

سلطة الطاقة والموارد الطبيعية
Palestinian Energy & Natural Resources Authority



ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

For

Advancing Sustainability in Performance, Infrastructure, and Reliability of the Energy (AS-
PIRE) Sector in the West Bank and Gaza

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ACRONYMS

ASPIRE	Advancing Sustainability in Performance, Infrastructure, and Reliability of the Energy
BESS	Battery Energy Storage System
CERC	Contingent Emergency Response Component
COGAT	Coordination of Government Activities in the Territories
CP	Connection point
CSH	Concentrated Solar Heating
DISCO	Distribution Company
E & S	Environmental and Social
EHS	Environmental, Health, and Safety
EIA	Environmental Impact Assessment
EMF	Electromagnetic Fields
EQA	Environmental Quality Authority
ES	Environmental and Social
ESCP	Environmental and Social Commitment Plan
ESE	Environmental and Social Engineer
ESF	Environmental and Social Framework
ESHS	Environmental, Social, Health, and Safety
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESO	Environmental and Social Officer
ESPIP	Electricity Sector Performance Improvement Project
ESS	Environmental and Social Standards
ESSs	Environmental and Social Standards
GBV	Gender-Based Violence
GDP	Gross Domestic Product
GEDCO	Gaza Electricity Distribution Corporation
GHG	Green House Gases
GM	Grievance Mechanism
Goi	Government of Israel
HEPCO	Hebron Electricity Power Company
HR	Human Resources
HVAC	Heating, Ventilation, and Air Conditioning
IEA	Initial Environmental Assessment

IEC	Israeli Electricity Company
IEE	Initial Environmental Evaluation
IFC	International Finance Corporation
IMS	Information Management System
ISO	International Standards Organization
JDECO	Jerusalem District Electricity Company
LMP	Labor Management Procedures
LSAPS	Liquidity Support Account and Payment System
MENA	Middle East and North Africa
MIS	Management Information System
MOE	Ministry of Education
MoH	Ministry of Health
MoLG	Ministry of Local Governorate
MoSD	Ministry of Social Development
MPA	Multiphase Programmatic Approach
MSMEs	Micro, Small and Medium Enterprises
MV	Medium Voltage
MVA	Megavolt Amperes
MVC	Municipalities and Village Councils
MW	Megawatt
NEDCO	Northern Electricity Distribution Company
NGO	Non-Governmental Organization
OHL	Overhead Line
OHS	Occupational Health and Safety
OHSP	Occupational Health and Safety Plan
OIPs	Other interested parties
PA	Palestinian Authority
PAPs	Project Affected Persons
PCBS	Palestinian Central Bureau of Statistics
PEAP	Palestinian Environmental Assessment Policy
PEL	Palestinian Environment Law
PENRA	Palestinian Energy and Natural Resources Authority
PERC	Palestinian Electricity Regulatory Council
PESIA	Preliminary Environmental and Social Impact Assessment
PETL	Palestinian Electricity Transmission Company Ltd

PMU	Project Management Unit
PNA	Palestinian National Authority
PPA	Power Purchase Agreement
PPE	Personal Protective Equipment
PV	Photovoltaic
RAP	Resettlement Action Plan
RE	Renewable Energy
RF	Resettlement Framework
RFB	Request for Bids
RFP	Request for Proposals
ROW	Right of Way
RP	Resettlement Plan
RPP	Revenue Protection Program
SCADA	Supervisory Control and Data Acquisition
SEA	Sexual Exploitation and Abuse
SEF	Stakeholder Engagement Framework
SELCO	Southern Electric Company
SEP	Stakeholder Engagement Plan
SH	Sexual Harassment
SIS	Strategic Information System
SOP	Standard Operation Procedure
TDECO	Tubas District Electricity Company
TMP	Traffic Management Plan
TOR	Terms of Reference
TS	Technical Assistance
TSO	Transmission System Operator
UN	United Nations
US	United States
WB	World Bank
WBG	World Bank Group
WHO	World Health Organization
WMP	Waste Management Plan

1. EXECUTIVE SUMMARY

- The Advancing Sustainability in Performance, Infrastructure and Reliability in Energy (ASPIRE) project aims to improve: (i) The sector performances in terms of electricity supply, distribution and collection of the service provider with higher efficiency & lower losses, (ii) the regional integration in terms of diversification of sources and energy exchange with neighboring countries, (iii) the Private sector participation in terms of better environment for investments in domestic generation usage of local resources, and (iv) the Environmental footprint by replacing the traditional energy with clean energy from renewable resources. Each phase of the ASPIRE program builds on the achievements of its predecessor, introducing sub-components tailored to specific priorities. All three phases of the ASPIRE MPA program have a consistent structure, with similarities in components and sub-components across the phases. Each phase includes five main components, with each component further divided into sub-components as follows:

- **Component 1: Improving Electricity Infrastructure in the West Bank and Gaza / Enhancement of Electricity Grid Infrastructure.**

This component aims to enhance the resilience, reliability, and efficiency of the electricity grid in the West Bank and Gaza, addressing critical challenges such as inadequate grid capacity, aging infrastructure, and frequent interruptions in electricity supply. The activities under this component will be led by PENRA, PETL, and relevant DISCOs and will focus on strengthening infrastructure for medium- and low-voltage distribution networks and improving quality of electricity supply, both through imports and evacuation of solar PV systems. Key interventions include expanding substations, rehabilitating medium-voltage lines, constructing new transmission infrastructure, and integrating Supervisory Control and Data Acquisition (SCADA) systems for PETL to optimize network management. Additionally, efforts will support electricity imports and the evacuation of solar PV systems, contributing to a more sustainable and efficient energy sector. The sub-components under Component 1 for each phase of the ASPIRE program are as follows:

Table 1: ASPIRE ph. 1,2,3 / component 1

ASPIRE 1
Component 1: Improving infrastructure for regional electricity interconnections in West Bank & Gaza

Subcomponent 1.1: Expansion of PETL's Tarqumia and Sarra Substations and supply of HV/MV spare parts)
Subcomponent 1.2: Upgrade of MV lines in Nablus, Jenin, Hebron, and Gaza to supply additional electricity from IEC; imports from Jordan and utilization within the DISCOs
ASPIRE 2
Component 1: Improving Electricity Infrastructure in the West Bank and Gaza
Subcomponent 1.1: Building Back Better the conflict affected MV Network in Gaza
Subcomponent 1.2: Enhancing the distribution network in the West Bank & Gaza
ASPIRE 3
Component 1: Enhancement of Electricity Grid Infrastructure
Subcomponent 1.1: Electricity Network Reinforcement a) Capacity expansion of PETL's substations including Qalandia b) Medium voltage lines (new and upgrades) including the Green Corridor
Subcomponent 1.2: Supervisory Control and Data Acquisition (SCADA) for PETL

• **Component 2: Improving Sustainability of Service Delivery of DISCOs/ Improvement of Electricity Service Delivery**

- This component supports improvement in operational and financial performance of the electricity sector and enhances focus on service delivery. The activities under this component will be led by PENRA, PERC and relevant DISCOs.
- This component continues the scaling-up of the Revenue Protection Program (RPP) for improved metering and billing in the West Bank Gaza. The main objective is to enhance financial performance and sustain improvements in the operational performance of the DISCOs and to improve billing and collection of consumers. It aims to tackle electricity theft, underbilling, and unpaid bills, which are significant factors contributing to the sector's financial inefficiencies. By addressing these issues, the component strives to achieve sustained improvements in the operational performance of the six DISCOs in the West Bank and Gaza.
- The component also emphasizes the development and maintenance of information management systems to enhance data-driven decision-making and improve service delivery. In Phase 3 of ASPIRE, under sub-component 2.2, particular focus will be placed on the Strategic Information System (SIS) for PERC and the continuity of the IMS for DISCOs. PENRA and PERC will gain the ability to directly monitor DISCO performance through dedicated MIS modules, enabling better regulatory oversight and consistency across the sector. Implementing a standardized MIS for all six DISCOs will streamline reporting, data management, and operational efficiency. The breakdown of Component 2 in the ASPIRE program is as follows:

Table 2: ASPIRE ph. 1,2,3 / component 2

ASPIRE 1
Component 2: Improving Sustainability of Service Delivery of DISCOs
Subcomponent 2.1: Deployment of Smart Meters
ASPIRE 2
Component 2: Improving Sustainability of Service Delivery of DISCOs
Subcomponent 2.1: Deployment of Smart Meters
ASPIRE 3
Component 2: Improvement of Electricity Service Delivery
Subcomponent 2.1: Deployment of Smart Meters
Subcomponent 2.2: SIS (Strategic Information System) for PERC & information Management System (IMS) Continuity for DISCOs

- **Component 3: Enabling Private and Public Sector Engagement in Renewable Energy / Deployment of Distributed Solar and Energy Efficiency Solutions.**
 - The activities under this component will be led by PENRA, with relevant line ministries including Ministry of Health, Ministry of Social Development, and Ministry of Education. The overall objective is to increase the adoption of renewable energy alternatives and reducing energy bills from public and private sectors, thus contributing to green economy, and sustainable development in the West Bank and Gaza. This component also seeks to strengthen energy security, lessen dependence on imported electricity, and reduce energy costs by integrating solar energy solutions, with or without battery storage. Additionally, the component focuses on deploying distributed solar photovoltaic (PV) systems, implementing energy efficiency measures, and enhancing the grid infrastructure to accommodate energy produced from clean sources. The pilot of the PETL Liquidity Support Facility is also a key element of this component.
 - This component comprises of the following sub-components under the 3 phases of ASPIRE :

Table 3: ASPIRE ph. 1,2,3 / component 3

ASPIRE 1
Component 3: Enabling Private Sector Engagement in Renewable Energy in West Bank & Gaza
Subcomponent 3.1: Grid reinforcement and upgrade to enable evacuation of utility-scale Renewable Energy in the West Bank and Gaza
Subcomponent 3.2: Scale up solar solutions for MSMEs, households and key sectors

Subcomponent 3.3: Design and Pilot PETL Liquidity Support Facility
ASPIRE 2
Component 3: Enabling Private and Public Sector Engagement in Renewable Energy
Subcomponent 3.1: Renewable Energy (RE) and Energy Efficiency for Public Sector, focus on health
ASPIRE 3
Component 3: Deployment of Distributed Solar and Energy Efficiency Solutions
Subcomponent 3.1: Distributed Solar PV Systems
a) Solar solutions (PV systems) for public buildings b) PV kits for residential and public buildings
Subcomponent 3.2: Demand-Side Energy Efficiency
c) Small energy efficiency interventions (replacement of lighting bulbs, smart energy management systems) d) Energy efficiency projects at health facilities, water pumping and public buildings
Subcomponent 3.3: Supply and installation of pilot large-scale energy storage system

- **Component 4: Technical Assistance (TA) for PENRA and operational expenses for PMU.**

- The objectives of this component are to strengthen the capacity of PENRA and support staffing of the PMU. It provides technical assistance aimed at enhancing institutional capacities while covering operational costs related to the project's implementation. The focus will be on specialized technical, environmental, and social studies, including the development of concept notes and terms of reference for the feasibility studies required before implementing sub-projects. Additionally, this component supports the operational expenses of the PMU, which is responsible for overseeing the implementation of the ASPIRE program.

Table 4: ASPIRE ph. 1,2,3 / component 4

ASPIRE 1
Component 4: Technical Assistance, Capacity Building and Project Management
ASPIRE 2
Component 4: Technical Assistance and Project Management
ASPIRE 3
Component 4: Technical Assistance (TA) and Implementation Support
Subcomponent 4.1: Technical Assistance and Capacity Building
Subcomponent 4.2: Operational Costs / Expenses for PMU

- **Component 5 : Contingency Emergency Response component(CERC).**

- This component, across the three phases of ASPIRE, is designed to facilitate a rapid response during emergencies that could cause significant impacts and require urgent

intervention. It enables the swift reallocation of undisbursed project funds to address post-crisis needs.

Key activities under CERC include the supply of emergency equipment to DISCOs and PETL in the West Bank and Gaza, particularly in areas where Israeli incursions have disrupted electricity infrastructure, leading to power outages in critical sectors such as healthcare and education. This includes the replacement of damaged equipment, as well as the provision of diesel generators, PV kits, and storage batteries to support essential services in vital sectors. Additionally, CERC supports the repair and rehabilitation of the electricity grid, including the replacement of underground cables and overhead medium-voltage components, along with the removal of rubble from damaged infrastructure. The component also covers the supply of office equipment as well as operational expenses for managing CERC activities.

- Of these 5 components, components 1 and 3 are expected to have a significant environmental and social impact while components 2 and 4 are likely to have a low to moderate environmental and social impact. These are addressed in this Environmental and Social Framework.
- **Legal Framework**
 - A number of national policies, legislations, and instruments are available to support environmental management and the Environmental Impact Assessment process in Palestine. The Palestinian Environmental Law (PEL) and the Palestinian Environmental Assessment Policy (PEAP), and other sectoral sections in other legislations are the key instruments that cover environmental management in sectors of development. The PEAP prescribes the process, procedures and practices for conducting an environmental assessment and preparing the environmental assessment reports.
 - Despite the presence of national Environmental Law and Environmental Assessment Policy, yet it lacks specific industrial standards and mechanisms for monitoring and enforcement of environmental regulations. To close this gap between national legislation and the Bank's ESF and standards, gap analysis was carried out and based on that, this Environmental and Social Management Framework (ESMF) and the other Environmental and Social documents are being prepared.
- **Institutional and Implementation Arrangements**

- PENRA serves as the implementing agency for all projects under the ASPIRE program phases 1, 2, and 3. Each project comprises various components, sub-components, and sub-projects that will be tendered and awarded to contractors or suppliers in accordance with the World Bank's Procurement Guidelines. PENRA will oversee the contracting process and be responsible for awarding contracts to the selected contractors or suppliers.
- Palestinian Electricity Transmission Company Ltd (PETL) and the Electricity Distributors (Distribution companies (DISCOs) and Local Government Units (LGUs)) will play a technical role in the bidding process, including overseeing technical and Environmental and Social aspects during implementation. All bidding documents will incorporate Environmental and Social (E&S) management measures, and all contracts will include sub-project-specific management plans to be implemented by contractors and subcontractors.
- PETL and the Electricity distributors will, in some cases, take on the implementation of sub-projects. For example, PETL will deploy its own staff to carry out repairs on specific equipment installed on transmission lines and within substations. Similarly, the DISCOs will directly handle the installation of smart or prepaid meters and contribute to certain electrical works related to components where 33 kV lines are to be installed.
- PENRA's Environmental and Social (E&S) capacity currently includes an Environmental and Social Officer (ESO) responsible for managing the environmental and social aspects of the 3 phases of ASPIRE program. The ESO, who is part of PENRA's Project Monitoring Unit (PMU), is supported by two Environmental and Social Engineers (ESEs) and is responsible for preparing site-specific Environmental and Social documents as sub-components and sub-projects are progressively identified. The ESO will oversee the implementation of the Environmental and Social Management Framework (ESMF) and ensure contractors comply with the provisions of the agreed Environmental and Social Instruments. The direct supervision of the implementation of specific ES plans for each sub-project will be carried out by the beneficiaries, each of whom has appointed an environmental and social specialist for this purpose.
- Arrangements with Palestinian institutions for the implementation phases include signed Memorandums of Understanding (MoUs) between PENRA and the beneficiaries, outlining the responsibilities of each party. Additionally, coordination has been established with other ministries, including the Environmental Quality Authority (EQA), Ministry of Tourism and Antiquities (MoTA), Ministry of Social Development (MoSD),

Ministry of Interior (Mol), and the Palestinian Mine Action Center. Collaboration also extends to various United Nation (UN) agencies, Non-Governmental Organization (NGOs), and civil society organizations, such as the Palestinian Red Crescent and Palestinian Civil Defense.

- **Environmental and Social Risk Screening**

- Based on project activities and the analysis and evaluation of the environmental and social risks of the project, this ESMF: (i) defines the screening process to be followed to determine the gaps to be addressed under the Environmental and Social instruments; (ii) identifies potential environmental and social risks and impacts; (iii) determines the appropriate environmental and social risk classification for each sub-project (iii) identifies, mitigates and monitors indicator measures. This is essential as sub-project activities entail risks and requirements as identified in World Bank ESSs.

Risk assessment and adverse impacts

- As for the 3 Phases of ASPIRE, the potential negative impacts during construction and installation of ASPIRE are generally short-term, temporary and reversible which can be reduced or eliminated by known mitigation measures. The Project is not likely to cause significant environmental and social impacts. Various occupational health and safety risks will be involved during construction, rehabilitation and operation of transmission and distribution lines, Grid reinforcement and upgrade , implementation of Energy Efficiency interventions in Public Sector and Installation of solar PV systems, including risks related to civil and electrical works and risks associated with handling hazardous wastes, such as waste oil from solar PV system . Other risks include the exposure to excess noise, dust, adverse weather, electromagnetic fields (EMF), and hazardous materials .Poor labor conditions may result from unregulated contracts, inadequate insurance, child labor, risks of GBV, SEA, and SH, compounded by limited worker rights awareness, insufficient training, and ineffective grievance mechanisms.
- Handling and disposing of old electricity meters, batteries and solar panels presents risks of hazardous waste generation, oil leaks, and chemical spills , leading to environmental contamination. Additionally, environmental pollution risks include Improper disposal of excavated materials, dust generation and noise disturbances.
- The main community health and safety risks include traffic accidents caused by congestion during equipment transportation, blackouts during transformer replacements, falling objects during rooftop installations, and risks from lifting operations and work area access. Electrical and excavation works may also impact nearby residential

houses. Vulnerable groups, such as children, the elderly, and disabled, could be affected, along with disturbances to educational and healthcare facilities. Additional risks include GBV or misconduct by workers and hazards from electrical work or heavy machinery.

- The main community health and safety risks include accidents for road users caused by traffic congestion, power outages during electrical work, falling objects during rooftop installations, and risks from lifting operations and unauthorized access to work areas. Electrical and excavation works may also affect nearby residential houses. Vulnerable groups, such as children, the elderly, and people with disabilities, could be impacted, along with disruptions to educational and healthcare facilities within the sub-projects area. Additional risks include GBV or misconduct by workers, as well as hazards associated with electrical work and heavy machinery
- Land acquisition is not required for most components. However, restricted access to commercial premises and agricultural land may cause temporary disruptions. Limited interventions requiring land acquisition may face risks of unfair compensation, protests, and project delays
- Habitat disturbances may occur, particularly during animal and bird breeding seasons or near natural areas for new transmission lines. Removal of trees and vegetation may also be required. Minimal water use is expected for cleaning solar cells and dust suppression activities
- Risks to cultural heritage may arise include accidental discoveries of artifacts during excavation, especially for greenfield projects where new excavations are required
- Risks associated with stakeholder engagement and inclusion include the exclusion of marginalized groups, poor communication regarding project details, reputational risks due to misinformation, and inadequate grievance mechanisms to address stakeholder concerns.
- Delays in implementation could pose additional contextual risks to the operation, particularly in Gaza due to the constraints on entry of materials and equipment. Some of the subprojects are located in Israeli Security Controlled areas of "Area C" in the West Bank and close to the security fence in Gaza. Works in these locations pose a security risk to staff, workers, and personnel, in addition to the risk of obtaining Israeli authority approvals for the permits required to allow workers and the project team to access and work in the security zone near the security fence in Gaza.
- Most activities will follow the existing right of way (ROW). However, some project activities might require temporary and/or permanent land acquiring. Some external factors, such as movement restrictions might increase the construction and operation

risks in the context of West Bank and Gaza, as restrictions on access and movement is a major concern for the implementation of activities that are related to Area C in the West Bank and close to the security fence in Gaza. Risk classifications were carried out for each subcomponent and are outlined in this report. The overall environmental and social risk for this project is classified as Substantial.

- Environmental and social instruments will be prepared to manage and mitigate the potential environmental and social risks and impacts for each sub-project.
- Labor management procedure (LMP) is prepared to set out the Project's approach to meeting national requirements as well as the objectives of the Bank's ESF, specifically objectives of Environmental and Social Standard 2: Labor and Working Conditions (ESS2) and Standard 4: Community Health and Safety (ESS4). Stakeholder Engagement Plan (SEP) is prepared for the project to be used as a reference for all stakeholder engagement activities. As some medium voltage lines will cross private agricultural land, PENRA prepared Resettlement Framework (RF) to purchase/compensate for land to locate the towers/poles, as well as the plot where the above ground infrastructure will be located. The RF includes a description of the screening of sub-projects for land acquisition and Grievance Mechanism (GM).
- Generic ESMP matrices were prepared for project's subcomponents. Each ESMP includes mitigation measures, responsibilities for implementation, supervision and monitoring. Mitigation measures were chosen carefully to be simple, measurable, achievable and can be achieved in a timely manner. The Table 5: Summary of the main potential risks and related mitigation measures summarizes the negative impact of the project components and the respective mitigation measures.

Table 5: Summary of the main potential risks and related mitigation measures

	Risks	Mitigation measures
ESS1	• Risks of improper assessment and mitigation of excavation, pollution, community health and safety, and waste management impacts. • Lack of institutional arrangements. • Lack of procedures for ES management	• Develop tailored ESMPs for each subproject, outlining risk assessment, mitigation measures, responsibilities, and timelines. • Establish a monitoring plan to track compliance with ES requirements of subprojects • Ensure all beneficiaries and contractors has an adequate ES team to implement and oversee sub-project in accordance with local laws and the ESF.

	• Exclusion of marginalized groups due to lack of access to project information and grievance mechanisms. • Misunderstanding of risks, impacts, and mitigation measures, leading to negative reputational risks for the project.	• Develop and Submit ES reports according to agreed schemes • Develop and carry out stakeholder engagement initiatives for each sub-project. • Coordinate with MoSD to engage with marginalized groups. • Ensure broad dissemination of the Grievance Mechanism (GM), with referral pathways for GBV issues.
ESS2	- Occupational health and safety (OHS) risks related to: • Civil and electrical site related risks. • Exposure to excess noise, dust, adverse weather and electromagnetic fields (EMFs). • Handling of hazardous materials like lithium batteries. • Handling sharp objects and accessing rooftops. • Lifting operations for heavy equipment or PV systems. - Poor labor conditions of : • Lack of regulated contracts and adequate insurance. • Potential use of child labor or forced labor . • Gender-based violence (GBV), sexual exploitation and abuse (SEA), and sexual harassment (SH) risks. • Lack of worker rights awareness, hazard knowledge, training, and grievance mechanisms.	• Include OHS provisions within the procurement documents. and Require Primary suppliers to adopt the LMP. • Require the contractor to develop an acceptable OHS plan according to the requirements of local laws, ESS2, LMP and EHSs. • Workers to receive adequate training to familiarize them with all potential risks and required safety precautions . • Provide workers with all required PPEs • Apply the suitable dust suppression techniques • Reduce workers exposure to hazardous conditions • Ensure that all workers are Provided with regulated contracts and insurances according to the labor laws. • Raise workers awareness on the issue of GBV, SEA, and SH . • Raise workers awareness on duties and rights. • Provide smooth access to grievance mechanism and keep records.
ESS3	- Improper disposal of: • Excavated materials. • Electrical waste, including oil leakage and lithium battery	• Contractor to prepare an acceptable WMP, including e-waste management for PV systems, according to requirements of related local

	chemicals. • Residual waste from PV installations . - Pollution risks of : • Dust generation. • Noise disturbances during excavation and construction. • Environmental contamination from hazardous chemicals in damaged batteries. - Potential long-term e-waste issues due to improper recycling.	laws, ESS3, and EHSGs. • Contractor to develop a response for potential spills or leaks, including containment measures and immediate cleanup protocols. • Apply the suitable dust suppression techniques • Proper vehicle management • Reduce use of heavy equipment when not required. • Ensure regular maintenance of vehicle and heavy equipment • Use equipment with ant particulate filters. • Dispose hazardous waste according to EQA requirements (Hazardous waste law 6/2021).
ESS4	- Increased risks from: • Traffic during transportation of equipment. • Blackouts during transformer replacement or line disconnections. • Falling objects during rooftop installations. • Lifting operations and accidental entry into work areas. - Disturbance to: • Educational and healthcare facilities near project sites. • Vulnerable groups (e.g., children, elderly, and disabled) in residential areas. - Potential GBV or misconduct by workers. - Hazards from exposure to electric works or heavy machinery.	• Develop a Traffic Management Plan (TMP) if needed and assign sufficient flagmen to guide heavy equipment transit. • Announce any potential Blackouts ahead of time. • Prepare an emergency plan in case of incidents or accidents. • Display visible warning signs and safety barriers . • Establish exclusion zones for lifting operations to prevent unauthorized access. • Adopt inclusive measures for vulnerable categories and coordinate with MoSD to properly engage with them • Raise awareness on GBV aspects among the local community. • Disseminate the Grievance Mechanism, ensuring confidential channels and referral pathways for GBV complaints.

		Schedule working hours with local receptors and vital facilities
ESS5	- Minimal land acquisition risks as most projects use existing footprints or masterplans. - Temporary disturbances to: - Commercial activities near project sites. - Livelihoods of Bedouin communities or others near proposed routes.	- Prepare and implement a RAP as per the RF and ESS5 when compensation to land or livelihood is required - Engage with commercial and Industrial property owners and Bedouin communities, providing a dedicated GM for land acquisition and livelihood concerns. - Schedule transportation, installation, and construction activities to minimize disruptions to commercial and industrial activities .
ESS6	- Possible disturbances to habitats, particularly: - During breeding seasons of animals and birds. - Near natural habitats for new transmission lines. - Minimal use of natural resources (e.g., water for cleaning operations).	- Identify peak nesting and breeding seasons of local bird species in advance and avoid sub-projects activities during these periods. - Conduct a detailed assessment of the sub-project's potential impacts on natural habitats, ecosystems, and nature reserves in advance - Implement water-efficient cleaning techniques and closely monitor and regulate water usage, particularly during dry periods.
ESS8	Accidental discoveries of cultural heritage or artifacts during excavation, especially for green field projects.	- Stop all activities immediately and coordinate with the Ministry of Tourism and Antiquities (MoTA). - Develop and implement a chance find procedure(CFP) if the intervention is located within or near a cultural heritage area.
ESS10	- Risks of exclusion of marginalized groups. - Lack of access to project information. - Poor communication about risks, impacts, and mitigation	- Coordinate with the MoSD to identify and engage marginalized groups in the sub-project areas. - Implement a comprehensive communication strategy to provide

	measures. - Project reputational risks due to misinformation or misunderstandings. - Lack of effective grievance mechanisms to address stakeholder concerns.	clear, accurate information to stakeholders and prevent misunderstandings. • Establish a transparent grievance mechanism to effectively address concerns. • Engage regularly with local communities and key stakeholders to ensure their understanding and active involvement throughout the project.
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• **Environmental and Social Management Procedure**

- The environmental and social management process for the proposed interventions across the 3 phases of ASPIRE program will commence with the identification of sub-projects, followed by a baseline screening of their environmental and social conditions. Based on the outcomes of this screening, the generic ESMP or checklists (see 12.4) will be updated to incorporate relevant environmental and social considerations. If the screening identifies social safeguard issues including loss of land, assets or source of income, the RF will be updated to resettlement action plan (RAP).
- Environmental and social screening (Annex 2) for each sub-project, along with any required ES instruments, will be reviewed and cleared by WB's ES team as needed. PENRA will provide the WB'S ES team with copies of the completed environmental and social screening forms for all sub-projects under its implementation.
- For an effective integration of environmental and social standards into the project implementation, the Contractor will need to adhere to all identified ES requirements of the sub-projects and prepare the required ES plans and documents that will provide the key reference points for compliance.
- Beneficiaries will be responsible for the daily supervision of implementing specific ES plans during the sub-project implementation phase, ensuring compliance with safety protocols, environmental and social measures, and mitigation actions for each sub-project. Each beneficiary will appoint an environmental and social specialist to oversee the project's implementation.

- PENRA will be responsible for effectively monitoring the overall implementation of the Subprojects from ES point of view, ensuring adherence to established ES plans. In particular, ESO will (i) monitor the implementation of mitigation measures and the environmental and social performance of contractors, (ii) Monitor training of project staff, implementing partners, and contractors.
- ESO will also prepare: (i) bi-annual reports summarizing monitoring results to be included in the Project's Quarterly Reports to the WB , (ii) reports aggregating and analyzing monitoring results ahead of regular World Bank implementation support missions with PENRA, (iii) an annual evaluation of all environmental and social monitoring results, which will be submitted to the World Bank as part of overall project implementation reporting.
- Staff from PENRA's PMU, PETL, and DISCOs will be trained on awareness issues related to environmental management, policies, regulation, environmental assessment and monitoring activities that are related to energy projects as well as recording and resolving any grievance matters related to the implementation of the project.

- **ESMF Implementation Costs:**

- The ESMF implementation Cost includes salaries for ESO, ESEs, beneficiaries and stakeholder trainings, environmental orientation seminars for contractors, remuneration of external local consultant to conduct an external monitoring and auditing process and to support PENRA in the implementation of the ESMF. The indicative budget associated with implementing the ESMF and monitoring of environmental and social risks associated with the project is estimated at US\$ 1,405,000. Other indicative cost related to implementation of stakeholder engagement and anticipated resettlements is available in the SEP and RF documents.

- **Public Consultations and Stakeholder Engagement Plan**

- PENRA's ES team conducted several high-level consultation meetings during December 2024 and January 2025, primarily virtual via Zoom with some in-person sessions with total number of about 50 participants. These meetings, aligned with the nature and scale of the project's impacts and risks, will be updated periodically and engaged key stakeholders, including Electricity Distribution Companies (DISCOs), Palestinian Electricity Transmission Ltd. (PETL), Governmental Institutions, Ministries such as the

Ministry of Health (MoH), Ministry of Social Development (MoSD), Ministry of Tourism and Antiques (MoTA), Ministry of Local Governorate (MoLG) and Ministry of Education and Higher Education (MoE), as well as Non-Governmental Organizations (NGOs), the Palestinian Demining Center, Palestinian Civil Defense and Community-Based Organizations (CBOs). These meetings provided an overview of ASPIRE 1 and 2 activities, explained their restructuring to address Gaza's post-conflict rehabilitation needs, and introduced the five components of ASPIRE 3. Participants examined the program's benefits, potential impacts, and challenges, discussing strategies for resolution and collaboration opportunities. The project specific Grievance Mechanism has also been detailed out.¹

- Key outcomes from these consultations highlighted the importance of addressing Gaza's post-conflict energy challenges, ensuring energy access for health and education sectors, and enhancing collaboration with local authorities for project implementation. Stakeholders emphasized the need for tailored communication strategies, capacity-building initiatives for the beneficiaries and the contractor, and the integration of renewable energy systems. The consultations underlined the collective commitment to ensuring equitable benefits and mitigating potential adverse impacts across project areas.
- The Stakeholder Engagement Plan (SEP) for ASPIRE3 addresses several key topics, including stakeholder identification, methods for effective engagement, and mechanisms to ensure inclusivity, especially for vulnerable groups. It outlines strategies for information disclosure, grievance handling, and public consultations throughout the project cycle. The SEP also highlights PENRA's commitment to transparency, sustainable energy solutions, and collaboration with stakeholders to mitigate project risks and maximize benefits.
- It is important to note that PENRA's ES team held earlier consultation meetings with key stakeholders in March and April 2024 regarding Gaza's energy sector and reconstruction efforts. The outcomes of these consultations have been integrated into the ESMF update for Gaza's rehabilitation under ASPIRE 1 and ASPIRE 2, which was approved by the World Bank in September 2024 and disclosed on PENRA's Facebook page.

- **Grievance Mechanism (GM)**

¹ See the stakeholder engagement plan (SEP)

- PENRA has implemented a grievance mechanism (GM) under the ASPIRE program to address project-related risks. The GM is fully operational, with a designated staff member responsible for receiving grievances and forwarding them to the Environmental and Social Officer (ESO). To raise awareness about the GM system, PENRA will utilize tools such as flyers and roll-ups, and share information during consultations, through social media, and on the PENRA website. The GM include specific features for managing GBV/SEA/SH-related complaints, including referral mechanisms.

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2. Introduction

- This ESMF is prepared for the ASPIRE Multi-Phase Programmatic Approach (MPA) which currently includes three phases: ASPIRE1 approved in April 2020, ASPIRE2 approved on April 2022 and ASPIRE3 which is currently under preparation.

2.1 Background

- The proposed Multiphase Programmatic Approach (MPA) is strategically aligned with the current World Bank Group's Assistance Strategy for West Bank and Gaza (FY18-21), which highlights the promotion of an environment for dynamic, inclusive private sector growth for job creation, and strengthening of institutions' accountability and capability. This MPA directly supports the three proposed outcomes, with a particular focus on creating conditions that incentivize the private sector and simultaneously mitigate the risks faced while investing in a fragile and uncertain environment.
- The MPA aligns with the MENA Regional Strategy Update 2019 in three important aspects. First, the MPA seeks to build a modern and efficient electricity sector and enable private sector led growth. Second, the MPA contributes to enhanced regional cooperation, by supporting regional interconnections and improved power trade between West Bank & Gaza and Israel and Jordan, with the possibility of also supporting resumption of power trade with Egypt. Third, the MPA directly results in an increased share of renewable energy and thus contributes to MENA and WBG Climate Change Strategies.
- ASPIRE 3 comes at a critical juncture for the Palestinian economy, the energy sector, and the broader governmental efforts under the "Build Palestine" initiative. ASPIRE 3 is strategically aligned with the Palestinian National Authority's (PNA) objectives and plays an essential role in strengthening Palestine's energy resilience, economic recovery, and long-term sustainability. The implementation of ASPIRE 3 is timely and necessary for several key reasons:
 - o Gaza Rehabilitation: Gaza's energy infrastructure has been severely damaged in recent conflicts, leaving the population in dire need of reliable electricity. ASPIRE 1 and 2 anticipated some of these needs, with the proactive procurement of essential materials like medium voltage cables, transformers, steel structures, and other critical components. PENRA's foresight in securing these goods in its warehouses will significantly reduce implementation lead times, enabling faster responses to emergencies. ASPIRE 3 will build on this readiness

by adopting a flexible approach that allows for immediate implementations and interventions in Gaza, ensuring rapid restoration of the energy infrastructure and helping to stabilize essential services in the region.

- Alignment with "Build Palestine" and Governmental Initiatives: ASPIRE 3 directly supports the PNA's "Build Palestine" framework, which aims to strengthen the national economy through improved infrastructure, sustainable development, and greater energy independence.
- The project contributes to the pillars outlined in Build Palestine, which include:
 - Infrastructure Development: Strengthening critical infrastructure to support national resilience and economic growth.
 - Energy Sovereignty: Reducing reliance on external electricity sources through domestic energy production and renewable energy projects.
 - Private Sector Engagement: Creating an enabling environment for private sector participation in key sectors, including energy.
 - Sustainable Growth: Promoting environmentally sustainable growth by integrating renewable energy solutions and reducing carbon emissions. ASPIRE 3 will enhance these pillars by improving electricity infrastructure, promoting renewable energy integration, and creating a more sustainable energy framework for the future.
- Continued Revenue Protection and MIS Expansion: The continuation of the Revenue Protection Program (RPP) is a cornerstone of ASPIRE 3, further strengthening the financial and operational health of the energy sector. By expanding the Management Information System (MIS) and deploying smart meters across distribution companies (DISCOs), ASPIRE 3 will enable DISCOs to reduce both technical and non-technical losses, ensuring greater financial stability. This is crucial for the sector's sustainability and long-term viability, as it will improve revenue collection, minimize losses, and provide DISCOs with the necessary tools to manage their operations more efficiently.
- Enhanced Infrastructure for Private Sector Investment: ASPIRE 3 will significantly improve Palestine's energy infrastructure, creating a favorable environment for private sector investment. Reliable and efficient energy supply is a prerequisite for private sector participation, particularly in sectors like manufacturing, services, and renewable energy. The enhanced infrastructure resulting from ASPIRE 3 will reduce bottlenecks, enhance the reliability of the electricity grid, and encourage private investments in Independent Power Producers (IPPs) and other energy-related ventures. This will lead to job creation, economic growth, and increased local production capacity.
- Immediate Relief to DISCOs in the West Bank: DISCOs have been grappling with significant operational and financial burdens due to recent Israeli destruction of electricity

infrastructure. ASPIRE 3 will provide immediate relief by rehabilitating damaged infrastructure and enabling DISCOs to restore services quickly. This will mitigate further losses and help restore confidence in the electricity sector, which is critical for maintaining service continuity and addressing the energy needs of local communities.

- **Capacity Building for Energy Sector Stakeholders:** One of the key aspects of ASPIRE 3 is the continued capacity building for the main stakeholders in Palestine's energy sector, including PENRA, PETL, and DISCOs. By enhancing technical expertise, operational capabilities, and financial management, ASPIRE 3 ensures that these institutions are better equipped to handle the challenges of a modernizing energy sector. Capacity building initiatives will focus on improving regulatory oversight, operational efficiency, and long-term planning, which are essential for the sustained development of the energy sector.
- **Enhanced Environmental and Social Practices:** ASPIRE 3 builds on the strong Environmental and Social practices already established under the ESPIP and the first two phases of ASPIRE projects. ASPIRE 3 will ensure that energy development in Palestine is both sustainable and inclusive, contributing to broader social and environmental goals, including the reduction of greenhouse gas emissions and the protection of natural resources.
- ASPIRE 3 will contribute to several ongoing and crucial tasks currently under procurement at PENRA, which are essential for the continued development and resilience of Palestine's energy sector. These tasks include:
 - a. **Supporting Renewable Energy Initiatives:** PENRA is working on the development of a Renewable Energy Strategic Action Plan aimed at scaling up both utility-scale and distributed solar energy projects. This includes the development of competitive solar IPPs (Independent Power Producers) and distributed solar solutions, such as rooftop solar systems for commercial buildings and households. ASPIRE 3 will facilitate the growth of these projects, helping to close the gap between the current renewable energy capacity and the 2030 target of 2000 MW.
 - b. **Grid Integration and Infrastructure Development:** Under the Liquidity Support Account and Payment System (LSAPS), which is designed to enhance the creditworthiness of the energy sector and attract private sector investment, ASPIRE 3 will further support the grid integration of new solar projects. This will ensure that competitively procured solar power is integrated into the national grid, contributing to a more resilient and diversified energy supply.
 - c. **Enhancing Legal and Regulatory Frameworks:** PENRA is also focusing on revising the legal frameworks that govern renewable energy, including the development of a new umbrella Energy Law that will consolidate and harmonize traditional energy, renewable energy, and energy efficiency regulations. ASPIRE 3 will support these efforts by ensuring that renewable energy projects comply with updated legal

standards, helping to streamline investments in solar and other clean energy initiatives.

- Given this background, the proposed Advancing Sustainability in Performance, Infrastructure, And Reliability of the Energy (ASPIRE) Sector seeks to improve the efficiency of the Palestinian electricity sector and improve energy security through a carefully selected set of measures along the Palestinian energy supply chain, from generation, distribution, transmission to regulation. As the World Bank provides core financing for the project implementation, therefore, this ESMF will explain the necessity of preparing Environmental and Social Impact Assessment (ESIA), Environmental and Social Management Framework (ESMF), Environmental and Social Management Plan (ESMP), Labor Management Procedures (LMP), Stakeholder Engagement Plan (SEP), Resettlement Framework(RF) , and Resettlement Plan (RP) in accordance with the new ESF of the World Bank for each component of the project.

2.2 Institutional and sectoral context

- Over the past two decades, the Palestinian Energy Sector has evolved from a fragmented municipal-based system into a more efficient single-buyer model. This reform consolidated the electricity distribution services of multiple municipalities and village councils (MVCs) into larger distribution companies (DISCOs), maximizing economies of scale. There are currently six DISCOs (five in the West Bank and one in Gaza), but 150 MVCs have yet to transfer their electricity services to the DISCOs, as they rely on electricity revenues to subsidize other municipal services. The Palestinian Electricity Regulatory Council (PERC) was established in 2009 to regulate and monitor the energy sector, and the Palestinian Electricity Transmission Company Ltd (PETL) was founded in 2013 to serve as the single buyer and Transmission System Operator (TSO).
- Despite these institutional developments, the Palestinian electricity sector remains heavily dependent on Israeli imports, which account for about 87% of the electricity supply in the West Bank and more than half in Gaza. Local renewable energy projects, especially solar PV, have started to diversify the energy mix, but the Israeli occupation's geopolitical constraints hinder the development of large-scale renewable energy projects and critical infrastructure, particularly in Gaza and Area C of the West Bank.
- The relatively new institutions—PENRA, PERC, and PETL—require continued support to enhance their capacity to provide coherent, reliable, and efficient services, reduce dependency on Israeli imports, and meet growing demand. As of 2023, before October 7th, GEDCO (Gaza Electricity Distribution Corporation) was recovering less than 50%

of its billed amount and could not cover electricity and fuel costs, which were subsidized by the Palestinian Authority (PA) and Qatar. This has led to a parallel electricity market, where wealthier consumers buy electricity from neighborhood diesel generators at rates as high as US\$1/kWh, undermining GEDCO's customer base and obstructing financial recovery.

- PENRA's long-term vision focuses on achieving greater energy autonomy by improving transmission and distribution infrastructure, supporting domestic generation through independent power producers (IPPs), and ensuring the sustainability of its institutions. This vision aligns with the broader reform efforts to make the energy sector more structured, regulated, and efficient.
- The reform process, led by PENRA with strong donor support, aims to modernize the Palestinian energy sector. Key goals include improving infrastructure, promoting renewable energy projects, engaging the private sector, and enhancing the sector's fiscal sustainability, which can boost the overall performance of the Palestinian economy. PENRA's strategy also prioritizes expanding renewable energy projects, particularly solar PV, to reduce dependency on imported electricity, improve energy security, and lower costs. By fostering private sector investment and public-private partnerships, PENRA is driving the energy sector toward financial stability and operational efficiency.

2.3 Economic Context

- In 2023, the unemployment rate in Palestine remained high, reflecting the ongoing economic challenges, particularly in Gaza. By the second quarter of 2023, the overall unemployment rate reached 30.7%, with Gaza facing an unemployment rate of 53% and the West Bank experiencing a rate of 18% .(PCBS)
- The situation worsened in Gaza due to continued conflict and economic isolation, which caused the unemployment rate to spike to 74% by the fourth quarter of 2023. (PCBS)
- The disparity between Gaza and the West Bank highlights the severe structural issues within the Palestinian economy. Gaza's economic collapse, compounded by the destruction of infrastructure and restricted access to basic resources, contrasts with slightly more stable conditions in the West Bank. Despite some improvements in the West Bank, overall unemployment remains a critical issue across Palestine. (PCBS)
- The poverty rate in Palestine has continued to rise. In 2016/2017, around 22% of Palestinians lived below the poverty line of US\$5.50 per day. By 2023, the poverty rate

had increased significantly, reaching 32.8%, with stark regional disparities. In the West Bank, the poverty rate remained around 12%, but in Gaza, it surged to approximately 64%, largely due to ongoing conflict and economic isolation. The combined impact of these factors has led to about 1.7 million people living in poverty across Palestine, with conditions expected to further deteriorate if the economic situation remains unstable. (World Bank / PCBS)

- This increase in poverty is a direct result of economic decline, compounded by conflicts in Gaza, which have severely disrupted livelihoods and access to basic services, worsening the overall well-being of the population.
- In Gaza, the economic outlook is particularly bleak. Due to severe damage to all aspects of life caused by ongoing conflict and the failure to reach a ceasefire agreement, the Strip's economy continues to deteriorate, with GDP expected to decline sharply, exacerbating existing social and economic challenges. Meanwhile, the West Bank shows slightly better prospects, though it too faces challenges from fiscal instability and reliance on external factors, such as movement restrictions and employment opportunities in Israel.

3. The Environmental and Social Management Framework (ESMF)

- This Environmental and Social Management Framework (ESMF) provides guide for making sure that all the interventions under all phases of ASPIRE programme are implemented in an environmentally and socially responsible manner. It provides guidance for screening the implementation against environmental and social risks. Based on the outcome of the risk identification and appraisal
- The main objectives of this ESMF are :
 - Develop the necessary protocol for assessing potential environmental and social impacts prior to and during subproject implementation; and
 - Incorporate a system for monitoring environmental and social impacts, protect against involuntary resettlement.

4. Policy, Legal and Administrative Framework

4.1 National Environmental Policies, Laws and Regulation

- The PA since its establishment in 1994 has worked to improve the Palestinian environ-

ment and strive towards sustainable development. Laws and legislations were also developed and endorsed to organize and manage the various sectors such as environment, water, wastewater, land use planning, etc. In this direction, the Palestinian constitution stressed the value the environment is a basic human right and approved the following laws and regulations:

4.1.1 The Palestinian Environmental Law (PEL)

- The PEL No. 7 of 1999 has the following objectives:
 - To protect the environment from all sorts and types of pollution;
 - To protect public health and social welfare;
 - To incorporate environmental resources protection in all social and economic development plans and promote sustainable development to protect the rights of future generations;
 - To conserve ecologically sensitive areas, protecting biodiversity, and to rehabilitate environmentally damaged areas;
 - To promote the collection and publication of environmental information and to raise public awareness of environmental issues.
- Articles 12 and 13 of the PEL provide for the disposal of hazardous materials, such as solar panels and storage batteries, only under the umbrella of the Ministry's approval, in coordination with the specialized agencies. Furthermore, a special license is required from the Ministry to import hazardous materials, these could be contained in solar panels and batteries. Article 45 empowers the Environmental Quality Authority (EQA) to set standards for environmental impact assessment studies and to prepare the relevant rules and procedures for such studies.
- The PEL further requires the EQA to cooperate with the competent authorities to follow up on the implementation of decisions that are issued concerning the environmental impact. The EQA is also required to monitor compliance with approved specifications, standards and instructions for the protection of environment and vital resources. The law further empowers EQA inspectors and other appointed inspectors to record the environmental violations and crimes that may take place and violate this law. The EQA inspectors shall also have, in cooperation with the competent departments and authorities, right of entry into the installations for the purpose of: inspecting them, taking samples, carrying out measurements, and ascertaining the application of the standards and conditions of the environment protection and prevention of pollution.

- EQA is also empowered to stop, for a period not exceeding two weeks, any project works that could constitute a serious hazard to the environment. The stoppage can only be extended by a judicial order from the competent court.

4.1.2 The Palestinian Environmental Assessment Policy

- The Palestinian Environmental Assessment Policy (PEAP), approved through resolution No: 27-23/4/2000 has the following goals:
 - Ensuring that development activities improve the standard of life, without negatively affecting the social, cultural and historical values of people.
 - Preserving and sustaining the natural environment.
 - Conserving biodiversity, landscapes and the sustainable use of natural resources.
 - Avoiding irreversible environmental damage and minimizing reversible environmental damage from development activities.
- The Environmental Quality Authority applies the following PEAP-defined screening process based on the requirements of relevant land use plans, to determine whether an Initial Environmental Assessment (IEA) Report or an Environmental Impact Assessment (EIA) Report is required. The screening process determines whether the project is likely to:
 - Use a natural resource in a way that pre-empts other uses of that resource.
 - Displace people or communities.
 - Locate them in or near environmentally sensitive areas such as natural reserves, wetlands, or registered archeological and cultural sites.
 - Generate unacceptable levels of environmental impact.
 - Create a state of public concern; or
 - Require further, related development activities that may cause significant environmental impacts.
- The IEE is for projects where significant environmental impacts are uncertain, or where compliance with environmental regulations must be ensured. An EIA is required for projects, which are likely to have significant environmental impacts. An IEE may determine whether to carry out an EIA.

4.1.3 Public Health Law

- The two documents comprising the legal framework of PNA health care are the 2003 Palestinian Constitution and the 2004 Public Health Law. The Public Health Law re-

quires the MoH to offer certain types of health services to Palestinians including: ensuring water, environmental safety, and public health infrastructure.

4.1.4 Laws and Regulations related to Resettlement, Land Expropriation and Involuntary Resettlement

- According to Law No.24 of year 1943 modified by Law No. 2 of year 1953 on “Land Expropriation for Public Projects” and its articles (3) and (21), the Government can expropriate up to 25% of any privately-owned land for public interest reasons - without compensating the owners. Exceptions are made to owners who prove to be largely damaged by this land expropriation. However, owners are entitled to compensation for all crops and trees, buildings and fixed structures on the expropriated 25% area of the land.
- In case the Government needs the whole plot of land, negotiations are made to reach an agreement with owners. However, in case of pressing time demands to expropriate land to a specific project serving public interest, the Government is entitled to seize the land immediately and then to initiate compensation negotiations with owners/users (Law 2/1953, Article (12)).

4.1.5 World Bank Environmental and Social Framework/ESSs

- The World Bank Environmental and Social Framework sets out the World Bank’s commitment to sustainable development, through a Bank Policy and a set of Environmental and Social Standards that are designed to support Borrowers’ projects, with the aim of ending extreme poverty and promoting shared prosperity. There are ten Environmental and social standards (ESS’s). The ESSs relevant for the 3 phases of ASPIRE program are:
 - ESS1: Assessment and Management of Environmental and Social Risks and Impacts.
 - ESS2: Labor and Working Conditions.
 - ESS3: Resource Efficiency and Pollution Prevention and Management.
 - ESS4: Community Health and Safety.
 - ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement.
 - ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources.
 - ESS8: Cultural Heritage.
 - ESS10: Stakeholder Engagement and Information Disclosure.
- Full list and details of World Bank environmental and social standards can be found at

the following link:

(<http://pubdocs.worldbank.org/en/837721522762050108/Environmental-and-Social-Framework.pdf>).

- Generally, Palestinian National laws provide less comprehensive requirements and guidance on the environmental and social aspects than the World Bank's environmental and social standards. Thus, the Bank's Environmental and Social standards (EESs) will apply to the project in order to ensure the environmental and social soundness of the projects, in addition to integrating the project's environmental and social aspects into the decision-making process. A comparison between the Environmental and Social standards of the World Bank and the Palestinian National Laws is shown in Annex 1.

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5. Project Components and Major Subproject Activities

- The three projects included under ASPIRE MPA program have similarities. All three projects include 5 components as following:

5.1 Component 1/ ASPIRE 1,2,3

ASPIRE 1: Improving infrastructure for regional electricity interconnections in West Bank and Gaza

ASPIRE 2: Improving Electricity Infrastructure in the West Bank and Gaza

ASPIRE 3: Enhancement of Electricity Grid Infrastructure

- The activities included in the subcomponents will be led by PENRA, PETL, relevant DISCOs and Distributors and will focus on strengthening infrastructure for medium- and low-voltage transmission and distribution networks and improving quality of electricity supply.
- Sub-components under component 1 includes:xxx

Table 6: Sub-components / component 1 of ASPIRE 1,2,3

Project phase / Component / Sub-component	Name of the sub-component / sub-project	Beneficiary
Ph1 / C1 / SC 1.1	Expansion of existing 161/33 kV substations (Sarraf and BeitOula)	PETL
Ph1 / C1 / SC 1.2	New transmission line from Beit Oula substation to Hebron city	PETL
Ph3 / C1 / SC 1.1	Expansion of existing 161/33 kV substation (Qalandia)	PETL
Ph2 / C1	Gaza Emergency Interventions including <i>"Building Back Better the conflict affected MV Network in Gaza "</i>	GEDCO
Ph1-2 / C1.2 Ph3 / C1.1	Rehabilitation of medium Voltage lines	Electricity distributors (DISCOs + LGUs)
Ph1-2 / C1.2 Ph3 / C1.1	New medium voltage distribution lines	Electricity distributors (DISCOs + LGUs)
Ph3 / C1	New transmission lines (Green Corridor)	PETL
Ph3 / C1	SCADA system (Hardware and Software)	PETL

5.1.1 Category: Capacity expansion of existing substations

- Under sub-component 1.1 of ASPIRE Phases 1 and 3, two sub-projects are aimed at expanding PETL's (131/33 kV) substations. The goal of these sub-projects is to enhance the substations' capacity, enabling the delivery of more electricity to distribution companies through PETL. The anticipated outcomes include an increase in energy transmission by PETL and a reduction in electricity shortages within the primary service areas of the distribution companies.

5.1.2 Category: Rehabilitation of medium voltage lines, grid reinforcement and upgrade

- Under sub-component 1.2 of ASPIRE 1,2 and subcomponent 1.1 of ASPIRE 3 multiple subprojects are included with very similar scope. This includes the rehabilitation of existing medium voltage lines under the electricity distributors concession areas including NEDCO, TEDCO, JDECO, HEPCO, SELCO and LGUs.
- The objectives of these sub-projects are the removal of existing risks of over headlines and increase in the performance of the existing networks through the reduction of technical and non-technical losses on the distribution grid.

5.1.3 Category: New distribution and transmission lines.

- Under Subcomponent 1.2 of ASPIRE 1 and Subcomponent 1.1 of ASPIRE 3, new infrastructure projects are planned, including the construction of 33 kV medium-voltage distribution lines within the service areas of DISCOs and Local Government Units (LGUs). This category also includes:
 - New 11 kV medium voltage line from Deir Quddis to Jammalah.
 - New 33 kV medium voltage line from BeitOula substation to Hebron.
 - The Green Corridor project, benefiting PETL, which involves constructing a 33/66 kV medium-voltage transmission line connecting the Tubas and Nablus substations.
- The objectives of these sub-projects are to enhance electricity service delivery and improve capacity and load management.

5.1.4 Category: Supply of equipment, repair jobs by PETL and DISCOs

- Under this sub-component, equipment supply is required for PETL and the DISCOs to facilitate repairs on existing infrastructure. This may involve providing transformers, reclosers, cable joints, medium-voltage line cables for replacement, and other related accessories.

5.2 Component 2/ ASPIRE 1-2-3:

ASPIRE 1,2: Improving sustainability of service delivery of DISCOs.

ASPIRE 3: Improvement of Electricity Service Delivery

- This component supports improvement in operational and financial performance of the electricity sector and enhances focus on service delivery. The activities under this component will be led by PENRA, PETL, and relevant DISCOs.

Table 7: Sub-components / component 2 of ASPIRE 1,2,3

Project phase / Component / Sub-component	Name of the sub-component / sub-project	Beneficiary
Ph1-2-3 / C2.1	Supply of smart meters and prepaid meters	DISCOs
Ph3 / C2.2	Supply of Strategic Information System (SIS) for PERC and MIS for PENRA	PERC - PENRA

5.2.1 Category: supply of smart meters and prepaid meters

- Under Component 2.1 of ASPIRE 1, 2, and 3, the supply of smart meters for DISCOs is included. This sub-component aims to modernize metering infrastructure and enhance revenue protection in the West Bank by reducing both technical and non-technical losses.

5.2.2 Category: supply of Strategic Information System for PERC (Hardware, software)

- Under Component 2.2 of ASPIRE 3, as part of implementing the Management Information System under the ESPIP project, the supply of a strategic Information System for PERC is intended to improve the collection of real-time data and the analysis of DISCOs Key Performance Indicators (KPIs) within PERC's mandate as the electricity regulator in the West Bank.

5.3 Component 3/ASPIRE 1-2-3:

ASPIRE 1,2: Enabling private and public sector engagement in renewable energy.

ASPIRE 3: Deployment of Distributed Solar and Energy Efficiency Solutions.

- The activities under this component will be led by PENRA, in collaboration with relevant line ministries such as the Ministry of Health, Ministry of Education, and the Ministry of Social Development. Beneficiaries of this component include the education and health sectors, the private sector, and public buildings. The overarching objective is to promote the adoption of renewable energy alternatives, reduce energy costs (and net-lending contributions), and thereby contribute to a green economy and sustainable development in the West Bank and Gaza.

- The activities under ASPIRE 3 includes also energy efficiency interventions in public sector.

Table 8: Sub-components / component 1 of ASPIRE 1,2,3

Project phase / Component / Sub-component	Sub-projects	Beneficiary
Ph1-3 / C3 / SCs 3.1	Multiple: Grid reinforcement and upgrade to enable evacuation of utility-scale renewable energy in WB&G	DISCOs
Ph1-2-3 / C3 / SCs 3.1	Multiple: Solar solutions for Public Buildings (Health, Education, and others)	Public sector
Ph1-3 / C3 / SCs 3.1	Multiple: PV kits for House Holders and SMEs (Revolving Fund projects)	Private sector
Ph2 / C3 / SCs 3.1 Ph3 / C3 / SCs 3.2	Energy Efficiency interventions in Public Sector (a: small integrations – b: system integrations)	Public sector
Ph3 / C3 / SCs 3.3	Energy efficiency - Battery Energy Storage System (BESS)	DISCOs

5.3.1 **Category: Grid Reinforcement and upgrade:**

- This category is found under ASPIRE 1 and 3 and is similar in nature to category 1.2 and includes interventions for the rehabilitation and upgrade of medium voltage grid to increase evacuation of electricity and better penetration of renewable energy on the local grids.

5.3.2 **Category: Solar solutions for public buildings and Energy Efficiency system integrations.**

- This category, included under ASPIRE 1, 2, and 3, and includes packages of small to medium-sized PV systems (ranging from 10 to 30 kWp) for public buildings. The objective of these interventions is to alleviate the government's electricity cost burden, enhance the public sector's green footprint, and reduce reliance on electricity imports from Israel.
- This category could also include the deployment of energy efficiency technologies at health facilities, water pumping and public buildings and Battery Energy Storage Systems (BESS).
- Feasibility study will be developed prior initiating activities under this category.

5.3.3 **Category: Small sized PV systems and PV kits and small energy efficiency**

interventions.

- This category includes the small sized and mobile PV systems with a limited capacity of few kWp (below 10 kWp) to be used for fast implementations on mobile health care facilities and educational sector. These kits are the same also used in the revolving fund sub-projects under ASPIRE 1.
- This category includes also the implementation of energy efficiency measures in the public building with the objective to reduce the energy consumption, it includes small interventions such as upgrades to lighting systems, heating, ventilation, and air conditioning (HVAC) systems, insulations, energy management solutions.

5.4 Component 4/ ASPIRE 1-2-3:

ASPIRE1: Technical assistance, capacity building and project management

ASPIRE2: Technical assistance for PENRA and operational expenses

ASPIRE3: Technical assistance and implementation support

- This component provides technical assistance to PENRA and electricity sector operators, focusing on specific technical, environmental, and social studies. It encompasses the development of concept notes and terms of reference for feasibility studies required before implementing sub-projects under Components 1 and 3.
- Additionally, it will fund capacity-building programs related to procurement, technical studies, and environmental and social assessments.
- The component also covers the operational expenses of PENRA's Project Management Unit (PMU).

Table 9: Sub-components / component 4 of ASPIRE 1,2,3

Project phase / Component / Sub-component	Category	Name of the sub-component / sub-project	Beneficiary
Ph1-2-3 / C4	4.1	Technical and economic feasibility studies	PETL – DISCOs – PENRA – Health Facilities
Ph1-2-3 / C4	4.2	Environmental and Social Studies	PENRA and Project beneficiaries.

Ph1-2-3 / C4	4.3	Operational Expenses	Private sector
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- Environmental and Social studies: the preparation of ES screening, ESMPs and other relevant instruments according to the risk's classification of the sub-project to be implemented.
- Gender action plan: A Gender Analysis and Action Plan will be prepared to provide a summary of the gender related opportunities identified in the project across all four components. The ASPIRE program addresses gender disparities in the energy sector of the West Bank and Gaza (WB&G) by promoting women's participation and empowerment. It focuses on improving energy access for female-headed households and women-owned businesses, particularly in Gaza, to enhance their income-generating opportunities and socio-economic outcomes. Recognizing the high proportion of female engineering graduates facing employment barriers, the program supports initiatives to create jobs for women in energy sector entities, private companies, and renewable energy entrepreneurship.
- Preparation of terms of references for technical studies and for environmental and social external assistance (external monitoring and auditing).
- Technical studies include:
 - The green corridor project: concept and detailed design of the project including load forecasting, renewable energy integration and environmental and social investigations.²
 - SCADA system development for PETL
 - Management Information System (MIS) integrations for DISCOs, PERC and PENRA
 - Assessment of energy efficiency measures in public buildings.³
 - Grid studies for DISCOs upgrade and new medium voltage lines.
 - Technical and Financial Audit of ASPIRE program
 - Technical and financial feasibility study for PV systems on public buildings in West Bank.
 - Technical Assistance for Liquidity Support Account and Payment System Design (LSAPS)
 - Design of 5 new Substations for PETL.
 - Study and design enhancement of distributed solar system in West Bank.
 - Consultancy Services for Developing the Palestine Grid Code
 - Advisory Services for the Development of RFP for Competitive Solar Project in Palestine (IPPs)

² "Green Corridor" Transmission Line and VREG Integration Study is under implementation.

³ TOR "Exploring Energy Efficiency opportunities in Public Building in West Bank" is prepared.

5.5 Component 5/ ASPIRE1-2-3: Contingency Emergency Response CERC component.

- The Contingent Emergency Response Component (CERC) is designed to provide swift response during eligible crises or emergencies, defined as events causing or likely to cause significant adverse economic or social impacts, such as natural disasters, conflicts, or public health emergencies. Activation of CERC enables rapid reallocation of undisbursed project funds to address urgent post-crisis needs.
- CERC is activated when an eligible crisis or emergency is declared by the government and recognized by the World Bank. A request is made with a supporting Emergency Action Plan (EAP) detailing the crisis, impacts, and proposed activities. Pre-requisites, including safeguard approvals and reallocation of funds, are met.

5.5.1 Category: Supply of equipment for Electricity Distributors and PETL

- Under this category, supply of equipment for emergency needs in West Bank and Gaza is included. Specifically for that areas under the Electricity Distributors concession areas where Israeli incursions have damaged the infrastructure of electricity supply and created interruptions and black outs in areas where critical health facilities are also found. Among the possible interventions:
 - Replacement of damaged transformers, reclosures, cable joints, Ring Main Units and other accessories
 - Supply of Diesel generators, PV kits, storage batteries for critical facilities such as health and educational sector.

5.5.2 Category: Repair and rehabilitation work on power grid (see subsection 5.1.2)

- This category includes emergency rehabilitation works on transmission and distribution lines. This includes:
 - Replacement of underground cables and overhead MV grid components.
 - Removal of rubbles and excavation works.

5.5.3 Category: Supply of office equipment

- This includes the supply of computers, printers, monitors, stationery and office furniture

5.5.4 Category: Operational expenses

- This includes the operational expenses for managing the CERC component.

Table 10: Sub-components / component 5 of ASPIRE 1,2,3

Project phase / Component / Sub-component	Name of the sub-component / sub-project	Beneficiary
Ph1-2-3 / C5	Supply of equipment (Diesel Generators, Rooftop PV systems, Mobile storage kits, Electricity Storage batteries)	PENRA, PETL, Distributors, Health and Educational sectors. ⁴
Ph1-2-3 / C5	Repair, rehabilitation, and reconstruction of medium and low-voltage electricity distribution systems. Removal and disposal of rubble associated with infrastructure destruction and related activities.	PETL – Electricity distributors
Ph1-2-3 / C5	Supply of computers, monitors, office furnishing	GEDCO - PENRA
Ph1-2-3 / C5	Operational expenses to manage CERC	PENRA

6. Institutional and Implementation Arrangements

6.1 General arrangements and roles

- Palestinian Energy and Natural Resources Authority (PENRA) is the Executing Agency responsible for implementing the ASPIRE Project through the existing Project Monitoring Unit (PMU) within PENRA.
- The Palestinian Electricity Transmission Ltd. Company (PETL); Distribution Companies (DISCOs), namely Northern Electricity Distribution Company (NEDCO), Jerusalem Distribution Electricity Company (JDECO), Tubas District Electricity Company (TDECO), Hebron Electricity Distribution Company (HEPCO), South Distribution Company (SELCO) and Gaza Electricity Distribution Company (GEDCO) who will have an active role during the implementation.

⁴ Other beneficiaries might be added according to emergencies.

- The Palestinian institutions involved in the component include the Ministry of Health (MoH), the Ministry of Education (MoE), and the Ministry of Social Development (MoSD). These ministries will play an active role in selecting beneficiaries for Component 3, contributing to data gathering during the project inception, participating in public consultations, and assisting PENRA with supervision and monitoring activities.
- Based on the size of the contract and required qualification to carry out the design and construction activities of the subprojects, PENRA will implement and execute subprojects mainly through awarding contracts through competitive bidding process which will select contractor(s) for Supply, Installation and Commissioning of the medium voltage lines, the substation expansions, and solar systems and meters. Portion of the installation might also be executed by PETL and the DISCO's technical Staff from their own budget or through internal bidding procedures. PENRA will implement and execute subprojects either through the technical departments in PETL and DISCOs or through bidding procedures, which will select contractor(s) for Supply, Installation and Commissioning.

6.2 Environmental and Social responsibilities:

- The preparation of key documents, including the Environmental and Social Management Framework (ESMF), Environmental and Social Commitment Plan (ESCP), Resettlement Framework (RF), Labor Management Procedures (LMP), and Stakeholder Engagement Plan (SEP), falls under the responsibilities of PENRA's Environmental and Social (ES) team. These documents will be developed in collaboration with the primary project beneficiaries, who will provide concept notes for the individual sub-projects to be implemented across ASPIRE phases 1, 2, and 3. Once finalized and approved by the World Bank's ES team, the documents will be disclosed on PENRA's website, and the social media page dedicated for ASPIRE project .
- The development of site-specific ES instruments, including ES screening, Environmental and Social Impact Assessments (ESIAs), and Environmental and Social Management Plans (ESMPs), along with stakeholder engagement activities tailored to each sub-project, will be a joint responsibility of PENRA and the main beneficiaries. These beneficiaries include PETL, PERC, Electricity Distributors , and key ministries such as the Ministry of Health, Ministry of Education, and Ministry of Social Development.
- To facilitate this process, each beneficiary has designated an Environmental and Social focal point who will actively contribute to the preparation and implementation of site-specific instruments. The daily supervision of ES plan implementation will be the responsibility of the beneficiaries, while monitoring the main ES indicators outlined in each plan will be the responsibility of PENRA's ES team, with support from external ES consultants as required.

- ES team of Contractors will be responsible for the preparation of Waste Management Plans (WMP), Occupational Health and Safety Plans (OHSP), Traffic Management Plans (TMP), and other plans necessary to safeguard communities, habitats, natural resources, and cultural heritage. They will also be responsible for ensuring the proper implementation of these plans and related mitigation measures. These measures will be directly supervised by the respective beneficiaries and monitored by PENRA's ES team.

6.3 Reporting

- The reporting scheme for the ASPIRE program is designed to ensure ongoing compliance with environmental, social, and safety standards throughout the project. This reporting structure guarantees transparency, accountability, and proactive management of environmental and social risks throughout the project's execution.
- PENRA's ES team is responsible for reviewing the ES progress reports from DISCOs, PETL, and other beneficiaries to ensure adherence to environmental and social obligations. The team ensures that corrective measures are implemented when necessary and monitors compliance with the project's environmental and social standards, including worker safety, incidents, and environmental regulations. PENRA's ESO is responsible for preparing several required ES reports and submitting them to the World Bank. These include: (i) bi-annual reports summarizing monitoring results, to be included in the Project's Quarterly Reports to the World Bank, (ii) reports that aggregate and analyze monitoring results ahead of regular World Bank implementation support missions with PENRA, and (iii) an annual evaluation of all environmental and social monitoring results, which will be submitted to the World Bank as part of overall project implementation reporting.
- The ES Focal Point of each beneficiary is required to submit regular progress reports to PENRA's ES team. These reports provide an overview of the contractor's environmental and social performance, identifying any non-compliance issues (if any), corrective actions taken, and ongoing environmental or social concerns. They also cover efforts to engage the local community and maintain communication with municipalities and authorities. Complaints log needs to be included within these reports.
- The contractor's ES team is responsible for compiling regular reports, which are submitted to the sub-project's beneficiary. The structure of these reports need to cover the implemented ES mitigation measures as well as safety precautions on project sites, incidents and accidents, and any complaints received from stakeholders, government

agencies, or citizens. They also need to highlight onsite safety training activities, community engagement, and communication with relevant authorities. The conducted interventions need to be covered.

7. Applicability of the World Banks ESSs on the proposed project.

- Some of the intervention locations under the ASPIRE program have already been identified, while many others are yet to be determined. The environmental and social impact screening and scoping for the project's subcomponents were conducted through a collaborative approach involving a broad range of stakeholders, including PENRA, PETL, relevant service ministries, municipalities, electrical distribution companies (DISCOs), the IEC, end users, and others.
- In accordance with World Bank standards, the project requires early screening for potential negative impacts and the selection of appropriate instruments to assess, minimize, and mitigate adverse effects. Additionally, the standards emphasize the importance of early consultations with affected groups and relevant stakeholders. These requirements have been thoroughly addressed as outlined below.

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

- Environmental and social risks for each subproject will be analyzed and assessed, including their risk classification. Wherever feasible, both quantitative and qualitative analyses will be conducted to identify all project impacts, covering direct and indirect, short-term and long-term, cumulative, reversible, and irreversible effects during both the construction and operation phases. A comprehensive set of mitigation, monitoring, and institutional measures will be developed to address these risks, eliminate adverse environmental and social impacts, or reduce them to acceptable levels.
- To this end, a generic Environmental and Social Management instrument (ESMP, ES checklist) will be prepared for each category (5.1), outlining the necessary measures and actions to implement these risk management strategies. PENRA jointly with the sub-project beneficiary will: (a) identify the appropriate responses to potentially adverse impacts; (b) establish the requirements to ensure these responses are executed effectively and on time; and (c) specify the methods for meeting these requirements.

7.2 ESS2 Labor and Working Conditions

- PENRA shall implement an adequate occupational health and safety measures including MoH and WHO guidelines in accordance with Labor Management Procedures (LMP) in a manner acceptable to the Bank and consistent with ESS2.

- Each subproject is expected to require a varying number of workers including direct, contracted and primary supplier workers. Civil servants are also among the team working on ASPIRE project and will be subject to their own contractual conditions. Portions of the installation work may be carried out by PETL and the technical staff of electricity distribution companies, either funded through their own budgets or through internal bidding processes. A Labor Management Procedure (LMP) will outline the project's approach to complying with national labor requirements and meeting the objectives of the World Bank's Environmental and Social Framework (ESF) regarding labor and working conditions.
- Measures within the prepared ES plans will include provisions for mitigating the OHS risks and labor condition risks. This will include also GBV, SEA and SH risks at work and possible risks to the community.
- A training plan will also be put in place for employees and contractors. Induction training on the HR policy and procedures and basic safety awareness training will be provided to all newly hired workers. Other types of technical skills training will be identified for staff on an as-need basis. This includes training of technicians and laborers on how to install, operate and maintain a PV solar plant and electrical transmission lines.
- The project's HR policies and procedures will specify the terms of employment (wages and benefits, hours of work, overtime arrangements and overtime compensation, annual and sick leave, vacation and holiday, health insurance and end of service benefits) and will also include provisions on restrictions to child labor and prevention of forced labor as well as commitment to non-discrimination and equal opportunities for employees and contractors and will be shared with all new hires. Nondiscrimination and equal opportunity will be adopted for all workers.
- A workers' grievance mechanism will be developed and made available to all workers including contractors and sub-contractors. The grievance mechanism will among others clearly define the response timeframes to grievances and incorporate a grievance log as part of the grievance mechanism process.
- PENRA will implement appropriate occupational health and safety measures, including adherence to Ministry of Health (MoH) and World Health Organization (WHO) guidelines on communicable diseases, in compliance with the Labor Management Procedures (LMP). These measures will be carried out in a manner acceptable to the World Bank and aligned with the requirements of Environmental and Social Standard 2 (ESS2).

- Key Occupational Health and Safety (OHS) risks for all project's subcomponents include slips and falls, potential hazards from on-site moving machinery, fall from height, exposure to excessive noise and dust, heavy load lifting, exposure to electric shocks and burns, exposure to high voltage lines, and safety issues related to PV module assembly. In addition to weather condition such as the relatively hot project location, construction workers might be at risk of dehydration, heat exhaustion and heat stroke if not properly hydrated.
- Prior to the start of construction activities, PENRA will ensure that Occupational Health and Safety procedures are in place and will cover the following issues: spread of pandemic viruses, hazard identification and assessment; construction site safety (barri-cades, safety nets, access control, clear demarcation of areas and provision of safety information to visitors); specific procedures for hazardous works; workers' safety and training plan; personal protective equipment needs; site supervision and audit proce-dures; incident intervention measures and reporting. The procedure will be designed to be specific to different project components including electrical transmission line con-nections, PV installation and battery recycling factories. OHS procedures will be re-vised and updated for operations where the risk is reduced.

7.3 ESS3 Resource Efficiency and Pollution Prevention and Management:

- Resource consumption across all project components is anticipated to be minimal. During the construction phase, the primary resource required will be water, used for dust suppression, concrete production, and domestic purposes. In the operational phase, water usage will primarily be limited to cleaning the PV modules and minimal domestic consumption.
- Greenhouse Gases: Greenhouse gas emissions from the project during construction are expected to be predominantly associated with the use of fuels such as in genera-tors, transportation, on-site equipment, and machinery.
- Solid waste generated during construction mainly consists of municipal and construc-tion wastes that will be collected by local Joint Service Council to be disposed of in an authorized landfill. The overall volumes of both solid and hazardous waste generated by the project during construction are expected to be minimal . It is anticipated that solid waste will comprise of paper, wood, plastic, scrap metals, and glass. Hazardous waste will be likely to comprise of fuel, oils, lubricants, hydraulic/insulating fluids and batteries, tires, metal drums and empty chemical containers. Scrap metals, plastic, bat-teries, metal drums, old meters and glass waste will be rewarded to small factories that recycle them. Waste management plan should be prepared by the contractors or the DISCOs and implemented for safe management of these waste. Wood wastes will

be given to factories that re-shape them and make them usable for fireplaces for residential purposes. A limited number of waste PV modules are expected to require disposal during the construction phase. During operations, waste generated will be largely limited to domestic waste, and waste generated from maintenance. These waste streams will be segregated as per the Waste Management Plan to be developed for construction. Waste management procedures will be revised to be aligned with the Palestinian National solid waste management strategy. When the plant is decommissioned, the priority option of disposal of the PV panels will be according to EQA hazardous waste management regulations that meet Basel convention requirements.

- During project construction, power needs will be met via diesel generators. These will locally impact air quality and require fuel management and containment. These impacts, however, will be short in duration (maximum 6 months) and vary from component to component. During operations, electricity will be back-fed from the grid. Plans and procedures that manage pollution related aspects of the project's component will be in line with the requirements of relevant national regulations. Aspects should cover air quality/ dust, spills, occupational noise, among others.

7.4 ESS4 Community Health and Safety:

- PENRA shall implement adequate occupational health and safety measures including MoH and WHO guidelines in accordance with Labor Management Procedures (LMP) in a manner acceptable to the Bank and consistent with ESS2.
- The safety of local communities throughout the implementation of sub-projects across the three phases of ASPIRE will be carefully assessed. The Environmental and Social Management Plans (ESMPs) have been developed to mitigate potential risks during construction and installation phases. In cases where construction activities necessitate route detours, appropriate safety measures will be implemented to protect nearby communities and road users from traffic-related risks. These measures will adhere to established best practices and comply with the relevant Environmental, Health, and Safety (EHS) guidelines set forth by the World Bank and the WBG/IFC EHS Guidelines for Electric Power Transmission and Distribution.
- It is essential that communities are not exposed to hazardous materials and communicable Diseases during construction phase. There is a need to ensure that the

safeguarding of personnel and property is carried out in a manner that avoids or minimizes risks to the project-affected communities. The design will also consider the health and safety of the communities close to the line after project implementation.

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

- Some of the project's components may require land acquisition and restrictions on land use which can have adverse impacts on communities and people. Project-related land acquisition or restrictions on land use may cause physical displacement (relocation, loss of residential land or loss of shelter), economic displacement (loss of land, assets or access to assets, leading to loss of income sources or other means of livelihood) or both. Therefore, Resettlement Framework (RF) is prepared.
- Once the design is complete and impacts on the known site is identified, specific resettlement action plans RAPs, if the number of affected are less than 200 per each subproject, will be prepared by the ESO based on the RF.

7.6 ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources:

- The overhead power transmission lines might impact trees and interrupt natural habitats for birds and other wildlife. According to Birdlife international, the country counts 20 Key Biodiversity Areas on which 13 Important Bird and Biodiversity Areas for a total area of 56,000 ha. Birdlife International has listed 16 globally threatened (VU, EN and CR) birds species. The country counts 262 landbirds species, 95 waterbirds and 24 seabirds. In addition 223 migratory birds species were identified by Birdlife International. As specific reconstruction and rehabilitation of MV transmission lines sites are not yet determined, the site-specific ESMP/ESIA will assess the impacts on habitats of importance, if any identified within the area of the influence. The mitigation hierarchy approach will be applied following the relevant provision under ESS6. PENRA will prefer installing underground cables whenever technically and economically feasible.

7.7 ESS8 Cultural Heritage:

- The presence of cultural heritage components within or near the proposed sub-project locations is not anticipated, and no registered archaeological sites have been identified in the vicinity. However, this will be further verified through site-specific

environmental and social assessments. Additionally, chance-find procedures will be applied to all construction activities involving excavation, demolition, or land movement to ensure the appropriate handling of any unexpected discoveries.

7.8 ESS10 Stakeholder Engagement and Information Disclosure:

- The project involves a range of stakeholders. Project-affected Parties include (but are not limited to) people living in the project areas of influence such as **project direct beneficiaries**, community members and other parties that may be subject to direct impacts from project activities (e.g., landowners, land users, encroachers), private sector entities including small and medium enterprises etc. Stakeholders also include institutional actors such as energy sector institutions such as PENRA, PETL and DISCOS, local government authorities, and health facilities. Vulnerable groups may include (but are not restricted to) women, the poor, women headed households, Bedouin communities residing both in Gaza and West Bank, etc. Other interested parties may include the PERC, Ministry of Finance, Ministry of Health, Ministry of Social Development, Ministry of Education, Environmental Quality Authority, Local Commercial Banks, Universities and think tanks, and local media and NGOs.
- The Stakeholder Engagement Plan (SEP) prepared for ASPIRE 1 and 2 has been updated in line with the requirements of ESS10. The SEP includes a comprehensive identification of various stakeholder categories and a methodology for information sharing, disclosure and ongoing consultation with all stakeholders. This including marginalized groups and those living in remote and access restricted areas, to ensure that all stakeholders are engaged throughout the project.
- Information Disclosure: PENRA will disclose on its website (<http://www.penra.pna.ps>), and on ASPIRE's Facebook page project information and all key documentation, including this Environmental and Social Management Framework (ESMF). This will allow stakeholders to understand the risks, impacts and potential opportunities of the project. The information will be disclosed in relevant local languages and in a manner that is accessible and culturally appropriate, taking into account any specific needs of groups that may be differentially or disproportionately affected by the project or groups of the population with specific information needs (such as, disability, literacy, gender, mobility, differences in language or accessibility).

- The disclosure will include information on: (i) stakeholder engagement process, highlighting the ways in which stakeholders can participate; (ii) time and venue of any proposed public consultation meetings, and the process by which meetings will be notified, summarized, and reported and; (iii) the process and means by which grievances can be raised and will be addressed.

8. Environmental and Social Risk Classification of Subprojects

- The Environmental and Social Risk classification are prepared for the subprojects envisaged under the project to ensure compliance with the World Bank ESF and environmental and social standards. The guidelines include parameters for environmental assessment, public consultations and measures to enhance project benefits to communities and women. Together, these guidelines provide the methods to identify the environmental and social impacts associated with the implementation of subprojects and include measures to mitigate such problems as well as enhance environmental and social performance. The environmental and social assessment of the subprojects is to:
 - Define the specific environmental and social instruments;
 - Identify potential environmental and social impacts;
 - Determine appropriate environmental risk category, according to Bank's Environmental and Social standards (EESs);
 - Review and approve subprojects; and
 - Identify and mitigation and monitoring indicator measures.
 - Stakeholder engagement plan, labor management procedure, ESCP, and re-settlement framework are prepared.
- The Project is not likely to cause significant environmental impacts. The environmental risk is rated as substantial as some of the project activities will involve: occupational health and safety during construction, rehabilitation and operation of transmission and distribution lines and solar PV systems, risks associated with handling hazardous wastes, such as waste oil from solar PV system (Component 3). Other environmental risks include, noise, dust and waste handling during construction and rehabilitation (Components 1 and 3) exposure to electromagnetic fields (EMF) (Component 1), possible risks to birds due to collisions and electrocution (Component 1), handling and disposal of old electricity meters (Component 2), handling and disposal of old batteries and solar panels (Component 3). Delays in implementation could pose additional contextual risks to the operation, particularly in Gaza due to the constraints on entry of materials and equipment. Some of the subprojects are located in Israeli Security Controlled areas of "Area C" in the West Bank and close to the security fence in Gaza.

Works in these locations pose a security risk to staff, workers, and personnel, in addition to the risk of obtaining Israeli authority approvals for the permits required to allow workers and the project team to access and work in the security zone near the security fence in Gaza. As mentioned above, the capacity of PENRA to manage environmental and social risks and impacts has been satisfactory in terms of human and technical resources.

9. Guidelines on Environmental and Social Risk Classifications

- The applicability of ESS's to the subproject will result in recommending the appropriate needed environmental and social management documents/instruments such as ESIA, ESMP, SEP, and RAP in compliance with the Bank ESF and ESSs, these are more clarified in section 7 (Applicability of the ESSs). If the risk rating of a subproject increases to a higher risk rating, the Bank will require PENRA to apply relevant requirements of the ESSs in a manner agreed with the Bank. The measures and actions agreed will be included in the ESCP, and will be monitored by the Bank.
- Below are more details of World Bank Environmental classifications of which the sub-projects will be classified accordingly are presented.
- **(a) High Risk classification:** A proposed project is classified as of High Risk if it is likely to have significantly adverse environmental impacts. These impacts may affect an area broader than the sites or facilities subject to physical works. A full ESIA is required. The ESIA examines the project's potential negative and positive environmental impacts, compares them with those of feasible alternatives, including a no-action i.e. no-project alternative and also incorporates public consultations as per the national EIA regulation requirements. The EIA will recommend needed measures to prevent, minimize, mitigate or compensate for adverse impacts and help improve environmental performance.
- **(b) Substantial Risk classification:** A proposed sub-project is classified as of Substantial Risk, if its potential adverse environmental impacts on human populations and environment are less adverse than those of High Risk Category. These impacts are site-specific; few if any of them are irreversible; and in most cases mitigation measures can be designed and implemented more readily than for high risk category projects.
- **(c) Moderate or low risk classification:** A proposed project is classified as of moderate or Low Risk if it is likely to have minimal or no adverse environmental impacts. For projects with moderate impacts and limited scale/footprint, an ESMP will be required.

Projects of low risks, simple mitigation measures in place such as checklist or no further environmental action are required for this classification.

10. Assessment of Environmental and Social Impacts (Main categories)

Based on the social and environmental baseline, the following likely environmental and social impacts and their risk classifications can be drawn:

10.1 Category: Capacity expansion of existing substations.

- This category is found under component 1, subcomponent 1.1 of ASPIRE 1 and 3.

Likely Environmental and Social impacts for categories:

- At the time of preparation of this ESMF only two sub-projects were identified under this category. Any future expansion of substations in West Bank and Gaza will be added to this category
 - Expansion of existing 161/33 kV substations (Sarraf and BeitOula)
 - Expansion of existing 161/33 kV substation (Qalandia)
- These sub-projects are associated with considerable risks related to:
 - ESS2: Occupational health and safety related to civil and electric works. Exposure to EMFs,
 - ESS2: Labor conditions: lack of regulated contracts and adequate insurances, use of child labor, SEA and SH at work, lack of right awareness among unskilled workers, Lack of training and knowledge of hazards sources, lack of Grievance Mechanism.
 - ESS3: Excavation works are anticipated to be of significant importance, with a potential risk of improper disposal of excavated materials in surrounding areas or on private land.
 - ESS3: Pollution impacts are expected to be minimal and primarily include dust generation, potential oil leakage, noise from excavation activities, and disturbances to nearby residential areas. Additionally, electric waste is among the anticipated waste types, with a potential risk of improper disposal.
 - ESS4: community health and Safety risks may include those related to increased traffic in the area and during transportation of exceptional size equipment (50-75 MVA transformers). Risks to close receptors as schools and health facilities is possible.

- ESS4: possible blackouts during the replacement of the transformers for residential, commercial, health and educational sectors.
- ESS4: Accidental entry into the substation during construction poses potential hazards, including exposure to heavy equipment operations and sources of electricity.
- ESS4: Risks related to gender-based violence (GBV) and misconduct by project workers are possible, though they are considered unlikely within the context of the Palestinian community.
- ESS5: Land acquisition is not required under this category, as expansions are typically focused on increasing capacity without the need for additional land. Minor disturbances to commercial activities may occur but are expected to be negligible.
- ESS6: Possible disturbance to close habitats during works and possible interference with animal and birds during reproducing seasons is among the risks. These risks would be rather considered as moderate and applicable only to the construction phase as the substations are already existing and operating regularly.
- ESS8: accidental finds could be one of the risks specially when new excavations within the Substation footprint is required.
- ESS10: Risks related to exclusion of marginalized groups, lack of information, project negative reputation, misunderstanding of risks, impacts and possible mitigation measures, lack of access to information and Grievance mechanism.

10.2 Category: Rehabilitation of medium Voltage lines, grid reinforcement and upgrade.

- This category is found under components 1, subcomponent 1.2 of ASPIRE 1,2 and 3 and component 3, subcomponent 3.1 of ASPIRE 1 and 3. This category could also be found UNDER CERC component 5.

Likely Environmental and Social impacts for this category:

- At the time of preparing this ESMF, some sub-projects under this category have been identified and are being implemented as part of the first phase of ASPIRE. Additional sub-projects will be identified under ASPIRE 1,2 and 3 and incorporated into the following list as they are determined.
 - Rehabilitation of medium voltage line in Qusein Beit Iba project (NEDCO)
 - Rehabilitation of Wadi Al Hurayah medium voltage line (HEPCO)

- Upgrade of medium voltage line in Sikka – Althahreyah (SELCO)
 - Upgrade of medium voltage line in Doha – Beit Jala (JDECO)
 - Rehabilitation of Umm Al-Tut MV ring System in Tubas (TDECO)
- These sub-projects are associated with considerable risks related to:
- ESS2: Occupational health and safety related to civil and electric works.
 - ESS2: Labor conditions: lack of regulated contracts and adequate insurances, use of child labor, SEA and SH at work, lack of right awareness among unskilled workers, Lack of training and knowledge of hazards sources, lack of Grievance Mechanism.
 - ESS3: Excavation works are anticipated to be of moderate importance, with a potential risk of improper disposal of excavated materials in surrounding areas or on private land.
 - ESS3: Pollution impacts are expected to be minimal and primarily include dust generation, potential oil leakage, noise from excavation activities, and disturbances to nearby residential areas.
 - ESS4: community health and Safety risks may include those related to increased traffic in the area and during excavations specially when excavations are in residential areas and heavy traffic areas. Risk for children, elderlies and people with disabilities within limited access to sidewalks.
 - ESS4: Disturbance to educational and health facilities specially for sub-project having excavations in the vicinity of those areas.
 - ESS4: possible blackouts during the disconnection of existing lines for residential, commercial, health and educational sectors.
 - ESS4: Risks related to gender-based violence (GBV) and misconduct by project workers are possible, though they are considered unlikely within the context of the Palestinian community.
 - ESS5: Land acquisition is not required under this category since the routes for medium voltage lines are chosen based on pre-approved masterplans and along existing roads. However, limited access to commercial premises may cause temporary disturbances to business activities.
 - ESS6: Disturbance to nearby habitats and potential interference with animals or birds during breeding seasons is unlikely, as these sub-projects are typically carried out in residential or commercial areas.
 - ESS8: Accidental discoveries of cultural heritage or artifacts are improbable because the intervention areas have already been excavated and contain existing electrical lines and utilities.

- ESS10: Risks related to exclusion of marginalized groups, lack of information, project negative reputation, misunderstanding of risks, impacts and possible mitigation measures, lack of access to information and Grievance mechanism.

10.3 Category: New distribution and transmission lines

- This category is found under components 1, subcomponent 1.2 of ASPIRE 1,2 and 3.

Likely Environmental and Social impacts for categories:

- This category involves new medium voltage (MV) lines, but with the distinction that these lines may span greater distances and traverse areas where no prior excavation has occurred. Some sub-projects under this category may pass near natural habitats or forests. At the time of preparing this ESMF, several sub-projects in this category have been identified and are being implemented under the first phases of ASPIRE 1 and 2. Additional sub-projects will be identified under ASPIRE 1, 2, and 3 and will be added to the following list as they are determined.
 - New medium voltage distribution line Deir Sharaf – Beit Lid. *(Implemented)*
 - New medium voltage distribution line Asirah – Nablus *(Implemented)*
 - New medium voltage distribution line (Deir Quddies – Kharbatha project)
 - **New transmission lines (Green Corridor)**
 - New transmission line (Beit Oula – Hebron)
 - New medium voltage line from MV Connection Point at WAD FAWWAR (DURA) ending at AGBAT AREA (YATTA)
- These sub-projects are associated with considerable risks related to:
 - ESS2: Occupational health and safety related to civil and electric works.
 - ESS2: Labor conditions: lack of regulated contracts and adequate insurances, use of child labor, SEA and SH at work, lack of right awareness among unskilled workers, Lack of training and knowledge of hazards sources, lack of Grievance Mechanism.
 - ESS3: Excavation works are anticipated to be of moderate to significant importance as these lines are normally of longer distances compared to rehabilitation works, with a potential risk of improper disposal of excavated materials in surrounding areas or on private land.

- ESS3: Pollution impacts are expected to be minimal and primarily include dust generation, potential oil leakage, noise from excavation activities, and disturbances to nearby residential areas.
- ESS4: community health and Safety risks may include those related to increased traffic in the area and during excavations specially when excavations are in residential areas and heavy traffic areas. Risk for children, elderly and people with disabilities within limited access to sidewalks.
- ESS4: Disturbance to educational and health facilities specially for sub-project having excavations in the vicinity of those areas.
- ESS5: Land acquisition is not excluded under this category although the design would preferably utilize approved masterplans and existing roads wherever possible. Limited access to commercial premises may cause temporary disturbances to business activities. Bedouin communities might be found close to the route of the proposed sub-projects.
- ESS6: There is a possibility of disturbances to nearby habitats and potential interference with animals or birds during breeding seasons, as these sub-projects may traverse areas close to natural habitats and regions with limited human activity.
- ESS8: Accidental discoveries of cultural heritage or artifacts may occur, as the route may pass through areas that have not been previously excavated.
- ESS10: Risks related to exclusion of marginalized groups, lack of information, project negative reputation, misunderstanding of risks, impacts and possible mitigation measures, lack of access to information and Grievance mechanism.

10.4 Category: Supply of smart meters and prepaid meters

- This category is found under components 2, subcomponent 2.1 of ASPIRE 1,2 and 3.

Likely Environmental and Social impacts for categories:

- This category includes the supply of smart meters for the DISCOs. The smart meters are used to replace the old meters installed in residential, commercial and industrial sector.
- Smart meters supply is one of the continuous operations of the Revenue Protection Program (RPP) included under all PENRA's projects.
- Sub-projects under this category are associated with considerable risks related to:
 - ESS2: Occupational health and safety concerns include risks associated with electrical work during the replacement of old meters.

- ESS2: Labor conditions: lack of regulated contracts and adequate insurances, Lack of training and knowledge of hazards sources, lack of Grievance Mechanism.
- ESS3: Risk are related to the dismantling of old meters which may contain small batteries and some electronic components.
- ESS4: Risk might be associated with interruption of electricity supply for single users while replacing the meters.
- ESS5: Not relevant to sub-projects under this category.
- ESS6: Batteries require specialized recycling processes to recover valuable metals and safely dispose of toxic components. Without proper recycling, these materials contribute to e-waste and environmental pollution.
- ESS8: Not relevant to sub-projects under this category.
- ESS10: Risks related to exclusion of marginalized groups, lack of information, project negative reputation, misunderstanding of risks, impacts and possible mitigation measures, lack of access to information and Grievance mechanism.

10.5 Category: Solar solutions for public buildings and Energy Efficiency system integrations

- This category is found under components 3, subcomponent 3.2 of ASPIRE 1,2 and 3 and 3.3 of ASPIRE 3.
 - Likely Environmental and Social impacts for this category**
- At the time of preparing this ESMF, some sub-projects under this category have been identified and are being implemented as part of the first and second phase of ASPIRE. Additional sub-projects will be identified under ASPIRE 1,2 and 3 and incorporated into the following list as they are determined.
 - Supply and installation of solar systems to cover energy consumption in 10 public buildings.
 - PV systems for six health facilities in the West Bank
 - Implementation of energy efficiency upgrades in public buildings, including improvements to Concentrated Solar Heating (CSH) systems, Heating, Ventilation, and Air Conditioning (HVAC) systems, and the replacement of low-efficiency equipment with high-efficiency alternatives. This initiative includes the

installation of CSH systems at the Palestinian Health Complex in Ramallah and other potential healthcare facilities.⁵⁶

- Battery Energy Storage System (BESS).
- Sub-projects under this category are associated with considerable risks related to:
 - ESS2: Occupational health and safety concerns include risks associated with electrical work, handling sharp objects on-site, absence of roof protection edges and accessing roofs that may pose challenges, and performing lifting operations for PV system installation. Exposure to leaked battery chemicals can cause skin burns, respiratory issues, or other health problems for workers handling damaged batteries.
 - ESS2: Labor conditions: lack of regulated contracts and adequate insurances, use of child labor, SEA and SH at work, lack of right awareness among unskilled workers, Lack of training and knowledge of hazards sources, lack of Grievance Mechanism.
 - ESS3: Lithium batteries contain hazardous chemicals, such as lithium, cobalt, and nickel, which can leak into the environment if improperly disposed of or damaged. This can contaminate soil and water sources.
Other are primarily involving noise generated by tools used for cutting and drilling operations. Visual impact is considered negligible, as these systems are typically installed on rooftops or in parking areas with a limited footprint. Waste generation is expected to include defective PV panels, replaced components such as circuit breakers and protection devices during system updates, and residual materials from the use of sealants. Proper waste management practices will be necessary to handle these materials effectively.
 - ESS4: Community health and safety risks may involve hazards such as lifting operations, accidental entry into the work area, and falling objects from the roof during system installation.
 - ESS4: Disturbances to educational and healthcare facilities may arise, particularly for sub-projects involving rooftop installations. Additional disruptions may occur during working hours in public buildings, along with privacy concerns when work is conducted in orphanages, student dormitories, or elderly care residences.

⁵ Feasibility studies are required for interventions under this category which will be part of the TA sub-component of component 4.

⁶ TOR “Exploring Energy Efficiency opportunities in Public Building in West Bank” is prepared.

- ESS5: Land acquisition is not applicable to this category, as the work is carried out on rooftops and within parking areas located within the boundaries of the buildings. For the same reason, no livelihoods will be affected.
- ESS6: The use of natural resources will be minimal, primarily involving water for cleaning operations. No impacts on habitats or sensitive areas are anticipated, as these interventions are confined within the boundaries of public facilities and are limited in duration.
- ESS6: Lithium batteries require specialized recycling processes to recover valuable metals and safely dispose of toxic components. Without proper recycling, these materials contribute to e-waste and environmental pollution.
- ESS8: Not relevant to sub-projects under this category. Accidental discoveries of cultural heritage or artifacts is excluded, as these interventions are confined within the boundaries of public facilities.
- ESS10: Risks related to exclusion of marginalized groups, lack of information, project negative reputation, misunderstanding of risks, impacts and possible mitigation measures, lack of access to information and Grievance mechanism.

10.6 Category: Small sized PV systems and PV kits, small energy efficiency interventions

- This category is found under components 3, subcomponent 3.3 of ASPIRE 1 and 3 and under CERC component whenever required.

Likely Environmental and Social impacts for category:

- PV kits for House Holders, SMEs and public facilities (Small interventions).
- Energy Efficiency interventions in Public Sector (Small interventions).
- These category includes small PV systems of limited capacity to be implemented on rooftop of buildings and Small Energy efficiency interventions on public buildings.
-
- Small PV kits sub-projects are recurrent which started its pilot phase under ESPIP project in 2016. While Energy efficiency interventions aim to reduce the electricity consumption by adopting alternative solutions including:
 - Supply and installation of PV kits (Up to 10 kWp)
 - Replacement of lighting systems (Bulbs, Smart solutions, Higher efficiency equipment, energy management systems)

- Sub-projects under this category are associated with risks related to:
 - ESS2: Occupational health and safety concerns include risks associated with electrical work, handling sharp objects on-site, absence of roof protection edges and accessing roofs that may pose challenges, and performing lifting operations for PV system installation.
 - ESS2: Labor conditions: lack of regulated contracts and adequate insurances, use of child labor, SEA and SH at work, lack of right awareness among unskilled workers, Lack of training and knowledge of hazards sources, lack of Grievance Mechanism.
 - ESS3: Primarily involving noise generated by tools used for cutting and drilling operations. Visual impact is considered negligible, as these systems are installed on rooftops or in parking areas with a limited footprint. Waste generation is expected to include defective PV panels, replaced components such as circuit breakers and protection devices during system updates, and residual materials from the use of sealants. Proper waste management practices will be necessary to handle these materials effectively.
 - ESS4: Community health and safety risks may involve hazards such as lifting operations, accidental entry into the work area, and falling objects from the roof during system installation.
 - ESS5: Land acquisition is not applicable to this category, as the work is carried out on rooftops. For the same reason, no livelihoods will be affected.
 - ESS6: The use of natural resources will be minimal, primarily involving water for cleaning operations. No impacts on habitats or sensitive areas are anticipated, as these interventions are confined within the boundaries of public facilities and are limited in duration.
 - ESS8: Not relevant to sub-projects under this category. Accidental discoveries of cultural heritage or artifacts is excluded, as these interventions are confined within the boundaries of public facilities.
 - ESS10: Risks related to exclusion of marginalized groups, lack of information, project negative reputation, misunderstanding of risks, impacts and possible mitigation measures, lack of access to information and Grievance mechanism.

10.7 Category: *Gaza emergency responses category*

- A specific ESMF for interventions under ASPIRE program is prepared for all interventions under “Gaza Emergency Response”. Please check annex # XX for all details

10.8 Category: *Supply of equipment, repair jobs by PETL and DISCOs*

- This category is found under the different components of ASPIRE 1,2 and 3 including CERC component. This includes the supply of single medium voltage equipment (transformers, reclosures, load switch breakers, accessories, PV panels, inverters, diesel generators, office furniture, vehicles, etc...)

Likely Environmental and Social impacts for interventions under the CERC component.

- For this category, risks are related to the supply chain of the equipment such as child labor for PV panels and OHS risks. Those risks are normally covered under the WB's standard procurement documents. The installation phase would not be covered under PENRA's procurement.

11. Environmental and Social Instruments

- As some of the subprojects locations are not known yet. The ESMF has identified the applicability of different ESSs to the Project activities as clarified above.
- A screening process, according to the WB's ESS1, will define the applicable specific instruments. Preliminary investigation of the different sub-projects and previous experience from sub-projects implemented under ASPIRE1 and 2 reveals that the following instruments are anticipated:
- For Categories "Capacity expansion of existing substations", "Rehabilitation of medium Voltage lines, grid reinforcement and upgrade", "New distribution and transmission lines", ESMPs will be prepared.
- For category "Supply of equipment, repair jobs by PETL and DISCOs" and "Supply of smart and prepaid meters": Mitigation measures within the screening document. waste management requirements will be included within the screening.
- For Category "Solar solutions for public buildings and Energy Efficiency system integrations", ESMP will be prepared.
- For category "Small PV systems, PV kits and small energy efficiency interventions": Checklist ESMPs will be prepared.
- For Gaza rehabilitation Emergency Response, the dedicated ESMF requirements will apply.
- For all components where supply/ replacement of equipment such as meters, batteries, transformers, poles and towers, cables, electricity accessories or where civil works are involved: Guideline for Waste Management Plan will be provided and a waste management plan will be developed by the contractor or the DISCO and incorporated in

the C-ESMP for the different wastes that will be generated within their geographical areas. The plan will include management procedures for the classified wasted material.

Labor Management Procedure (LMP) and Workers Grievance Mechanism (GM):

- PENRA has prepared the labor management procedures for the project. In line with the LMP, PENRA will develop and implement a grievance mechanism for their workers/staff. PENRA will also require contractors to develop and implement a grievance mechanism for their workforce prior to the start of civil works. The construction contractors will prepare their labor management procedure before the start of civil works, which will also include detailed description of the workers grievance mechanism.
- The risk of forced labor in the global supply chain for solar panels and solar components needs to be addressed. To support forced labor risk mitigation, PENRA will strengthen the solar related procurement processes by including forced labor bidder declarations, qualification requirements and strengthened contractual provision in procurements involving financing of solar panels/solar components.⁷
- For full details please review the Labor Management Plan (LMP) available on PENRA's website and the project's social media pages.

Stakeholder Engagement Plan and project's Grievance Mechanism (GM)

- A Stakeholder Engagement Plan (SEP) has been developed for the project that seeks to define a technically and culturally appropriate approach to consultation and disclosure.
- PENRA has established a grievance mechanism (GM) under ASPIRE1 for project related risks and the same mechanism will be used for the other phases. The GM is functioning well and PENRA has assigned a staff to be responsible for receiving grievances and transferring them to the ESO. PENRA prepared several tools such as flyers and roll ups to disseminate information regarding the GM system. PENRA also disseminated information about the GM to the project's affected parties during consultations, through social media and on the PENRA website.
- For full details please review the Stakeholder Engagement Plan (SEP) available on

⁷ See annex 14.3

PENRA's website and the project's social media pages.

Resettlement Framework

- Resettlement Framework (RF) is prepared as separate document for the project. The RF sets out the policies, principles, institutional arrangements, schedules and indicative budgets that will take care of anticipated resettlements for various project components.
- For full details please review the Resettlement Framework (RF) available on PENRA's website and the project's social media pages.

12. Environmental and Social Management Procedure

12.1 Environmental/Social Screening

- The sub-projects under components 1,2, 3 and 5 will be subject to Environmental and Social screening according to ESS1 requirements. Gaza Emergency interventions will follow the screening requirements as per the dedicated ESMF (See annex 2).
- The purpose of "environmental/social screening" is to get a preliminary idea about the degree and extent potential environmental impacts of a particular sub-project, which would subsequently be used to assess the need for further environmental/social assessment. The screening will be developed based on existing templates (See annex 2) in cooperation between PENRA's ESO and the beneficiaries ES appointed specialists (PETL, Electricity Distributors, MoH, MoE, MoSA). (defined as the ES team).
- The environmental and social screening process will determine the nature of environmental and social assessment that should be subsequently undertaken. The environmental/social screening will provide a rapid assessment of the project characteristics, its beneficiaries, the socio-economic dimensions of the area, and its potential environmental/social impacts and risks. The results of the environmental/social screening will determine whether or not a sub-project requires further environmental and social assessment, including Environmental and Social Impact Assessment (ESIA), Environmental and Social Management Plan (ESMP), and Resettlement Plan (RP).
- The environmental/social screening would involve: (i) reconnaissance of the sub-project areas/routes and their surroundings; (ii) identification of the major sub-project

activities; and (iii) preliminary assessment of the impacts of these activities on the ecological, physic-chemical and socio-economic environment of the sub-project surrounding areas.

- The ES team would carry out the “environmental/social screening” of all sub-projects having a preliminary definition in terms of nature of the sub-project location and sub-project activities. The ESO will be filling in the Environmental/Social Screening Forms presented in Annex XX. Based on the evaluation results, PENRA’s ESO should follow the ESMF procedure to recommend suitable measures and instruments to be prepared to avoid or minimize the environmental and social risks of the subproject.

12.2 Generic Environmental and Social Management Plan

- This chapter presents Generic Environmental and Social Management Plans (ESMPs) and Environmental and Social Check list (ES Check lists) aligned with the identified risks and impacts outlined in the ESMF. It includes mitigation measures, monitoring protocols, and institutional actions to be implemented during the project's execution and operation phases to eliminate, offset, or reduce adverse environmental and social risks and impacts to acceptable levels.

12.3 Mitigation and Enhancement Measures

- Depending on the nature of the intervention, a Generic ESMP is prepared. This G-ESMP includes mitigation measures, responsibilities for Planning, implementation, supervision and monitoring. Hence, the following environmental management plans describe how an action might impact the natural environment in which it occurs and set out clear commitments from the entity taking the action on how those impacts will be avoided, minimized and managed so that they are environmentally acceptable.
- PENRA will mitigate the environmental and social impacts associated with implementation activities by: (i) including environmental and social clauses in all supply, installation/construction contracts and (ii) ensuring that contractor/ installer personnel are familiar with these clauses.
- Mitigation measures which will effectively address potential risks and impacts and implementation and monitoring responsibilities for mitigation measures are identified. The following Tables provide generic ES matrices which should be modified after exact location and detailed information of the subproject are identified.

12.4 Generic ESMPs:

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12.4.1 Generic ESMP for Capacity expansion of existing substations

Table 11: Generic ESMP (expansion of existing substations)

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS1	Institutional arrange- ments	All	Improper implementation of the ES plans	(1. Require the beneficiary to maintain an Environmental and Social employee responsible for preparation and implementation of the sub-project in accordance with local laws and ESF. (2. Require the contractor to appoint an Environmental and Social employee and a safety officer and transfer any ES requirement to sub-contractors (3. Develop ES reports according to agreed schemes.	(1. Beneficiary (2. Contractor (3. Beneficiary and Contractor		PENRA

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS1	Permits	All	Hold of activities and delay during implementation	(1. Require the beneficiary to obtain permits from relevant institutions including EQA, Municipalities, Civil defense, Israeli civil administration	(1. Beneficiary		PENRA
ESS1	Procedures	All	Improper implementation of the ES plans	(1. Require the beneficiary to have internal procedures for Occupational Health and Safety, Waste Management, Emergency action Plan, Training plans, stakeholder engagement and complaints.	(2. Beneficiary		PENRA

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS2	Labor and working conditions	Sup- ply	OHS impacts related to supply phase	(1. Include OHS provi- sions within the pro- curement documents. (2. Require Primary sup- pliers to adopt the LMP.	(1. PENRA		

ESS2	Labor and working conditions	Installation	OHS impacts: (1. Injuries from working tools. (2. Electroshocks. (3. Exposure to electromagnetic fields. (4. Falling from height. (5. SEA and SH. (6. Exposure to adverse weather conditions. Labor conditions impact: (1. Unequal opportunities and discriminations. (2. Lack of regulated contracts and insurance coverage (3. Lack of awareness among workers for hazards and rights. (4. Lack of Grievance Mechanism. (5. Forced labor and child labor	(1. Require the contractor to develop an acceptable OHS plan according to the requirements to local laws, ESS2 requirements, LMP and EHSs to include: a) Assessment of workers capacities and risks. b) Tailored training and SEA, SH awareness according to assessment. c) Required PPEs. d) Adopt warning signs for potential source of hazards. e) Mitigation measures to reduce workers exposure to hazardous conditions. f) Emergency Plan	(1. Contractor	(1. Beneficiary	(1. PENRA
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ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
				Labor and working conditions (2. All workers shall be provided with clear regulated contracts and insurances according to the labor laws. (3. Raise workers awareness on duties and rights. (4. Provide access to grievance mechanism and keep records.			

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS3	Pollution prevention		Contamination of surrounding areas including: Noise Dust Air and soil pollution (emissions and leakages) Excavation waste Hazardous waste	(1. Reduce use of heavy equipment when not required. (2. Use dust suppression techniques (3. Use equipment with ant particulate filters. (4. Install noise barriers if sensitive receptors are in the vicinity. (5. Prepare an acceptable WMP to include: a) Agreements with the municipality for construction waste disposal. b) Dispose hazardous waste according to EQA requirements (Hazardous waste law 6/2021).	(1. Contractor	(2. Beneficiary	(2. PENRA

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS4	Hazards to community		(1. Unintentional access to the site, leading to potential safety risks. (2. Risk of injuries or exposure to hazardous materials. (3. Potential incidents of gender-based violence (GBV). (4. Disturbance caused by excessive noise and dust. (5. Increased traffic congestion during the transportation of transformers. (6. Utility disruption.	(1. Install warning signs at the site entry. (2. Prepare an emergency plan in case of incidents or accidents. (3. Raise awareness on GBV aspects among the local community. (4. Appoint a flagman during the transit of heavy equipment to reach the site. (5. Coordinate working hours with local receptors (Schools, Hospital, etc...) (6. Announce any service interruption ahead of time.	Contractor and PETL	PETL	PENRA

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS5	Livelihood	in- stal- lation	Disturbance to close com- mercial and industrial sec- tor. Possible access limitation to agricultural land	Plan transportation, instal- lation, and construction ac- tivities during non-peak hours or periods to mini- mize disruption to com- mercial and industrial op- erations.	Contractor	PETL	PENRA
ESS6	Biodiversity	In- stal- lation	Disturbance of animal life in close habitats.	Avoid the peak nesting and breeding seasons of local bird species by identifying these periods in advance	PETL		PENRA
ESS8	Heritage findings	in- stal- lation	Improper use or damage of findings	Cease all activities immedi- ately and coordinate with the Ministry of Tourism and Antiquities. Develop and implement a chance find procedure if the intervention is located within or near a cultural heritage area.	Contractor	PETL	PENRA

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS10	Stakeholder engagement and disclosure	All	(1. Negative reputation. (2. Misunderstanding of risks and mitigation measures. (3. Exclusion of vulnerable categories.	(1. Prepare and implement a Stakeholder engagement activity for each sub-project. (2. Announce activities on social media and project's website. (3. Coordinate with MoSD for engagement with vulnerable categories. (4. Widely disclose Grievance Mechanism with referral mechanism for GBV aspects.	Contractor and beneficiary	Beneficiary	PENRA

12.4.2 Generic ESMP for (i) Rehabilitation of medium voltage lines, (ii) Grid reinforcement and upgrade

Table 12: ESMP (Rehabilitation of medium voltage lines, grid reinforcement and upgrade)

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS1	Institu- tional ar- range- ments	All	Improper implementa- tion of the ES plans	(1. Require the beneficiary to maintain an Environmental and Social employee responsible for preparation and implementation of the sub-project in accordance with local laws and ESF. (2. Require the contractor to appoint an Environmental and Social employee and a safety officer and transfer any ES requirement to sub-contractors (3. Develop ES reports according to agreed schemes.	(1. Benefi- ciary (2. Con- tractor (3. Benefi- ciary and Con- tractor		PENRA

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS1	Per- mits	All	Hold of activities and delay during implemen- tation Damage to under- ground utilities	(1. Require the beneficiary to obtain permits from rele- vant institutions including EQA, Municipalities, Civil defense, Israeli civil admin- istration (2. Obtain as build drawings from municipalities, minis- try of housing and public works.	(1. Benefi- ciary		PENRA
ESS1	Proce- dures	All	Improper implementa- tion of the ES plans	(2. Require the beneficiary to have internal procedures for Occupational Health and Safety, Waste Man- agement, Emergency ac- tion Plan, Training plans, stakeholder engagement and complaints.	(2. Benefi- ciary		PENRA

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS2	Labor and work- ing condi- tions	Sup- ply	OHS impacts related to supply phase	(3. Include OHS provisions within the procurement documents. 4. Require Primary suppliers to adopt the LMP.	(2. PENRA		

ESS2	Labor and working conditions	Installation	OHS impacts: (1. Injuries from working tools. (2. Electroshocks. (3. Falling from height. (4. Security risks and UXOs (5. Military incursions (6. SEA and SH. (7. Exposure to adverse weather conditions. Labor conditions impact: (6. Unequal opportunities and discriminations. (7. Lack of regulated contracts and insurance coverage (8. Lack of awareness among workers for hazards and rights. (9. Lack of Grievance Mechanism.	(1. Require the contractor to develop an acceptable OHS plan according to the requirements to local laws, ESS2 requirements, LMP and EHSs to include: a) Assessment of workers capacities and risks. b) Tailored training and SEA, SH awareness according to assessment. c) Required PPEs. d) Adopt warning signs for potential source of hazards. e) Mitigation measures to reduce workers exposure to hazardous conditions. f) Emergency Plan. (2. Coordinate security aspects and training with the Palestinian mine action center (UNMASS and UNDSS) and Implement SOP.⁸	(2. Contractor	(3. Beneficiary	(3. PENRA
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ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
			(10. Forced labor and child labor	Labor and working conditions (3. All workers shall be provided with clear regulated contracts and insurances according to the labor laws. (4. Raise workers awareness on duties and rights. (5. Provide access to grievance mechanism and keep records.			

⁸ Whenever assessment findings indicate areas affected by shelling or raise concerns regarding security issues.

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS3	Pollu- tion pre- vention		Contamination of sur- rounding areas includ- ing: Noise Dust Air and soil pollution (emissions and leak- ages) Excavation waste Hazardous waste	(1. Reduce use of heavy equip- ment when not required. (2. Use dust suppression tech- niques (3. Use equipment with ant particulate filters. (4. Prepare an acceptable WMP to include: c) Agreements with the municipality for con- struction waste dis- posal. d) Dispose hazardous waste according to EQA requirements (Hazardous waste law 6/2021).	(1. Con- tractor	(1. Ben- efi- ciary	(1. PENRA

ESS4	Hazards to community		(1. Accidental fall into open trenches. (2. Potential incidents of gender-based violence (GBV). (3. UXOs (4. Schools, Hospitals (5. Disturbance caused by excessive noise and dust. (6. Increased traffic congestion during excavation works. (7. Utility disruption. (8. Exclusion of vulnerable categories.	(1. Install a project board sign at site. (2. Set up temporary pedestrian crossing points. (3. Coordinate excavation activities with sensitive receptors. (4. Prepare an emergency plan in case of incidents or accidents. (5. Coordinate security aspects and training with the Palestinian mine action center (UNMASS and UNDSS) and Implement SOP.⁹ (6. Raise awareness on GBV aspects among the local community. (7. Prepare a TMP (if required following to assessment) (8. Appoint a flagman during the transit of heavy equipment to reach the site. (9. Coordinate working hours with local receptors	Contractor and beneficiary	Beneficiary	PENRA
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ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
				(Schools, Hospital, etc...) (10. Adopt inclusive measures for vulnerable categories (to be included in the design phase) (11. Announce any service interruption ahead of time.			
ESS5	Liveli- hood	in- stal- lation	Disturbance to close commercial and industrial sector. Possible access limitation to agricultural land	Plan transportation, installation, and construction activities during non-peak hours or periods to minimize disruption to commercial and industrial operations.	Contractor	PETL	PENRA
ESS6	Biodi- versity	In- stal- lation	Disturbance of animal life in close habitats. Removal of trees and vegetation	Avoid the peak nesting and breeding seasons of local bird species by identifying these periods in advance. Do not remove forest or perennial trees. Plant new trees to replace those that have been removed.	PETL		PENRA

⁹ Whenever assessment findings indicate areas affected by shelling or raise concerns regarding security issues.

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS8	Herit- age find- ings	in- stal- lation	Improper use or dam- age of findings	Cease all activities immediately and coordinate with the Minis- try of Tourism and Antiquities. Develop and implement a chance find procedure if the in- tervention is located within or near a cultural heritage area.	Contractor	PETL	PENRA
ESS10	Stake- holder en- gage- ment and disclo- sure	All	(1. Negative reputa- tion. (2. Misunderstanding of risks and mitiga- tion measures. (3. Exclusion of vulner- able categories.	(1. Prepare and implement a Stakeholder engagement activity for each sub-pro- ject. (2. Announce activities on so- cial media and project's website. (3. Coordinate with MoSD for engagement with vulnera- ble categories. (4. Widely disclose Grievance Mechanism with referral mechanism for GBV as- pects.	Contractor and benefi- ciary	Benefi- ciary	PENRA

12.4.3 Generic ESMP for new distribution and transmission lines

Table 13: ESMP (New distribution and transmission lines)

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS1	Institu- tional ar- range- ments	All	Improper implementa- tion of the ES plans	(1. Require the beneficiary to maintain an Environmental and Social employee responsible for preparation and implementation of the sub-project in accordance with local laws and ESF. (2. Require the contractor to appoint an Environmental and Social employee and a safety officer and transfer any ES requirement to sub-contractors (3. Develop ES reports according to agreed schemes.	(1. Benefi- ciary (2. Con- tractor (3. Benefi- ciary and Con- tractor		PENRA

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS1	Per- mits and prepar- edness	All	Hold of activities and delay during implemen- tation Damage to under- ground utilities. Halt of activities be- cause of unsettled land aspects.	(1. Require the beneficiary to obtain permits from relevant institutions including EQA, Municipalities, Civil defense, Israeli civil admin- istration (2. Obtain as build drawings from municipalities, minis- try of housing and public works. (3. Engage with municipalities or village councils for mas- ter plans and right of way. (4. Make available all land title deeds for private lands along the proposed route.¹⁰	(1. Benefi- ciary		PENRA

¹⁰ Whenever assessment findings indicate further investigation on landownership and right of ways.

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS1	Proce- dures	All	Improper implementa- tion of the ES plans	(1. Require the beneficiary to have internal procedures for Occupational Health and Safety, Waste Man- agement, Emergency ac- tion Plan, Training plans, stakeholder engagement and complaints.	(2. Benefi- ciary		PENRA
ESS2	Labor and work- ing condi- tions	Sup- ply	OHS impacts related to supply phase	(1. Include OHS provisions within the procurement documents. (2. Require Primary suppliers to adopt the LMP.	(1. PENRA		

ESS2	Labor and working conditions	Installation	OHS impacts: (1. Injuries from working tools. (2. Electroshocks. (3. Falling from height. (4. Security risks and UXOs (5. Military incursions (6. SEA and SH. (7. Exposure to adverse weather conditions. Labor conditions impact: (11. Unequal opportunities and discriminations. (12. Lack of regulated contracts and insurance coverage (13. Lack of awareness among workers for hazards and rights. (14. Lack of Grievance Mechanism.	(1. Require the contractor to develop an acceptable OHS plan according to the requirements to local laws, ESS2 requirements, LMP and EHSGs to include: g) Assessment of workers capacities and risks. h) Tailored training and SEA, SH awareness according to assessment. i) Required PPEs. j) Adopt warning signs for potential source of hazards. k) Mitigation measures to reduce workers exposure to hazardous conditions. l) Emergency Plan. (2. Coordinate security aspects and training with the Palestinian mine action center (UNMASS and UNDSS) and Implement SOP.¹¹	(1. Contractor	(1. Beneficiary	(1. PENRA
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ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
			(15. Forced labor and child labor	Labor and working conditions (3. All workers shall be provided with clear regulated contracts and insurances according to the labor laws. (4. Raise workers awareness on duties and rights. (5. Provide access to grievance mechanism and keep records.			

¹¹ Whenever assessment findings indicate areas affected by shelling or raise concerns regarding security issues.

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS3	Pollu- tion pre- vention		Contamination of sur- rounding areas includ- ing: Noise Dust Air and soil pollution (emissions and leak- ages) Excavation waste Hazardous waste	(1. Reduce use of heavy equip- ment when not required. (2. Use dust suppression tech- niques (3. Use equipment with ant particulate filters. (4. Prepare an acceptable WMP to include: e) Agreements with the municipality for con- struction waste dis- posal. f) Dispose hazardous waste according to EQA requirements (Hazardous waste law 6/2021).	(1. Con- tractor	(1. Ben- efi- ciary	(1. PENRA

ESS4	Hazards to community		(1. Accidental fall into open trenches. (2. Potential incidents of gender-based violence (GBV). (3. UXOs (4. Schools, Hospitals (5. Disturbance caused by excessive noise and dust. (6. Increased traffic congestion during excavation works. (7. Utility disruption. (8. Exclusion of vulnerable categories.	(1. Install a project board sign at site. (2. Set up temporary pedestrian crossing points. (3. Coordinate excavation activities with sensitive receptors. (4. Prepare an emergency plan in case of incidents or accidents. (5. Coordinate security aspects and training with the Palestinian mine action center (UNMASS and UNDSS) and Implement SOP.¹² (6. Raise awareness on GBV aspects among the local community. (7. Prepare a TMP (if required following to assessment) (8. Appoint a flagman during the transit of heavy equipment to reach the site. (9. Coordinate working hours with local receptors	Contractor and beneficiary	Beneficiary	PENRA
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ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
				(Schools, Hospital, etc...) (10. Adopt inclusive measures for vulnerable categories (to be included in the design phase) (11. Announce any service interruption ahead of time.			
ESS5	Land acquisition and livelihood	in- stal- lation	Unfair compensation for land values Protests and project halt because of unsettled land aspects. Disturbance to close commercial and industrial sector. Possible access limitation to agricultural land	Prepare and implement a RAP in accordance with the RF and requirements of ESS5.¹³ Engage with stakeholders and make available a dedicated GM for land acquisition and livelihood aspects. Plan transportation, installation, and construction activities during non-peak hours or periods to minimize disruption to commercial and industrial operations.	Beneficiary Contractor	Beneficiary	PENRA

¹² Whenever assessment findings indicate areas affected by shelling or raise concerns regarding security issues.

¹³ Whenever assessment findings indicate compensation requirements (land and livelihood)

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS6	Biodi- versity	In- stal- lation	(1. Alteration of Eco- system. (2. Disturbance of ani- mal life in close habitats. (3. Removal of trees and vegetation	(1. Further assess impacts on Natural habitats, ecosys- tems, natural reserves. ¹⁴ (2. Avoid the peak nesting and breeding seasons of local bird species by identifying these periods in advance. (3. Do not remove forest or perennial trees. (4. Plant new trees to replace those that have been re- moved.	PETL		PENRA
ESS8	Herit- age find- ings	in- stal- lation	(1. Improper handling or damage to dis- covered artifacts.	(1. Cease all activities immedi- ately and coordinate with the Ministry of Tourism and Antiquities. (2. Develop and implement a chance find procedure if the intervention is located within or near a cultural heritage area.	Contractor	PETL	PENRA

¹⁴ Whenever assessment findings indicate areas with close habitats, high biodiversity, endangered species.

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS10	Stakeholder engagement and disclosure	All	(1. Negative reputation. (2. Misunderstanding of risks and mitigation measures. (3. Exclusion of vulnerable categories.	(1. Prepare and implement a Stakeholder engagement activity for each sub-project. (2. Announce activities on social media and project's website. (3. Coordinate with MoSD for engagement with vulnerable categories. (4. Widely disclose Grievance Mechanism with referral mechanism for GBV aspects.	Contractor and beneficiary	Beneficiary	PENRA

12.4.4 Generic ESMP for Solar solutions for public buildings and Energy Efficiency system integrations.

Table 14: ESMP (Solar solutions for public buildings and Energy Efficiency system integrations)

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS1	Institu- tional ar- range- ments	All	Improper implementa- tion of the ES plans	(1. Require the beneficiary to maintain an Environmental and Social employee responsible for preparation and implementation of the sub-project in accordance with local laws and ESF. (2. Require the contractor to appoint an Environmental and Social employee and a safety officer and transfer any ES requirement to sub-contractors (3. Develop ES reports according to agreed schemes.	(1. Benefi- ciary (2. Con- tractor (3. Benefi- ciary and Con- tractor		PENRA

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS1	Per- mits and prepar- edness	All	Hold of activities and delay during implemen- tation	(1. Require the beneficiary to obtain permits from relevant institutions including EQA, Municipalities, Civil defense.	(1. Benefi- ciary		PENRA
ESS1	Proce- dures	All	Improper implementa- tion of the ES plans	(1. Require the beneficiary to have internal procedures for Occupational Health and Safety, Waste Man- agement, Emergency ac- tion Plan, Training plans, stakeholder engagement and complaints.	(1. Benefi- ciary		PENRA
ESS2	Labor and work- ing condi- tions	Sup- ply	OHS impacts related to supply phase	(1. Include OHS provisions within the procurement documents. (2. Require Primary suppliers to adopt the LMP.	(2. PENRA		

ESS2	Labor and working conditions	Installation OHS impacts: (1. Injuries from working tools, sharp objects and falling objects. (2. Electroshocks. (3. Falling from unprotected roof. (4. Military incursions (5. SEA and SH. (6. Exposure to adverse weather conditions. Labor conditions impact: (1. Unequal opportunities and discriminations. (2. Lack of regulated contracts and insurance coverage (3. Lack of awareness among workers for hazards and rights. (4. Lack of Grievance	(1. Require the contractor to develop an acceptable OHS plan according to the requirements to local laws, ESS2 requirements, LMP and EHSs to include: a) Assessment of workers capacities and risks. b) Tailored training and SEA, SH awareness according to assessment. c) Required PPEs. d) Adopt warning signs for potential source of hazards. e) Mitigation measures to reduce workers exposure to hazardous conditions. f) Emergency Plan. Labor and working conditions (1. All workers shall be provided with clear regulated contracts and insurances according to the labor	(1. Contractor	(1. Beneficiary	(1. PENRA
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ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
			Mechanism. (5. Forced labor and child labor	laws. (2. Raise workers awareness on duties and rights. (3. Provide access to grievance mechanism and keep rec- ords.			

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS3	Pollu- tion pre- vention		(1. Contamination of surrounding areas including: a) Noise b) Dust c) Sealants d) Heavy metals (lithium, co-balt, and nickel) from damaged equipment (PV panels and Bat-teries) (2. Hazardous waste (PV panels and bat-teries)	(1. Reduce use of heavy equip-ment when not required. (2. Use vehicles with ant par-ticulate filters. (3. Prepare an acceptable WMP to include: a) Agreements with the municipality for con-struction waste dis-posal. b) Dispose hazardous waste according to EQA requirements (Hazardous waste law 6/2021).	(1. Con- tractor	(1. Ben- efi- ciary	(1. PENRA

ESS4	Hazards to community		(1. Accidental fall of objects during lifting operations. (2. Potential incidents of gender-based violence (GBV). (3. Disturbance of Schools, Health facilities and privacy aspects. (4. Disturbance caused by excessive noise. (5. Increased traffic congestion during excavation works. (6. Utility disruption. (7. Exclusion of vulnerable categories.	(1. Install a project board sign at site. (2. Coordinate activities with sensitive receptors. (3. Prepare an emergency plan in case of incidents or accidents. (4. Coordinate security aspects and training with the Palestinian mine action center (UNMASS and UNDSS) and Implement SOP.¹⁵ (5. Raise awareness on GBV aspects among the local community. (6. Coordinate working hours with local receptors (Schools, Hospital, etc...) (7. Adopt inclusive measures for vulnerable categories (to be included in the design phase) (8. Announce any service interruption ahead of time.	Contractor and beneficiary	Beneficiary	PENRA
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¹⁵ Whenever assessment findings indicate areas affected by shelling or raise concerns regarding security issues.

ESSs	Topic	Phase	Potential Impact	Mitigation measures	implemen- tation	Supervi- sion	Monitoring
ESS6	Man- age- ment of nat- ural re- sources	End of life.	(1. Loss of valuable re- sources.	(1. Look into possible syner- gies for reuse and recycling of raw materials (Silicon, valuable metals)	PETL		PENRA
ESS10	Stake- holder en- gage- ment and disclo- sure	All	(1. Negative reputa- tion. (2. Misunderstanding of risks and mitiga- tion measures. (3. Exclusion of vulner- able categories.	(1. Prepare and implement a Stakeholder engagement activity for each sub-pro- ject. (2. Announce activities on so- cial media and project's website. (3. Coordinate with MoSD for engagement with vulnera- ble categories. (4. Widely disclose Grievance Mechanism with referral mechanism for GBV as- pects.	Contractor and benefi- ciary	Benefi- ciary	PENRA

12.4.5 Checklist ESMP for PV kits and small energy efficiency interventions

The simplified procedure adopted for the small implementations under ASPIRE 1 project is extended to all sub-projects under ASPIRE 1 and 3 and under CERC component whenever required.

This simplified procedure covers the implementation phase (supply + installation), the maintenance phase and the dismantling phase.

Post review: The set of (screening + ESMP + Consultation) will compose the site specific ESMP. PENRA will appoint a consultant to audit the prepared documents and implemented sub-projects upon conclusion of the sub-project implementation.

The check list ESMP can be reviewed from the following link:

Link will be added

12.5 Environmental and Social Monitoring Plan

Based on the above ESMP and the mitigation measures set, the following monitoring plan is developed to help, track and assess the interventions set in the mitigations of each environmental parameter throughout the life cycle of the project. In this plan all indicators to be monitored and the institutional responsibilities are presented, in addition to a column showing the implementation route/plan needed.

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Table 15: Environmental and Social Monitoring Plan

Project Activity/Aspect	Parameter	Indicator	Institutional Responsibility			Project Phase	Monitoring Cost
			Implementa- tion Route/Plan	Monitoring Re- sponsibility	Frequency		
Impact on Flora	Visual Inspection	Bare Soil / Soil Erosion	ESMP	Contractor Project Manager/ Supervising Engineer	Monthly	Construction and operation	Included in supervision scope and costs
Air emissions and quality of dust	TPS, SO2, CO, H2S, CO2, Dust fallout	Bad Odor, Use of PPE, Health and Safety Plan in use Record of induction for workers, Active dust suppression	ESMP	Contractor Supervising Engineer	Monthly	Construction and operation	Included in supervision scope and costs
Safeguarding community health and safety	Visual Inspection and accident records	Induction training records Safety working procedure Maintenance of complaints log and resolution process	SEP Project performance Grievance Mechanism	Contractor Supervising Engineer	Daily	Prior to and during Construction and operation	Included in supervision scope and costs

Project Activity/Aspect	Parameter	Indicator	Institutional Responsibility			Project Phase	Monitoring Cost
			Implementation Route/Plan	Monitoring Responsibility	Frequency		
		and Evidence of effective GM. Photographs of appropriate fencing; and signage around site perimeter and were identified through risk assessment process.					
Safeguarding Worker Occupation Health and Safety	Health and safety records Visual inspection Active and passive monitoring	Audits of PPE use, maintenance of disciplinary records, etc. Records of inductions, trainings & toolbox talks	OHS Management system	Contractor Supervising Engineer	Daily	Construction and operation	Included in supervision Scope and costs
		Good “housekeeping” on site					

Project Activity/Aspect	Parameter	Indicator	Institutional Responsibility			Project Phase	Monitoring Cost
			Implementation Route/Plan	Monitoring Responsibility	Frequency		
		Worker Grievance Records & resolution					
Storage of hazardous materials and chemicals	Spillages Visual inspection	MSDS for all store Chemicals Functioning storage containers Chemical usage records	Waste Management Plan	Contractor Supervising Engineer	Monthly Audit Review	Construction	Included in supervision scope and costs
Traffic concerns	Visual inspection	Record of accidents involving project vehicles	Traffic Management Plan	Contractor Supervising Engineer	Daily	Construction and operation	Included in supervision scope and costs
		Flag man shall be used to direct vehicle traffic around construction sites and hazards during working hours					

Project Activity/Aspect	Parameter	Indicator	Institutional Responsibility			Project Phase	Monitoring Cost
			Implementation Route/Plan	Monitoring Responsibility	Frequency		
		(Health and Safety Plan).					
		Plan approved by project Manager barrier and signage					
Public Awareness and Community perceptions	Community Consultations	Grievance management records & resolution process Evidence of Occurrence- Event report	SEP GM	Contractor Supervising Engineer	Monthly	Construction and operation	Included in supervision scope and costs
Noise	dB(A)	Measure included in design and procurement plans	ESMP	Contractor Supervising Engineer	Monthly	Construction and operation	Included in Supervision scope and Costs

Project Activity/Aspect	Parameter		Indicator	Institutional Responsibility			Project Phase	Monitoring Cost
				Implementation Route/Plan	Monitoring Responsibility	Frequency		
			Hearing protection and PPE in use Record of equipment maintenance					
Soil Erosion	Visual inspection		Bare soil pillars	ESMP	Contractor Supervising Engineer	Weekly	Construction and operation	Included in Supervision scope and Cost
Solid waste management	Domestic refuse, metallic scraps,		Documented Approvals for placement of wastes,	Comprehensive waste management plan	Contractor Supervising Engineer	Daily	Construction and operation	Included in Supervision scope and Costs
Land Acquisition, displacement and restrictions on land use	Consultations Site Visits		Records of compensation completion & completion rate	RF/RAP	PENRA	Daily	Prior to and during Construction	Included in supervision scope and costs

Project Activity/Aspect	Parameter	Indicator	Institutional Responsibility			Project Phase	Monitoring Cost
			Implementation Route/Plan	Monitoring Responsibility	Frequency		
		Progress on RAP/Land Restriction Plan (LRP) implementation Compliance with RPF/RAP and national legislation					
Cultural Heritage	Visual inspection	Records of CFP activated	ESMP (Chance Finds Procedures)	Contractor Supervising Engineer	Daily	Prior to and during Construction	Included in supervision Scope and costs
Supply Chain	Reporting	Bidding documents and Contracts Supply chain performance on ESS2 compliance	ESMP Bidding documents	Contractor Supervising Engineer	Weekly	Construction and Operation	Included in supervision scope and costs

13. Institutional Set Up for E&S Monitoring and Capacity Building Requirements Responsibilities for Environmental and Social Monitoring

As mentioned in “section 6” concerning the Environmental and Social implementation measures, the ESO at PENRA’s PMU will be responsible for compliance with any provisions of environmental and social documents required under this ESMF. The ESO will be assisted by two Environmental and Social Engineers (ESEs) and external consultants and will be responsible for the preparation of the site specific Environmental and Social documents as soon as the subcomponents and sub-projects will be determined. The ESO will also be responsible for monitoring of the plans.

The EQA will be fully informed, and any additional requirements will be followed between the ESO and the EQA. PENRA will be responsible for grievances reported from communities and workers related to the implementation of project activities.

13.1 Monitoring Evaluation and Reporting

The objectives for monitoring are:

- To record environmental impacts resulting from the sub-project activities and to ensure implementation of the “mitigation measures” identified earlier in order to reduce adverse impacts and enhance positive impacts from project activities.
- To alert project authorities by providing timely information about the success or otherwise of the ES process as outlined in this ESMF in such a manner that changes to the system can be made in a timely manner, if required; and
- To make a final evaluation in order to determine whether the mitigation measures designed into the sub-projects have been successful in such a way that the pre- sub-project environmental and social conditions have been restored, improved upon or are worse than before.
- Environmental monitoring needs to be carried out during pre-construction, construction and post construction of the sub-projects in order to measure the success of the recommended mitigation measures.

The following table shows some specific environmental and social indicators that need to be monitored and assessed by various institutions.

Table 16: Environmental and Social Indicators and Monitored Institutions

Impact	Indicator	Information Source	Responsibility
Air Emissions	Reduction in GHG caused by the project cumulative reduction in GHG emissions from project installations.	Contractor	PENRA
Noise Emissions	Noise intensity and duration in installation of solar panels.	Contractor	PENRA, DISCOs
Heat or Light Reflection	Number of Complaints on heat or light reflection	Contractor	PENRA, EQA
Biodiversity	Number of tresses that have fallen. Reported Number of incidents of injury and killing of birds.	Contractor	PENRA, EQA
Chemicals	Number of recorded accidents due to chemical exposure	Contractor	PENRA, EQA
Cultural Heritage	Reported complaints on reduction of aesthetic value or impact on heritage.	Contractor	PENRA, EQA
Employment	Number of technical and unskilled workers hired and contract duration.	Contraction	PENRA
Economic and livelihood impacts	Individual project cost saving to utility company. Price of solar panels purchased per kW. Cumulative cost saving to government. Changes in household incomes in project locations. Proportion of household expenditure on electricity.	JDECO	PENRA
Social Conflicts	Number of stakeholders consulted and minutes of the meeting. Number of complaints received on inconvenience and maintenance.	Contractor, JEDCO	PENRA, EQA

Impact	Indicator	Information Source	Responsibility
Health and Safety	Quantity of day to day waste produced and taken to waste management site. Quantity of solar panel special waste taken to designated waste. Quantity of solar panel waste exported	Contractor	PENRA, EQA

13.2 Capacity Building and Training Requirement

PENRA has a Project Management Unit (PMU) that is well staffed with competent engineers and environmental and social risk management personnel, including an Environmental and Social Officer (ESO) and an Environmental and Social Engineer (ESE). The PMU will also be maintained and strengthened as required for implementing ASPIRE program. In addition, PENRA has engaged independent environmental and social consultants to support the implementation of projects. As a result of the ASPIRE 1 and 2 project, which is being implemented under the Bank's Environmental and Social Framework (ESF), PENRA also has experience of using the ESF. The environmental and social team has worked well in supporting project implementation (e.g. conducting E&S screening and preparing screening reports, preparing site-specific E&S documents including ESMP, LMP and SEP.

The training requirements for strengthening the capacities are:

- Fundamental trainings: (Overview of the ESS's, dive into ESS1, ESS10, ESS2, ESS4, ESS5) including case Studies, clearance, and disclosure requirements.
- Operation Related Training: content of the different GM tools, Resettlement and Livelihood (Framework and Plans), recording and resolve of grievances.
- WB requirements for eliminating GBV, SEA, and violence against minors, in addition to the applied code of conducts for implemented projects.
- ESHS provisions inclusion in the bidding documents
- Training and awareness sessions related to environmental management, policies and regulations.

Monitoring and reporting on environmental and social performance during project implementation

- Training sessions on preparing manuals and guidelines on how to assess the environmental impact of ASPIRE phases.

- Training on prevention of disease transmission; and Contractors SEA/SH protocols.

13.3 ESMF implementation Budget

- The cost of mitigation measures of site specific ESMPs will be included in the procurement Bidding documents.
- Table XX presents an indicative budget for the actions of ESMF implementation covering (i) cost of ES staff, (ii) cost of training, and (iii) cost of orientation seminar for contractors.

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Table 17: ESMF Cost Estimate for ASPIRE

Activities	Quantity	Unit Rate \$	Total \$
Remuneration of ES Specialist	96 ¹⁶	2,500	240,000
Remuneration of the ES Engineers	96	2500 x 2	480,000
Remuneration of ES consultants (monitoring and auditing)			350,000
Health Insurances/ laptops/ phones	3	7,000	21,000
Logistics (site visits, car expenses and transfer costs)	400	150	60,000
Capacity Building for ESO and contractors	8	6,000	48,000
Mid-term and end of project review by independent third party and reporting	6	5000	30,000
Legal consultant	2	3,000	6,000
Dispute resolution budget	Lump sum		150,000
Permits	Lump sum		20,000
Total			1,405,000
SEP implementation	8	31,000	248,000 ¹⁷

¹⁶ Considering the ASPIRE phases will be implemented over 48 months and overlapping 24 months.

¹⁷ See "Stakeholder Engagement Plan for ASPIRE".

14. Annexes

14.1 Annex 1: Comparative Analysis of Applicable ESSs and Palestinian's National Regulations

The following table matches the relevant World Bank's 10 Environmental and Social Standards with the relevant Palestinian national laws and regulations.

Note: This comparison is a preliminary and indicative in nature.

Table 18: Comparative Analysis of Applicable ESSs and Palestinian's National Regulations

ESF	National Laws and Requirements	Gaps
ESS1: Assessment and Management of Environmental and Social Risks and Impacts		
Identify, assess, evaluate, and manage environmental and social risks and impacts.	Environment Act No 7, 1999 aims to protect the environment from all different forms of pollution, inserts environmental protection grounds in the economical & social developmental plans, conserves the biodiversity, protects the environmentally sensitive areas and improves the environmentally damaged areas. Chapter 3 of the Environment Act No 7, 1999 relates to the EIA, section 1 identifies the subjected projects under the EIA studies, section 2 sets out the nature of licenses and permissions on the projects that may affect the environment, section 3 lays out the inspections and the administrative procedures regarding the facilities and the projects.	No significant gaps between Performance Standard 1 and the national laws.
To adopt a mitigation hierarchy approach to:	Environment Act No 7, 1999 aims to protect the environment from all different forms of pollution, inserts environmental protection grounds in the economical & social developmental plans, conserves	No significant gaps between ESS1 and the various national laws.

ESF	National Laws and Requirements	Gaps
Anticipate and avoid risks and impacts; Where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels; Once risks and impacts have been minimized or reduced, mitigate; and where significant Residual impacts remain, compensate for or offset them, where technically and financially feasible.	the biodiversity, protects the environmentally sensitive areas as well as improves the environmentally damaged areas.	
To adopt differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable.	No provision in the National laws for adopt differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable	This is gap between ESS1 and the national laws.
To utilize national environmental and social institutions, systems, laws, Regulations and procedures in the assessment, development	There are many Palestinian institutions, regulations, and laws that support the environmental protection and the sustainable development as well as to the international environmental conventions that are adopted, these include: Authorities and Institutions: -	This project is not using country systems per se.

ESF	National Laws and Requirements	Gaps
and implementation of projects, whenever appropriate.	Environment Quality Authority (EQA). Palestine Association for Education & Environmental Protection. Palestinian Environmental Friends Association. Laws, Regulations and Procedures: The Environment Act No 7, 1999 which represents the general legal framework regulating rights and duties in protecting the environment. EQA adopted the Environmental Impact Assessment Policy. United Nations Framework Convention on Climate Change (UNFCCC). United Nations Convention to Combat Desertification (UNCCD).	
To promote improved environmental and social performance, in ways which recognize and enhance Borrower capacity.	Improve and support the environment, for example: Project to strengthen the capacity of the Ministry of Environmental Affairs in the field of supervision and inspection 2013. Horizon 2020 Capacity Building (2010-2014)	The Project in itself is an opportunity to enhance the environmental and social management systems in Palestine.
ESS2: Labor and Working Conditions		
To promote safety and health at work.	Section 5 of Chapter 1 of the Public Health Act No 20, 2004 states the Occupational Health. Article 34 of this section identifies the health conditions to be met by workers in their occupations, trades, and industries that may affect their health; it also identifies the initial & preventive tests that are vital for workers in their occupations, trades, and industries.	Apply ESS2 requirements for the development and implementation of a labor management procedures applicable to the project. These procedures will set out the way in which workers will be a managed

ESF	National Laws and Requirements	Gaps
	Chapter 5 of the Employment Act No 7, 2000 lays out the conditions of the work, section 1 of this chapter defines the working hours and leaves; Article 68; the working hours are 45 hours per week, Article 69; daily working hours shall be reduced by at least one hour in hazardous or harmful work to health and night work. Article 70; daily working hours should have a period or more for worker to rest. This should not be more than 1 hour, taking into account that the worker should not work more than 5 hours without a break. Article 90 states means of personal protection and prevention of workers from work hazards and occupational diseases. Chapter 9 of the Employment Act No 7, 2000 defines the working injuries and states the treatment that should be provided to the injured worker as well as the compensations that should be given.	safely in accordance with requirements of national employment laws and ESS2 requirements.”
To promote the fair treatment, non-discrimination and equal opportunity for project workers.	The Employment Act No 7, 2000; Article 2: work is a right for every citizen that can work and it is on the basis of equal opportunity & without any kind of discrimination. Article 90: discrimination between men and women is prohibited.	No precise clarification regarding the penalties towards all types of discrimination. Special measures of protection and assistance to remedy discrimination or selection for a particular job based on the inherent requirements of the job or the objectives of the project should be consistent with national law.

ESF	National Laws and Requirements	Gaps
To protect project workers, including vulnerable workers such as women, people with disabilities, children (of working age, in accordance with this ESS) and migrant workers, contracted workers, community workers and primary supply workers, as appropriate.	The Employment Act No 7, 2000; Article 2: working is a right for every citizen that can work and it is on the basis of equal opportunity & without any kind of discrimination. Article 13: The employer is obliged to employ a number of qualified disabled workers in work commensurate with their disability at least (5%) of the size of the workforce in the establishment. Article 90: discrimination between men and women is prohibited. Article 93: Children employment before 15 years is prohibited. Article 101: Employment of women is prohibited in the three following cases; dangerous work, additional working hours during pregnancy and the first six months of giving birth, night working hours except the occupations that the ministries council defines. The Council of Ministers Act 11, 2012 determines the minimum wage of the worker; The minimum monthly wage in all areas of the Palestinian National Authority and in all sectors shall be (1450 NIS). The minimum wage for day laborers, especially those who work daily, shall be irregular, in addition to seasonal workers (65 NIS). The minimum wage per hour per worker shall be NIS (8.5 NIS). The Employment Act No,2000, the Workman compensation; Article 119: If a worker is temporarily incapacitated and has lost his or her ability to perform his / her temporary work, he / she is entitled to receive 75% of his / her daily wage up to a maximum of 180 days.	No significant gaps between ESS2 requirement and the various national laws

ESF	National Laws and Requirements	Gaps
	Article 120: The amount of monetary compensation in the case of permanent total disability or death with 3500 working days or 80% of his basic wage until he reaches the age of sixty, whichever is higher. In terms of the Act, Workman is any person who performs work for the employer for a wage and is in the course of his work under his administration and supervision.	
To prevent the use of all forms of forced labor and child labor.	The Employment Act No 7, 2000; Article 93: Children employment before 15 years is prohibited. Article 95: juvenile must not work at; industries hazardous or harmful to health, night work, official or religious holidays or public holidays, additional working hours, and remote, distant places. Article 13 of the Palestinian constitution; No one shall be subjected to any coercion or torture. The Palestinian Child Act No 7, 2004; Article 14: Children employment before 15 years is prohibited.	No significant gaps between ESS 2 requirement and the various national laws
To support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law.	The Employment Act No 7, 2000: In accordance with the provisions of the law, workers and employers have the right to form trade union organizations on a professional basis in order to protect their interests and defend their rights. General Federation of Palestinian Workers' Union: It organizes the labors based on professional grounds, it improves the labor conditions, follows up the labor demand issues, and defends the workers in case of labor disputes.	No significant gaps between ESS 2 requirement and the various national laws

ESF	National Laws and Requirements	Gaps
To provide project workers with accessible means to raise workplace concerns.	No precise regulations or grievance procedures that raise the workplace concerns. Also, there are no specialized labor courts. Project-level worker GMs are not covered in the law.	There is a gap in description the grievance procedures. Development of grievance mechanism is needed in order to make sure that workers are not prohibitive from freely practicing alternative mechanism to express their grievances and protect their rights regarding working conditions and terms of employment.
ESS3: Resource efficiency and Pollution Prevention and Management		
To promote the sustainable use of resources, including energy, water and raw materials.	Environment Act No 7, 1999 aims to protect the environment from all different forms of pollution, inserts environmental protection grounds in the economical & social developmental plans, conserves the biodiversity, protects the environmentally sensitive areas and also improves the environmentally damaged areas. Chapter 2 of the Environment Act No 7, 1999 presents the protection of all types of the environment including air, water, ground... and sets out plans, procedures, limits, conditions, and standards to prevent any deterioration or harm that may be caused to the environment.	There is gap between ESS3 requirement and the various national laws. National laws do not address all of the requirements of the ESF.
To avoid or minimize adverse impacts on human health and the environment by	Environment Act No 7, 1999 aims to protect the environment from all different forms of pollution, inserts environmental protection grounds in the economical & social developmental plans, conserves	No significant gaps between ESS 3 requirement and the various national laws

ESF	National Laws and Requirements	Gaps
Avoiding or minimizing pollution from project activities.	the biodiversity, protects the environmentally sensitive areas and improves the environmentally damaged areas. Chapter 3 of the Environment Act No 7, 1999 relates to the EIA, section 1 identifies the subjected projects under the EIA studies, section 2 sets out the nature of licenses and permissions on the projects that may affect the environment, section 3 lays out the inspections and the administrative procedures regarding the facilities and the projects. Chapter 4 of the Environment Act No 7, 1999 puts penalties for anyone or any project that violates the articles regarding the protection of the environment. Article 76 of the Environment Act No 7, 1999 “Pay compensation” states that any person who has caused any environmental damage as a result of an act or negligence contrary to the provisions of this law or any international agreement to which Palestine is a party in is obliged to pay the appropriate damages in addition to the criminal responsibility stipulated in this law.	
To avoid or minimize project-related emissions of short and long-lived climate pollutants.	Section 2 of Chapter 2 of the Environment Act No 7, 1999, it describes all the regulations that are related to the atmosphere, it determines the air pollutant ratios, it restricts using any equipment that may produce a non-standard exhaust. Article 24 of the Environment Act No 7, 1999 talks about reducing the depletion of the ozone layer in accordance to the international treaties which Palestine is signed on.	No significant gaps between ESS3 requirement and the various national laws

ESF	National Laws and Requirements	Gaps
To avoid or minimize generation of hazardous and non-hazardous waste.	Article 7 of the Environment Act No 7, 1999 sets out a plan of solid wastes management plan. Article 11 of the Environment Act No 7, 1999 defines a list of the most dangerous wastes. Article 12 of the Environment Act No 7, 1999 restricts the use of the dangerous materials by setting out many instructions and regulations. Article 13 of the Environment Act No 7, 1999 bans any dangerous wastes and restricts their access through the Palestinian lands. Apply hazardous waste by-law	No significant gaps between ESS 3 requirement and the various national laws
To minimize and manage the risks and impacts associated with pesticide use.	Article 14 of the Environment Act No 7, 1999 puts conditions to use the agricultural chemical materials. Article 15 of the Environment Act No 7, 1999 puts special quantifications of the permitted agricultural chemical material. Palestine has an international convention regarding the pesticides; Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.	No significant gaps between ESS 3 requirement and the various national laws.
ESS 4 Community Health and Safety		
To anticipate and avoid adverse impacts on the health and safety of project-affected communities during the project lifecycle from both	Safety plan should be provided: - Spray the dust with water - Work only at the allowable hours. - Use safety fence around the site.	There is gap between ESS 4 requirement and the various national laws

ESF	National Laws and Requirements	Gaps
routine and non-routine circumstances	National laws do not have provisions to assess and manage specific risks and impacts to the community arising from Project activities including behavior of Project workers, response to emergency situations, and Gender Based Violence (GBV) and sexual exploitation and abuse (SEA).	
To promote quality and safety, and considerations relating to climate change, in the design and construction of infrastructure, including dams.	Palestine has international conventions regarding the climate change and the environment: United Nations Framework Convention on Climate Change (UNFCCC). Stockholm Convention on Persistent Organic Pollutants (POPs). Basel convention	Still there is a need to empower all international convention and agreements.
To avoid or minimize community exposure to project-related traffic and road safety risks, diseases and hazardous materials.	The Traffic Act No 5, 2000 provides for the compliance of all the conditions of the vehicles that should have in the traffic roads as well as the traffic safety procedures. Article 7 of the Environment Act No 7, 1999, sets out a plan of solid wastes management plan. Article 11 of the Environment Act No 7, 1999 defines a list of the most dangerous wastes. Article 12 of the Environment Act No 7, 1999 restricts the use of the dangerous materials by setting out many instructions and regulations. Article 13 of the Environment Act No 7, 1999 bans any dangerous wastes and restricts their access through the Palestinian lands. Section 5 of Chapter 1 of the Public Health Act No 20, 2004 states the Occupational Health. Article 34 of this section identifies the	There is gap resulted from the fact that the national laws only provides general guidelines. Hence there is a need to empower the environment Act no 7. This can be accomplished by the preparation of an ESMP specifically for respective component.

ESF	National Laws and Requirements	Gaps
	health conditions to be met by workers in the occupations, trades, and industries that may affect their health; it also identifies the initial & preventive tests that are vital for workers in their occupations, trades, and industries.	
To have in place effective Measures to address emergency events.	No specific laws or regulations that take action in emergency events. However, Chapter 9 of the Employment Act No 7, 2000 defines the working injuries and states the treatment that should be provided to the injured worker as well as to the compensations that should be given.	There is gap between ESS 4 requirement and the various national laws. Should comply with ESS4 requirements and prepare an effective emergency plan.
To ensure that the safeguarding of personnel and property is carried out in a manner that avoids or minimizes risks to the project-affected Communities.	Safety plan should be provided.	There is a gap where there is no coverage for this issue in any national document
ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement		
ESS5: Eligibility Classification People who have formal legal rights to land or assets People who do not have formal legal rights to land or assets, but have a claim to land or assets that are recognized	The Palestinian Civil Act No 4, 2012, article 931 ” No one shall be deprived of his property or of the use thereof, no property shall be expropriated except for the public benefit, all this shall be in the cases prescribed by the law and in the manner prescribed by it, and in return for fair compensation”. The Palestinian Constitution in article 21 states “Private property is protected; property is not expropriated except for the public benefit	All The Palestinian civic act is in line with the ESS5 objective “To avoid involuntary resettlement or, when unavoidable, minimize involuntary resettlement by exploring project design alternatives”.

ESF	National Laws and Requirements	Gaps
or recognizable under national law; People who have no recognizable legal right or claim to the land or assets they occupy or use.	in accordance to the law in exchange for fair compensation or by judicial order.” The Settlement of land rights Act No 80, 1928, article 16 states” after the publication of the settlement declaration in any village, any person claiming ownership of land in that village must attend at the time and place designated by the settlement officer and submit a list of his claim according to the specified form”.	
To avoid forced eviction.	The Palestinian Civil Act No 4, 2012, article 931” No one shall be deprived of his property or of the use thereof, no property shall be expropriated except for the public benefit, all this shall be in the cases prescribed by the law and in the manner prescribed by it, and in return for fair compensation”. The Palestinian Constitution in article 21 states “Private property is protected; property is not expropriated APPENDIX 3 except for the public benefit in accordance to the law in exchange for fair compensation or by judicial order.”	There is a need to follow RF in order to avoid or minimize involuntary settlement
To mitigate unavoidable adverse social and economic impacts from land acquisition or restrictions on land use by: (a) Providing timely compensation for loss of assets at replacement cost and	The Land Expropriation Act No 2, 1953, article 5 states that the decision of taking the lands should be disseminated in an official newspaper, and this publication is considered conclusive evidence based on article 7. Article 6 states that the decision should be informed to the land owners. Article 9 of this law states that “after notification of the decision in accordance to Article 6, the originator shall negotiate with the owner of the land or any person entitled to it and agree with him to buy,	There are specific regulations regarding the description of various cases of compensations.

ESF	National Laws and Requirements	Gaps
(b) Assisting displaced people in their efforts to improve, or at least restore, their livelihoods and living standards, in real terms, to pre- displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.	dispose of it or use it for a limited period or to own any right required by the project.” Article 10 states that “In the case of people related to the land due to the right of benefit or lease, the owner of the land shall notify the originator of their names within fifteen days from the date of notification of the expropriation decision, otherwise, he shall be solely responsible to them for the compensation they seek, tenants and beneficiaries shall be entitled to compensation by the originator if they have a contract with a fixed date prior to the expropriation decision, in this case, compensation is estimated in the same way as compensation to landowners”. Article 15 discusses specifically the various cases of compensation that should be given to the land owners.	
To improve living conditions of poor or vulnerable people who are physically displaced, through the provision of adequate housing, access to services and facilities and security of tenure.	No resettlement framework exists.	There are specific regulations regarding the description of various cases of compensations. Abide to the RF and if site is specified perform RAP
“To conceive and execute resettlement activities as sustainable development pro-	No resettlement framework exists.	Follow the RF and for specified area prepare RAP

ESF	National Laws and Requirements	Gaps
grams, providing sufficient investment resources to enable displaced persons to benefit directly from the project, as the nature of the project may warrant. • To ensure that resettlement activities are planned and implemented with appropriate disclosure of information, meaningful consultation, and the informed participation of those affected.”		Ensure that appropriate disclosure of information is meaningful and practiced.
ESS6: Biodiversity conservation and Sustainable Management of Living Natural Resources		
To protect and conserve biodiversity and habitats.	The Environment Act No 7, 1999, article 40 put grounds and standards to protect the national and natural reserves. Article 41 bans any hunt or killing for specific wild and marine animals. Article 42 concerns about the conservation of the biodiversity in Palestine. Natural Resources Act No 1, 1999 which aims to prepare scientific studies as well as the supervision on the natural resources’ investment processes. Chapter 2 of the Environment Act No 7, 1999 presents the protection of all types of the environment including air, water, ground...	There are significant gaps between ESS 6 requirements and the various national laws. National laws have variable definitions of habitats and do not include measures to assess impacts on ecosystem services

ESF	National Laws and Requirements	Gaps
	and sets out plans, procedures, limits, conditions, and standards to prevent any deterioration or harm that may happen to the environment.	
To apply the mitigation hierarchy and the precautionary approach in the design and implementation of projects that could have an impact on biodiversity.	Environment Act No 7, 1999 aims to protect the environment from all different forms of pollution, inserts environmental protection grounds in the economical & social developmental plans, conserves the biodiversity, protects the environmentally sensitive areas and also improves the environmentally damaged areas. Chapter 2 of the Environment Act No 7, 1999 presents the protection of all types of the environment including air, water, ground... and sets out plans, procedures, limits, conditions, and standards to prevent any deterioration or harm that may happen on the environment. Chapter 3 of the Environment Act No 7, 1999 relates to the EIA, section 1 identifies the subjected projects under the EIA studies, section 2 sets out the nature of licenses and permissions on the projects that may affect the environment, section 3 lays out the inspections and the administrative procedures regarding the facilities and the projects.	No significant gaps between ESS 6 requirement and the various national laws.
To promote the sustainable management of living natural resources.	Environment Act No 7, 1999 aims to protect the environment from all different forms of pollution, inserts environmental protection grounds in the economical & social developmental plans, conserves the biodiversity, protects the environmentally sensitive areas and also improves the environmentally damaged areas.	There is gap between ESS 6 requirement and the various national laws. The standard has provision for certification for industrial scale

ESF	National Laws and Requirements	Gaps
	Chapter 2 of the Environment Act No 7, 1999 presents the protection of all types of the environment including air, water, ground... and sets out plans, procedures, limits, conditions, and standards to prevent any deterioration or harm that may happen on the environment. Chapter 3 of the Environment Act No 7, 1999 relates to the EIA, section 1 identifies the subjected projects under the EIA studies, section 2 sets out the nature of licenses and permissions on the projects that may affect the environment, section 3 lays out the inspections and the administrative procedures regarding the facilities and the projects. Natural Resources Act No 1, 1999 which aims to prepare scientific studies as well as the supervision on the natural resources' investment processes.	production and animal husbandry and welfare.
ESS8: Cultural Heritage		
To protect cultural heritage from the adverse impacts of project activities and support its preservation.	Section 5 of Chapter of the Environment Act No 7, 1999 presents the regulations regarding the cultural and historical regions to guarantee their protection.	There is gap between ESS8 requirement and the various national laws. National law does not include similar definitions of intangible and tangible cultural heritage.
To address cultural heritage as an integral aspect of sustainable development.	Section 5 of Chapter of the Environment Act No 7, 1999 presents the regulations regarding the cultural and historical regions to guarantee their protection.	No significant gaps between ESS8 requirement and the various national laws.

ESF	National Laws and Requirements	Gaps
To promote meaningful consultation with stakeholders regarding cultural heritage.	Chapter 3 of the Environment Act No 7, 1999 relates to the EIA which involves public participation and consultation.	No significant gaps between ESS8 requirement and the various national laws.
To promote the equitable sharing of benefits from the use of cultural heritage.	Palestine does not have requirements specific to equitable benefit sharing from the use of cultural heritage.	There is significant gap between ESS8 requirement and the various national laws. Hence follow ESS8 requirements
ESS10: Stakeholder Engagement and Information Disclosure		
To establish a systematic approach to stakeholder engagement that will help borrowers identify stakeholders and build and maintain a constructive relationship with them, in particular project-affected parties.	Chapter 3 of the Environment Act No 7, 1999 relates to the EIA which involves stakeholder engagement plan as well as public hearing and consultation. However, no precise systematic approach is clear.	Slight gaps between ESS 10 requirement and the various national laws.
To assess the level of stakeholder interest and support for the project and to enable stakeholders' views to be taken into account in project design and environmental and social performance.	Chapter 3 of the Environment Act No 7, 1999 relates to the EIA which involves stakeholder engagement plan as well as public hearing and consultation. The stakeholder engagement plan involves the assessment of the interest and powers for each stakeholder.	No significant gaps between ESS 10 requirement and the various national laws.

ESF	National Laws and Requirements	Gaps
To promote and provide means for effective and inclusive engagement with project-affected parties throughout the project life cycle on issues that could potentially affect them.	No clear regulations about inclusive engagement with project –affected parties throughout its lifecycle.	Significant gaps between ESS 10 requirement and the various national laws.
To ensure that appropriate project information on environmental and social risks and impacts are disclosed to stakeholders in a timely, understandable, accessible and appropriate manner and format.	The Environmental Impact Assessment Policy, 1999, article 8 invites to make coordination between all the stakeholders and the participative entities and presents many points to engage all the stakeholders in many stages of the implemented project.	No significant gaps between ESS 10 requirement and the various national laws
To provide project- affected parties with accessible and inclusive means to raise issues and grievances, and allow borrowers to respond to and manage such grievances.	The Palestinian Bylaw sets the rules for grievance of the public and the improving the performance of the Palestinian Ministries and Authorities. No project GM is required.	The ESS ensures reception and timely response to any complaints made about the Project and be the basis for developing appropriate mitigation strategies
To establish a systematic approach to stakeholder engagement that will help borrowers identify stakeholders	The Environmental Impact Assessment Policy, 1999 defines participation of stakeholders in many stages like in the TOR stage, the policy also includes that wider participation in case of projects that may	No significant gaps between ESS 10 requirement and the various national laws during preparation phase. However, no explicit

ESF	National Laws and Requirements	Gaps
and build and maintain a constructive relationship with them, in particular project-affected parties.	affect the environment, and the methods and the results of the meetings should be documented in the EIS.	mention of stakeholder engagement during implementation/construction and operation phase.

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14.2 Annex 2: Environmental/Social Screening

14.2.1 Category: Capacity expansion of existing substations

General description of the sub-project:

Project location // activities // number of workers and classification // duration of works // (add other if required)

Topic	Answer			Comments
(1. Is there a designated safety officer for this substation?)	Yes	No		
(2. Is there a dedicated ESO at the beneficiary?)	Yes	No		
(3. Will the activities generate significant noise or excessive dust?)	Low	moderate	high	
(4. Will the project involve working on live power lines?)	YES	NO		
(5. Are safety protocols in place within this substation?)	Yes	No	Partial	
(6. Are internal warning signs present to indicate hazard sources?)	Yes	No	Partial	
(7. Does the facility have a properly maintained access road and entrance?)	Yes	No		
(8. Are fire extinguishers or hydraulic fire systems available?)	Yes	No		
(9. Will hazardous materials (e.g., oils, SF6, or others) be used in this activity?)	Yes	No		Which are used?
(10. Are there arrangements with local authorities for the disposal of construction waste?)	Yes	No		
(11. Will any trees need to be removed, or vegetation cleared for expansion?)	Yes	No		If yes, give description
(12. Is armed security personnel stationed at this facility?)	Yes	No		
(13. Is the substation located near residential, commercial, or industrial areas?)	Yes	No		If yes give explanation
(14. Are there warning signs and secure fencing around the facility?)	Yes	No	Partial	
(15. Are schools, healthcare facilities, or public utilities located near the substation?)	Yes	No		If yes give description
(16. Are agricultural lands situated near the proposed location?)	Yes	No		If yes give description
(17. Have there been any disputes with residents regarding noise, pollution, or GBV-related concerns?)	Yes	No		If yes give description
(18. Is the location near sensitive receptors such as habitats, natural reserves, forests, or surface water?)	Yes	No		If yes give description
(19. Are vulnerable groups (e.g., elderly, persons with disabilities, low-income families, or Bedouin communities) living near the proposed location?)	Yes	No		If yes give description
(20. Are there cultural heritage sites in proximity to this facility?)	Yes	No		If yes give description
(21. Does the facility operator have a functional grievance mechanism?)	Yes	No		If yes give description
(22. Does the facility operator disclose its activities through social media or a website?)	Yes	No		If yes give description
(23. Has any consultation been conducted with stakeholders during the operations phase?)	Yes	No		If yes give description

Potential Environmental and social impacts as per list above (1 to 23):

Environmental and social mitigation measures to be added to the generic ESMP:

Residual impacts:

Conclusions:

Prepared by (Name and position)

Date:

Draft

14.2.2 Categories: Rehabilitation of medium voltage lines, grid reinforcement and upgrade.

General description of the sub-project:

Project location // activities // number of workers and classification // duration of works // (add other if required)

Topic	Answer			Comments
(1. Is there a designated safety officer within the beneficiary's team?	Yes	No		
(2. Is there a dedicated Environmental and Social Officer (ESO) within the beneficiary's staff?	Yes	No		
(3. Does the beneficiary have Occupational Health and Safety (OHS) procedures in place?				
(4. Will the planned activities produce significant noise or excessive dust?	Low	moderate	high	
(5. Has the proposed route been subjected to shelling in the past, and is there a potential risk of unexploded ordnance (UXOs)?	Yes	No		If yes, give description
(6. Is the location prone to frequent military incursions?	Yes	No		If yes, give description
(7. Will the project require working on live power lines?	Yes	No		
(8. Will hazardous materials (e.g., oils, SF6, or others) be used during this activity?	Yes	No		Which are used?
(9. Are there arrangements with local authorities for the proper disposal of construction waste?	Yes	No		
(10. Will any trees need to be removed, or vegetation cleared for the project?	Yes	No		If yes, give description
(11. Is the proposed route located near residential, commercial, or industrial areas?	Yes	No		If yes give explanation
(12. Is the proposed route wide enough to accommodate vehicle movements during excavation work?	Yes	No		Give description
(13. Are schools, healthcare facilities, or public utilities located near the proposed route?	Yes	No		If yes give description
(14. Is there any encroachment to the Right of Way?	Yes	No		If yes give description
(15. Will the medium-voltage (MV) line pass through Area C?	Yes	No		If yes give description
(16. Are as-built drawings available for existing underground utilities along the route?	Yes	No		If yes give description
(17. Are agricultural lands located near the proposed route?	Yes	No		If yes give description
(18. Have there been any disputes with residents regarding noise, pollution, or GBV-related concerns?	Yes	No		If yes give description
(19. Are vulnerable groups (e.g., elderly, persons with disabilities, low-income families, or Bedouin communities) living near the proposed location?	Yes	No		If yes give description
(20. Does the electricity distributor have a functional grievance mechanism?	Yes	No		If yes give description
(21. Does the electricity distributor share information about its activities on social media or its website?	Yes	No		If yes give description
(22. Has stakeholder consultation been conducted during similar projects?	Yes	No		If yes give description

Potential Environmental and social impacts as per list above (1 to 22):

Environmental and social mitigation measures to be added to the generic ESMP:

Residual impacts:

Conclusions:

Prepared by (Name and position)

Date:

Draft

14.2.3 Category: New distribution and transmission lines

General description of the sub-project:

Project location // activities // number of workers and classification // duration of works // (add other if required)

Topic	Answer			Comments
(1. Is there a designated safety officer within the beneficiary's staff?	Yes	No		
(2. Is there a dedicated ESO within the beneficiary's staff?	Yes	No		
(3. Does the beneficiary have OHS procedures?				
(4. Will the activities generate significant noise or excessive dust?	Low	moderate	high	
(5. Has the location of the proposed route been shelled in the past? is there possibility of UXOs?	Yes	No		If yes, give description
(6. Is this location subject to frequent military incursions?	Yes	No		If yes, give description
(7. Will the project involve working on live power lines?	Yes	No		
(8. Will hazardous materials (e.g., oils, SF6, or others) be used in this activity?	Yes	No		Which are used?
(9. Are there arrangements with local authorities for the disposal of construction waste?	Yes	No		
(10. Will the medium voltage line cross near natural reserves, forests, sensitive areas?	Yes	No		If yes, give description
(11. Will any trees need to be removed, or vegetation cleared for expansion?	Yes	No		If yes, give description
(12. Are there unsettled issues with the landowners?	Yes	No		If yes, give description
(13. Is there an approved master plan at the municipality and is the roads opened to its approved width?	Yes	No		Give description
(14. Is the proposed route located near residential, commercial, or industrial areas?	Yes	No		If yes give explanation
(15. Have there been any disputes with residents regarding noise, pollution, or GBV-related concerns?	Yes	No		If yes give description
(16. Will the proposed route transverse private lands	Yes	No		If yes give explanation
(17. Is there any encroachment to the Right of Way?	Yes	No		If yes give description
(18. Is the proposed route wide enough to consent vehicle movements during excavation works?	Yes	No		Give description
(19. Are schools, healthcare facilities, or public utilities located near the proposed route?	Yes	No		If yes give description
(20. Are as built drawing available for existing underground utilities?	Yes	No		If yes give description
(21. Are agricultural lands situated near the proposed route?	Yes	No		If yes give description
(22. Are vulnerable groups (e.g., elderly, persons with disabilities, low-income families, or Bedouin communities) living near the proposed location?	Yes	No		If yes give description
(23. Does the electricity distributor have a functional grievance mechanism?	Yes	No		If yes give description
(24. Does the electricity distributor disclose its activities through social media or a website?	Yes	No		If yes give description

Topic	Answer			Comments
(25. Has any consultation been conducted with stakeholders during similar projects?	Yes	No		If yes give description

Potential Environmental and social impacts as per list above (1 to 25):

Environmental and social mitigation measures to be added to the generic ESMP:

Residual impacts:

Conclusions:

Prepared by (Name and position)

Date:

Draft

14.2.4 Category: Solar solutions for public buildings and Energy Efficiency system integrations

General description of the sub-project:

Project location // activities // number of workers and classification // duration of works // (add other if required).

Will there be any preliminary studies (technical and economic feasibility studies)?

Topic	Answer			Comments
(1. Is there a designated safety officer within the beneficiary's staff?	Yes	No		
(2. Is there a dedicated ESO within the beneficiary's staff?	Yes	No		
(3. Does the beneficiary have OHS procedures?	Yes	No		
(4. Is there a maintenance engineer and what familiarity is he having with electrical components and hazards from solar panels, inverters and batteries?				Give description
(5. Are fire extinguishers available in this building?	Yes	No		
(6. Is there a visible evacuation plan for each floor?	Yes	No		
(7. Will the activities generate significant noise or excessive dust?	Low	moderate	high	
(8. Does the building's roof have protective edge walls?	Yes	No		Give description
(9. Is the roof constructed from concrete or a steel structure, and is it flat or sloped?				Give description
(10. Is there any asbestos on the roof?	Yes	No		
(11. Will this operation require special lifting of the equipment?	Yes	No		Give description
(12. Is this location subject to frequent military incursions?	Yes	No		If yes, give description
(13. Will any trees need to be removed, or vegetation cleared?	Yes	No		If yes, give description
(14. Is the building situated in a high-traffic area?	Yes	No		If yes, give description
(15. For PV systems: Is there a dedicated room for installing the inverters and batteries?	Yes	No		If yes, give description
(16. Is there a suitable stair and a lockable door to access the roof?	Yes	No		Give description
(17. Are there exposed steel bars of the roof?	Yes	No		If yes, give description
(18. For parking lots: Is the installation located near emergency access points and exits (e.g., for ambulances, patients, students, or employees)?				Give description
(19. Have there been any disputes with residents regarding noise, pollution, or GBV-related concerns?	Yes	No		If yes give description
(20. Does the beneficiary have a functional grievance mechanism?	Yes	No		If yes give description
(21. Does the beneficiary disclose its activities through social media or a website?	Yes	No		If yes give description
(22. Has any consultation been conducted with stakeholders during similar projects?	Yes	No		If yes give description

Potential Environmental and social impacts as per list above (1 to 22):
Environmental and social mitigation measures to be added to the generic ESMP¹⁸:

Residual impacts:

Conclusions:

Prepared by (Name and position)

Date:

Draft

¹⁸ See annex 14.3: Forced labor declaration forms and code of conduct (section 14.3)

14.2.5 Category: PV kits (< 10 kWp) and small energy efficiency interventions

General description of the sub-project:

Project location // activities // number of workers and classification // duration of works // (add other if required)

Topic	Answer			Comments
(1. Will the activities generate significant noise or excessive dust?	Low	moderate	high	
(2. Does the building's roof have protective edge walls?	Yes	No		Give description
(3. Is the roof constructed from concrete or a steel structure, and is it flat or sloped?				Give description
(4. Is there any asbestos on the roof?	Yes	No		
(5. Will this operation require special lifting of the equipment?	Yes	No		Give description
(6. Is this location subject to frequent military incursions?	Yes	No		If yes, give description
(7. Will any trees need to be removed, or vegetation cleared?	Yes	No		If yes, give description
(8. Will there be generation of electrical waste following to the intervention? (example, Florescent bulbs, old or damaged PV panels and inverters)				
(9. Is the building situated in a high-traffic area?	Yes	No		If yes, give description
(10. Have there been any disputes with residents regarding noise, pollution, or GBV-related concerns?	Yes	No		If yes give description
(11. Is there a dedicated room for installing the inverters?	Yes	No		If yes, give description
(12. Is there a suitable stair and a lockable door to access the roof?	Yes	No		Give description
(13. Are there exposed steel bars of the roof?	Yes	No		If yes, give description
(14. Are there any disputes/complaints from neighbors/ neighboring properties?	Yes	No		If yes, give description
(15. Is this system provided for vulnerable categories	Yes	No		If yes, give description

Potential Environmental and social impacts:

Environmental and social mitigation measures to be added to the checklist ESMP¹⁹²⁰:

Residual impacts:

Conclusions:

Prepared by (Name and position)

Date:

¹⁹ See section 10.6 Category: Small sized PV systems and PV kits, small energy efficiency interventions

²⁰ See annex 14.3: Forced labor declaration forms and code of conduct

14.2.6 Supply of smart meters:

Beneficiary: Electricity distributors

Receiver: Residential, commercial and industrial sector.

General description of the sub-project:

Project location // activities // number of workers and classification // duration of works // (add other if required)

Topic	Answer			Comments
(1. Does the beneficiary (Electricity distributors and public buildings) have qualified staff to execute the intervention?	Yes	No		If yes, give description
(2. Does the beneficiary have OHS manual and safety procedure?	Yes	No		If yes, give description
(3. Will this intervention cause generation of noise and dust?	Yes	No		
(4. Will the intervention be carried out while the power supply is active?	Yes	No		
(5. Will there be generation of electrical waste following to the intervention? (old meters containing batteries)?	Yes	No		
(6. Has the beneficiary previously developed a waste management plan for smart meters?	Yes	No		If yes, give description
(7. Are there any in place arrangements for waste disposal with the municipalities?	Yes	No		If yes, give description
(8. Will this intervention require access to privately owned property?	Yes	No		If yes, give description
(9. Has there been any recorded cases of GBV?	Yes	No		If yes, give description
(10. is the receiver of the intervention within vulnerable categories (health care, elderlies, disables, schools)?	Yes	No		If yes, give description
(11. Has the beneficiary previously implemented consultation and public disclosure of information?	Yes	No		If yes, give description
(12. Will the intervention cause interruption of electricity services to the receiver or neighbors?	Yes	No		If yes, give description
(13. Is there an active Grievance Mechanism at the beneficiary?				

Potential Environmental and social impacts as per list above (1 to 13):

Environmental and social mitigation measures to be added:

Residual impacts:

Conclusions:

Prepared by (Name and position)

Date:

14.2.7 Category: Supply of equipment, repair jobs by PETL and DISCOs.

Beneficiary: The electricity distributors, PETL

Installation activities: Excluded from PENRA's scope. To be implemented by the Beneficiary.

Examples: Supply of Joints, Transformers, Reclosures, MV equipment, MV accessories for small interventions (to be completed in 48 hours).

General description of the sub-project:

Project location // activities // number of workers and classification // duration of works // (add other if required)

Note: depending on the interventions screening will include a small assessment of the beneficiary's preparedness on ES aspects and some essential mitigation measures for OHS, waste management, consultation and public disclosure.

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14.3 Forced labor declaration forms and code of conduct

Forced Labor Performance Declaration²¹

[The following table shall be filled in by the Bidder, each member of a Joint Venture, each Subcontractor/ supplier/ manufacturer providing solar panels and/or solar panel components proposed by the Bidder]

Bidder's Name: *[insert full name]*

Date: *[insert day, month, year]*

Joint Venture Member's or Subcontractor's/supplier's/manufacturer's Name: *[insert full name]*

RFB No. and title: *[insert RFB number and title]*

Page *[insert page number]* of *[insert total number]* pages

Forced Labor Performance Declaration in accordance with Section III, Evaluation and Qualification Criteria			
We:			
☐ (a) have not been suspended or terminated, and/or other contractual remedies applied including calling of performance security by an employer, for reasons of breach of forced labor obligations in the past five years. <i>[if (a) is declared, state N/A for (b) below]</i>			
☐ (b) have been suspended or terminated, and/or other contractual remedies applied including calling of performance security by an employer, for reasons of breach of forced labor obligations in the past five years. Details are provided below:			
Year	Contract identification	Name of Employer	Reasons for suspension or, termination, and/or other contractual remedies applied including calling of performance security
-	-	-	-
☐ (c) <i>[If (b) above is applicable, attach evidence demonstrating that adequate capacity and commitment to comply with Forced Labor obligations.]</i>			

We declare that all the information and statements made in this Form are true, and we accept that any misrepresentation contained in this Form may lead to our disqualification by the Employer and/or sanctions by the Bank.

Name of the Bidder/ JV member/ Subcontractor/ supplier/ manufacturer _____

Name of the person duly authorized to sign on behalf of the Bidder/ JV member/ Subcontractor/ supplier/manufacturer _____

Title of the person signing on behalf of the Bidder/ JV member/ Subcontractor/ supplier/ manufacturer _____

Signature of the person named above _____

Date signed _____ day of _____, _____

²¹ Annex II uses terms such as "RFB" and "bidder". The terms should be adjusted depending on the applicable procurement process terms such as "RFP" "proposer" and "applicant".

Countersignature of authorized representative of the Bidder (for forms submitted by a JV member, Subcontractor/ supplier/ manufacturer):

Signature: _____

Date signed _____ day of _____, _____

Draft

Forced Labor Declaration²²

Date: _____

RFB No.: _____

Alternative No.: _____

Contract Title: _____

To:

We, the undersigned, declare that, if awarded the Contract, we, including our Subcontractors and suppliers/ manufacturers, are required to comply with the contractual Forced Labor obligations. In this regard, we:

- (a) accept that there will be no Forced Labor among the staff, employees, workers and any other persons employed or engaged by us;
- (b) accept that staff, employees, workers and any other persons employed or engaged, will be hired under employment conditions that meet the contractual obligations set out in the Contract;
- (c) will include in our contracts with Subcontractors/ suppliers/ manufacturers of *[solar panels]* *[solar panel components]* obligations to prevent Forced Labor among the staff, employees, workers and any other person employed or engaged by the Subcontractor/ supplier/ manufacturer;
- (d) will include in our contracts with Subcontractors/ suppliers/ manufacturers of *[solar panels]* *[solar panel components]*, that the Subcontractors/ suppliers/ manufacturers include an obligation to prevent Forced Labor in all contracts that they execute with their suppliers/ manufacturers of *[solar panel]**[solar panel components]*;
- (e) will monitor our Subcontractors/ suppliers/ manufacturers of *[solar panels]**[solar panel components]* on implementation of obligations to prevent Forced Labor among the staff, employees, workers and any other person employed or engaged by them;
- (f) will require our Subcontractors to monitor their suppliers/ manufacturers of *[solar panels]**[solar panel components]* on implementation of obligations to prevent Forced Labor among the staff, employees, workers and any other person employed or engaged by them;
- (g) will require our Subcontractors/ suppliers/ manufacturers to immediately notify us of any incidents of Forced Labor;
- (h) will immediately notify the Employer any incident of Forced labor on the site, or premises of Subcontractors/ suppliers/ manufacturers of *[solar panels]* *[solar panel components]*;
- (i) will include in periodic progress reports submitted in accordance with the contract sufficient details on our, including our Subcontractors/ suppliers/ manufacturers, compliance with Forced Labor obligations; and we
- (j) confirm that the Subcontractors/ suppliers/ manufacturers for *[solar panels]**[solar panel components]* for this contract are (or likely to be):

²² Annex III uses terms such as “bid” and “bidder”. The terms should be adjusted depending on the applicable procurement process terms such as “proposal” “proposer”

[Provide each firm's name, address, primary contact, e-mail address, and the link to the firm's web-site]

OR

confirm that you have not yet finalized the Subcontractors/ suppliers/ manufacturers of solar panels/components, but when known the firm/s name(s), address(es), primary contact(s), e-mail address(es) and web site link(s) will be provided to the Employer, prior to signing the contract, with documentation demonstrating compliance with forced labor obligations to the Employer for approval].

THEN

If (c) above is applicable, attach evidence of how these contract obligations are/will be made.

If (d) above is applicable, attach evidence of how these contract obligations are/will be made.

If (e) above is applicable, please attach evidence of how this monitoring/due diligence is/will be undertaken (such as your inspection protocols, use of inspection agents, frequency of inspections, examples of previous factory/labor inspection reports etc.).

If (f) above is applicable, please attach evidence of how this monitoring/due diligence is/will be undertaken by Subcontractors (such as their inspection protocols, use of inspection agents, frequency of inspections, examples of previous factory/labor inspection reports etc.).

We declare all the information and statements made in this Form are true, and we accept that any misrepresentation contained in this Form may lead to our disqualification by the Employer and/or sanctions by the Bank.

Name of the Bidder* _____

Name of the person duly authorized to sign the Bid on behalf of the Bidder** _____

Title of the person signing the Bid _____

Signature of the person named above _____

Date signed _____ day of _____, _____

*: In the case of the Bid submitted by joint venture specify the name of the Joint Venture as Bidder

** : Person signing the Bid shall have the power of attorney given by the Bidder attached to the Bid

[Note: In case of a Joint Venture, the Forced Labor Declaration must be in the name of all members to the Joint Venture that submits the Bid.]

CODE OF CONDUCT

Individual signed commitment:

I, _____, acknowledge that sexual exploitation and abuse (SEA) and sexual harassment, are prohibited. As an (employee/contractor) of (contracted agency / sub-contracted agency) in (country), I acknowledge that SEA and SH activities on the work site, the work site surroundings, at workers' camps, or the surrounding community constitute a violation of this Code of Conduct. I understand SEA and SH activities are grounds for sanctions, penalties or potential termination of employment. Prosecution of those who commit SEA and SH may be pursued if appropriate.

I agree that while working on the project I will:

Treat all persons, including children (persons under the age of 18), with respect regardless of sex, race, color, language, religion, political or other opinion, national, ethnic or social origin, gender identity, sexual orientation, property, disability, birth or other status.

- Commit to creating an environment which prevents SEA and SH and promotes this code of conduct. In particular, I will seek to support the systems which maintain this environment.
- Not participate in SEA and SH as defined by this Code of Conduct and as defined under (country) law (and other local law, where applicable).
- Not use language or behavior towards women, children or men that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.
- Not participate in sexual contact or activity with anyone below the age of 18. Mistaken belief regarding the age of a child is not a defense. Consent from the child is also not a defense. I will not participate in actions intended to build a relationship with a minor that will lead to sexual activity.
- Not solicit/engage in sexual favors in exchange for anything as described above.
- Unless there is the full consent by all parties involved, recognizing that a child is unable to give consent and a child is anyone under the age of 18, I will not have sexual interactions with members of the surrounding communities. This includes relationships involving the withholding or promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex—such sexual activity is considered “non-consensual” under this Code.

I commit to:

- Adhere to the provisions of this code of conduct both on and off the project site.
- Attend and actively partake in training courses related to preventing SEA and SH as requested by my employer.

If I am aware of or suspect SEA and SH, at the project site or surrounding community, I understand that I am encouraged to report it to the Grievance Reporting Mechanism (GRM) or to my manager. The safety, consent, and consequences for the person who has suffered the abuse will be part of my consideration when reporting. I understand that I will be expected to maintain confidentiality on any matters related to the incident to protect the privacy and security of all those involved.

Sanctions: I understand that if I breach this Individual Code of Conduct, my employer will take disciplinary action which could include:

- Informal warning or formal warning
- Additional training.
- Loss of salary.
- Suspension of employment (with or without payment of salary)
- Termination of employment.
- Report to the police or other authorities as warranted.

I understand that it is my responsibility to adhere to this code of conduct. That I will avoid actions or behavior that could be construed as SEA and SH. Any such actions will be a breach of this Individual Code of Conduct. I acknowledge that I have read the Individual Code of Conduct, do agree to comply with the standards contained in this document, and understand my roles and responsibilities to prevent and potentially report SEA and SH issues. I understand that any action inconsistent with this Individual Code of Conduct or failure to act mandated by this Individual Code of Conduct may result in disciplinary action and may affect my ongoing employment.

Signature: _____

Printed Name: _____

Title: _____

Date: _____

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14.4 Standard Operation Procedure applicable for shelled areas in West Bank and Gaza.

Standard Operating Procedure (SOP) for Emergency Intervention

- **Project workers risks:** The ongoing military activities in West Bank and Gaza, including airstrikes, ground operations, and the presence of unexploded ordnance (UXO) and rubble, present significant risks to PENRA's employees, the Distribution companies' employees and workers, contractors, and sub-contractors. These risks are dynamic and can evolve rapidly, requiring continuous monitoring and adaptation of risk management strategies. The destruction of critical infrastructure has also heightened these risks, particularly in terms of accessing project sites and transporting materials, further endangering all personnel involved in the implementation of activities on-site.
- **Community Risks:** Additionally, the ongoing military activities in Gaza, including airstrikes, ground operations, and the presence of unexploded ordnance (UXO) and rubble, pose significant risks to local communities, particularly during the execution of project works. These risks might arise as construction and repair activities take place, potentially leading to heightened tensions or accidental exposure to hazardous conditions community and the successful continuation of project activities.

Description of Project Activities and specific risks

1. Description of the activities
 - The interventions encompass several critical activities aimed at restoring essential energy infrastructure that has been severely damaged due to ongoing conflict. These activities include the reconstruction of the medium and low voltage network, the installation of solar photovoltaic (PV) systems, the rehabilitation of medium voltage (MV) feeders, and emergency repairs to address urgent electrical failures.
 - The reconstruction of the medium and low voltage network involves the repair and replacement of transformers, cables, and towers that have been damaged or destroyed during the conflict. This work is essential for re-establishing reliable electricity supplies to key areas, including residential zones and critical facilities.
 - Simultaneously, the project will deploy solar PV systems in health facilities to provide a sustainable and immediate source of energy. This includes the installation of mobile photovoltaic kits, which are crucial for ensuring that health services remain operational, especially in areas where the electricity grid cannot be quickly restored.
 - The rehabilitation of Medium Voltage (MV) feeders involves the installation of underground cables, which is a critical step in enhancing the resilience and reliability of the power supply infrastructure. Where trench opening is required, careful planning and coordination will be necessary to ensure that these underground cables are laid effectively and safely. This process includes excavating trenches along designated routes, placing the cables securely underground, and then properly covering and restoring the trenches to their original condition.
 - In response to ongoing disruptions, emergency repair teams at the DISCOs will be established to address urgent electrical failures. These rapid response teams will be critical in minimizing downtime and ensuring that vital services, such as hospitals and water treatment plants, remain operational.

2. Specific risks during the interventions

- The presence of unexploded ordnance (UXO) in areas affected by previous conflicts further exacerbates the danger. These UXOs, often hidden in the debris of destroyed infrastructure, can detonate if disturbed during construction activities, posing a lethal risk to anyone nearby.
- The rubble and debris left from destroyed buildings present additional hazards. This debris may conceal UXOs or other explosive devices, making the removal of rubble a particularly dangerous task. Moreover, the rubble often contains steel bars and other sharp objects that can cause severe injuries if not handled with extreme caution. Holes and craters left by bombs or collapsed buildings add another layer of danger, as they may not be immediately visible and can lead to falls or other accidents.
- Unstable infrastructure, including damaged buildings, and other structures, is a major concern during reconstruction. These structures can collapse without warning, especially when subjected to the vibrations or stress caused by reconstruction activities. The risk is further heightened in Gaza where the integrity of the infrastructure has been compromised by repeated attacks and the lack of maintenance.

3. The project workers

- PENRA Staff and Consultants: These individuals are directly employed by the project and will include staff who are on contracts financed by the project. This group also includes supervisors and consultants specifically appointed to oversee and monitor the implementation of project activities.
- Contracted workers: This category includes workers employed by contractors responsible for the implementation of medium voltage and low voltage line installations, the deployment of solar photovoltaic (PV) systems, as well as sub-contractors and service providers engaged in various aspects of the project. Sub-contractors may handle specialized tasks such as electrical installations, civil works, or equipment supply, while service providers might include those offering logistical support, maintenance services, or other essential functions to ensure the successful completion of the project.
- Primary supplier workers are the workers of the main suppliers responsible for supplying the equipment required for the interventions.

These workers are all subject to the full scope of ESS2 and project's LMP.

[https://www.penra.pna.ps/ar/Uploads/Files/Labor%20Management%20Procedure%20\(LMP\).pdf](https://www.penra.pna.ps/ar/Uploads/Files/Labor%20Management%20Procedure%20(LMP).pdf)

- Civil servants: Other DISCO's and PENRAs employees working on the project and having contracts financed by ministry of finance or by own budget. To this category OHS provisions of the LMP will apply.

5. Institutional Arrangements for Managing Safety Risks in the Gaza and West Bank Emergency Interventions

- Given the high-risk environment in, particularly with regard to unexploded ordnance (UXO), rubble removal, and the overall security situation, a robust institutional framework is necessary to ensure the safety of all project workers and affected communities. The following outlines the key roles and responsibilities of various UN agencies, Palestinian authorities, and other stakeholders in managing these safety risks.

Institution	Role	Responsibility
PENRA / Gaza (Employees and consultants)	Project coordinator Project monitoring (PMU)	Coordinate activities between PENRA's offices in Ramallah and Gaza, ensuring alignment with GEDCO and the Contractor on the project schedule and progress.
PENRA / Ramallah	Security coordinator	Ongoing monitoring of updates related to UXO mapping, and the safety of areas scheduled for intervention. Daily bulletins will be prepared for consistent communication.
DISCOs	Project supervisor	Coordinate the site activities. Prepare and implement an emergency response plan. Supervise the implementation of the ESMP including the aspects related to safety and security.
Palestinian Mine Action Center	Assistance	Provide assistance through use of maps and access to real time security information. Provide training to workers and local communities and raise awareness on security and UXO identification and risks.
UNMAS/UNDSS	Assistance	Provide assistance through use of maps and access to real time security information. Provide training to workers and local communities and raise awareness on security and UXO identification and risks.

4. Palestinian Mine Action Center / UN Agencies and UXO Clearance

The Palestinian Mine Action Center and the United Nations Mine Action Service (UNMAS) will play a key role in supporting the safety of project activities within the Gaza Strip. UNMAS will provide access to updated maps identifying areas that are free from unexploded ordnance (UXO), ensuring that project teams have accurate and current information on safe zones through updates to PENRA's security coordinator. In addition, UNMAS will assist in conducting comprehensive risk assessments for project sites, working closely with local authorities to identify and mitigate UXO-related risks. They will also provide guidance on the safe removal of rubble, coordinating these efforts with local authorities to ensure that the removal process is conducted safely and effectively, minimizing risks to all involved. Furthermore, UNMAS will offer training to workers and

local communities on the identification and management of UXO-related risks, enhancing their ability to recognize and respond appropriately to potential hazards.

5. Security Coordination by UNDSS

- The United Nations Department for Safety and Security (UNDSS) will provide assistance on security aspects of the project, working in close coordination with PENRA's appointed security coordinator, DISCOs, the Palestinian Civil Defense, the Ministry of Health, and the Red Crescent. The UNDSS will be assist on:
 - Security Risk Assessments: Conducting regular security risk assessments to monitor the evolving conflict situation and its potential impact on project sites. This includes identifying areas of high risk due to ongoing military operations and advising on safe work locations.
 - Emergency Communication Protocols: Establishing and maintaining communication protocols for emergency notifications, ensuring that all project teams are informed promptly about any security threats or incidents in their vicinity.
 - PENRA will request access to real-time alerts for areas experiencing active conflict, as well as maps indicating UXO-cleared zones in Gaza.

3. DISCOs and PENRA's Role in Safety Management

- Security coordinator will be nominated from PENRA to closely monitor the evolving of safety and security aspects according to real time and most updated data. The safety officer will prepare bulletins containing continuous updates.
- The DISCOs, in partnership with PENRA's project coordinator, will contribute on-the-ground site identification related to rubble removal and the implementation of the reconstruction activities. Their responsibilities will include:
 - Rubble Removal and Site Preparation: the DISCOs teams will coordinate the safe removal of rubble from project sites, whenever these areas are cleared to be free from UXOs. This involves ensuring that all rubble is checked for UXOs and other hazards before being handled.
 - Ongoing Safety Monitoring: PENRA's project coordinator, in collaboration with the DISCOs, will conduct safety monitoring during all phases of the project. This includes regular site inspections to ensure compliance with safety protocols and immediate response to any identified risks.

6. Reporting:

- DISCOs project supervisors will prepare daily reports and submit them to PENRA's project coordinator.
- PENRA's project coordinator will compile weekly progress reports to be submitted to PENRA's Project Monitoring Unit.
- PENRA's security coordinator will issue daily bulletins and a weekly security report.
- The PMU at PENRA will prepare monthly security reports for the World Bank, with urgent situations being communicated daily based on the severity of the emergency.

7. Development of Emergency Plans

- Emergency Response Plans: DISCOs will be developing and implementing emergency response plans. These plans will outline procedures for evacuating workers, contacting emergency services, and coordinating with local health facilities in case of injuries or UXO discoveries. These plans will include:

- **Evacuation Routes and Assembly Points:** Clearly marked evacuation routes and designated assembly points will be established for each project site, ensuring that all workers know where to go in the event of an emergency.
- **Medical Emergency Protocols:** Coordination with the Ministry of Health and the Red Crescent to ensure that medical teams are on standby and can be quickly deployed to project sites if needed.
- **Communication Drills:** Regular drills will be conducted to test the effectiveness of communication protocols and ensure that all personnel are familiar with emergency procedures.
- **Medical Support:** On-site first aid stations will be established at all project locations, and arrangements for medical evacuation (medevac) will be made. The risk management process will include regular reviews of medical support arrangements to ensure they remain effective.

8. Security-Risk Management in Contracts and Budgets

- **Incorporation in Contracts:** Contractors are required to include detailed risk management strategies in their contracts, covering personnel security, site security, and emergency evacuation plans. These strategies must ensure a structured and comprehensive approach to risk management.
- **Budget Provisions:** Specific budget lines must be allocated for security measures, including possible fees to be paid for UN agencies assistance, security personnel, and training. Additionally, contractors should allocate funds for emergency resources and contingencies, as part of a dynamic risk management plan that can adapt to changing conditions.

9. Protection Measures for Workers and community

- **Rubble removal and site work interventions** will only be conducted in areas confirmed to be UXO-free according to the latest maps provided by UNMAS.
- Any planned site activities must be scheduled and communicated to PENRA's headquarters, which will closely monitor real-time alerts for any potential risks in the areas where interventions are scheduled to take place.
- **Emergency response plans** will be developed for each project site, including clear evacuation routes and coordination with medical services for prompt emergency response.
- **Safety training** will be provided to all workers, focusing on UXO awareness, handling of hazardous materials, and emergency procedures to minimize risks on-site.
- **Duty of Care:** All workers will be provided with appropriate PPE, regular security briefings, and emergency contact information. The risk management process will ensure that these measures are adapted to the specific risks identified in the project environment.
- **Community Engagement:** Regular consultations with local communities will be conducted to inform them of project activities, associated risks, and safety measures. The risk management process will ensure that these consultations are inclusive and participatory, addressing the concerns of all stakeholders.

10. Monitoring and Compliance Inspections

- **Regular Audits:** Bi-weekly security audits and safety inspections will be conducted at all project sites. These audits will be part of a continuous monitoring process, ensuring that risk treatments are effective and that new risks are identified and addressed promptly.
- **Compliance Tracking:** Detailed logs of all security incidents, near misses, and corrective actions taken will be maintained. The risk management process will include regular reviews of these logs to identify trends and improve risk treatments.

- Reporting: monthly security reports will be submitted to the World Bank and other relevant stakeholders. These reports will provide an overview of the risk management process, including identified risks, treatments, and outcomes.

11. Cost Estimates

- Security Budget: Approximately (TBD) of the total project budget will be allocated for security measures. This includes the cost of UN agencies assistance and conducting safety training, all of which are essential components of the risk management process.
- Contingency Fund: An additional (TBD) of the project budget will be set aside as a contingency fund to cover unforeseen security-related expenditures. This fund will be managed as part of a dynamic risk management plan that can adapt to changing conditions.

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