# **1** INTRODUCTION

This section is equivalent to Section v, introduction, of the legislative structure. If in doubt, please refer to Table 1.5-1 Environmental Impact Statement Structure on page 1-5.

## 1.1 General

This introduction to the East African Crude Oil Pipeline (EACOP) project environmental impact statement (EIS) describes the following:

- project purpose and need
- project overview:
  - EACOP System
  - o EACOP Tanzania
- developer contact information
- EIS overview
- EIS structure.

## 1.2 Objective and Rationale

The objective and rationale for the EACOP project is, with due consideration to the management of associated environmental and social impacts, to enable crude oil produced from the Lake Albert development area to be transported to the coast of Tanzania and exported to international markets, net of Uganda supply commitments. A project objective is to design, construct and operate a pipeline and its AGIs that do not present risk, injury or harm to personnel, and or host communities and their supporting ecosystem services. In addition, the construction and operation of the pipeline will:

- contribute to the economy
- provide business opportunities for different sectors of the economy
- provide approximately three years of employment opportunities for highly and semi-skilled workers and labourers during construction and 25 years for highly skilled workers during operational phases.

## 1.3 **Project Overview**

#### 1.3.1 EACOP System

Total E&P, Uganda BV (TEPU), Tullow Uganda Operations Pty Ltd (TUOP) and CNOOC Uganda Limited (CUL) ("UPSTREAM PARTNERS") hold interests in petroleum resource licences near Lake Albert.

The crude oil produced from the Lake Albert area will be stabilised at their respective central production facilities and transported via feeder pipelines to the Delivery Point. The Delivery Point, EACOP pumping station (PS1) and a refinery will be in the future Kabaale Oil and Gas Industrial Park, in Hoima district.

The UPSTREAM PARTNERS, the Tanzania Petroleum Development Corporation and Uganda National Oil Company will be shareholders in a pipeline company that will develop, construct and operate a pipeline to export the Lake Albert area crude oil reserves to international markets, net of supply commitments to the planned refinery at Kabaale, Uganda. In the interim, Total East Africa Midstream (TEAM) BV is the developer of the project.

The export pipeline, also known as the EACOP System, is defined in the Inter-Governmental Agreement signed by Government of Tanzania and Government of Uganda on 26 May 2017. The EACOP System means the petroleum export pipeline system intended to traverse from the inlet flange at the Kabaale pumping station (PS1), in Hoima district, Uganda, to an export flange at a proposed marine storage terminal (MST) at Chongoleani, Tanga district, on the East African coast of Tanzania. The system will include:

- 1443 km of insulated, electric heat-traced, buried 24-in. pipeline
- aboveground installations:
  - six pumping stations to provide the pressure for crude oil flow at the production rate of 216 kbopd
  - electric heat trace stations
  - block valves
  - two pressure reduction stations on the pipeline, and a pressure reduction system at the MST, to ensure the maximum allowable operating pressure is not exceeded upon arrival at the crude oil storage tanks
  - the MST, which includes storage tanks and load-out facility (LOF) comprising a trestle and loading
- facility access roads.

Figure 1.3-1 shows a map of the EACOP System.

#### 1.3.2 EACOP Tanzania

In Tanzania, the EACOP project comprises the following components:

- 1147 km of insulated, electrical heat-traced heated, buried 24-in. pipeline
- aboveground installations:
  - four pumping stations (PS3–PS6)
  - o main line block valve stations and electric heat trace substations
  - two pressure reduction stations
- MST and LOF
- roads:
  - new and upgraded permanent access roads
  - new and upgraded construction facility access roads
- 12 main camps and pipe yards (MCPY5 through to MCPY16) for the construction phase
- a coating facility.

The project description for the EACOP Tanzania pipeline and MST, including maps, is included in Volume 1, Section 2 and the LOF description is in Volume 2, Section 2.



#### Figure 1.3-1 EACOP System

#### 1.3.3 Developer Contact Information

The developer of the EACOP is Total East Africa Midstream (TEAM) BV. Table 1.3-1 provides the Tanzania contact information for the project developer.

#### Table 1.3-1 Contact Information

Name of Developer	Address	Named Key Contact	Telephone
Total East Africa Midstream BV	Total Tanzania Limited, 1720 Haile Selasie Road Msanai Peninsula P.O. Box 1503 Dar es Salaam, Tanzania	Maxime Marchenko	+255 2222 927 739

## 1.4 Environmental Impact Statement Overview

#### 1.4.1 Purpose

This EIS is a report of the environmental and social impact assessment (ESIA) conducted to identify, describe and assess the likely interactions of the EACOP project in Tanzania with environmental and socio-economic receptors, termed as the "valued environmental and social components" (VECs). The phrase, environmental and social impact assessment (ESIA), will be used interchangeably for both EIS and environmental impact assessment in this report.

The objective of the ESIA is to document the:

- potential impacts of the project on the physical, biological and human environment
- identified mitigation measures, where necessary, to eliminate or reduce impacts through early recognition and incorporation to engineering, construction and operation
- significance of the impacts.

This ESIA has been prepared pursuant to the Government of Tanzania Environmental Impact Assessment and Audit Regulations G.N. 349 (2005), amended 2018.

The impact assessment also concords with international guidance to enable the developer to apply for international funding. International guidance includes:

- the International Finance Corporation's environmental and social performance standards
- Equator Principles
- other relevant international standards and guidelines (see Section 4).

The ESIA has been conducted in accordance with the Scoping Report and terms of reference (ToR) approved by the National Environmental Management Council (NEMC) by way of correspondence to TEAM dated 15 September 2017. The approval contained comments and recommendations, which have been addressed in this ESIA.

The methodology used to evaluate potential project impacts is fully described in Section 5 while the different methodologies used to acquire data to inform baseline studies are described for each VEC in Appendix A.

#### 1.4.2 Environmental and Social Impact Assessment Team

An experienced ESIA team with extensive pipeline engineering, environmental and social impact assessment knowledge was formed to prepare this ESIA, which included Tanzanian partners experienced in ESIA development in the Tanzania oil and gas sector. The interdisciplinary team comprised:

- registered independent environmental and social consultancies JSB EnviDep Ltd, COWI Tanzania Ltd and RSK Environment Limited
- ESIA and HSE management from TEAM
- an international engineering consultancy, Gulf Interstate Engineering (GIE).

The registered and key contributing environmental and socio-economic expert members of the ESIA team are listed in the Executive Summary.

## **1.5 Environmental Impact Statement Structure**

This ESIA is closely styled to and contains all the information required by the Environmental Management (EIS & Audit) Regulations, 2005, amended 2018. However, the structure differs slightly from the set format. Please use Table 1.5-1 below to ensure you are referring to the intended section.

### Table 1.5-1 Environmental Impact Statement Structure

LEGISLATIVE STRUCTURE		
i	Executive summary	=
ii	Acknowledgement	=
iii	Acronyms	→
iv	Abbreviations	÷
v	Introduction	=
vi	Project background and description	=
vii	Policy, administrative and legal framework	<i>→</i>
viii	Baseline or existing conditions	÷
ix	Assessment of impacts and identification of alternatives	÷
		→

IN THIS DOCUMENT		
Executive summary	Executive summary	
Acknowledgement	Acknowledgement	
Glossary	Glossary	
1	Introduction	
2	Project description	
4	Legislative, policy and institutional framework, permitting requirements, and international conventions, standards, guidelines and agreements	
6	Environmental and social baseline conditions	
7	Stakeholder engagement	
3	Alternatives	
5	Processes and methods for environmental and social impact assessment	
8	Impact identification and evaluation – normal construction and operations	
9	Potential impact identification and evaluation – unplanned events	

LEGISLATIVE STRUCTURE		
x	Impacts management or environmental mitigation measures	<i>&gt;</i>
		→
xi	Environmental and social management plan	<b>→</b>
xii	Environmental and social monitoring plan	→
xiii	Resource evaluation or cost benefit analysis	÷
xiv		$\rightarrow$
		$\rightarrow$
	Decommissioning	→
		÷
xv	Summary and conclusions	→
xvi	References	=
xvii	Appendices	=

IN THIS DOCUMENT	
8	Impact identification and evaluation – normal construction and operations
9	Potential impact identification and evaluation – unplanned events
10	Environmental and social management and monitoring plans
10	Environmental and social management and monitoring plans
11	Cost benefit analysis
Decommissioning is addressed in the ESIA sections below:	
2.4.6	Project description
9.6	Potential impact identification and evaluation – unplanned events
10	Environmental and social management and monitoring plans
12	Summary and recommendations
13	References
Appendix A-N	Appendices