



Rovuma
LNG

**ENVIRONMENTAL AND SOCIAL
REQUIREMENTS FOR CONTRACTORS:
ANNEX 14 – WILDLIFE PROTECTION**

ROVUMA LNG PROJECT


MZLN-EL-RBENV-00-0001

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1. PURPOSE AND SCOPE

This document is one of a series of topic-specific supporting annexes contained in the overarching document: Environmental and Social Requirements for Contractors: Environmental and Social Management System (ESMS).

These annexes define the processes that need to be followed and the control measures that must be applied to ensure the delivery and approval of a topic-specific Contractor Implementation Plan (CIP) and other implementation deliverables ahead of commencing activity.

Where the final design basis or execution strategy has not been determined and alternatives exist, an analysis of alternatives (taking environmental and social (E&S) factors into account) shall be undertaken. This analysis shall be based on an accurate characterisation of the local setting using up-to-date baseline data and an assessment of the risks and impacts related to each alternative.

Where the project base case has already been determined, additional baseline information may be required to inform an up-to-date / site-specific E&S risks and impacts evaluation. This evaluation may result in a refinement of control measures relative to the local conditions and licensing requirements.

1.1. Objectives

The overall objective of this document is to set out all the E&S requirements that need to be fulfilled in order to prevent and manage potential E&S risks and impacts associated with Wildlife Protection.

1.2. Scope

For the purposes of this document, Wildlife Protection encompasses the following activities related to terrestrial wildlife (including plants): prohibited activities (hunting, trapping, trafficking, collection, etc.) measures to take in the event of incidents and accidents involving wildlife, and monitoring related to wildlife which are not contained elsewhere in the requirement documents. It does not include marine wildlife, which are covered in Annex 7 - Marine Operations. It also does not include all items related to biodiversity which the company has committed to, for example biodiversity offsets, which will be contained in the Company's Biodiversity Strategy.

This document follows the overall Scope definition outlined in the "E&S Management System Requirements for Contractors" described in Section 1.2 of that document.

1.3. Linkage to Other Contractor Requirements

This document is an overarching document which is supported by a number of topic-specific annexes. It also needs to be read in conjunction with Section D (Scope of Work) and Section F (Coordination Procedure) to provide a holistic view of E&S requirements.

This document should be read specifically in conjunction with Weed and Pest Management Requirements Annex and Site Development, Construction and Reinstatement.

1.4. Background Context

As stated in the Anadarko / Eni EIA (2014), several species that are of concern have been identified within the Project area, of which, some are protected by Mozambican Laws and Regulations regarding forestry and wildlife protection, recreation and fishing, and hunting.

Furthermore, several species have been identified that are listed in the International Union for Conservation of Nature (IUCN) Red List of Threatened Species which creates awareness for loss of biodiversity and identifying species most in need of conservation.


This document therefore provides the Contractor requirements to ensure continued protection and safe work practices where human/wildlife conflict may occur.

1.5. E&S Risks and Potential Impacts

Table 1-1 outlines the E&S risks and potential impacts identified to date associated with Wildlife Protection. This table is meant to provide insight to the risks and potential impacts which are possible and a guide for additional assessment activities required by Section 2.1 of this document. It also provides a reference to the control measures tables (Table 2-1).

Table 1-1: A Guide to Activities, Consequences, Risks and Potential Impacts

ACTIVITY	POTENTIAL CONSEQUENCE	RISKS AND POTENTIAL IMPACTS
Behaviour of construction personnel	Physical presence / interference / hunting and poaching / collection / accidents	Detrimental impact on natural habitat and populations of indigenous plant and animal species (NR3)
		Contravention of international conventions (O1)

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2. REQUIREMENTS

2.1. E&S Assessment and Evaluation and CIP Development

As discussed in the overarching Environmental and Social Requirements for Contractors: Environmental and Social Management System (Section 1.1), due to the further refinement of the design since the EIA was prepared, and due to the Project seeking finance (which requires compliance with the International Finance Corporation (IFC) E&S requirements), it is anticipated that additional E&S assessment will be required for some topics which may result in the addition or refinement of E&S controls specified to date. This assessment, as outlined in the overarching ESMS document, includes three stages:

- Stage 1: Analysis of Alternatives
- Stage 2: E&S risk and impact evaluation of the project base case and refinement of control measures
- Stage 3: CIP development (based on the refined control measures).

For Wildlife Protection, only stage 3 is required.

2.1.1. Stage 3 – Contractor Implementation Plan

The Contractor shall develop a CIP which outlines how they propose to implement the control measures in the Table 2-1 (including any proposed additions or refinements as applicable to the update and finalisation of the design and execution strategy), and how they propose to implement the management system requirements (as outlined in the E&S Management System Requirements for Contractors) which relate specifically to the topic of this document, in a way that conforms to E&S requirements.

2.2. E&S Control Measures

The control measures in Table 2-1 have been defined ahead of the site-specific risk / impact evaluations defined in Section 2.1. The Contractor shall apply these or seek agreement to apply a refined list, with justification for all changes based on the outcomes of assessments described in Section 2.1.

Where these requirements originate from the Anadarko / Eni EIA (2014), henceforth called the EIA, the EIA section reference is included. Similarly, the Government-approved Environmental Management Plans (EMPs) references are included for those relevant controls. As noted in the overarching ESMS requirements document, a number of additional controls have been identified as being required to meet lender expectations. As such, the EIA / EMP controls have been supplemented by good practice design and control requirements where practicable and appropriate, however, where any overlap is present, the EMP (and EIA) commitments should be considered paramount over good practice guidance in the hierarchy of adoption of such controls.

Table 2-1: E&S Control Measures

ACTIVITY / SOURCE OF POTENTIAL IMPACT	CONTROL MEASURE	IMPACT / RISK BEING ADDRESSED	SOURCE			Notes
			EIA	EMP	Other	
Overarching Requirements						
General	The Project (including Contractors) shall at all times adhere to international wildlife agreements such as The Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), 1973; and The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) 1979.				A	
	Workforce inductions and on-going training programs shall include an environmental awareness component that details the risks and impacts associated with interactions with wildlife, both from a conservation perspective and in terms of personal health and safety.				A	
Execution Requirements						
Prohibited activities	Prohibit all crew members from killing or causing injury to marine fauna (any crew members found to have deliberately killed or caused injury to marine fauna shall be dismissed immediately and removed to shore).	NR3, O1	EIA 11.7.2	Area 4 ME 18 LNGMT ME 8 MOF ME 8		
	Prohibit all employees, subcontractor's employees, and crew members from hunting, trapping, fishing and general harassment of wild animals. Any employee or crew members found to have deliberately killed or caused injury to wildlife shall be dismissed immediately and removed from the Project site.	NR3, O1			A	
	Possession of hunting rifles or tools used for hunting will be prohibited.	NR3, O1			A	

ACTIVITY / SOURCE OF POTENTIAL IMPACT	CONTROL MEASURE	IMPACT / RISK BEING ADDRESSED	SOURCE			Notes
			EIA	EMP	Other	
	Do not permit pets or other animals to be kept on camps or at the worksite (with the exclusion of security dogs where considered necessary) and do not permit feeding of native or stray animals in camps or other work areas.	NR3			A	
	Prohibit all employees, subcontractor's employees, and crew members from participating in wildlife trafficking.	NR3, O1			A	
	Prohibit all employees and subcontractor's employees from collecting wild plants and flowers.	NR3, O1			A	
Incidents and accidents	In consultation with Subject Matter Experts, develop a procedure to manage wild animals that may enter the camp. The procedure shall include measures to provide for the safety of humans and, to the extent feasible, not harm the animals.	NR3			A	
	Develop onsite capacity to deal with dangerous fauna such as venomous snakes or aggressive mammals.	NR3			A	
	Procure the equipment for the safe capture and handling of dangerous fauna; monitor the use of this equipment to prevent abuse outside of the Project area.	NR3			A	
	Consult with experienced veterinary support, to be available either telephonically or via online (e.g., videocall), to advise on how to manage difficult incidents when they occur.	NR3			A	
	Refer to suitably appointed and trained personnel to handle potentially dangerous fauna.	NR3			A	

ACTIVITY / SOURCE OF POTENTIAL IMPACT	CONTROL MEASURE	IMPACT / RISK BEING ADDRESSED	SOURCE			Notes
			EIA	EMP	Other	
Wildlife monitoring and control	Periodic, random checks of project vehicles shall be undertaken to check for any collection of any plant and animal life.	NR3, O1			A	
	Implement a monitoring program to identify areas of high mammal volumes along particular road alignments, and implement appropriate precautionary behaviour in these areas (e.g., reduce speed).	NR3	EIA 12.13.3	Shared MA 15		
	The occurrence of larger fauna trapped in Catchment A must be monitored and a careful decision made to translocate if considered necessary.	NR3			A	
	Herpetologist to undertake additional field studies prior to construction to determine the habitat extent for the potentially new species of Acontine skink. The results of these field surveys are to be considered prior to site clearance activities.	NR3	EIA 12.11.2			
	Wildlife monitoring programs will be explained, and where possible, opportunities for staff to participate will be explored.	NR3			A	
Induction and Training	Carry out awareness training / campaigns to educate workers in prohibitions.	NR3	EIA 11.7.2		A	
	As part of induction training, the Project will develop and provide Environmental Awareness Training. This training will include information related to the preservation of sensitive herpetofauna importance and mammalian importance of the area, and will be provided to all staff (as well as visitors and labourers).	NR3	EIA 12.11.3 EIA 12.13.3	Area 4 HE 6, MA 4 Shared HE 6, MA 4 LNGMT MA 1 MOF MA 1		

2.3. Pre-Construction Surveys

Contractor shall carry out the pre-construction surveys outlined in Table 2-2 as well as any other pre-construction survey requirements identified through the impact assessment process.

Table 2-2: Pre-Construction Surveys

NO	SPECIFIC REQUIREMENTS	RESPONSIBILITY	DELIVERABLE
1	Herpetologist to undertake additional field studies prior to construction to determine the habitat extent for the potentially new species of Acontine skink. The results of these field surveys are to be considered prior to site clearance activities.	Contractor	Pre-construction survey report including a description of methodology and results.

3. DELIVERABLES

The following deliverables are associated with Wildlife Protection. Contractor deliverables shall be submitted to the Company for Company approval.

Table 3-1: Summary of Deliverables

SECTION REFERENCE	DELIVERABLE	RESPONSIBILITY	DELIVERABLE DATE
STAGE 3			
Table 2-2	Pre-construction survey report including methodology and results	Contractor	To be agreed on contract award
Section 2.1.1	Topic-Specific CIP, which as a minimum includes: <ol style="list-style-type: none"> 1) Approved list of E&S control measures 2) Details of how the approved control measures will be implemented (including linkage to other Project plans and procedures, where necessary, to demonstrate the implementation of the E&S controls committed to) 3) Details of the monitoring, reporting and assessment. 	Contractor	To be agreed on contract award