettlement issues to support them in their interventions.

7.1.9. Independent power producers (IPPs) such as Contour global (Togo) Azura-Edo (Nigeria), Access Power (Mali), AMDA (Burkina Faso)

Independent power producers (IPPs) are involved because they own generation facilities, including electrical transformer substations, which will undergo work to synchronise their substations. This work will generate environmental and social risks and impacts. As independent promoters, they will play their part in the environmental and social management of the project.

7.1.10. Consultants and suppliers

Consultants and suppliers are the direct executors of the project preparation phase. Their actions are at the root of conflicts and frustrations. Their services boil down to carrying out pre-investment studies according to the rules of the trade. It is precisely in this respect that imperfections are noted, namely: failure to respect procedures for recruiting experts and/or manpower, poor behavior of members of their teams towards communities, insufficient sharing of information, negligence in consulting the public, etc.

7.1.11. The World Bank

The General Secretariat of the West African Power Exchange System has requested financial support from the International Development Association (IDA) with a view to financing the cost of the RESPITE Project through the activities of Component 4A "Regional Integration and Technical Assistance (RITA).

An Environmental and Social Framework (ESF) that came into force on October 1, 2018, applies to all new World Bank investment project financing. It enables the

World Bank and Borrowers to better manage the environmental and social risks of projects and achieve better development outcomes.

The ESC addresses environmental and social risks in a thorough and systematic way; it marks a major evolution in the way issues such as transparency, non-discrimination, public participation and ethical accountability are addressed, including by expanding the role of complaint review mechanisms; it further harmonizes the World Bank's environmental and social protection mechanisms with project sponsors.

It includes the World Bank's Sustainable Development Vision, the World Bank's Environmental and Social Policy for Investment Project Finance, which sets out the Bank's requirements, and the ten Environmental and Social Standards (ESS), which set out the Borrowers' obligations.

7.1.12. Local authorities

Local authorities and elected representatives (mayors), traditional chiefs and local traditional leaders in the countries concerned by the country play a major role in mobilizing support for effective management of the ESMP. But they are undoubtedly consulted in the process of implementing the various E&S instruments.

Local authorities are essential intermediaries between the WAPP-EMU/national PMUs and the local population. In particular, they take part in all discussions and negotiations concerning compensation. They also carry out specific tasks, including those relating to land tenure.

The project preparation documents show that it is necessary for certain stakeholders to be and participate actively in the implementation of the ESMP at this stage of project preparation.

To sum up, the players highlighted above are involved in project implementation because they:

- participate in project design and/or financing (technical and financial partners, sectoral ministries, local authorities);
- play a role in the preparation and/or execution of project implementation documents (technical and financial partners, sectoral ministries, local authorities, decentralized public and administrative authorities, regional and departmental government technical services);
- actively participate in consultations to voice concerns on a wider scale than that of a household Base Community Organizations (BCOs), Civil Society Organizations (CSOs), the media, etc.) ;
- receive information due to the fact that public funding is proposed to support this project (populations in general).
- are stakeholders in the project's area of intervention (regional and departmental government technical services involved in the specific field, CSOs, the private sector, the media, etc.).

Table 9: Presentation of the Institutional Arrangement and the roles and responsibilities of stakeholders in project implementation

Level	Institutional players	Roles and responsibilities
WAPP	D/PIPES PIU_WAPP	• Project promoter and coordinator • Responsible for preparing technical and environmental feasibility studies Responsible for drawing up and monitoring implementation of SE, ESMP, WMP, MG, HSE
National electricity companies of ECOWAS countries concerned by the project	PIU / WAPP project, Focal points National PIU	• Monitoring of project implementation • Monitoring implementation of SEP, ESMP, WMP, MG, etc.
Ministries in charge of energy in the ECOWAS countries concerned by the Project	PIU / WAPP Focal points	• Ensure project implementation in accordance with the financing agreement • Support utilities in the diligent processing of applications with environmental agencies to obtain feasibility opinions on time. • Regional and national monitoring and coordination of project activities. • Implementation of SEP and ESMP • Inform and involve stakeholders • Ensuring compliance with commitments made in relation to stakeholders • Manage and monitor the grievance management mechanism • Ensuring that the needs and interests of the local population are taken into account
Ministries in charge of the Environment in the ECOWAS countries concerned by the Project	PIU / WAPP National environnemental institutions/ administrations/ agencies	• Validate terms of reference • Validate scoping, ESIA and RAP reports • Monitor implementation of Environmental and Social Management Plans (ESMP), • Organize public hearings
Other Ministries - Finance	PIU / WAPP Agriculture Labor and Employment Town Planning Gender and Child Promotion	• Provision of resources for compensation • Timely provision of compensation funds • Monitoring and evaluation of programs and projects • Participate in defining the compensation price scale for assets to be affected (arable land, crops, plantations and agricultural harvests). • Validate action and resettlement plans • Prepare the declaration of public utility • Monitoring and adoption of WMP content (compliance with labor regulations (child labor)) • Monitoring and adoption of hygiene, health, safety and working conditions plans • Monitoring of social issues, gender-based violence and child labor.
Private sector electricity generation transmission	PIU / WAPP Works contractors Works execution	• Construction works • Drawing up a works ESMP, • Implementing a labor code and a code of good conduct for personnel, • Respecting the principle of individual protection for workers

Level	Institutional players	Roles and responsibilities
Consultants and suppliers	PIU / WAPP Technical study consultants Supervision and control consultants	• Monitoring of ESMP and SEP implementation
Territorial administration	PIU / WAPP Local elected representatives Technical departments of regional councils	• Participation in local monitoring of environmental and social SEP and ESMP, WMP, MG, etc. • Setting up and running the Complaints Management Mechanism • Mobilization, information and awareness-raising of local communities
Local chiefs Neighbourhood	Village chiefs	• Implementation and management of the Complaints Management Mechanism • Mobilize, inform and sensitize local communities
Donor	World Bank	• External monitoring, evaluation and audit of the implementation of the project • Financial support

7.2. Mitigation and improvement measures

Impact mitigation measures designed to avoid, mitigate, compensate for or ameliorate the various impacts identified are presented in a table entitled Project Environmental and Social Management Plan for the project preparation phase.

Those responsible for implementation and monitoring or follow-up are also identified for each activity, along with the associated costs. Indicators for the implementation of measures are proposed to enable the environmental performance of the ESMP to be assessed. For further details on monitoring and follow-up, please refer to the section below.

Table 10: Presentation of the simplified Environmental and Social Management Plan (ESMP)

Activities	Potential risks and impacts	Mitigation of negative impacts	Indicators	Implementation period	Responsible for		Periodicity
					implementation artwork	monitoring	
Selection of consultants and suppliers	• Risk exclusion, favouritism and discrimination in the selection and appointment of project team members • Risks imprecision and inconsistency of the terms of reference • Risk of complaints, frustrations and conflicts	• Adopt a clear and objective method for appointing project focal points. • Develop, adopt, disclose and implement in artwork a procedure for selection fair and transparent consultants • terms of reference adopted by stakeholders concerned • Develop, adopt, disclose and implement in implements the Stakeholder Engagement Plan, the Workforce Management Procedure (WMP), and the Grievance Mechanism (GM)	• Availability of procedure for designating focal points • Number and nature of complaints recorded • Quality of terms of reference and deliverables	Study preparation and completion phase	Project Management Unit /WAPP, public services concerned, company focal points electricity, Consultants	Project Management Unit /WAPP Companies electricity	Half-yearly
Activities of consultants and suppliers	• Failure to respect the study schedule • Risks of conflict and non-respect of community habits and customs	• Assess periodically the states study progress • Develop, adopt, disclose and implement in implements the Stakeholder Engagement Plan, the Workforce Management Procedure (WMP), and the Grievance Mechanism (GM)	• Number of periodic meetings organized • Periodic reports products • Number and nature of complaints recorded	Study preparation and completion phase	Project Management Unit /WAPP, public services concerned, company focal points electricity, Consultants	Project Management Unit /WAPP Companies electricity	Half-yearly
Mobility of consultants and their teams (travel and transport of consultants and/ or suppliers for work and field visits	• Risk increases in traffic road in localities • Risk of road accidents • Risk insecurity and violence in certain project areas • Risks exploitation, abuse sexual as well as harassment Sexual, Gender-Based Violence and Violence Against Children	• Develop and implement a health and safety plan and provide periodic training on accident prevention • Develop and implement the Risk Management Plan Safe • the consultants sign the code of conduct • Develop, adopt, disclose and implement in implements the Stakeholder Engagement Plan, the Workforce Management Procedure (WMP) and the GM	• Health and safety plan available • Number and nature of complaints recorded • Number of cases of insecurity recorded	Study preparation and completion phase	Project Management Unit /WAPP, public services concerned, focal points companies electricity, Consultants	Project Management Unit /WAPP Companies electricity	Monthly

Field activities (consultations with institutions and communities)	• Bad organization of consultations • Increased complaints, frustration and conflict • Risk insecurity in certain project areas • Risk of marginalization of groups vulnerable, including discrimination against women • Risks exploitation, abuse sexual as well as harassment Sexual, Gender-Based Violence and Violence Against Children	• Involve opinion leaders and village chiefs in organizing sessions • Develop and implement the Risk Management Plan Safe • Develop, adopt, disclose and implement in implements the Stakeholder Engagement Plan, the Workforce Management Procedure (WMP) and the GM	• Risk Management Plan Safe available and implemented • Number of complaints recorded	Study preparation and completion phase	Project Management Unit /WAPP, public services concerned, company focal points electricity, Consultants	Project Management Unit /WAPP Companies electricity	Monthly
Monitoring the execution of studies and design work	• Risk of poor appreciation of the contents of the deliverables • Risk of non-compliance with schedules execution of studies, standards and procedures in force	• Do the quality review periodic deliverables with consultants	• Number of meetings periodicals organized • Progress reports products • Number of rejected reports	Study preparation and completion phase	Project Management Unit /WAPP, public services concerned, company focal points electricity, Consultants	Project Management Unit /WAPP Companies electricity	Monthly
Monitoring of training and institutional capacity building activities	• Lack effectiveness of capacity building programs • Bad targeting of staff to be strengthened	• Raise awareness among stakeholders about training modules • Retain the expertise necessary to develop and conduct training	• Number of training courses organized • Number and level of experts selected to conduct the training • Number of employees trained	Study preparation and completion phase	Project Management Unit /WAPP, public services concerned, company focal points electricity, Consultants	Project Management Unit /WAPP Companies electricity	Half-yearly

7.3. Environmental and social monitoring and follow-up program

The aim of environmental monitoring and follow-up is to ensure that the environmental and social commitments and recommendations included in the ESMP are applied in full during project implementation.

During the pre-construction/construction and operation phases, the national or regional institutions in charge of environmental management carry out external monitoring of the proper implementation of mitigation and enhancement measures. They may also mobilize local state representatives to take part in monitoring missions to verify the coordination of the project's ESMP monitoring. The environmental and social specialists recruited will be responsible for internal audit.

Donors will also play a role in monitoring the proper implementation of the ESMP. The project will be required to submit periodic ESMP implementation reports to the lenders. An independent environmental and social audit of the project will also be carried out annually.

The WAPP, as the project's executing agency, will also need to appoint an E&S specialist, who will be responsible for monitoring the implementation of the ESMP and transmitting monthly reports and audit reports to the World Bank.

7.4. Stakeholders' capacity building Programme and Training

The effective and efficient implementation of the environmental and social management plan requires a collaborative approach between actors where responsibilities are shared among the many stakeholders, to varying degrees, and by asserting knowledge of the World Bank's environmental and social framework by stakeholders. To be sure, it is imperative to assess the level of capacity of the actors and if necessary, strengthen them in terms of environmental and social protection. Concerned are the PIU_WAPP, the PIU national level, the Consultants within the D/PIPES of the General Secretariat of the WAPP is the key player in the implementation of the ESMP.

In this context, the successful implementation of the ESMP requires a better understanding of the responsibilities of the various stakeholders and their individual involvement in environmental and social management. This implementation will be supported by an institutional support and capacity-building program that will focus on training PIU members, stakeholders, affected communities and consultants on:

- Environmental and Social Framework (ESF) Requirements;
- Stakeholder identification and inclusive engagement
- roles and responsibilities in environmental and social monitoring
- Capacity building of actors in the development and implementation of E&S instruments (ESCP, ESMP, SEP, BMP, DMP, LMP, CMP),
- E&S documentation and reports
- Good complaint management and record keeping practices including SEA/SH and GM

- Population health and safety Management and monitoring of risks identified in the ESMP
- Work Management Procedures
- Emergency preparedness and response

Support local communities on the issues, dangers, challenges and responsibilities related to the installed infrastructure. Indeed, experience gained in the context of energy line projects shows that some residents do not observe the prohibitions related to the presence of energy infrastructure in their environment and accidents involving communities occur yet. Such accidents could be minimized through training tailored to these communities as well as the distribution of awareness materials.

The needs for capacity building and training of actors will be discussed with regional, national and local administrative stakeholders and analysed to validate the content of the training. Questionnaires will also be developed to collect expressions of capacity building needs.

In addition to the training needs, the human, material and financial resources of the actors were analysed. It is noted that generally the necessary equipment for monitoring and surveillance, vehicles, measuring equipment and computer equipment are not provided to monitoring teams being rare. Monitoring and surveillance activities also appear to be underfunded within the public entities interviewed. Human resources are easier to mobilize, although, as mentioned earlier, a small proportion of staff are adequately trained in environmental and social management.

Table 11: Training and capacity-building program

Axes	Beneficiaries of the training	Mode of training	Theme Animation	Animation	Approximate cost
1 Training on the requirements of the environmental and social framework (ESF) Identification and inclusive mobilization of stakeholders (and monitoring of the SEP) Raise awareness of roles and responsibilities in environmental and social monitoring	PIU_WAPP, national PIUs, Institutions in charge of the environment	3-day training workshop for 20 participants	• Examine the requirements of the environmental and social framework and provide an overview of the environmental aspects of energy projects. • Environmental regulations and laws governing energy activities. • Roles and responsibilities of various stakeholders in the implementation of the ESMP and associated mitigation and enhancement measures and management plans.	1 national expert (local consultant)	• Participant allowances, Facilitator • Room and health breaks • TOTAL: $17,000 per country and ($136,000) the equivalent of 80,000,000 FCFA for the 8 countries involved
2 Capacity-building for stakeholders in the development of E&S instruments (ESCP, ESMP, SEP, WMP, DMP, LMP, BMP, PGPC),	PIU_WAPP, national PIUs,	3-day training workshop for 20 participants	Strengthen capacities to be able to undertake the development of specific plans Their importance and usefulness		• Participant allowances, Facilitator • Room and health breaks • Allow an amount of approximately TOTAL: $17,000 per country and ($136,000) the equivalent of 80,000,000 FCFA for the 8 countries concerned
3 Sensitize and train the main actors of the project on the implementation of the ESMP, the monitoring of environmental and social performance, as well as the nature of their respective responsibilities	Institutions in charge of the environment	3-day training workshop for 20 participants	• Overview of environmental aspects in energy projects. • Regulations and laws relating to the environment and governing energy activities. • Roles and responsibilities of the various stakeholders in the implementation of the ESMP and the mitigation and improvement measures as well as the associated management plans, both in the construction and operation phases	1 national expert (local consultant)	• Participant allowances, Facilitator • Room and health breaks • TOTAL: $17,700 (10,620,000 FCFA)

4 Best Practices in Complaint Handling and Record Keeping, Including SEA/SH and GM	PIU_WAPP, national PIUs,	3-day training workshop for 20 participants	• Insist on the objectives and the main aspects to be developed in a complaint management mechanism, in particular, complaints related to sexual exploitation and abuse and sexual harassment.	1 national expert (local consultant)	
5 Provide national PIUs with the tools, techniques and support necessary for effective implementation of the ESMP	Institutions in charge of the environment	5-day training workshop for 20 participants for period	• Implementation of the ESMP and mitigation and enhancement measures as well as associated management plans during the operation phase. • Best environmental practices. • Integration of environmental and social management measures in plans and specifications. • Complaint management, negotiation and mediation techniques. • Monitoring of environmental and social performance during the operational phase	1 national expert (local consultant)	• Participating allowances international trainer • National trainer Room and health breaks: • Tracking tools: TOTAL: $63,345 per country (38,007,000 FCFA)
6 Support the national PMUs on Health and Safety aspects during the maintenance of the right-of-way	PIU_WAPP, national PIUs,	5-day training workshop for 20 participants	• Health and safety during the maintenance of the right-of-way, including in particular the following aspects: • Introduction, and use, of toxic chemicals or other harmful to health; • handling of hazardous products and specialized residual materials • use of helmets and other safety equipment • poisoning treatment • injuries caused by chemicals and fires • security checks	1 international expert (consultant)	• Participating allowances • International trainer • Room and health breaks • TOTAL: $27,550 (16,530,000 FCFA)
7 Support local communities located near worksites on issues, dangers, challenges and responsibilities related to the arrival of new infrastructure	Local communities ((local elected representatives, opinion leaders, NGO leaders, etc.)	Half a day of interventions per village over a set period of 6 months	• Awareness of the risks and opportunities of the construction and operation of the power line. • Respect of the right-of-way, risks of electrocution, activities permitted/proscribed under the right-of-way, monitoring of bird mortality and nesting (if applicable), opportunities brought by electrification and efficient management of electricity.	1 national expert/ local consultant	• National presenter • National PIU facilitator TOTAL: $8,190 per country (5,000,000 FCFA)

7.5. Stakeholder Engagement Plan (SEP)

Stakeholder involvement in the RESPITE project is an ongoing process which, initiated in the study phase, should be maintained throughout the project. It is recommended to ensure the continuation of information and consultation activities with affected communities and other stakeholders during the various activities of the preparation phase of subcomponent 4A, based on a SEP adapted for each activity.

Typically, the SEP provides information on the overall objectives, target groups and suggested communication methods. Resource and organizational requirements for implementing the SEP are also addressed.

7.5.1. Objectives

The SEP aims to define, in this phase of preparing RESPITE sub-projects, the preferred mechanisms for facilitating sustained communication with local communities and other external project stakeholders and maintaining a relationship of trust with them.

Its main objectives are to:

- maintain a social and institutional dialogue through which the population, authorities and other organizations concerned by the project will be informed about project activities and will be able to express their “informed” opinion on perceived nuisances, risks or opportunities in connection with the project, as well as on measures and actions to be taken in response to perceived or anticipated impacts;

- ensure that the project complies with international best practice in stakeholder participation in the implementation of major infrastructure projects;

- ensure that the project implementation process helps to consolidate WAPP's efforts to build lasting relationships with national utilities, relevant authorities and other stakeholders.

7.5.2. Identification of stakeholders

In the context of RESPITE subcomponent 4A, the stakeholders of the project in accordance with the targeted activities, who will be consulted and to whom information will be disclosed, are: i) affected parties, ii) parties interested in the project and iii) vulnerable groups.

These are generally individuals, groups, local populations, institutions and other stakeholders likely to be affected by the project, directly or indirectly, positively or negatively.

Affected parties

This is a category of stakeholders likely to be affected by the project's actions. They are essentially the following groups: (i) men, women, (ii) local youth and (iii) vulnerable groups.

Interested parties

This category of stakeholders includes all individuals, groups of individuals or institutions likely to influence or be affected by the project's results, or who have an interest in the project's implementation.

Vulnerable individuals or groups

These are marginalized, disadvantaged individuals or households who, because of their particular situation, could be disproportionately affected by the project's actions. The latter often lack the means to voice their concerns or to grasp the scope of the project's impact, and for whom special engagement efforts (granting money as transportation costs and providing a transportation vehicle) might also be necessary to ensure their equal representation in the consultation and decision-making process associated with the project.

7.5.3. Stakeholders in the preparation phase of RESPITE component 4A sub-projects

Stakeholder groups include:

- ministries in charge of energy
- relevant national environmental agencies;
- consultants and suppliers
- departmental and communal authorities and technical services;
- the communities crossed by the line route and the populations bordering the substation;
- NGOs and civil society organizations, particularly in the fields of nature conservation, development, gender equality and human rights.
- Electricity companies and utilities in WAPP member states that will benefit from the sub-projects:
    - ✓ Benin: Communauté Électrique du Bénin (CEB) and Société Béninoise d'Energie Electrique (SBEE).
    - ✓ Togo: Compagnie Energie Electrique du Togo (CEET)
    - ✓ Ghana: Ghana Grid Company (GRIDCo)
    - ✓ Nigeria: Transmission Company of Nigeria (Nigeria-TCN)
    - ✓ Côte d'Ivoire: CI Energie (CI)
    - ✓ Burkina Faso: Société Nationale d'électricité du Burkina Faso (Burkina Sonabel)
    - ✓ Mali: Energie du Mali (EDM)
    - ✓ Niger: Société Nigérienne d'Electricité (NIGELEC)
    - ✓ Senegal: Société Nationale d'Electricité du Sénégal (SENELEC)
    - ✓ Senegal: Société nationale d'électricité du Sénégal (SENELEC).

7.5.4. Stakeholder engagement program

This plan must include the actions to be taken to disclose information, the subjects to be addressed, to whom, when and how. It must also include actions to ensure stakeholder consultation in this preparation phase of Component 4A sub-projects.

Project stakeholders will then be mobilized by distinct and appropriate means, depending on their different interests and situations, in order to meet the objectives of the “stakeholder mobilization plan”.

7.5.5. Proposed strategy for disseminating information during the preparation phase of subcomponent 4A project studies

In order to adequately inform stakeholders, various means will be employed during the study preparation phase, namely: Official letters, Emails, Websites, Meetings, Workshops, Interviews, Focus-groups, local disclosure, reports, brochures, non-technical summaries, etc.

Publicly disclosed information will include:

- prior announcements of planned field activities (objectives, nature, organizations involved and timetables);
- any significant adjustments made to the overall schedule, if any;
- anticipated short- and medium-term local labor requirements;
- recruitment requirements for consultants and suppliers;
- the progress of work to define line layouts;
- progress on the preparation of the ESIA, the ESMP including the various specific management plans;
- the dangers to public safety associated with the presence of the works to be built (a power line), the mitigation measures adopted and the dangerous behaviors to be proscribed;
- restitution of the results of the completed studies.

The table below sets out the project implementation stages, the stakeholders targeted, the consultation topics, the methods used to reach participants, the timetable and the people responsible.

Table 12: Proposed disclosure strategy

N°	Project stage	Information to be disclosed	Proposed methods	Target stakeholders	Responsibilities	Timetable
1	***Project preparation and conception***	• Project preparation and design - Project negotiation document, Completion of ESC instruments for WAPP (SEP, ESCP) • Prior announcements of planned field activities (objectives, nature, organizations involved and timetables) • Recruitment requirements for consultants and suppliers; . Anticipated short- and medium-term local manpower requirements.	• Meetings • Field visit • Websites • Official letters • Emails • WhatsApp	• Electricity companies/countries: Transmission Company of Nigeria (TCN) - Nigeria • Communauté Electrique du Benin (CEB) - Togo/Benin • GRIDCo - Ghana VRA - Ghana Côte d'Ivoire (CIE) - Côte d'Ivoire CI-ENERGIES - Côte d'Ivoire, etc. Ministries, agencies and departments, • Research organizations, • communities and local authorities, • NGOs, CSOs, development partners Local communities	• PIU/WAPP • Electricity companies	Throughout project preparation and implementation
		Information on the implementation of safeguard instruments (ESMF, RPF SEP, ESIA, RAP, GM, LMP etc.)	• Letters • Meetings • Official websites • Regional and district publications • Workshops, • Local disclosure	• Electricity companies/countries: Transmission Company of Nigeria (TCN) - Nigeria • Communauté Electrique du Benin (CEB) - Togo/Benin • GRIDCo - Ghana VRA - Ghana Côte d'Ivoire (CIE) - Côte d'Ivoire CI-ENERGIES - Côte d'Ivoire, etc. Ministries, agencies and departments, • Research organizations, • Communities and local authorities, • NGOs, CSOs, development partners Local communities	• PIU/WAPP • Electricity companies	Throughout project preparation and implementation

2	***Works on studies***	Need for site investigations Completion of ESMPs, ESIAs, RAPs, other instruments required by the ESC (labor management procedure, Occupational Health and Safety Plan, Emergency Preparedness and Response, etc.) Project monitoring and E&S compliance report	• Letters • Meetings • Official websites • Regional and district publications • Workshops, • Local disclosure	• Electricity companies/countries: Transmission Company of Nigeria (TCN) - Nigeria • Communauté Electrique du Benin (CEB) - Togo/Benin • GRIDCo - Ghana VRA - Ghana Côte d'Ivoire (CIE) - Côte d'Ivoire CI-ENERGIES - Côte d'Ivoire, etc. Ministries, agencies and departments, • Research organizations, • Communities and local authorities, NGOs, CSOs, development partners Local communities	• PIU/WAPP • Electricity companies	Throughout project preparation and implementation
3	***End of preparatory studies and final disclosure***	Restitution of final reports and final disclosure	• Official websites • Publications Regional and district level • Workshops • Meetings	• Electricity companies/countries: Transmission Company of Nigeria (TCN) - Nigeria • Communauté Electrique du Benin (CEB) - Togo/Benin • GRIDCo - Ghana VRA - Ghana Côte d'Ivoire (CIE) - Côte d'Ivoire CI-ENERGIES - Côte d'Ivoire, etc. Ministries, agencies and departments, • Research organizations, • Communities and local authorities, • NGOs, CSOs, development partners Local communities	• PIU/WAPP • Consultants • Electricity companies	Completion of preparatory studies

7.5.6. Proposed strategy for consultations during the study preparation phase of subcomponent 4A projects

This strategy includes consultations already underway and those to be carried out.

Summary of consultation activities already undertaken

The stakeholder mobilization activities carried out to date are linked to the negotiation and start-up activities for the preparation studies and the development of environmental and social safeguard instruments. This section reports on the consultations carried out. The attendance lists for these consultations can be found in the appendices.

As part of the negotiations for the WAPP grant agreement for the RESPITE project, a pre-evaluation mission was held on November 9, 2022, bringing together 25 participants (10 from the World Bank and 15 from WAPP).

On November 22, 2022, a hybrid (face-to-face and virtual) negotiation meeting was held in Lomé, bringing together 45 participants, including 21 from WAPP and 23 from the World Bank.

On January 31, 2023, the RESPITE project Grant Agreement signing meeting was held in Sierra Leone, with the participation of twenty-one (21) representatives from Sierra Leone, seven (7) from Chad, six (6) from Liberia, five (5) from Togo, two (2) from WAPP and thirty-six (36) from other technical and financial partners.

Table 13: Summary of consultations carried out

No	Meeting venue	Locations concerned	Date of meeting	Activities /Location	Numbers of participants
1	Washington and Cotonou	WAPP	November 9 2022	Virtual meeting	25
2	Lomé (Togo)	World Bank and WAPP	November 22, 2022	Face-to-face meeting	45
3	Sierra Leone	Countries concerned by the RESPITE project	January 31, 2023	Face-to-face meeting	77

Table 14: Proposed stakeholder consultation strategy

Project stage	Consultation theme	Methods used	Target stakeholders	Responsibilities	Periodicity
Complaints management mechanism, including SEA/SH procedures	• Information on the mechanism and its principles • Setting up complaints management committees • How to access the mechanism • Handling sensitive and non-sensitive complaints • Monitoring and evaluation of the mechanism	• Public meetings • Focus groups • Interviews • Formal meetings • Video conferences • Letters and memos	• World Bank • Electricity companies • Development partners • Communities and local authorities NGOS, CSOS, • Project countries (Liberia, Ghana, Burkina Faso, Mali, Togo, Ivory Coast, Benin, Nigeria, etc.)	Electricity companies	Start of project
Sub-project design and preparation	• Project negotiation • Project presentation • Project benefits and risks • Institutional arrangements • Identification of implementing partners • Project financing • Interest of other donors in the project	• Public meetings • Focus groups • Interviews • Formal meetings • Video conferences • Letters and memos	• World Bank • Electricity companies • Development partners • Communities and local authorities NGOS, CSOS, • Project countries (Liberia, Ghana, Burkina Faso, Mali, Togo, Ivory Coast, Benin, Nigeria, etc.)	Electricity companies	Start of project
Preparation of environmental and social safeguard instruments (ESMF, RPF, SEP, LMP, RAP and other relevant ESC instruments)	• Environmental and social impacts and project risks • Stakeholder consultation requirements • Gender considerations • Consideration of vulnerable groups • Land mobilization for project activities	• Interviews with local communities and authorities • Discussions with target groups • Meetings with women's groups • Meetings with affected households	• The institutions concerned • Local communities and authorities • NGOs active in the community • Vulnerable groups, including women and girls	PIU Consultants	Preparatory studies phase

7.5.7. Management duties and responsibilities

The Head of the Project Implementation Unit (PIU) will be responsible for the overall stakeholder engagement process, its diligent implementation and its success.

Key functions and responsibilities for the process will be assigned to the Health, Safety and Environment Manager. WAPP, through the PIU, will ensure that adequate human and financial resources are available at all times for the effective development and implementation of the SEP. Under the supervision of the Health, Safety and Environment Manager, a Stakeholder Relations Officer will be appointed and made responsible for the implementation of the entire community engagement process during the study preparation phase.

Table 15: SEP management team

N°	Contact person	Roles and responsibilities	Contacts[1]:
1	Project Implementation Unit (PIU)	• Coordinate and oversee the development and implementation of the SEP; • Provide contact information for those responsible for responding to comments or questions about the project or the consultation process, including telephone number, address, e-mail address and job title (these people will not necessarily be the same throughout the duration of the project).	Name Tel: fax: cell: email:
2	The Environmental Specialist and the Social Issues Specialist	Responsible for implementing the SEP, under the supervision of the PIU Coordinator. Monitor the SEP in collaboration with the M&E specialist. Oversee external consultants hired to evaluate the implementation of the SEP for the project	Name Tel: fax: cell: email:
3	PIU Administrative and Financial Manager	Confirm the establishment of a sufficient budget for stakeholder mobilization	Name Tel: fax: cell:
5	Communication specialist	Responsible for developing and implementing the communication plan with reference to the SEP	Name Tél: cell: email:
6	Monitoring and evaluation specialist	Set up a database of stakeholders at central/national level and registers of commitments at local level; Monitor the SEP and the project's environmental and social performance indicators.	Name Tél: cell: email:

7.5.8. Monitoring and evaluation of SEP implementation

The social specialist will monitor and evaluate the implementation of the SEP. This activity enables the performance of the plan to be assessed with a view to its improvement. To this end, reports from public consultations during the implementation phase with stakeholders will be evaluated, along with field missions and surveys of beneficiaries and PAPs throughout the project cycle.

7.5.9. SEP implementation budget

Table 16: SEP implementation budget

	Main activities	Unity/ number	Periodicity	Amount in US dollars US
1.	Hold awareness and information sessions on the project	1	Once	5.000
2.	SEP sharing and ownership sessions with stakeholders	01	Once	5000
3.	Design and production of communication media and materials	01	Once	10.000
4.	Implementation of various SEP activities	01	During project phases	40.000
5.	Dissemination of awareness-raising messages through the mass media	04	During project phases	8.000
TOTAL				**68.000**

7.6. Implementation schedule and costs

7.6.1. Implementation schedule

In addition to being a source of reference for managing the project's environmental impacts, the ESMP is also a guide to the deployment of the various stages and procedures required for its proper implementation. The following table outlines the main logical steps required to ensure the effectiveness of the ESMP, avoid duplication of effort and ensure that information is shared between all key parties to the project.

The ESMP implementation schedule is presented in the table below.

Table 17: ESMP Implementation schedule

ACTIVITIES	MONTHS BEFORE START OF WORK																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Pre-investment study preparation phase																		
Sensitize and train key project stakeholders on the development and implementation of E&S instruments (SEP, ESIA, ESMP, RAP, OMMP, TMP, BMP), environmental and social performance monitoring, and the nature of their respective responsibilities.																		
Selection and recruitment of consultants/suppliers to carry out pre-investment studies																		
Implementation of mitigation and enhancement measures for biophysical and socioeconomic impacts																		
Preparation and implementation of the Stakeholder Engagement Plan (SEP)																		
Preparation and implementation of the Grievance Mechanism **t**																		
Preparation and implementation of the Hazardous and Non-Hazardous Waste and Residual Materials Management Plan																		
Preparation and implementation of the Health, Safety and Environment Plan																		
Preparation and implementation of the Traffic, Travel and Transportation Plan																		
Organization of grassroots community consultations																		
Development and implementation of a training program for stakeholders on environmental and social management.																		

7.6.2. Summary of ESMP implementation costs

The following table summarizes the costs of implementing the ESMP at the pre-investment study stage.

Table 18: ESMP implementation budget

ACTIVITIES	Source of verification	Costs (US$)	Costs FCFA
Pre-investment study preparation phase			
Implementation of a training program for stakeholders on environmental and social E&S tools	ESCP, SEP, ESIA, ESMP	40 000	24 000 000

ACTIVITIES	Source of verification	Costs (US$)	Costs FCFA
Pre-investment study preparation phase			
Raise awareness and train key project players in the development and implementation of E&S instruments (SEP, ESIA, ESMP, RAP, WMP, LMP, HSE, DMP, BAP), environmental and social performance monitoring, and the nature of their respective responsibilities.	ESCP, SEP, ESIA, ESMP	64 000	38 400 000
Provide the PMU and national PMUs with the tools, techniques and support necessary for effective implementation of the ESMP	ESIA, ESMP	PM	PM
Support local communities near sites and construction sites in understanding the issues, dangers, challenges and responsibilities associated with the arrival of new infrastructure.	ESIA, ESMP	PM	PM
Sub-total training program	ESCP, SEP, ESIA, ESMP	100 000	60 000 000
Develop and implement Stakeholder Engagement Plan and GM	ESCP, SEP, ESIA, ESMP	PM	PM
Development and implementation of health and safety management plan	ESCP, SEP, ESIA, ESMP, HSE	PM	PM
Soil and agricultural potential - Soil integrity Water resources - Hydrology and water quality Ambient air - Air quality Noise environnement - Noise levels Terrestrial habitats, flora and fauna Aquatic and semi-aquatic habitats and fauna - State of vegetation Avian fauna - Conservation of avian species Terrestrial habitats, flora and fauna Aquatic and semi-aquatic habitats and wildlife - Wildlife protection Quality of life, health and safety - Nuisances to local residents Land use and development Economy, employment and livelihoods - Community land use Economy, employment and livelihood - Local and regional economy	Works ESMP, HSE, Environmental and social requirements for companies		
Total costs of ESMP implementation study preparation phase		**204 000**	**122 400 000**

CONCLUSION

The simplified Environmental and Social Management Plan (ESMP) was drawn up on the basis of a review of documents, namely the Project Implementation Manual (PIM), the approved Project Appraisal Document, the Environmental and Social Commitment Plan (ESCP), the Stakeholder Mobilization Plan (SEP) of the Projet Régional d'Intervention d'Urgence dans le Secteur de l'Energie Solaire (RESPITE) and consultations with stakeholders.

More specifically, the rigorous application of the mitigation and enhancement measures prescribed in the ESMP will make it possible to control the impact of both the pre-investment study phase and to achieve a residual negative impact of minor, medium or positive significance for all the other environmental and social components.

Implementation of the ESMP is based on an adaptive approach that is phased throughout the life of the project. Environmental and social monitoring and follow-up will enable us to analyze the quality and effectiveness of the prescribed measures, and to detect any unanticipated impacts. The ESMP thus provides for the adaptation of management measures to take account of different realities, with a view to reducing the real impacts of the project.

The ESIA studies to be carried out by the consultants will develop the detailed ESMP for all activities of sub-component 4A of the RESPITE project.

BIBLIOGRAPHICAL REFERENCES

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3. Projet Régional d'Intervention d'Urgence dans le Secteur de l'Energie Solaire (RESPITE ; RESPITE ; Environmental and Social Engagement Plan (PEES) of the Stakeholder Mobilization Plan (SEP) of the Projet Régional d'Intervention d'Urgence dans le Secteur de l'Energie Solaire (RESPITE); November 2022

4. Projet Régional d'Intervention d'Urgence dans le Secteur de l'Energie Solaire (RESPITE; RESPITE: Stakeholders Engagement Plan; November 2022.

APPENDICES

- Terms of reference for the RESPITE component 4A ESMP development mission

WEST AFRICAN POWER POOL

SYSTÈME D'ÉCHANGES D'ÉNERGIE ÉLECTRIQUE OUEST AFRICAIN

Regional Emergency Response Program in the Solar Energy Sector (RESPITE)
P179267

Drawing up a simplified Environmental and Social Management Plan (ESMP) of RESPITE

Terms of reference

I- CONTEXT AND PRESENTATION OF THE PROJECT

I.1. CONTEXT OF THE PROJECT

As part of its mandate to create a Regional Electricity market in West Africa, the World Bank granted the West African Power Pool (WAPP) a grant of US$31.5 million for of component 2 “WAPP Technical Assistance and Network Integration Project (ITAP)” for the financing of the Ivory Coast – Liberia – Sierra Leone – Guinea (CLSG) interconnection project. Following this successfully executed project, the Bank through the Regional Emergency Intervention Program in the Solar Energy Sector (RESPITE) granted another donation to WAPP to continue and consolidate the activities of the ITAP project.

The RESPITE program aims to support four (4) countries in Sub-Saharan Africa: Liberia, Sierra Leone, Chad and Togo, to address the energy crisis facing the sub-region. Its development objective is to rapidly increase the grid-connected renewable energy capacity of these countries and thus strengthen regional integration in the electricity sector. RESPITE was the subject of a financing agreement (P179267 IDA GRANT N°E1500-3W) signed on February 2, 2023, between the IDA/World Bank and WAPP and mainly covers sub-component 4A “Regional integration and technical assistance (RITA)".

I.2. PRESENTATION OF THE PROJECT

The RESPITE has been prepared under the requirements of the World Bank's Environmental and Social Framework (ESF) (October 2018) and during negotiations with the Bank to benefit from the Project Preparation Assistance, it was required the preparation of an Environmental and Social Commitment Plan (ESCP).

The approved ESCP requires the preparation of a simplified Environmental and Social Management Plan (ESMP) no later than three (03) months after the start of the project.

The ESMP to be drawn up must take into account the activities carried out exclusively by WAPP in this preparation phase.

It should be noted that five standards are relevant to the implementation of RESPITE in its preparation phase: (i) NES n°01 "Assessment and management of environmental and social risks and effects"; (ii) NES n°02 "Employment and working conditions"; (iii) NES n°03 "Rational use of resources and prevention and management of pollution"; (iv) NES n°04 "Health and safety of populations" and (v) NES n°10 "Mobilisation of stakeholders and information".

RESPITE component 4A, which is the responsibility of the WAPP General Secretariat, covers the following activities:

- the finalization and operationalization of the legal, regulatory and technical frameworks to enable efficient regional trade between the countries of the WAPP system, including the countries involved in the CLSG interconnector and the North Core interconnector.
- technical integration of the WAPP network by improving the synchronous operation and reliability of interconnections.

- the preparation of regional priority generation and transmission projects in line with the WAPP 2018 System Master Plan, including preparatory studies for the Mt Coffee Island Solar PV Project (sub-component 1A) and the expansion of the Mt Coffee Hydro Power Plant (component 2), the Saint Paul 2 Hydro Power Plant, the WAPP Ghana-Burkina-Mali Interconnector and the WAPP Mid Interconnector.
- and strengthening the institutional and technical capacities of the WAPP Secretariat General (SG) to enable it to fulfil its regional mandate.

I.3 PRESENTATION OF WAPP AS PROMOTER

WAPP is a specialized ECOWAS institution in charge of integrating the regional energy system and creating a regional electricity market. Its mission is to ensure the promotion and development of energy production and transmission, as well as the coordination of energy exchanges between ECOWAS member states. WAPP is made up of public and private companies involved in the production, transmission and distribution of electricity in West Africa.

The General Secretariat is the administrative and technical body responsible for the day-to-day management of WAPP's activities, with three departments: the Information and Coordination Centre Department, the Administration and Finance Department and the Planning, Programming, Investment and Environmental Safeguarding Department (PIPES), which is responsible for the project at institutional level.

The present term of reference is part of the mission to draw up a simplified ESMP of the activities to be implemented by WAPP in the preparation phase of the RESPITE project's sub-component studies, in this case those of sub-component 4A.

II. MISSION OBJECTIVES

2.1. GENERAL OBJECTIVE

The present mission consists in elaborating the simplified ESMP of the activities to be carried out by WAPP under sub-component 4A of RESPITE in the preparation phase of the pre-investment studies according to the Bank's Environmental and Social Framework.

2.2 SPECIFIC OBJECTIVES

The mission aims specifically to:

a. Describe the activities of sub-component 4A in the preparation phase;
b. Describe the legal and institutional framework for implementing project activities;
c. Present and analyse the World Bank's environmental and social requirements and standards applicable to the sub-component;
d. Analyse and assess the main environmental and social risks and impacts;
e. Summarize public consultations;

f. Identify measures for mitigating negative impacts, maximizing potential positive impacts, and preventing and managing potential environmental and social risks;

g. Draw up a simplified Environmental and Social Management Plan (ESMP);

h. Draw up an environmental monitoring and follow-up program for implementation of the ESMP.

III-EXPECTED RESULTS

At the end of this study, a simplified ESMP will be drawn up and adopted. This ESMP should provide a framework for managing the potential environmental and social impacts of the component to be implemented by WAPP through i) the identification and analysis of risks and impacts; ii) the proposal of mitigation measures; iii) the establishment of a monitoring and follow-up program with capacity-building measures accompanied by an institutional arrangement.

WAPP is responsible for this assignment.

IV-DELIVERABLES

The deliverable is the simplified ESMP document.

RESPITE Signing Ceremony
January 30 – 31, 2023

Participant Name	Designation and Organization
Chad	
S.E.M. Moussa Natal Batraki	Ministre de la Prospective Economique et des Partenariats Internationaux (Governor for Chad)
S.E.M. Djerassem Le Bemadjiel	Ministre des Hydrocarbures et de l'Energie
Mr. Nathaniel Dolmia	Directeur Général de la SNE
Mr. Abdelkerim Dangaye	Directeur Général Technique du Ministère des Hydrocarbures et de l'Energie
Ferdinand M'Baissan	Solar Expert, Chad
Sabir Abakar	Procurement Expert, Chad
Mr. Bechir Ali Medellaye	Coordonnateur National du PIRECT
Liberia	
H.E. Samuel D. Tweah, Jr	Minister of Finance, Ministry of Finance and Development Planning
H.E. George Abou Gontor	Deputy Minister of Energy, MME
Mr. Monie Captain	Chief Executive Officer, LEC
Thomas Gongerwon	T&D expert, Liberia
Paschalina Mandingiadze	Procurement Expert, Liberia
Mr. Moses E. Farley	Executive Director for Donor Funded Projects,LEC
Togo Government	
M. Tchapo Singo	Directeur des Energies Renouvelables a la DGE
M. Abdoulaye-Robil Nassoma	Directeur General de l'AT2ER
M. Boda Stephane Waguena	Procurement expert
Mme. Sitou Laetita Kloutse	Renewables expert
M. Dosseh Kuevidjen	T&D expert
Sierra Leone	
H.E. Sheku Bangura	Minister of Finance, Ministry of Finance (MoF)
H.E. Alhaji Kanja Sesay	Minister of Energy, Ministry of Energy (MoE)
Mr. Abu Kamara	EDSA DG
Mr. Emmanuel Ozigbo	IPS EDSA PIT
Mr. Aleksandar Nikolic	PC EDSA PIT
Mr. Robin Fola Mansaray	Director, MoE
H.E. Eldred Tunde Taylor	Deputy Minister, Ministry of Energy
Mr. Kombo Koroma	FMS EDSA PIT
Mrs. Augusta Berewa	SGMS EDSA PIT
Mr. Richar Goba	PO EDSA PIT
Mr. Senesie Fullah	Environmentalist EDSA
Mr. Theophilus Amara	PM EDSA
Mr. Milton Gegbai	EGTC DG
Mr. Benjamin Kamara	MOE
Mr. Cyril Grant	MOE

Dr. Wuseni	MOE
Aleksandar Nikolic	EDSA-PIT
Mr. Albert Patewa	SFMS MOE
Dr. Alhassan	MOF
Mr. Sahr Lahai Jusu	Financial Secretary, MoF
Mr. Tamba Gbetuwa	Permanent Secretary, Ministry of Energy

WAPP	
Mr. Bernard Hessou	Acting Director, Planning, Investment Programming and Environmental Safeguards (PIPES)
Ms. Mariam Kamagaté	Project Administrator

World Bank	
Franz R. Dees-Gross	Regional Director, Infrastructure
Boutheina Guermazi	Director, Regional Integration
Ashish Khanna	West and Central Africa Energy
Dhruva Sahai	Senior Energy Specialist, PL (Liberia and Sierra Leone)
Rhonda Jordan-Antoine	Senior Energy Specialist, TTL
Alassane Agalassou	Senior Energy Specialist, SL
Ky Hong	Senior Energy Specialist, Liberia
Abdou Toure	Senior Energy Specialist, Chad
Saliou Aitcheou	Energy Specialist, Togo
Ibrahim Jalloh	Energy Specialist, Sierra Leone
Anshul Rana	Energy Specialist
Rida Rizvi	Energy Specialist
Gina Cosentino	Senior Social Development Specialist
Oyewole Oluyemi Afuye	Senior Procurement Specialist
Marcel Frederik	Senior Social Development Specialist
Enno Heijndermans	Consultant
Gilles Marie Veuillot	Legal Consultant
RCU	
Francis Kyere	RCU Coordinator
Hafedh Ben Jemma	Senior Solar PV expert (RCU PoE)
Adeyemo Babatunde	Senior T&D Expert (RCU PoE)
Aboubacar Magassouba	Senior Procurement Expert
Maria De Laiglesia	Senior BESS Expert (RCU PoE)

Donors and Select Private Sector

No	Agency	Position	Name
1	**IFC**	Energy Team	William Conteh
2		Enery Team	Giima Mabel Lavaly
3		Country Representative	Alexandra Celestin
4	**USAID**	Country Representative	Miriam Lutz
5	**AfDB**	Country Manager	Halima Hashi
7	**FCDO**	SRO Bo-kenema Project	Matthew Edwards
8		Infrastructure Adviser	Keith Hammond
9	**MCC**	Country Manager	Steven Grudda
10	**MCC**		Mike Sehzue
11	**MCC**	Energy Director	Kate Iovanna
12	**SLDU**	Country Manager SLCDU	Ndeye Koroma
13	**SLDU**	Economist	Wilbourne Nadim Showers
14	**Compact Desk**	Head	Dr. Jalloh
15	**JICA**		Hitoshi Sato
16			Endo Kana
17	**EU**	Infrastructure Adviser/Lead	Pierre Trellu
18			Thomas Opperer
19			Holger Rommen
20	**UNDP**	Country Representative	Pa Lamin Beyai
21	**GIZ**	Country Representative	Hartlieb Euler
	UNOPS	Country Representative	Sophia Goinhas
22	**UNOPS**	Energy Lead	Ezekiel Kamangulu
23	**Parliament**		Hon. Kekura Vandy
24	**GEAPP**	Country Representative	Jasmin Roberts
25	**FLS Power (SL)**	CEO	Leah Mansaray
26	**PowerLeone**	CEO	Nicole Pointdexter
27	**Powergen**	Country Manager	Hassan Suma
28	**Winch Energy**	Country Manager	Mohammed Munu
29	**Betmai Power**	CEO	Kofie Macauley
30	**AMDA**	Country Manager	Aminata Dumbuya
31	**West Africa Offghrid**	Country Manager	Sam Zoker
32	**Serengeti Energy- Baoma**	Country Manager	Sophie Johnson
33	**Melele Energy & TCQ Power Ltd**		Karim Nasser
34	**Seli Hydropower**		James Harding
35	**Seli Hydropower**		Christian Windmann
36	**Crossboundary**		Tombo Banda

Regional Emergency Solar Power Intervention Project

Pre-Appraisal Mission

Attendance list (November 9, 2022)

World Bank	WAPP
1. Rhonda Jordan Antoine 2. Rida Rizvi 3. Ky Hong 4. Gina Cosentino 5. Ibrahim Jalloh 6. Charles Girard 7. Anshul Rana 8. Anna Aghababyan 9. Enno Heijndermans 10. Innocent Kamugisha	11. Bernard Hessou (Acting PIPES Director) 12. Ibrahim Soumana (Project Coordinator) 13. Viviane Ahossi (Legal Assistant) 14. Sie Kam (Head Market Operator Coordination Division) 15. Gaffar Bawa (Accountant) 16. Ibrahim Imorou (Accountant) 17. Julius Abayateye (HD- System Operator Coordination) 18. Mawufemo Modjinou (Project Coordinator) 19. Mariam Kamagate (Project Administrator/) 20. Alois Ndorere (Senior Procurement Specialist) 21. Sotelle Houessou (Senior Environmental Specialist) 22. Arouna Karamon (Senior Social Development Specialist) 23. Ama Djiwonou (Bilingual Management Assistant) 24. Mingdièbe Kanfor-Lare (Technical Project Coordinator) 25. Alassane Tiemtore (Senior Power Expert)

List of participants at the WAPP-World Bank negotiation session held in Lomé on November 22, 2022

Members of Recipient Delegation

1. Mr. Siengui A. Ki, Secretary General, Head of Delegation;
2. Mr. Baba Jarjusey, Director, Finance and Administration, Member;
3. Mr. Bernard Hessou, Acting Director, Planning, Investment Programming and Environmental Safeguards (PIPES), Member;
4. Mr. Sanno Mondré, Personal Assistant to WAPP Secretary General, Member;
5. Mr. Karamoko Alpha Barry, Legal Advisor, Member;
6. Ms. Mariam Kamagaté, Project Administrator, Member;
7. Mr. Sié Kam, Ag. Head of Division, Customer and Market, Member;
8. Mr. Boladale A. Afolabi, Internal Auditor, Member;
9. Mr. Mouhamadou Salif Diedhiou, Procurement Officer, Member;
10. Mr. Mingdiebe Kanfor-Lare, Technical Project Coordinator, Member;
11. Mr. Mawufemo Modjinou, Project Coordinator, Member;
12. Mr. Gaffar Bawa, Project Accountant, Member;
13. Mr. Arouna Karamon, Social Expert, Member;
14. Mr. Abdulkadir Nazif, Director, Information and Coordination Center, Member;
15. Mr. Julius Abayateye, Ag. Head of Division, System Operation Coordination, Member;
16. Mr. Ibrahim Soumana Nouhou, Project Coordinator, Member;
17. Dr. Sotelle Houessou, Environnemental Expert, Member;
18. Mr. Alois Ndorere, Senior Procurement Officer, Member;
19. Ms. Viviane Ahossi, Legal Assistant, Member.

Members of World Bank Delegation

1 Ms. Rhonda Jordan Antoine, Senior Energy Specialist, Task Team Leader;
2 Mr. Anshul Rana, Energy Specialist;
3 Mr. Nicholas Elms, Senior Energy Specialist;
4 Mr. Charles Girard, Energy Consultant;
5 Mr. Ky Hong Tran, Senior Energy Specialist;
6 Ms. Anna Aghababyan, Operations Officer;
7 Ms. Gina Cosentino, Senior Social Development Specialist;
8 Mr. Fisseha Tessema Abissa, Senior Environmental Specialist;
9 Mr. Yeo Yenemanyan, Senior Financial Management Specialist;
10 Ms. Ines Etty, Finance Officer;
11 Mr. Gilles Veuillot, Senior Counsel;
12 Mr. Oyewole Oluyemi Afuye, Senior Procurement Specialist;
13 Mr. Harouna Djibrilla Djimba, Senior Procurement Specialist;
14 Mr. Prosper Nindorera, Senior Procurement Specialist;
15 Mr. Kouami Messan, Senior Procurement Specialist;
16 Ms. Esinam Hlomador, Program Assistant;
17 Ms. Haoua Diallo, Senior Program Assistant.