PROMASS ENGINEERING SERVICES LIMITED

ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEM

For the Proposed Interconnected Mini-grid Project under the Distributed Access through Renewable Energy Scale-up (DARES) Programme

Submission purpose: Developer-level ESMS for submission to the Rural Electrification Agency (REA) and application throughout project development, construction, operation, maintenance and decommissioning.

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DOCUMENT APPROVAL AND REVISION CONTROL

Promass Engineering Services Limited approves this Environmental and Social Management System as the governing framework for identifying, assessing, avoiding, minimizing, mitigating, monitoring and reporting environmental and social risks associated with the proposed DARES Interconnected Mini-grid Project.

Environmental and Social Manager	Project Director	Dr Sani Mohammed Bida, MD/CEO
Prepared / coordinated by	Reviewed by	Approved by

Revision history

Version	Date	Description of change	Approved by
0.1	08 September 2025	Original Promass ESMS prepared for a proposed standalone mini-grid.	MD/CEO
1.0	29 July 2026	Comprehensively amended for the DARES Interconnected Mini-grid Project; financial intermediary terminology removed; interconnection, DisCo interface, customer transition, electrical safety, battery/ e-waste, stakeholder and reporting controls strengthened.	MD/CEO

Before final submission or mobilisation: complete Annex A with the project location, installed capacity, host communities, DisCo, point of common coupling, land status, permits, named E&S focal persons, GRM contacts, GBV referral service contacts and approved budget. Prepare site-specific ESIA/ESMP, RAP/LRP or other instruments where screening requires them.

EXECUTIVE SUMMARY

This Environmental and Social Management System (ESMS) establishes the governance, procedures, resources and records through which Promass Engineering Services Limited will manage environmental and social risks for the proposed Interconnected Mini-grid Project under the Distributed Access through Renewable Energy Scale-up (DARES) Programme. It is adapted from the company's existing ESMS, which was framed around a 1 MW standalone mini-grid and included screening, exclusion criteria, grievance management, GBV/SEA prevention, occupational health and safety, monitoring and templates.

The amended system recognizes that an interconnected mini-grid is not an isolated generation project. It interfaces with an existing Distribution Company (DisCo) network, existing customers, network assets, protection systems, outage arrangements, revenue and metering systems, and public rights-of-way. Consequently, the ESMS adds controls for joint planning with the DisCo, interconnection agreements, protection coordination, lock-out/tag-out, controlled energisation, service continuity, customer communication, electrical public safety, network rehabilitation and decommissioning.

The ESMS applies to Promass personnel, engineering and procurement teams, contractors, subcontractors, suppliers, consultants, security personnel, community liaison teams and operation-and-maintenance personnel. Compliance with this ESMS and all project-specific E&S instruments is a condition of procurement, contract award, mobilisation, payment and continued engagement.

Core implementation commitments

- Screen every site, associated facility and design change against the DARES/REA exclusion criteria and this ESMS before commitment or construction.
- Apply the mitigation hierarchy: avoid; minimize; restore or rectify; and compensate or offset only for residual impacts where permitted.
- Do not commence works until applicable land, environmental, planning, electrical, road, fire, labour and interconnection approvals are in place.
- Prepare and implement proportionate site-specific instruments, including an ESIA/ESMP, Stakeholder Engagement Plan, Labour Management Procedure, RAP/LRP and biodiversity or security plans where screening requires them.
- Maintain separate, accessible community and worker grievance mechanisms and a confidential survivor-centred channel for SEA/SH and GBV concerns.
- Provide safe work systems for electrical work, work at height, lifting, excavation, battery handling, hot work, confined spaces and energisation.
- Report serious incidents promptly to senior management and within the timeline specified by REA/DARES; undertake root-cause investigation and corrective action.
- Monitor E&S performance through inspections, indicators, audits, management review and regular reporting to REA and other authorized stakeholders.

> **Relationship to project-specific instruments:** this ESMS is a management framework and does not replace a project-specific ESIA, ESMP, RAP, LRP, SEP, Emergency Response Plan or other instrument required by REA, the Federal Ministry of Environment, NERC, the relevant State, the DisCo or a financing agreement. Where requirements differ, the more protective requirement applies unless REA provides written direction otherwise.

ABBREVIATIONS AND ACRONYMS

Acronym	Meaning	Acronym	Meaning
AP	Affected Person	BESS	Battery Energy Storage System
C-ESMP	Contractor Environmental and Social Management Plan	CLO	Community Liaison Officer
CoC	Code of Conduct	DARES	Distributed Access through Renewable Energy Scale-up
DisCo	Electricity Distribution Company	E&S	Environmental and Social
EIA	Environmental Impact Assessment	ERP	Emergency Response Plan
ESCP	Environmental and Social Commitment Plan	ESF	World Bank Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment	ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System	ESRM	Environmental and Social Risk Management
ESS	World Bank Environmental and Social Standard	FMEnv	Federal Ministry of Environment
GBV	Gender-Based Violence	GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism	HSE	Health, Safety and Environment
ILO	International Labour Organization	IMG	Interconnected Mini-grid
LMP	Labour Management Procedure	LOTO	Lock-out/Tag-out
LRP	Livelihood Restoration Plan	NERC	Nigerian Electricity Regulatory Commission
NESREA	National Environmental Standards and Regulations Enforcement Agency	O&M	Operation and Maintenance
OHS	Occupational Health and Safety	PCC	Point of Common Coupling
PCS	Power Conversion System	PPE	Personal Protective Equipment
PTW	Permit to Work	PV	Photovoltaic
RAP	Resettlement Action Plan	REA	Rural Electrification Agency
SEA	Sexual Exploitation and Abuse	SEP	Stakeholder Engagement Plan
SH	Sexual Harassment	VAC	Violence Against Children
VLD	Voluntary Land Donation	WMP	Waste Management Plan

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1. INTRODUCTION AND PROJECT CONTEXT

1.1 Purpose

The purpose of this ESMS is to provide a systematic, auditable and proportionate approach for managing E&S risks and impacts across the full lifecycle of the proposed DARES Interconnected Mini-grid Project. It translates corporate commitments and programme requirements into practical procedures for decision-making, procurement, construction, operation, maintenance and decommissioning.

1.2 Project concept and associated facilities

The final project configuration will be confirmed in Annex A and the approved technical design. This ESMS assumes that the project may include:

- Solar PV, mounting structures, inverters/power conversion, BESS, control systems, powerhouse, switchgear, transformers, protection, earthing, metering and approved backup generation.
- Interconnection at the point of common coupling, including switching, feeder rehabilitation or reconfiguration, poles, conductors, substations, service connections and customer meters.
- Access, drainage, fencing, security lighting, water/sanitation, storage, temporary work areas and necessary transport or contractor support facilities.
- Existing DisCo assets, customer premises and other associated areas affected by rehabilitation, testing, outages, changeover, energisation, waste handling or restoration.

1.3 Scope and applicability

The ESMS applies to all Promass employees and all organizations acting on behalf of the company. It applies within the project site, along distribution routes and access roads, at temporary facilities and storage locations, at the PCC, at customer premises where works are undertaken, and during transport, consultation, procurement, installation, testing, energisation, O&M and decommissioning.

1.4 ESMS boundaries and interfaces

Interface	Minimum management requirement
REA / DARES	Provide requested screening, instruments, monitoring reports, incident notifications, audit evidence and corrective-action closure records.
DisCo	Define asset ownership, switching authority, outage planning, access rights, protection settings, metering, customer communication, emergency response and handover responsibilities in written agreements.
Communities and customers	Provide timely, accessible information on land, construction, safety, outages, tariffs, metering, grievance channels and service changes; consult women and vulnerable groups separately where useful.
Contractors and suppliers	Embed ESHS specifications, Code of Conduct, reporting obligations, competency requirements and remedies in procurement and contracts; verify performance before payment.
Government and regulators	Secure and maintain applicable approvals, permits and inspections; comply with conditions and retain evidence in the legal register.
Emergency and referral providers	Maintain current contacts, response routes, first-aid and medical arrangements, fire response and survivor-centred referral pathways.

1.5 ESMS operating cycle

1. Screen and classify the site, design, land, network, associated facilities and supply chain; determine required studies, permits and consultations.
2. Integrate approved mitigation, budget and responsibilities into design, procurement, contracts, programme and interconnection agreements.
3. Implement controls through C-ESMPs, method statements, permits to work, supervision, stakeholder engagement and grievance mechanisms.
4. Monitor, report, audit and review performance; close actions and update instruments when risks, design or conditions change.

2. APPLICABLE REQUIREMENTS AND STANDARDS

2.1 Compliance hierarchy

Promass will comply with: applicable Nigerian federal, state and local laws and permit conditions; NERC, REA/DARES and DisCo requirements; the World Bank Environmental and Social Framework and project financing instruments; contractual ESHS obligations; and recognized Good International Industry Practice where national requirements are silent. The legal register shall be verified and updated before mobilisation and at least annually.

2.2 Indicative Nigerian legal and institutional framework

Instrument / authority	Relevance to the project
Constitution of the Federal Republic of Nigeria 1999, as amended	Property rights, non-discrimination, dignity and access to remedies.
Electricity Act 2023 and applicable regulations	Licensing, electricity market responsibilities, safety and consumer protection.
Applicable NERC Mini-grid Regulations and orders, as amended	Interconnected mini-grid approval, agreements, tariffs, compensation and technical/ commercial interface.
Grid Code, Distribution Code, Metering Code and DisCo procedures	Protection, quality of supply, switching, metering, testing, energisation and operating coordination.
Environmental Impact Assessment Act 1992, as amended	Environmental assessment, approval, disclosure and monitoring for prescribed projects.
NESREA Act and applicable environmental regulations	Pollution control, air quality, noise, sanitation, hazardous chemicals, waste and enforcement.
Land Use Act 1978 and State land laws	Land rights, acquisition, occupancy, compensation and documentation.
Labour Act; Factories Act; Employees Compensation Act	Employment conditions, workplace safety, injury compensation and welfare.
Child Rights Act and applicable State laws	Protection of persons under 18, prohibition of exploitation and hazardous child labour.
Violence Against Persons (Prohibition) Act and applicable State laws	Prevention and response to violence, including sexual violence and harmful practices.
National building, fire, road traffic and public health requirements	Safe structures, emergency access, transport, sanitation and community protection.
State and local planning, environmental and development-control requirements	Site approvals, rights-of-way, building permits, waste disposal and local conditions.

Legal verification: the titles and current editions of laws, regulations, standards and permit processes shall be confirmed by the Project Legal/Compliance Lead before submission and mobilisation. This ESMS uses the requirements contained in the attached company ESMS and generally applicable sector controls; it is not a substitute for legal advice.

2.3 World Bank Environmental and Social Standards

ESS	Subject	Project application
ESS1	Assessment and Management of E&S Risks and Impacts	Screening, risk classification, ESIA/ESMP, mitigation hierarchy, monitoring, incident response and adaptive management.
ESS2	Labour and Working Conditions	Written terms, fair treatment, worker GRM, OHS, prohibition of forced labour and harmful child labour, contractor management.
ESS3	Resource Efficiency and Pollution Prevention	Energy and water efficiency, emissions, waste, hazardous materials, batteries and e-waste.
ESS4	Community Health and Safety	Traffic, electrical safety, security, emergency response, infrastructure safety, GBV/ SEA and disease risk.
ESS5	Land Acquisition and Involuntary Resettlement	Avoidance, replacement-cost compensation, livelihood restoration, VLD safeguards and grievance management.

ESS	Subject	Project application
ESS6	Biodiversity Conservation	Site selection, habitat screening, vegetation management, restoration and invasive species prevention.
ESS7	Historically Underserved Traditional Local Communities	Screening and culturally appropriate engagement where applicable; follow REA direction if triggered.
ESS8	Cultural Heritage	Screening, consultation, avoidance and chance finds procedure.
ESS9	Financial Intermediaries	Not the primary basis for Promass as project developer; applicable only to a financing intermediary where specifically required.
ESS10	Stakeholder Engagement and Information Disclosure	Inclusive engagement, disclosure, community GRM, feedback and documentation throughout the project lifecycle.

2.4 Standards and good practice

- Applicable IEC and Nigerian electrical standards for PV, BESS, switchgear, protection, earthing, metering and grid connection.
- ISO 14001 environmental management and ISO 45001 occupational health and safety principles, where practicable.
- ILO fundamental conventions and applicable labour standards.
- World Bank Group General Environmental, Health and Safety Guidelines and relevant power-sector guidance.
- Manufacturer instructions, safety data sheets and warranty conditions for batteries, inverters, transformers, chemicals and equipment.

3. ENVIRONMENTAL AND SOCIAL POLICY AND COMMITMENTS

3.1 Policy statement

Promass Engineering Services Limited is committed to developing and operating the Interconnected Mini-grid in a manner that protects workers, communities and the environment; respects human rights; complies with applicable law and DARES requirements; prevents pollution and injury; avoids involuntary displacement wherever feasible; promotes inclusive benefits; and continually improves E&S performance.

3.2 Binding commitments

Commitment area	Promass commitment
Mitigation hierarchy	Avoid adverse impacts where practicable; minimize unavoidable impacts; restore affected conditions; and compensate for eligible residual loss in accordance with approved instruments.
No excluded activities	Do not support forced labour, harmful child labour, illegal waste trade, critical habitat conversion, illegal eviction or other excluded activities listed in Annex C.
Pollution prevention	Prevent spills, uncontrolled discharge, open burning, improper waste disposal and unsafe handling of batteries, oils, fuels, chemicals and e-waste.
Safe work and public safety	Design and operate safe facilities; apply PTW and LOTO; provide PPE and competent supervision; protect customers and the public from electrical and construction hazards.
Fair labour	Provide written terms, fair wages, equal opportunity, non-discrimination, worker welfare and freedom from retaliation; maintain a worker GRM.
SEA/SH, GBV and VAC	Apply zero tolerance to sexual exploitation and abuse, sexual harassment, GBV and violence against children; use a survivor-centred referral approach.
Community participation	Consult early, disclose relevant information in accessible forms and local languages, and respond to grievances without charge or retaliation.
Land and livelihoods	Prefer negotiated lease or purchase; use VLD only where all safeguards are satisfied; avoid physical displacement and restore affected livelihoods where impacts occur.
Biodiversity and heritage	Avoid protected and sensitive areas, minimize vegetation clearance, restore disturbed areas and implement the chance finds procedure.
Climate resilience	Assess flood, heat, wind, erosion, fire and other climate or natural hazards and integrate resilience into design and emergency planning.
Accountability	Allocate competent staff and budget, maintain records, report incidents, close corrective actions and conduct periodic management review.

3.3 Stop-work and non-retaliation authority

Every worker has authority and responsibility to stop or refuse work where there is an imminent threat to life, serious environmental harm, unauthorized energisation, unsafe excavation, suspected child labour, SEA/SH or other serious breach. No person shall suffer retaliation for a good-faith report or stop-work action. Work may resume only after the hazard has been assessed and formally released by an authorized competent person.

4. ESMS GOVERNANCE, ROLES AND RESOURCES

4.1 Governance structure

Role	Key responsibilities
MD/CEO	Approve the ESMS and resources; ensure accountability; notify the Board of material E&S issues; approve serious-incident response and management review actions.
Project Director	Integrate E&S requirements into project decisions, design, programme, procurement, contractor management and DisCo coordination.
E&S Manager	Maintain the ESMS; lead screening and due diligence; review instruments; coordinate REA reporting, audits, corrective actions and permit register.
HSE Manager / Site HSE Officer	Manage OHS, environmental controls, inspections, PTW, LOTO, emergency readiness, incident investigation and site reporting.
Social / Community Liaison Officer	Implement SEP; maintain community GRM; coordinate land access, vulnerable-group engagement, local employment communication and disclosure.
SEA/SH and GBV Focal Person	Maintain confidential reporting and referral pathways; deliver awareness; protect survivor confidentiality; report anonymized data only.
DisCo Interface / Electrical Safety Coordinator	Coordinate switching, protection, outages, test approvals, access boundaries, asset handover and energisation with the DisCo.
HR and Procurement Leads	Apply labour requirements, worker GRM, Code of Conduct, supplier due diligence, ESHS clauses, competency checks and performance remedies.
Contractor Project Manager	Prepare and implement the C-ESMP; provide competent ESHS staff; train workers; report incidents; close non-conformities; control subcontractors.
All workers	Follow the Code of Conduct, method statements, PTW and safety rules; use PPE; protect communities and report hazards, incidents and grievances.

4.2 Minimum staffing

- A qualified E&S Manager with authority to report directly to the Project Director and MD/CEO.
- A full-time Site HSE Officer during construction, supported by trained first aiders, fire wardens and authorised electrical persons.
- A Community Liaison Officer and a designated female SEA/SH and GBV focal person or accessible female referral contact.
- Competent interconnection/protection personnel and specialist consultants for ESIA, RAP/LRP, biodiversity, security or other studies when required.

4.3 E&S decision gates

Decision gate	Mandatory E&S evidence
Gate 1 - Site opportunity	Exclusion screening, land status, sensitive receptors, flood risk, existing network and community acceptance before commercial commitment.
Gate 2 - Concept design	Risk rating, required instruments, alternative sites/routes, interconnection responsibilities, preliminary budget and disclosure plan.
Gate 3 - Procurement	Approved ESMP measures, ESHS specifications, Code of Conduct, competence and reporting requirements in tender and contract documents.
Gate 4 - Mobilisation	Permits, land access, approved C-ESMP, insurance, emergency plan, trained staff, GRM, welfare, waste vendors and baseline evidence.
Gate 5 - Energisation	Annex Q, test results, protection, earthing, LOTO, customer notice, DisCo approval, emergency readiness and asset boundaries.
Gate 6 - Handover, O&M and decommissioning	Close construction non-conformities; restore land; document waste and handover; train operators; maintain O&M monitoring; and approve decommissioning, recycling, worker-safety and hand-back arrangements before closure.

5. ENVIRONMENTAL AND SOCIAL RISK MANAGEMENT PROCEDURE

5.1 Screening and exclusion review

The E&S Manager shall complete Annex B for the site, distribution routes, temporary facilities, material sources, waste destinations and associated facilities using site visits, land/network records, consultation, maps and available data. Any exclusion-list trigger shall be referred to senior management and REA; no commitment may proceed without documented clearance.

5.2 Preliminary risk rating

Internal tier	Typical indicators	Minimum response
Tier 1 - potentially high or substantial	Sensitive habitat or cultural heritage; physical or significant economic displacement; material labour influx or security risk; complex land disputes; major network rehabilitation; significant customer disruption; serious pollution or cumulative impacts.	Full specialist assessment and site-specific instruments; senior management and REA review before commitment.
Tier 2 - moderate	Site-specific, predictable impacts manageable through established measures, such as vegetation clearance, traffic, noise, waste, worker-community interaction and limited rights-of-way.	Site-specific ESMP, SEP, LMP, emergency plan and contractor controls.
Tier 3 - low	Minor works with limited footprint and readily managed impacts; no sensitive receptors, displacement, labour influx or complex interconnection work.	Proportionate checklist, method statements, monitoring and standard ESHS clauses.

Important: this internal tiering supports Promass decision-making and does not replace the formal risk classification assigned by REA/DARES, the Federal Ministry of Environment, NERC or another competent authority.

5.3 Due diligence and instruments

Instrument	When / why required
ESIA / site-specific ESMP	Where required by law, REA or screening; establish baseline, alternatives, impacts, consultation, mitigation, monitoring, budget and disclosure.
C-ESMP and task plans	Contractor controls, method statements, PTW, emergency, waste, traffic, labour and community arrangements aligned with the approved ESMP.
SEP and community GRM	Stakeholder mapping, inclusive disclosure and consultation, grievance channels, response targets and records.
LMP and worker GRM	Recruitment, terms, welfare, OHS, worker representation, Code of Conduct and confidential grievance handling.
RAP / LRP	Required where land acquisition or restrictions cause physical or economic displacement; implement before access or impact.
Specialist plans	Biodiversity, security, GBV/SEA, emergency or other instruments where screening identifies material risk.

5.4 Change management

Changes in design, route, battery chemistry, generation, labour facilities, land, PCC, switching or programme shall be screened before approval. The E&S Manager shall confirm whether existing instruments remain adequate or require amendment, consultation or regulatory approval.

5.5 Contractor and supply-chain due diligence

- Prequalify contractors and key suppliers for legal compliance, ESHS competence, staffing, incident history, labour risks, hazardous-substance controls, traceability and take-back capacity.
- Require approved C-ESMPs, method statements, risk assessments, competent staff, training, insurance and emergency arrangements before mobilisation.
- Link payment and retention to reporting, performance and closure; apply corrective action, suspension, personnel removal or termination for serious or repeated breach.

6. INTERCONNECTED MINI-GRID RISK PROFILE AND CONTROLS

The risks below are characteristic of an interconnected mini-grid and shall be reflected in the site-specific ESIA/ESMP and design. Annex D provides the detailed generic risk register.

Risk area	Typical risk	Core control
Land and right-of-way	Land disputes, access restrictions, crop or business loss, pole and line corridors, temporary occupation.	Avoid displacement; verify title and users; consult affected persons; document lease/purchase/VLD; compensate and restore livelihoods before impact.
Existing network and customers	Unplanned outages, unsafe back-feed, damaged appliances, unclear asset ownership, customer exclusion, tariff misunderstanding.	Approved agreements; outage plan; protection studies; customer disclosure; complaint channel; metering and service-quality monitoring.
Electrical and energisation	Arc flash, electrocution, induced voltage, inadequate earthing, live-line contact, public access to energized assets.	Authorized persons; PTW/LOTO; test-before-touch; isolation boundaries; earthing tests; barriers and signage; joint DisCo energisation checklist.
BESS and hazardous materials	Thermal runaway, fire, electrolyte leak, toxic smoke, damaged batteries, end-of-life waste.	Approved chemistry/design; ventilation and separation; detection/suppression; spill response; quarantine; licensed recycler/take-back; emergency plan.
Construction and traffic	Dust, noise, vibration, road incidents, open trenches, falling objects, pole erection and lifting hazards.	Traffic and lifting plans; barriers; spotters; daytime work; dust suppression; competent operators; reinstatement and community notice.
Labour and community interaction	Labour influx, discrimination, poor conditions, SEA/SH, GBV, VAC, disease and conflict over jobs.	Local recruitment protocol; Code of Conduct; worker GRM; training; separate facilities; survivor-centred referrals; transparent employment communication.
Environment and climate	Vegetation loss, erosion, flooding, drainage blockage, water pollution, heat, wind and wildfire.	Alternative siting; limited clearance; drainage and erosion control; spill prevention; climate-resilient design; restoration and fire breaks.
Security	Theft, vandalism, conflict, excessive force, intimidation and access restrictions.	Risk assessment; unarmed security where feasible; human-rights/CoC training; incident and grievance channels; authority coordination.
Operation and decommissioning	Maintenance injuries, waste accumulation, battery replacement, obsolete equipment and land restoration.	Preventive maintenance; O&M PTW; inspection; waste tracking; take-back; decommissioning fund and plan; restoration and stakeholder closure.

6.1 Interconnection interface management

- A written responsibility matrix shall identify the owner and operator of each generation, network, metering, communication and protection asset.
- Only the DisCo or an explicitly authorized person may issue or accept switching instructions for DisCo-owned assets.
- Protection coordination, short-circuit, load-flow, earthing and power-quality studies shall be approved before energisation where required by the technical agreement.
- Planned outages shall be jointly scheduled and communicated to customers, health facilities, water systems, businesses and other critical users with reasonable notice.
- Temporary generation, back-feed risks and customer-owned generators shall be addressed in the isolation and energisation plan.
- Complaints about voltage, damaged appliances, metering, billing, connection quality or service interruption shall be logged, investigated and resolved through defined commercial and community channels.

7. ENVIRONMENTAL MANAGEMENT PROCEDURES

7.1 Pollution prevention and resource efficiency

Each work package shall identify potential emissions, effluent, waste, resource use and hazardous materials. Controls shall be designed into the work and verified through inspections. Water, fuel and materials shall be used efficiently; leaks and losses shall be recorded and corrected.

7.2 Waste management hierarchy

1. Prevent waste through design, accurate procurement, reusable packaging and material control.
2. Reuse or return pallets, cable drums, containers and surplus materials where safe and lawful.
3. Segregate recyclable metal, cable, cardboard, plastics and clean construction material.
4. Store hazardous waste, batteries, oily materials, chemicals and e-waste in labelled, secure and weather-protected areas with secondary containment where needed.
5. Use authorized transporters, recyclers and disposal facilities; retain manifests, receipts and certificates.
6. Prohibit open burning, uncontrolled burial, disposal into drains or watercourses, and informal sale of hazardous waste.

7.3 Batteries, e-waste and transformer materials

Battery and e-waste management shall follow Annex P. Procurement shall prioritize suppliers with take-back or approved recycling arrangements. Damaged, swollen, leaking, overheated or recalled batteries shall be isolated in a controlled quarantine area and managed according to manufacturer instructions and the emergency plan. Used transformer oil, if any, shall be tested or managed as potentially hazardous and shall not be mixed with general waste.

7.4 Soil, water, drainage and spills

- Minimize earthworks and maintain stable slopes, drains, culverts and erosion controls before the rainy season.
- Store fuels and chemicals on impermeable surfaces with containment; inspect tanks, hoses and generators regularly.
- Provide spill kits at storage, refuelling, generator and transformer locations; train workers and report all spills.
- Do not discharge cement washout, oily water, sewage or contaminated runoff to land, drains or water bodies without approved treatment.
- Provide adequate toilets, handwashing and potable water for workers without reducing community access to water.

7.5 Biodiversity and vegetation

The project shall avoid protected areas, critical habitat and significant conversion of natural habitat. Vegetation clearance shall be limited to the approved footprint and safe electrical clearances. Mature trees, riparian areas, nesting sites and community resources shall be avoided where practicable. Disturbed areas shall be stabilized and replanted with suitable native species; herbicides shall not be used without approval and trained applicators.

7.6 Cultural heritage

Known cultural, archaeological, burial, religious or sacred sites shall be identified through screening and consultation and avoided where practicable. All excavation teams shall be trained on Annex K. Work shall stop immediately when a potential chance find is discovered; the area shall be protected and the competent authority consulted before work resumes.

7.7 Climate and natural-hazard resilience

Design and site selection shall consider flood levels, drainage, erosion, extreme heat, high wind, lightning, wildfire, drought, dust and access during severe weather. Critical equipment shall be elevated or protected where flood risk exists; drainage shall not transfer risk to neighbouring properties; emergency access and safe shutdown procedures shall be maintained.

8. SOCIAL MANAGEMENT PROCEDURES

8.1 Land access and livelihood protection

No construction access shall be taken until land rights, users, claims, crops, structures, businesses and communal resources have been identified and documented. Promass will prioritize willing-buyer/willing-seller purchase or lease. VLD may be used only where Annex O safeguards are satisfied, including genuine refusal rights, informed consent, no physical relocation, limited impact on productive assets, spousal and user consent, independent verification and grievance access.

8.2 Labour and working conditions

- Provide written terms, wages, hours, leave, benefits and disciplinary procedures in a language the worker understands.
- Prohibit forced labour, debt bondage, trafficking and employment of children in project work. No person under 18 shall perform hazardous work.
- Apply non-discrimination and equal opportunity in recruitment, pay, training, promotion and termination.
- Maintain safe, clean and gender-appropriate welfare and accommodation; prevent overcrowding and exploitation.
- Provide a confidential worker GRM that allows direct reporting without requiring the immediate supervisor.
- Require every worker to sign, understand and comply with the DARES Interconnected Mini-grid Code of Conduct.

8.3 Local employment and procurement

Local employment shall be encouraged for suitable roles through transparent criteria. Promass shall not promise jobs to secure land or consent. Vacancies, qualification requirements, duration and selection processes shall be communicated publicly. Local procurement shall be based on quality, safety, value, legal compliance and capacity; preferential arrangements shall not create exclusion or conflict.

8.4 Inclusion and vulnerable groups

Stakeholder mapping shall identify women, persons with disabilities, older persons, youth, minority groups, landless users, low-income households, tenants, informal businesses and critical service providers. Engagement methods shall address mobility, literacy, language, timing, safety and cultural barriers. Project benefits and connection information shall be communicated equitably, and accessibility shall be considered in customer service and grievance channels.

8.5 SEA/SH, GBV and child protection

Promass will implement Annex I and the approved Code of Conduct. All workers shall receive induction and refresher training. Reports shall be handled confidentially, with informed consent and a survivor-centred approach. The GRM shall not conduct fact-finding interviews with survivors or store identifying details in general registers. A child's best interests and applicable mandatory reporting requirements shall guide response to cases involving children.

8.6 Security personnel

Security arrangements shall be based on a documented risk assessment. Security personnel shall be trained on lawful, proportionate conduct, the Code of Conduct, community relations, grievance channels and incident reporting. The use of force is a last resort and shall be proportionate to the threat. Complaints against security personnel shall be promptly referred and monitored without retaliation.

8.7 Community health and safety

- Fence and secure power facilities and hazardous work areas; provide warning signs and prevent unauthorized access.
- Protect open trenches, excavations, conductors, poles and lifting zones; reinstate roads, paths, drains and customer premises promptly.
- Use traffic marshals, safe speeds, route planning and driver controls; avoid school and market peak periods where practicable.
- Provide advance notice of high-risk activities, planned outages, testing and energisation.
- Coordinate with health facilities, water suppliers, telecoms and other critical users where outages or access restrictions could create secondary risk.

9. OCCUPATIONAL HEALTH, SAFETY AND EMERGENCY MANAGEMENT

9.1 OHS management hierarchy

Hazards shall be controlled using elimination, substitution, engineering controls, administrative controls and PPE in that order. Risk assessments and method statements shall be task-specific and communicated before work. Supervisors shall verify competence, tools, equipment, weather, work area and emergency readiness before authorizing high-risk work.

9.2 Permit-to-work activities

PTW activity	Minimum authorization controls
Electrical isolation / energised work	Single-line diagram, switching schedule, authorized persons, LOTO, test-before-touch, temporary earths, arc-flash controls, rescue plan.
Hot work	Fire watch, combustible removal, extinguisher, gas cylinder controls, post-work inspection.
Work at height	Certified access equipment, fall prevention or arrest, rescue plan, weather limits, dropped-object controls.
Lifting and pole erection	Lift plan, competent operator and rigger, equipment certification, exclusion zone, ground condition and spotter.
Excavation / trenching	Utility clearance, shoring or battering, safe access, spoil setback, barricade, water control and daily inspection.
Confined space	Atmospheric testing, isolation, attendant, communication, rescue equipment and entry permit.
Battery maintenance	Electrical and chemical controls, ventilation, insulated tools, PPE, emergency eyewash, fire and spill response.

9.3 Electrical safety and LOTO

- Maintain an approved single-line diagram, asset labels and defined operational boundaries between Promass and the DisCo.
- Use a written switching programme and isolation certificate for commissioning, maintenance and interconnection work.
- Identify all possible sources, including PV DC, BESS, generators, grid supply, customer generation, induced or stored energy.
- Lock and tag isolation points, prove test instruments, test for dead, discharge stored energy and apply temporary earths where required.
- Only competent authorized persons may remove locks, issue safety documents or authorize energisation.
- Maintain insulated tools, arc-rated PPE where indicated, rescue hooks and first-aid/CPR capability.

9.4 Emergency preparedness

A site-specific Emergency Response Plan shall be prepared using Annex J. It shall address medical emergency, electrical shock and arc flash, BESS fire or thermal runaway, transformer or fuel fire, spill, severe weather, flood, structural failure, road accident, security event, community incident and mass evacuation. Drills shall be conducted before energisation and at planned intervals during operation.

9.5 Incident and near-miss management

All incidents and near misses shall be made safe, reported, classified and investigated in accordance with Annex L. Serious incidents shall be immediately escalated. Evidence shall be preserved without delaying rescue. Root causes, not only immediate acts, shall be identified, and corrective actions shall be assigned, tracked and verified before closure.

10. STAKEHOLDER ENGAGEMENT AND GRIEVANCE MANAGEMENT

10.1 Stakeholder engagement principles

- Begin engagement before site selection is finalized and continue through decommissioning.
- Provide accurate, timely and understandable information, including project limits, land needs, jobs, connection process, tariffs, service changes, outages, safety and grievance channels.
- Use inclusive methods and separate consultations where women, youth or vulnerable groups may not speak freely in general meetings.
- Document attendance, issues, commitments, responsible persons and closure; do not record sensitive personal data unnecessarily.
- Avoid coercion, political capture, elite-only consultation or promises that are not authorized and budgeted.

10.2 Community GRM

The community GRM in Annex F shall accept grievances verbally, in writing, by telephone, email, suggestion box or through a trusted focal person. Anonymous complaints shall be accepted. Acknowledgement should normally be issued within two working days, assessment within five working days and a proposed response within fifteen working days, unless the matter requires urgent safety action or a longer investigation. These internal targets may be shortened where REA requirements specify.

10.3 Worker GRM

The worker GRM in Annex G is separate from the community GRM and is available to direct and contracted workers. Workers may report to HR, the E&S Manager, a worker representative, confidential email/phone or another designated channel. Grievances shall not be routed only through the immediate supervisor. Retaliation is prohibited.

10.4 SEA/SH and GBV complaints

SEA/SH and GBV complaints shall be referred directly to the designated focal person or specialist service provider. The general register shall record only a non-identifying case code, date, type of referral and status. The survivor decides whether to access medical, psychosocial, legal or security services, subject to child safeguarding and mandatory legal obligations. Investigation and disciplinary processes shall not compromise safety or confidentiality.

10.5 Appeals and external remedies

A complainant may request review by the Project Grievance Redress Committee or senior management. Access to the GRM does not restrict judicial, regulatory, labour, traditional or other lawful remedies. Promass shall cooperate with REA and competent authorities where a complaint falls within their mandate.

11. MONITORING, REPORTING, AUDIT AND MANAGEMENT REVIEW

11.1 Monitoring programme

Frequency	Minimum scope	Responsible
Daily / task	PTW, PPE, housekeeping, barriers, electrical isolation, excavations, lifting, spills, weather, workforce and community interface.	Supervisor / HSE Officer
Weekly construction	ESMP inspection, waste, drainage, dust/noise, welfare, labour records, Code of Conduct, grievances and corrective actions.	HSE and E&S Team
Monthly	E&S KPI report, incident trends, training, permits, land, stakeholder engagement, worker/community GRM, contractor scorecard.	E&S Manager / Project Director
Quarterly	Internal ESMS compliance audit, management review of high-risk actions, supplier and contractor performance, community feedback.	Management / Internal auditor
Operation	Electrical safety, protection trips, power quality, outages, customer complaints, battery condition, waste, vegetation and emergency readiness.	O&M Manager / E&S Manager
Annual	Legal register review, ESMS audit, stakeholder review, emergency drill programme, objectives and budget update.	MD/CEO / Project Director

11.2 Key performance indicators

- Fatalities; lost-time and recordable injuries; electrical incidents; near misses; vehicle incidents and days worked without lost-time injury.
- Serious environmental incidents; spill volume; waste generated, recycled and disposed; battery/e-waste quantities and certificates.
- Percentage of workers inducted, Code of Conduct signed, toolbox talks completed and high-risk competencies verified.
- Open and overdue corrective actions; audit findings; permit conditions completed; contractor ESHS score.
- Stakeholder engagements by group; grievances received, acknowledged, resolved, overdue and appealed; anonymized SEA/SH referrals only.
- Land agreements completed before access; compensation or livelihood actions completed; restoration and reinstatement status.
- Planned and unplanned outages, customer safety complaints, voltage or service-quality complaints and resolution time.

11.3 Reporting to REA and external parties

Promass will submit E&S reports at the frequency and in the form required by REA/DARES. At minimum, reports will summarize activities, risk status, implementation of instruments, incidents, grievances, stakeholder engagement, labour, OHS, environmental performance, contractor compliance, permits, photos, corrective actions and next-period priorities. Personal or survivor-identifying information shall not be included.

11.4 Audits and management review

Internal audits shall evaluate implementation, legal compliance, document control and effectiveness. External or REA audits shall be facilitated. Senior management shall review at least annually and after any fatality, major electrical incident, serious pollution event, material land dispute, substantiated SEA/SH allegation or significant regulatory non-compliance. Management review shall approve objectives, resources and improvement actions.

12. TRAINING, COMPETENCE AND AWARENESS

12.1 Competence requirements

Persons performing work that can cause significant E&S impact shall be competent through appropriate education, training, certification and experience. Promass shall verify competence before assignment and maintain evidence. Contractors remain responsible for competence of their workers and subcontractors.

12.2 Minimum training programme

- Induction covering the ESMS, Code of Conduct, worker and community GRMs, SEA/SH and GBV, child protection, environmental controls, emergency procedures and stop-work authority.
- Daily or task-specific toolbox talks and pre-job briefings.
- Electrical authorization, LOTO, switching, arc-flash awareness, test equipment and rescue/CPR training for relevant personnel.
- Work at height, lifting, excavation, hot work, confined space, first aid, fire response, traffic and defensive driving as applicable.
- Stakeholder engagement, grievance handling, land access, cultural sensitivity, data confidentiality and vulnerable-group inclusion.
- Battery chemistry, safe handling, thermal runaway, spill response, quarantine, transport, recycling and waste documentation.
- Refresher training after incidents, design changes, poor performance or extended absence.

12.3 Training evaluation

Training effectiveness shall be checked through practical demonstration, quizzes where useful, observation, audits and incident trends. Attendance alone does not demonstrate competence. Annex R provides the training matrix and record requirements.

13. DOCUMENT CONTROL, RECORDS AND DISCLOSURE

13.1 Controlled documents

The E&S Manager shall maintain a master list showing document title, number, version, owner, approval, distribution and review date. Superseded versions shall be marked and archived. Site teams shall use only current approved documents. Changes shall be reviewed for E&S implications and communicated to affected personnel.

13.2 Records

- Screening, risk classification, permits, approvals, ESIA/ESMP and specialist plans.
- Land due diligence, consultation, agreements, compensation, VLD verification and livelihood records.
- Contracts, C-ESMPs, method statements, PTWs, inspections, test certificates, incident investigations and corrective actions.
- Training, competence, worker contracts, age verification, Code of Conduct, worker GRM and welfare inspections.
- Community engagement, disclosure, grievance registers, response evidence and anonymized referral records.
- Waste manifests, recycler licences, battery take-back certificates, spill records and environmental monitoring.
- Interconnection studies, switching schedules, energisation authorization, asset handover, outage and customer communication records.

13.3 Confidentiality and retention

Records shall be retained for the period required by law, financing agreements, warranties and company policy. Personal data shall be limited to what is necessary, stored securely and accessed only by authorized persons. SEA/SH and sensitive medical information shall be kept separately with enhanced access controls and shall not be disclosed without lawful basis and informed consent, except where child safeguarding or mandatory reporting applies.

13.4 Public disclosure

Promass shall disclose non-technical summaries, stakeholder information, relevant ESMP commitments, grievance channels and other documents required by REA or law in accessible locations and formats. Commercially sensitive, security-sensitive and personal information shall be protected.

14. ESMS IMPLEMENTATION BUDGET AND SCHEDULE

14.1 Budget principles

E&S controls are project costs and shall be included in design, tender, contract, operation and decommissioning budgets. The Project Director shall not approve mobilisation where critical E&S measures are unfunded. Budget lines shall be updated after screening and each design stage.

Budget line	Typical contents	Amount / status
E&S staffing and specialist studies	E&S Manager, HSE personnel, CLO, specialist consultants, baseline surveys and reviews.	To be costed
Permits and disclosure	Applications, consultations, disclosure materials, translation and public notices.	To be costed
Land and livelihood measures	Survey, legal documentation, compensation, livelihood restoration, monitoring and independent verification.	Contingent
OHS and emergency readiness	PPE, training, PTW/LOTO equipment, first aid, rescue, fire detection/ suppression, drills and medical arrangements.	To be costed
Environmental controls	Drainage, erosion control, dust/noise, spill kits, waste storage, transport, recycling and restoration.	To be costed
Stakeholder and GRM	CLO logistics, meetings, accessible channels, grievance database, feedback and vulnerable-group engagement.	To be costed
SEA/SH and GBV prevention/response	Training, confidential channels, mapping and agreements with referral service providers.	To be costed
Monitoring, audit and reporting	Inspections, instruments, laboratory tests if required, audits, reporting and corrective actions.	To be costed
Decommissioning and end-of-life	Battery/e-waste take-back, dismantling, transport, recycling, site restoration and closure engagement.	Fund / provision
E&S contingency	Unforeseen mitigation and emergency corrective action.	Project contingency

14.2 Implementation schedule

Stage	Required ESMS action
Before site commitment	Exclusion screening, land and stakeholder due diligence, preliminary risk rating, alternatives.
Before detailed design	Required studies, permits strategy, SEP, interconnection interface and preliminary ESMP.
Before tender	Approved ESHS specifications, costed mitigation, contractor selection criteria and Code of Conduct.
Before mobilisation	Permits, land access, C-ESMP, staff, GRMs, emergency arrangements, training and baseline records.
During construction	Daily controls, weekly inspections, monthly reports, consultations, grievances, incident management and audits.
Before energisation	Annex Q, joint DisCo authorization, test certificates, public notice, emergency drill and handover readiness.
During operation	O&M controls, electrical/public safety, service and grievance monitoring, waste and battery management, annual review.
Before decommissioning	Closure plan, consultation, waste routes, land restoration, worker transition and financial provision.

ANNEX A: PROJECT INFORMATION AND ESMS COMMITMENT SHEET

Project field	Approved information
Project name	[Insert approved project name]
DARES window / reference	[Insert]
State, LGA and community/communities	[Insert]
Coordinates and site area	[Insert]
Installed generation capacity	[Insert kWp / MWp]
BESS chemistry and capacity	[Insert technology and kWh/MWh]
Backup generation, if any	[Insert type and capacity / Not applicable]
Distribution Company	[Insert DisCo]
Point of Common Coupling / feeder	[Insert]
Existing network works	[Describe rehabilitation, line extension, transformers, metering and customer transition]
Estimated customers / critical users	[Insert]
Land acquisition method and status	[Lease / purchase / VLD / government allocation; attach evidence]
Project E&S risk rating	[Insert REA/DARES rating and date]
Required instruments	[ESIA / ESMP / SEP / LMP / RAP / LRP / biodiversity / security / other]
Key permits and status	[Insert permit register reference]
Construction period and peak workforce	[Insert]
E&S Manager and contacts	[Insert]
HSE Manager / Site HSE Officer and contacts	[Insert]
Community Liaison Officer and contacts	[Insert]
SEA/SH and GBV focal person / service contact	[Insert confidential contact arrangement]
Community GRM phone/email/address	[Insert]
Worker GRM phone/email	[Insert]
Nearest health facility / emergency contacts	[Insert]

Management commitment

Promass Engineering Services Limited commits to implementing this ESMS and all approved project-specific E&S instruments; providing competent staff and budget; reporting serious incidents and material changes; cooperating with REA/DARES monitoring; and taking corrective action where performance does not meet requirements.

Dr Sani Mohammed Bida		
MD/CEO signature	Date	Company stamp

ANNEX B: INITIAL E&S SCREENING CHECKLIST

Complete before site commitment and update after route/design changes. Mark Yes, No or Unknown and provide evidence. Any Yes or Unknown response requires an action, responsible person and due date.

No.	Screening question	Y/N/Unknown	Evidence / required action
1	Is any component inconsistent with the DARES/REA exclusion list in Annex C?		
2	Is the site or route within or near a protected area, critical habitat, wetland, forest reserve, key biodiversity area or important migratory route?		
3	Could the project cause significant conversion or degradation of natural habitat or removal of mature/important trees?		
4	Is the site flood-prone, erosion-prone, unstable, affected by wildfire or exposed to severe climate hazards?		
5	Are there known archaeological, burial, sacred, religious, historic or cultural heritage resources?		
6	Will land be acquired, leased, donated or temporarily occupied? Are there competing claims, tenants, users, encroachers or communal rights?		
7	Could any household, business, farm, grazing route or resource user be physically or economically displaced or lose access?		
8	Would VLD affect more than 10% of a donor's productive assets, require relocation, involve pressure or lack genuine refusal rights?		
9	Will the project require new access roads, borrow areas, camps, storage sites or disposal areas?		
10	Will construction generate significant noise, dust, vibration, spoil, wastewater, hazardous waste or traffic?		
11	Will batteries, oils, fuels, chemicals, transformer materials or e-waste be stored, transported or disposed?		
12	Are licensed recyclers, transporters and disposal facilities available and documented?		
13	Could water abstraction, drainage or discharge affect community water sources, farms or downstream users?		
14	Will trenches, pole erection, lifting, work at height, hot work, confined spaces or blasting be required?		
15	Does the existing network contain unsafe, damaged, unlabelled or unauthorized connections?		
16	Could interconnection create back-feed, arc-flash, earthing, protection, power-quality or switching risks?		
17	Will customer service be interrupted, transferred or re-metered? Are critical users dependent on continuous power?		
18	Is asset ownership or operational responsibility between Promass and the DisCo unclear?		
19	Will significant numbers of non-local workers be recruited or accommodated in/near the community?		
20	Are there known labour disputes, discrimination risks, child labour, forced labour or supply-chain concerns?		
21	Could labour influx, security personnel or project benefits increase SEA/SH, GBV, VAC, trafficking, conflict or exploitation risks?		
22	Are women, persons with disabilities, low-income households, tenants, youth or other vulnerable groups likely to face disproportionate impacts or barriers to benefits?		
23	Could project traffic affect schools, markets, clinics, pedestrians, livestock or narrow community roads?		
24	Could fencing, lines or facilities restrict access to farms, homes, water points, paths or community resources?		
25	Are there existing grievances, unresolved land issues or stakeholder opposition?		
26	Will security personnel be used, and is there risk of excessive force, intimidation or community conflict?		
27	Are emergency services, medical support, fire response and GBV referral services available and accessible?		
28	Could decommissioning or end-of-life batteries/equipment create significant waste, safety or land-restoration risks?		

No.	Screening question	Y/N/Unknown	Evidence / required action
29	Are all required environmental, planning, land, NERC/REA, DisCo, road, fire and labour approvals known?		
30	Has the project design or schedule changed in a way that could increase E&S risk?		

Screening conclusion

Item	Conclusion
Preliminary risk tier	[Tier 1 / Tier 2 / Tier 3]
Exclusion issue	[None / describe and refer]
Required instruments	[List]
Required permits / approvals	[List]
Required specialist support	[List]
Decision	[Proceed / proceed with conditions / hold / reject]
Prepared / reviewed / date	[Insert names, signatures and date]

ANNEX C: ENVIRONMENTAL AND SOCIAL EXCLUSION LIST

Promass shall not undertake or contract project activities involving the following, unless the applicable DARES/REA exclusion list expressly permits the activity and written clearance is obtained:

- Forced labour, trafficked labour, debt bondage or any work extracted under threat or penalty.
- Child labour or employment of persons under 18 in hazardous project work.
- Illegal production, storage, transport, trade or disposal of hazardous substances or waste, including cross-border waste movements not compliant with applicable law and the Basel Convention.
- Sites that do not comply with applicable environmental, social, planning, land or electricity-sector laws and approvals.
- Sites within legally protected areas, internationally recognized biodiversity areas or critical habitat where the project is prohibited or would cause significant adverse impact.
- Significant conversion or degradation of natural habitat without acceptable alternatives and approvals.
- Sites subject to illegal forced eviction, unresolved involuntary displacement or uncompensated removal undertaken in anticipation of the project.
- Activities causing significant adverse impact on critical cultural heritage or requiring its destruction or relocation.
- Land acquisition involving physical displacement or significant economic displacement without an approved RAP/LRP and full implementation before impact.
- Use of VLD where consent is not informed and voluntary, refusal is not realistic, relocation is required, productive assets are materially affected or ownership/users are disputed.
- Uncontrolled disposal, open burning or informal dismantling of batteries, electronic waste, transformer oil or other hazardous materials.
- Unapproved energisation, live electrical work without lawful authorization and competent controls, or interconnection without required DisCo/NERC/REA approvals.
- Project arrangements that discriminate unlawfully, exclude eligible vulnerable groups or create unavoidable severe community health and safety risk.
- Activities involving weapons, excessive force or security practices inconsistent with law, proportionality and the Code of Conduct.

Decision rule: where an exclusion risk is suspected, no land, procurement, construction or energisation commitment shall be made until the E&S Manager documents the review and obtains all required written clearances.

ANNEX D: GENERIC ESMP AND RISK REGISTER

The table below is a minimum generic ESMP. It shall be expanded with site-specific impacts, locations, standards, quantities, responsibilities, budget and monitoring methods. Controls must be incorporated into design, contracts and approved work methods.

Phase	Aspect	Risk / impact	Mitigation	Indicator	Responsibility / frequency
Planning	Site selection / habitat	Sensitive habitat, vegetation loss, ecosystem services.	Avoid protected/critical habitat; minimize footprint; mark no-go areas; seasonal restrictions; restore native vegetation.	Approved siting; clearance area; restoration survival.	E&S Manager / design; pre-construction and monthly.
Planning	Land and livelihoods	Disputes, access restrictions, crop/business loss, displacement.	Due diligence; consultation; lease/purchase preferred; VLD safeguards; RAP/LRP and compensation before impact.	Land files; compensation completion; grievances.	Social Lead; before access and monthly.
Design	Flood and drainage	Equipment damage, transferred flood risk, erosion.	Flood assessment; elevate critical equipment; sized drains; safe outfall; erosion protection.	Design review; drainage inspection after rain.	Engineer / E&S Manager.
Design	Interconnection / protection	Back-feed, arc flash, poor selectivity, public or worker electrocution.	Approved studies; defined boundaries; protection settings; earthing; anti-islanding; labels and interlocks.	Study approvals; test certificates; trip records.	Electrical/DisCo Coordinator.
Procurement	Supply-chain labour	Forced labour, child labour, unsafe manufacturing.	Supplier declarations and due diligence; contractual prohibition; traceability and audit rights where proportionate.	Supplier screening and contract clauses.	Procurement / E&S Manager.
Construction	Vegetation clearing	Unnecessary clearance, firewood collection, invasive species.	Demarcate footprint; prohibit off-site cutting/ hunting; topsoil management; restoration.	Weekly cleared-area inspection.	Contractor / HSE Officer.
Construction	Earthworks and erosion	Sediment, unstable slopes, blocked drainage.	Phase works; protect stockpiles; silt controls; reinstate; avoid heavy rain.	Weekly and post-rain inspection.	Contractor / HSE Officer.
Construction	Dust/noise/ vibration	Nuisance, respiratory risk, damage complaints.	Watering; cover loads; equipment maintenance; daytime work; notify receptors; monitor complaints.	Observations, complaints, measurements if needed.	Contractor; daily/weekly.
Construction	Traffic and transport	Collisions, pedestrian/ livestock risk, road damage.	Traffic plan; licensed drivers; speed limits; spotters; route/time controls; repair damage.	Vehicle checks; incidents; complaints.	Logistics Lead / HSE.
Construction	Excavations / trenches	Collapse, falls, service strike, community injury.	Permit; utility clearance; shoring/battering; barriers; access; inspections; prompt backfill.	Daily excavation register.	Site Engineer / HSE.
Construction	Pole erection / lifting	Dropped load, overturning, contact with lines.	Lift plan; certified equipment; competent team; exclusion zone; ground assessment; isolation.	Lift permits; equipment certificates.	Lifting Supervisor.
Construction	Work at height	Falls and dropped objects.	Collective protection; certified platforms; inspected harness; rescue plan; exclusion zone.	Daily equipment inspection; PTW.	Supervisor / HSE.
Construction	Electrical installation	Shock, arc flash, stored energy.	LOTO; test-before-touch; insulated tools; authorized persons; temporary earths; PPE; rescue.	PTW/LOTO audits; incidents.	Authorized Electrical Person.
Construction	Waste	Litter, illegal dumping, hazardous exposure.	Segregated labelled storage; authorized vendors; manifests; no burning/burying.	Waste register; site cleanliness.	Environmental Officer; weekly.
Construction	Fuel/oil/chemicals	Spill, soil/water contamination, fire.	Contained storage; SDS; spill kits; trained refuelling; inspections; emergency response.	Storage inspection; spill volume/closure.	HSE Officer; daily/weekly.
Construction	Worker welfare	Poor sanitation, disease, conflict, exploitation.	Potable water; toilets; handwashing; rest; accommodation standards; medical and worker GRM.	Welfare inspection; grievances.	HR / Contractor; weekly.
Construction	SEA/SH, GBV, VAC	Exploitation, harassment, abuse, retaliation.	Code of Conduct; training; confidential channels; referral pathway; sanctions; no child labour.	Training/CoC coverage; anonymized referrals.	GBV Focal Person; monthly.
Construction	Community safety	Unauthorized entry, injury, damaged access, nuisance.	Fencing; signs; barriers; community notice; safe reinstatement; GRM.	Inspection and complaints.	CLO / HSE; ongoing.

Phase	Aspect	Risk / impact	Mitigation	Indicator	Responsibility / frequency
Construction	Cultural heritage	Damage to undiscovered heritage.	Worker awareness; chance finds procedure; stop work and authority notification.	Chance finds log.	E&S Manager; during excavation.
Commissioning	Outages / changeover	Service interruption to homes, clinics, water and businesses.	Joint outage plan; critical-user assessment; advance notice; contingency; restoration confirmation.	Notice records; outage duration; complaints.	DisCo Interface / CLO.
Commissioning	Energisation	Electrocution, fire, equipment damage, public exposure.	Annex Q; joint authorization; test results; clearances; barriers; emergency drill; public notice.	Signed checklist; test certificates.	Project Director / DisCo.
Operation	BESS operation	Thermal runaway, toxic smoke, leak, degraded cells.	BMS alarms; temperature control; separation; fire detection/suppression; inspections; quarantine.	Alarm/trip logs; inspections; incidents.	O&M Manager; continuous/ monthly.
Operation	Power quality / protection	Voltage/frequency problems, nuisance trips, appliance damage.	Monitor quality; maintain settings; investigate complaints; coordinate with DisCo.	Power-quality and trip records.	O&M / DisCo Interface.
Operation	Vegetation management	Fire, access, biodiversity impact, herbicide exposure.	Manual/mechanical control; fire breaks; approved herbicide only; habitat-sensitive timing.	Vegetation and fire inspection.	O&M / Environmental Officer.
Operation	Security	Theft, conflict, excessive force.	Risk-based security; training; access control; incident and grievance reporting; proportionate conduct.	Security incidents/ complaints.	Security Lead / CLO.
Operation	Customer service	Exclusion, billing/tariff disputes, unsafe connections.	Transparent connection/tariff information; safe wiring interface; complaint resolution; vulnerable-user support.	Connections, complaints, resolution time.	Commercial Lead / CLO.
Maintenance	Electrical maintenance	Shock, arc flash, unplanned outage.	O&M PTW/LOTO; switching coordination; competent persons; customer notice.	Permits; outage record; incidents.	O&M Manager.
Maintenance	Battery replacement / e-waste	Fire, spill, transport and informal recycling.	Safe removal; quarantine; compliant transport; licensed recycler/take-back; certificates.	Quantity and certificate reconciliation.	O&M / Environmental Officer.
Decommissioning	Dismantling and waste	Injury, hazardous waste, abandoned assets.	Approved plan; isolation; lifting controls; inventory; take-back/recycling; waste manifests.	Closure audit; certificates.	Project Director / E&S Manager.
Decommissioning	Land restoration	Erosion, contamination, unresolved access or livelihood issues.	Remove foundations where agreed; clean contamination; restore drainage/topsoil; consult landholders; close grievances.	Restoration sign-off and stakeholder feedback.	E&S Manager / Landholder.

ANNEX E: STAKEHOLDER ENGAGEMENT PLAN TEMPLATE

Stakeholder	Key interests / risks	Method	Timing
REA / DARES	Compliance, milestones, incidents, monitoring.	Formal submissions, meetings, site visits.	As required / monthly or quarterly.
DisCo and NERC interfaces	Interconnection, ownership, switching, tariffs, metering, outages.	Technical workshops, written approvals, joint inspections.	Design through operation.
Traditional/community leadership	Site, land, jobs, safety, benefits, grievances.	Meetings, letters, site walkovers.	Before commitment and monthly.
Affected landowners/users	Rights, alternatives, compensation, access, restoration.	Individual consultation, surveys, written agreements.	Before access; ongoing until closure.
Women and women-led groups	Safety, information/jobs/energy access, SEA/SH risks.	Separate safe consultations, female facilitators.	Each major phase.
Youth and jobseekers	Recruitment process, conduct, training and expectations.	Public notices, meetings, skills registration.	Before and during recruitment.
Persons with disabilities / vulnerable households	Accessibility, affordability, safety and service continuity.	Targeted visits and accessible formats.	Design and operation.
Businesses and productive users	Outages, connections, power quality, tariffs and growth.	Workshops, notices, surveys.	Before changeover and operation.
Critical services	Continuity, backup arrangements, safety.	Direct coordination and outage plans.	Before any planned outage.
Workers and contractors	Terms, OHS, worker GRM, Code of Conduct.	Induction, toolbox talks, committees.	Before work and ongoing.
Authorities and emergency services	Permits, roads, waste, fire, health and security.	Formal engagement, inspections, drills.	As required.
Civil society / referral services	GBV support, vulnerable groups, community feedback.	Confidential coordination and referral agreements.	Before mobilisation and review.

Engagement record

Date / place	Stakeholder group	Female / male / vulnerable participation	Issues and commitments	Owner / due date / status

ANNEX F: COMMUNITY GRIEVANCE REDRESS MECHANISM

F.1 Channels

- Telephone / SMS / WhatsApp: [insert approved number].
- Email: [insert project grievance email].
- Verbal or written report to the Community Liaison Officer or trained community focal person.
- Secure suggestion / grievance box at [insert accessible locations].
- Letter or visit to the project office at [insert address].
- Confidential SEA/SH and GBV channel: [insert separate focal person/service contact].

F.2 Process and target timelines

Step	Action	Target
1. Receive and make safe	Record the grievance; take immediate action for safety, environmental emergency or service-critical issue.	Same day
2. Acknowledge	Confirm receipt and explain process, confidentiality and expected next step.	Within 2 working days
3. Screen and assign	Classify subject and severity; refer SEA/SH confidentially; assign owner and target date.	Within 5 working days
4. Assess / consult	Review evidence, consult relevant parties and identify options without retaliation.	Normally within 10 working days
5. Respond and agree action	Provide clear proposed resolution, responsible person and completion date.	Normally within 15 working days
6. Implement and verify	Complete action, obtain complainant feedback where possible and retain evidence.	As agreed
7. Appeal / close	Offer review where dissatisfied; close only after decision and documentation.	Within 10 working days of appeal

F.3 Community grievance form

Field	Record
Case number / date received	
Name and contact (optional)	
Preferred language / response method	
Location / project activity	
Grievance description	
Immediate safety or confidentiality concern	
Consent to share information and limits	
Assigned owner / classification	
Action and due date	
Outcome / complainant feedback	
Appeal / closure date	

ANNEX G: WORKER GRIEVANCE MECHANISM

The Worker Grievance Mechanism is separate from the community GRM and is available to direct workers, contracted workers, casual workers, apprentices and eligible job applicants. It covers recruitment, contracts, wages, hours, leave, welfare, discrimination, harassment, disciplinary action, termination, accommodation, occupational health and safety, and conduct by supervisors or co-workers.

> **Access and non-retaliation:** A worker may raise a concern anonymously, may bypass a supervisor who is the subject of a complaint, and may seek external legal or administrative remedies at any time. Retaliation, intimidation, loss of shifts or other adverse treatment for good-faith reporting is prohibited.

G.1 Channels and procedure

Element	Requirement
Channels	Line manager; Human Resources; E&S/OHS Officer; worker representative; confidential telephone/email; sealed box; or direct escalation to the Project Manager/MD.
Acknowledgement	Within 2 working days, except an emergency which requires immediate action.
Assessment	Classify the issue, identify any urgent safety or protection need, assign an impartial case owner and agree a target response date.
Resolution	Normally within 15 working days. Complex cases may require more time, but the worker shall receive a progress update and revised date.
Appeal	Review by a manager not involved in the original decision, normally within 10 working days.
SEA/SH	Do not investigate through the ordinary grievance process. Obtain only minimum information, protect confidentiality and refer immediately to the designated survivor-centred channel.
Records	Maintain a coded register, action evidence and closure status. Personnel and medical information shall be restricted to authorised persons.
Contractor oversight	Contractors shall operate a compliant worker GRM and report anonymised trends and overdue actions to PROMASS.

G.2 Worker grievance register

Case no.	Date	Category	Anonymous?	Owner	Due date	Action / outcome	Status / closure

ANNEX H: LABOUR MANAGEMENT AND WORKER PROTECTION

H.1 Minimum labour requirements

Topic	Minimum control	Evidence
Recruitment	Transparent recruitment; no recruitment fees charged to workers; local recruitment for suitable unskilled roles without excluding qualified applicants.	Vacancy notice, applicant list, selection record.
Written terms	Terms understood by the worker before mobilisation, including job, wages, hours, overtime, leave, benefits, deductions, grievance channel and termination conditions.	Signed contract and induction record.
Minimum age	Verify age before engagement. No person under 18 shall perform hazardous work, electrical work, work at height, night work, heavy lifting, plant operation, confined-space work or chemical/battery handling.	Age verification register; task risk assessment.
Forced labour	No debt bondage, retention of identity documents, restriction of movement, threats, coercion or involuntary overtime.	Worker interviews, payroll and document checks.
Fair treatment	No discrimination in recruitment, pay, training, promotion or termination. Equal pay for work of equal value and reasonable accommodation for persons with disabilities.	Payroll review, workforce statistics, grievance trends.
Worker organisations	Respect lawful freedom of association and collective representation. No retaliation for participation.	Consultation minutes; worker representative records.
Working time and pay	Comply with applicable law and contract; accurate timekeeping; timely wages; authorised deductions only; adequate rest and fatigue controls.	Timesheets, payslips, payroll reconciliation.
Welfare and sanitation	Potable water; clean sex-separated toilets and changing areas; handwashing; shaded rest areas; first aid; safe food arrangements where provided.	Inspection checklist and photographs.
Accommodation	Avoid labour camps where practicable. Any accommodation shall be safe, sanitary, secure, uncrowded and managed without unreasonable restriction of movement.	Accommodation inspection and occupancy register.
OHS	Competence, induction, task risk assessment, permit to work, PPE, supervision, emergency preparedness, incident reporting and medical response.	Training, permits, inspections and incident records.
Code of Conduct	All workers and managers sign and receive training on the approved DARES Interconnected Mini-grid Code of Conduct before site access.	Signed forms and training attendance.
Termination and demobilisation	Document reasons, settle lawful entitlements, return personal documents, provide safe demobilisation and keep access to the worker GRM.	Exit checklist and final payment evidence.

H.2 Workforce records

Record	Owner	Frequency / retention	Verification
Worker master list, age and employer	HR / contractor	Current; retain for project and legal period	Monthly
Contracts, payroll, timesheets and deductions	HR / Finance	Monthly	Quarterly sample
Induction, competence and Code of Conduct	HSE / HR	Before access; refresher as scheduled	Monthly
Worker grievances and disciplinary actions	HR / E&S	Continuous; confidential	Monthly trend review
Injuries, health surveillance and return to work	OHS / medical provider	Continuous; restricted access	Monthly

ANNEX I: SEA/SH AND GBV PREVENTION AND RESPONSE ACTION PLAN

Survivor-centred handling: Safety, confidentiality, informed consent, dignity, non-discrimination and access to services take priority. The GRM shall not investigate the allegation, mediate between survivor and alleged perpetrator, or request unnecessary details.

Action area	Required measures	Responsible person	Timing / evidence
Context risk assessment	Assess labour influx, security presence, transport routes, isolated work areas, customer connection activities, power imbalances and risks to women, girls, children and persons with disabilities.	Social Specialist / GBV Focal Point	Before mobilisation; update after major change.
Referral pathway	Map qualified medical, psychosocial, legal, shelter, child-protection and security services; verify hours, eligibility, cost and safe referral protocol.	GBV Focal Point	Before works; verify quarterly.
Code of Conduct	Sign, explain in understood language and enforce prohibitions on SEA, SH, GBV, VAC, transactional sex, grooming, retaliation and abuse of power.	HR / contractor managers	Before site access; records retained.
Training	Induction and refreshers for workers, supervisors, security personnel and GRM staff on prohibited conduct, safe reporting and bystander responsibilities.	GBV Focal Point / HSE	Induction and at least quarterly.
Community awareness	Explain expected conduct, confidential reporting options, available services and non-retaliation in appropriate languages and accessible formats.	Community Liaison Officer	Before mobilisation and periodically.
Safe workplace	Provide lighting, sex-separated sanitation, safe transport arrangements, controlled access, buddy systems for isolated tasks and appropriate supervision.	Project Manager / HSE	Continuous; inspection evidence.
Report receipt	Listen without judgement; obtain minimum information; assess immediate safety; explain choices; obtain informed consent before referral except where mandatory child-safeguarding duties apply.	Trained GBV Focal Point	Immediately and confidentially.
Employer action	Apply fair, confidential employment procedures to alleged misconduct; protect reporter and witnesses; avoid action that increases risk to the survivor.	MD/CEO / HR / legal adviser	Promptly; restricted case record.
Reporting to REA	Submit only non-identifying information through the required serious-incident channel and within the applicable DARES timeframe.	Project Manager / E&S Manager	Per current DARES requirements.
Monitoring	Track training coverage, signed Codes, functionality of channels, referral verification and anonymised case status - never publish identifying details.	E&S Manager	Monthly / quarterly.

I.1 Confidential referral contact sheet

Service	Provider / focal person	Telephone / address	Availability / referral conditions	Date verified
Medical / clinical management				
Psychosocial support				
Legal assistance				
Child protection				
Safe shelter / protection				
Emergency security / police				

ANNEX J: EMERGENCY PREPAREDNESS AND RESPONSE

A site-specific Emergency Response Plan shall be approved before mobilisation and updated before first energisation, major testing, operation and any material change. It shall align with the DisCo interface and define incident command, communication, muster points, shutdown authority, external responders, community warning and recovery.

Scenario	Immediate controls	Preparedness requirements
Electric shock / arc flash	Do not touch until source is isolated; emergency shutdown; trained rescue using rated equipment; first aid/CPR; emergency medical response; preserve scene.	LOTO, arc-flash boundaries, rescue hook, insulated tools, competent switching persons, CPR training and emergency contacts.
BESS fire / thermal runaway	Raise alarm, evacuate and isolate area, follow manufacturer emergency guidance, prevent unauthorised entry, notify fire service and DisCo/REA as applicable, monitor re-ignition.	Battery-specific response plan, detection/alarm, ventilation, separation, emergency isolation, SDS, firefighting strategy agreed with competent fire adviser.
Transformer / fuel fire	Trip and isolate where safe; raise alarm; evacuate; use suitable extinguisher only by trained persons; contain contaminated runoff where safe.	Fire load review, oil containment, extinguishers, clear access, fire-water/runoff plan and drills.
Chemical or oil spill	Stop source if safe; protect drains and soil; use spill kit; collect contaminated materials; report and arrange licensed disposal.	Secondary containment, labelled storage, SDS, spill kits, trained responders and waste contractor.
Serious injury / illness	Make area safe; first aid; call ambulance/medical provider; arrange transport; notify management; preserve evidence.	Trained first aiders, stocked kits, clinic agreement, rescue plan for height/confined space and emergency transport.
Road traffic accident	Protect scene, call emergency services, give first aid, manage traffic without creating further risk, notify company and authorities.	Journey management, driver competence, vehicle checks, speed controls, emergency numbers and incident kit.
Flood / severe weather	Stop work; isolate electrical equipment; move people and hazardous materials to safe area; prevent entry into floodwater; inspect before restart.	Weather monitoring, drainage, elevated equipment, evacuation routes, lightning protocol and restart inspection.
Security threat / civil disturbance	Follow security plan; avoid confrontation; account for workers; communicate verified instructions; suspend movement/works where necessary.	Context assessment, unarmed approach where practicable, security Code of Conduct, communications tree and hibernation/evacuation plan.
Community incident / public contact	Make safe, provide first aid, notify community focal point and authorities, preserve dignity and evidence, communicate factually.	Site fencing, warning signs, public awareness, emergency contact display, traffic marshals and community notification protocol.

J.1 Emergency contacts and resources

Role / service	Name / organisation	Primary contact	Alternate contact	Last verified
Incident Commander				
DisCo control / switching authority				
Ambulance / nearest capable clinic				
Fire service				
Police / security				
REA / DARES E&S contact				
Environmental regulator				
Community emergency focal point				

J.2 Drill record

Date	Scenario	Participants	Response time	Observations	Corrective actions / due date

ANNEX K: CHANCE FINDS PROCEDURE

This procedure applies whenever excavation, pole planting, trenching, access-road work or site preparation reveals an object, structure, burial, fossil, sacred feature or other material that may have archaeological, historical, paleontological, religious or cultural significance.

1. **Stop work immediately** within the affected area. Do not remove, clean, photograph publicly or disturb the find.
2. **Protect the location** with a safe exclusion zone and prevent access, theft, weather damage or further excavation.
3. **Notify** the Site Supervisor and E&S Officer immediately. The E&S Officer informs the Project Manager, community/ traditional representatives where appropriate, and the competent government cultural-heritage authority.
4. **Record minimum facts**: date, location, activity, general description and protective action. Do not disclose sensitive location data beyond authorised persons.
5. **Obtain competent assessment** and written direction from the relevant authority or qualified specialist. Human remains shall be handled only under applicable law and official instruction.
6. **Implement the approved action**, which may include preservation in place, controlled recovery, redesign, monitoring or permanent avoidance.
7. **Restart only after written clearance** from the authorised Project Manager and competent authority. Brief workers on any revised controls.

> **Community respect:** Cultural heritage may be important even if it is not legally designated. Consult custodians in a respectful and confidential manner and avoid commercial use of cultural knowledge without consent.

K.1 Chance find register

Case no. / date	Location / activity	General description	Immediate protection	Authority / custodian notified	Decision / clearance	Close date

ANNEX L: INCIDENT CLASSIFICATION, NOTIFICATION AND INVESTIGATION

L.1 Classification and notification

Level	Examples	Minimum response
Level 1 - serious / significant	Fatality; life-threatening or disabling injury; electric shock or arc-flash event; BESS thermal runaway/fire; major fire, explosion or pollution; community fatality or serious injury; violent security incident or use of force; credible SEA/SH allegation; child safeguarding event; significant land conflict/displacement; major damage to cultural heritage; or any event likely to attract regulator/media attention.	Emergency response and immediate internal escalation. Notify REA/ DARES and other required authorities within the applicable financing/legal timeframe; PROMASS internal target is as soon as practicable and not later than 48 hours unless a shorter requirement applies. Preserve confidentiality and submit follow-up investigation.
Level 2 - recordable / moderate	Lost-time or medical-treatment injury; significant near miss; contained spill; material property damage; repeated non-compliance; serious grievance; outage or protection incident with limited impact; contractor breach requiring formal corrective action.	Report internally within 24 hours; make safe; investigate proportionately; assign corrective action; include in periodic report and notify external parties where required.
Level 3 - minor / near miss	First-aid case, minor spill, unsafe act/condition, minor complaint, equipment damage without injury, near miss with low actual consequence.	Record the same day, correct immediate cause, review trends and escalate if repeated or potentially high consequence.

Important: Notification timeframes and categories shall be confirmed against the current DARES legal agreements, REA guidance, permits and applicable law before mobilisation. Personal data and survivor-identifying information shall not be included in routine incident reports.

L.2 Initial incident report

Field	Record
Incident number / level	
Date, time and precise location	
Activity and parties involved	
Factual description - no speculation	
Injury, environmental, community, asset or service impact	
Immediate response and current status	
Emergency services / authorities notified	
REA / DisCo / lender notification and time	

L.3 Investigation and corrective action

- Appoint a competent, impartial team; secure evidence and protect personal or survivor information.
- Identify immediate, underlying and organisational causes - not only worker error.
- Apply the hierarchy of controls; assign owners, due dates and objective closure evidence.
- Verify effectiveness and share lessons. Use specialist survivor-centred procedures for SEA/SH.

Finding / root cause	Corrective or preventive action	Owner	Due date	Evidence / effectiveness check	Status

ANNEX M: MONTHLY E&S MONITORING AND REPORTING TEMPLATE

M.1 Project and reporting information

Project / location		**Reporting month**	
Construction / operation status		**Workforce total (F/M/PWD/ local)**	
Contractors active		**Report prepared / approved**	
Key activities this month			
Planned activities next month			

M.2 Performance dashboard

Indicator	This month	Cumulative	Target / threshold	Comment / action
Hours worked				
Fatalities / lost-time injuries / medical-treatment cases / first aid			Zero fatalities	
High-potential near misses / electrical incidents			Zero uncontrolled exposure	
Environmental incidents / spills / uncontrolled discharge			Zero significant releases	
Waste generated / recycled / hazardous waste transferred			Licensed handling and full traceability	
Community grievances received / closed / overdue			No overdue cases without agreed extension	
Worker grievances received / closed / overdue			No retaliation	
Stakeholder engagements and female/vulnerable participation			Per approved SEP	
Workers inducted / Code of Conduct signed / refresher trained			100% before access	
Inspections / audits completed and actions overdue			Zero critical overdue actions	
Local employment and procurement			Project target	
Unplanned outages / public electrical-safety events			Zero serious public events	

M.3 Narrative summary

E&S achievements	
Significant risks, incidents or non-compliance	
Stakeholder concerns and commitments	
Land, livelihood and vulnerable-person issues	
Interconnection / energisation E&S issues	
Management support / decisions required	

M.4 Corrective action register

Ref.	Source / finding	Risk	Required action	Owner	Due date	Status / evidence

ANNEX N: CONTRACTOR ESHS REQUIREMENTS AND SCORECARD

N.1 Contract requirements

Requirement	Contractor obligation
Prequalification	Provide ESHS policy, competent personnel, legal compliance record, incident statistics, relevant experience and evidence of resources before award.
Project plans	Submit contractor ESMP/C-ESMP, OHS plan, waste plan, traffic plan, emergency plan, labour plan, security arrangements and method statements for approval before mobilisation.
Personnel	Appoint competent site management and ESHS staff with authority to stop unsafe work; notify PROMASS before replacement.
Workers	Verify age and competence; issue written terms; provide induction, signed Code of Conduct, welfare, PPE and worker GRM; prohibit child and forced labour.
High-risk work	Use task risk assessment and permit-to-work controls for electrical work, energisation, LOTO, work at height, lifting, excavation, hot work, confined space and other identified hazards.
Community protection	Control access, traffic, dust, noise, open trenches, poles/conductors, public information, customer connection work and reinstatement.
Environmental controls	Minimise clearing and erosion; manage drainage, spills, fuel, water, wastewater, waste, batteries/e-waste and hazardous materials; use licensed handlers.
Land and heritage	Work only within approved footprint and access routes; no unauthorised land take; implement chance-finds procedure and livelihood commitments.
SEA/SH and GBV	Implement the project action plan, confidential reporting and non-retaliation; cooperate with lawful employer procedures without compromising survivor confidentiality.
Incidents and reporting	Report immediately according to Annex L; provide monthly ESHS data; investigate and close corrective actions.
Subcontractors	Flow all requirements to subcontractors and suppliers; remain fully accountable for their performance.
Enforcement	PROMASS may issue stop-work instructions, require removal of personnel, withhold certification/ payment for uncorrected material breach, or terminate in accordance with contract.

N.2 Monthly contractor scorecard

Area	Weight	Score (0-5)	Weighted result	Evidence / finding	Action
Leadership, staffing and legal compliance	10%				
Risk assessment, PTW, LOTO and high-risk work	20%				
Worker conditions, competence and welfare	15%				
Community safety, traffic and engagement	15%				
Pollution prevention, waste and reinstatement	15%				
Electrical / interconnection / energisation controls	15%				
Incident, grievance and corrective-action management	10%				
Total	**100%**				

Suggested interpretation: 4.0-5.0 satisfactory/good; 3.0-3.9 improvement required; below 3.0 formal recovery plan; any critical breach may trigger stop work regardless of total score.

ANNEX O: LAND ACCESS, VLD AND LIVELIHOOD SCREENING

O.1 Core land principles

- Avoid physical or economic displacement through site and route alternatives.
- Confirm ownership, customary rights, users, tenants, seasonal users, access routes and competing claims before commitment.
- No construction, storage, access or pole installation outside documented rights and approved footprint.
- No coercion, intimidation, forced eviction or retrospective regularisation of land already occupied for the project.
- Consult women, youth, tenants, vulnerable persons and livelihood users separately where needed; traditional approval alone does not extinguish individual rights.
- Where impacts cannot be avoided, prepare and implement the required RAP/LRP or other approved instrument before displacement or restriction occurs.
- Keep an accessible land grievance channel and monitor livelihood outcomes after implementation.

O.2 Voluntary Land Donation safeguards

Voluntary Land Donation (VLD) may be considered only where current DARES/REA requirements permit it and where the owner/user is fully informed, can refuse without retaliation, and receives independent confirmation of rights and consequences. The original PROMASS attachment referenced safeguards including a limit of no more than 10% of a donor's productive assets and benchmark land needs of 15 m²/kW for initial installation plus 7.5 m²/kW for future expansion, with lease or purchase for areas above 1,500 m². These figures shall be verified against the current DARES instruments before use.

VLD eligibility test	Yes / No / N.A.	Evidence / comment
Donation is permitted by the current DARES framework and applicable law.		
Donor is the legitimate owner/right-holder and all users/claimants are identified.		
Donor received complete information on land need, alternatives, impacts and right to refuse.		
Decision is free of pressure from project staff, authorities, leaders or family members.		
Donation does not cause physical displacement, significant livelihood loss or disproportionate harm.		
Remaining land and access are sufficient for household and livelihood needs.		
Women and other household members with rights or use interests consent separately where relevant.		
Independent witness/verification and signed record are available in a language understood.		
Boundary survey, photographs, coordinates and grievance channels are documented.		
No work begins until review and written approval are complete.		

O.3 Land and livelihood screening form

Parcel / route / asset reference	
Location, coordinates, survey plan and total area	
Legal owner, customary owner, users, tenants and competing claims	
Current use, crops, structures, trees, seasonal use and natural-resource access	
Proposed acquisition method and alternatives assessed	
Physical displacement?	Yes / No - details:
Economic displacement or temporary restriction?	Yes / No - details:
Women, vulnerable persons and gender-specific impacts	
Consultations, disclosures, consent and outstanding claims	
Valuation / compensation / livelihood-restoration requirement	
GRM cases and resolution status	
Required instrument and approval conditions	
Boundary marking, access and pre-entry evidence	
Prepared / reviewed / approved / date	

ANNEX P: BATTERY, E-WASTE AND HAZARDOUS-MATERIAL MANAGEMENT

This procedure covers batteries, PV modules, inverters, electronic controls, transformer oil, fuels, lubricants, cleaning chemicals, damaged equipment and contaminated absorbents throughout procurement, transport, storage, use, maintenance, return, recycling and disposal.

Lifecycle stage	Minimum controls	Records
Procurement	Approved manufacturers; technical and safety data; warranty and take-back obligations; restriction of hazardous substances where practicable; supplier environmental/OHS evidence; traceable serial numbers.	Approved supplier file, SDS, declarations, warranty/take-back agreement.
Transport	Use competent carriers; compliant packaging, separation and securing; protect terminals; inspect for damage; carry emergency information and spill/fire response equipment.	Waybill, inspection, transporter licence/competence, incident record.
Storage	Secure, dry, ventilated, weather-protected area; compatible segregation; secondary containment where needed; temperature control; no ignition sources; signage and restricted access.	Inventory, inspection log, temperature/alarm records.
Installation and use	Manufacturer requirements; competent electrical work; correct BMS settings; protection, earthing and isolation; thermal monitoring; emergency shutdown; fire strategy; no bypass of safety devices.	Commissioning tests, settings, as-built drawings, maintenance record.
Damaged / defective units	Isolate, label and quarantine; do not puncture, open or mix; assess thermal risk; follow manufacturer and dangerous-goods requirements; notify supplier and E&S/OHS team.	Defect report, quarantine register, return authorisation.
End of life / e-waste	Prioritise manufacturer take-back, reuse only after safe technical assessment, and recycling by authorised facilities. No open burning, informal dismantling, burial or disposal with general waste.	Waste transfer note, recycler authorisation, weight, serial/asset reconciliation and certificate.
Spills / releases	Stop and contain if safe; protect soil/drains; use compatible absorbent; collect as hazardous waste; report and investigate; remediate contaminated area.	Incident report, disposal manifest, remediation verification.

P.1 Hazardous-material and e-waste register

Date	Material / equipment	Quantity / serial	Condition / hazard	Storage location	Movement / receiver	Manifest / certificate

ANNEX Q: INTERCONNECTION, TESTING AND ENERGISATION E&S CHECKLIST

No plant, feeder, customer connection or point of common coupling shall be energised until technical, environmental, social and safety readiness has been jointly verified and the authorised switching/energisation instruction has been issued.

No.	Readiness requirement	Yes / No / N.A.	Evidence / reference / action
1	Required permits, approvals, interconnection agreement and DisCo interface responsibilities are current.		
2	Approved single-line diagrams, protection philosophy, settings, ownership boundary and switching authority are available.		
3	Construction is complete to approved design; punch-list items affecting safety are closed.		
4	Earthing, bonding, insulation resistance, polarity, phase sequence and protection tests are satisfactory.		
5	Anti-islanding, synchronisation, loss-of-mains and reconnection functions have been tested and witnessed where required.		
6	LOTO points, isolators, labels, danger signs and access controls are complete and understood.		
7	BESS commissioning, BMS alarms, ventilation/thermal monitoring, emergency isolation and fire controls are verified.		
8	Transformer, oil containment, fire separation and spill response arrangements are complete.		
9	Distribution poles, stays, conductors, clearances, crossings, trenches and reinstatement are safe for the public.		
10	Customer installations, metering and service connections have passed inspection; unsafe premises are not connected.		
11	Public and worker electrical-safety communication, outage notices and energisation warning have been issued in appropriate languages.		
12	Emergency plan, rescue equipment, first aid, fire response, muster points and contacts have been tested.		
13	Competent authorised persons, operators and DisCo representatives are present and communication channels tested.		
14	Open grievances, land commitments and community-safety issues that could be worsened by energisation are resolved or controlled.		
15	Environmental controls, waste removal, drainage and site housekeeping are satisfactory.		
16	As-built drawings, test certificates, operating procedures, maintenance plans and handover records are controlled.		

Q.1 Energisation authorisation

Role	Name	Organisation	Signature	Date / time
PROMASS Project Manager		PROMASS		
Authorised Electrical Person				
E&S / OHS clearance		PROMASS		
DisCo authorised representative				
Independent witness / engineer, where required				

Final instruction: Energisation shall proceed only under the approved switching programme. Any unexpected condition, test failure, unauthorised person, communication failure or loss of control requires stop, isolate, reassess and re-authorise.

ANNEX R: TRAINING AND COMPETENCE MATRIX

Training / competence	Target group	Before work?	Refresher / frequency	Evidence / assessor
Project E&S induction and ESMS awareness	All workers, visitors as applicable	Yes	On change / annually	Attendance and knowledge check
Code of Conduct; SEA/SH, GBV and VAC	All workers, managers, security	Yes	At least quarterly toolbox reinforcement	Signed Code and attendance
Community engagement and GRM	CLO, supervisors, customer teams	Yes	Six-monthly / on procedure change	Scenario assessment
Worker GRM and labour rights	Workers, HR, contractor managers	Yes	Annually / on change	Briefing record
General OHS, PPE and emergency response	All site workers	Yes	Toolbox talks and annual refresher	Attendance / observation
First aid and CPR	Designated first aiders / electrical teams	Yes	Per certification; drills	Valid certificate
Electrical authorisation, LOTO and arc-flash safety	Electrical workers and authorised persons	Yes	Annual and on system change	Competence assessment / authorisation
Protection, synchronisation and anti-islanding	Commissioning and operations engineers	Yes	On design or settings change	Test demonstration
BESS operation, alarms and emergency response	Operators, electrical and emergency teams	Yes	Six-monthly / manufacturer update	Practical drill
Work at height / rescue	Approved workers and rescuers	Yes	Per certification and drill schedule	Certificate / rescue drill
Lifting and rigging	Operators, riggers, banksmen	Yes	Per certification	Licence / assessment
Excavation, trench and underground services	Supervisors and excavation teams	Yes	Annual / site-specific briefing	Permit and observation
Fire prevention and extinguisher use	All workers; wardens in depth	Yes	Six-monthly drill	Drill record
Spill prevention and hazardous materials	Stores, maintenance, fuel/battery teams	Yes	Annual / product change	Practical demonstration
Traffic and journey management	Drivers, marshals, logistics team	Yes	Annual / after incident	Licence, defensive driving record
Chance finds and cultural heritage	Excavation and supervisory teams	Yes	At new site / route	Briefing record
Incident reporting and investigation	Supervisors, E&S/OHS, managers	Yes	Annual / after serious event	Exercise / report quality review

R.1 Training record

Date	Topic	Trainer / competence	Participants	Assessment result	Refresher due

ANNEX S: ESMS AUDIT CHECKLIST AND CONTROLLED RECORDS

S.1 Audit checklist

Audit area	Conform?	Evidence sampled	Finding / risk	Action / owner / due date
Policy, leadership, resources and management review				
Legal and other requirements; permits and approvals				
Project screening, categorisation and exclusion criteria				
ESIA/ESMP and action-plan implementation				
Contractor and supply-chain ESHS management				
Labour, working conditions and worker GRM				
OHS, PTW, LOTO and high-risk work				
Community health, safety and security				
Stakeholder engagement and community GRM				
SEA/SH, GBV and child safeguarding				
Land access, livelihood and cultural heritage				
Waste, hazardous materials, batteries and e-waste				
Biodiversity, drainage, erosion, water, dust and noise				
Interconnection, commissioning and public electrical safety				
Emergency preparedness, incidents and corrective actions				
Monitoring, reporting, document control and data protection				

S.2 Controlled records register

Record category	Custodian	Storage / access	Minimum retention	Disposal / archive control
ESMS, policies, legal register and approvals	E&S Manager	Controlled electronic repository	Project life plus applicable legal/ financing period	Authorised archive
Screening, ESIA/ESMP, RAP/LRP and permits	Project Manager / E&S	Project file; approved versions	Project life plus applicable period	Authorised archive
Stakeholder engagement and community grievances	CLO / Social Specialist	Restricted where personal data	Per legal/financing requirements	Secure destruction
SEA/SH and safeguarding records	Designated Focal Point	Strictly restricted, coded and separate	Minimum necessary under specialist protocol	Confidential secure destruction
Worker contracts, payroll and grievances	HR	Restricted personnel files	Per labour/tax law and contract	Secure destruction
OHS permits, inspections, training and incidents	OHS Manager	Controlled project system	Per law and project requirements	Authorised archive
Waste, battery/e-waste manifests and certificates	Environmental Officer	Asset/waste register	Project life plus applicable period	Authorised archive
Tests, energisation, protection settings and as-builts	Engineering / Operations	Technical document-control system	Asset life plus applicable period	Controlled supersession/ archive
Audits, management reviews and corrective actions	E&S Manager	Controlled repository	Project life plus applicable period	Authorised archive

MANAGEMENT ADOPTION

PROMASS Engineering Services Limited adopts this Environmental and Social Management System for the proposed Interconnected Mini-grid Project under the DARES Programme. Management commits to provide competent personnel, budget, authority and oversight necessary to implement the system, and to require equivalent performance from contractors, suppliers and operators.

Approval	Name / title	Signature	Date
Prepared by	[E&S Manager / Consultant]		
Reviewed by	[Project Manager / Technical Director]		
Approved by	Dr Sani Mohammed Bida - MD/CEO		

Submission readiness: Before formal submission, complete all bracketed project-specific fields, confirm the current DARES/REA legal and reporting requirements, attach the site-specific screening and safeguards instruments, insert GRM and referral contacts, approve the implementation budget, and sign the document-control page.

END OF DOCUMENT
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