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(UNOPS)**

**YEMEN EMERGENCY LIFELINE CONNECTIVITY PROJECT  
(YELCP)  
(P177053)**

# **Environmental and Social Management Framework (ESMF)**

**31 December 2021**

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## Abbreviations

EHS	Environmental, Health and Safety
EIA	Environmental and Social Impact Assessment
EPA	Yemen Public Environmental Protection Agency
EPL	Yemen Environmental Protection Law
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
ESPECRP	Emergency Social Protection and COVID-19 Response Project
FI	Financial Intermediary
GBV	Gender Based Violence
GIIP	Good International Industry Practice
GOAM	General Organization for Antiquities and Museums
GRM	Grievance Redress Mechanism
IDP	Internally Displaced Person
ILO	International Labour Organization
MSME	Micro, Small and Medium Enterprise
MIS	Management Information System
NEAP	Yemen National Environmental Action Plan
NGO	Non-Governmental Organization
OHS	Occupational, Health and Safety
PAD	World Bank's Project Appraisal Document
PDO	Project Development Objectives
PMC	Project Management Consultant
RAP	Rural Access Program
RED	Roads Economic Decision Model of the World Bank
RMF	Road Maintenance Fund
RoY	Republic of Yemen
SEA	Sexual Exploitation and Abuse
SME	Small-to-Medium Enterprise
SMEPS	Small and Micro Enterprise Promotion Service
TFR	Total Fertility Rate
TPMA	Third-Party-Monitoring Agent
UN	United Nations
UNDP	United Nations Development Programme
UNOPS	United Nations Office for Project Services
SMED	Small-to-Medium Enterprise Development
WHO	World Health Organization
YECRP/ECRP	Yemen Emergency Response Project

# Glossary of Terms Used in the ESMF

**Chance find procedure.** A chance find is archaeological material encountered unexpectedly during project construction or operation. A chance find procedure is a project-specific procedure which will be followed if previously unknown cultural heritage is encountered during project activities. The chance finds procedure will set out how chance finds associated with the project will be managed. The procedure will include a requirement to notify relevant authorities of found objects or sites by cultural heritage experts; to fence off the area of finds or sites to avoid further disturbance; to conduct an assessment of found objects or sites by cultural heritage experts; to identify and implement actions consistent with national law; and to train project personnel and project workers on chance find procedures.

**Child labor** consists of work by children that is economically exploitative or likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.

**Compliance** compares how well a process meet the requirements placed on the process.

**Disposal.** Final placement or destruction of wastes, polluted soils, and toxic or hazardous materials. Disposal may be accomplished through approved secure landfills, surface impoundments, or incineration.

**Environmental, Health, and Safety Guidelines (EHSGs)** are technical reference documents with general and industry-specific statements of Good International Industry Practice. The EHSGs contain the performance levels and measures that are generally considered achievable in new facilities by existing technology at reasonable cost. For complete reference, consult the World Bank Group Environmental, Health, and Safety Guidelines, [http://www.ifc.org/wps/wcm/connect/topics\\_ext\\_content/ifc\\_external\\_corporate\\_site/ifc+sustainability/our+approach/risk+management/ehsguidelines](http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+sustainability/our+approach/risk+management/ehsguidelines).

**Environment and Social Impact Assessment (ESIA)** identifies and assesses the potential environmental risks impacts of a proposed project, evaluate alternatives, and design appropriate mitigation, management, and monitoring measures.

**Environmental and Social Management Plan (ESMP)** details: (a) the measures to be taken during the implementation and operation of a project to eliminate or offset adverse environmental impacts, or to reduce them to acceptable levels; and (b) the actions needed to implement these measures.

**Environmental and Social Management Framework (ESMF)** is an instrument that examines the risks and impacts when a project consists of a program and/or series of subprojects, and the risks and impacts cannot be determined until the program or subproject details have been identified.

**Good International Industry Practice (GIIP)** is defined as the exercise of professional skill, diligence, prudence, and foresight that would reasonably be expected from skilled and experienced professionals engaged in the same type of undertaking under the same or similar circumstances globally or regionally. The outcome of such exercise should be that the project employs the most appropriate technologies in the project-specific circumstances.

**Grievance.** An issue, concern, problem, or claim (perceived or actual) that an individual or community group wants a project implementor or contractor to address and resolve.

**Grievance Mechanism (GM)** is a locally based, formalized way to accept, assess, and resolve community feedback or complaints from individuals or communities who believe they are adversely affected by the Project.

**Hazardous wastes.** By-products of society that can pose a substantial or potential hazard to human health or the environment when improperly managed. Substances classified as hazardous wastes possess at least one of four characteristics—ignitability, corrosivity, reactivity, or toxicity—or appear on special lists.

**Lost Time Injury (LTI)** is the incapacity to work for at least one full workday beyond the day on which the accident or illness occurred.

**Lost workdays** are the number of workdays (consecutive or not) beyond the date of injury or onset of illness that the employee was away from work or limited to restricted work activity because of an occupational injury or illness.

**Mitigation.** Measures taken to reduce adverse impacts on the environment.

**Monitoring.** Periodic or continuous surveillance or testing to determine the level of compliance with statutory requirements or pollutant levels in various media or in humans, animals, and other living things.

**Occupational Health and Safety** deals with all aspects of health and safety in the workplace and has a strong focus on primary prevention of hazards (WHO).

**Resettlement Framework (RF)** is instrument used to clarify resettlement principles, eligibility criteria, compensation entitlement, organizational arrangements and guidelines for carrying out census surveys and Resettlement Action Plan (RAP).

**Solid wastes.** Nonliquid, nonsoluble materials, ranging from municipal garbage to industrial wastes that contain complex, and sometimes hazardous, substances. Solid wastes include sewage sludge, agricultural refuse, demolition wastes, and mining residues. Technically, solid wastes also refer to liquids and gases in containers.

**Stakeholder.** Persons or groups who are directly or indirectly affected by a project as well as those who may have interests in a project and/or the ability to influence its outcome, either positively or negatively. They may include locally affected communities or individuals and their formal or informal representatives, national or local government authorities, politicians, religious leaders, civil society organizations and groups with special interests, the academic community, or other businesses.

**Stakeholder Engagement** is a broad, inclusive, and continuous process between a project proponent and those potentially affected by the project that usually spans the project's life. It includes consultations, information disclosure and dissemination, and participation.

# Executive summary

This Environmental and Social Management Framework (ESMF) was prepared by UNOPS for the Yemen Emergency Lifeline Connectivity Project (YELCP) to meet the requirements of the World Bank's Environmental and Social Framework (ESF), most particularly the Environmental and Social Standard on the Assessment and Management of Environmental and Social Risks, including the World Bank Group Environment, Health and Safety (EHS) Guidelines. It also meets the UNOPS Environmental, Health and Safety (EHS) procedures and practices and complies with Yemeni environmental and social laws and regulations.

The World Bank is financing the YELCP to support Yemen's reconstruction and recovery, under the provisions of World Bank OP 10.00, paragraph 12, *Projects in Situations of Urgent Need of Assistance or Capacity Constraints*. The Project will improve provide climate resilient road access, employment and entrepreneurship opportunities to food insecure rural population of Yemen, through 4 components:

**Component 1** Rural and Village Access Roads Improvement and Maintenance.

- **Subcomponent 1A.** *Rehabilitation of Lifeline Rural Access Roads*
- **Subcomponent 1B.** *Employment-Intensive Road Maintenance*

**Component 2** Strengthening Management Capacity of Transport Sector Public Institutions

**Component 3** Project Implementation and Monitoring Support, Studies and Preparatory Activities)

**Component 4** **Contingent Emergency Response (to be capitalized in case of emergency)**

The use of a framework is appropriate and necessary, given that the Project consists of a large number of subprojects in many different localities, and that the specific location and activities of each subproject will only be determined during implementation.

UNOPS has in parallel prepared a Labor Management Procedure (LMP) to meet the requirements of ESS2, a SEA/SH Action Plan and a Security Management Plan (SMP) to meet the requirements of ESS4, a Resettlement Framework to meet the requirements of ESS5, and a preliminary Stakeholder Engagement Plan (SEP) to meet the requirements of ESS10.

The United Nations Office for Project Services (UNOPS) is responsible for overall project implementation, in cooperation with three local Implementing Partners. UNOPS has recruited an Environmental and Social Safeguards Officer (ESSO) based in Sana'a, to oversee Project safeguards, as well as Gender Mainstreaming Officer, a Health and Safety Officer, and a part-time international expert to support the ESSO in the implementation of the ESMF. The Road Access Program (RAP), UNOPS' implementing partner, will also deploy an ESSO and a Health and Safety Officer.

## ***Potential Environmental and Social Risks and Mitigation***

The World Bank has rated the environmental risks of the Project as substantial, and the social risks as high. Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) risks are rated as moderate.

The environmental risks include:

- (i) Work related accidents and injuries
- (ii) Risks to workers from hazardous material used for construction such as acetylene, bitumen, petroleum, diesel, lubricating oil, paints and chemicals
- (iii) Poor onsite sanitation or water supply, leading to illness and disease
- (iv) The risk of employing children for construction
- (v) Risks to workers due to ongoing security concerns in project areas
- (vi) Increased road traffic flows due to construction transport for road rehabilitation
- (vii) Increased levels of noise and vibration due to heavy vehicles and construction equipment,

- which are a nuisance to the communities affected
- (viii) Air pollution due to emissions from construction vehicles and equipment
  - (ix) Creation of liquid wastes which might cause soil pollution; creation of solid, or potentially hazardous
  - (x) Wastes from construction debris or the use of chemicals during construction
  - (xi) Bad odors
  - (xii) Dust generation during excavation, backfilling, compaction, or transportation of construction materials
  - (xiii) Public safety during and after construction.

Social risks of the Project include:

- (i) The potential for excluding vulnerable and disadvantaged groups and individuals -including IDPs, and elite capture when selecting roads to be rehabilitated or maintained or when awarding contracts for road maintenance
- (xiv) Ensuring project workers and beneficiaries are safe and secure during project implementation, given the conflict context
- (xv) Restriction on land use and involuntary resettlement, in particular impacts on livelihood of formal and informal street vendors and shops or fields along the selected roads. While physical relocation is expected to be limited given the nature of civils works, which will take place in-situ of the existing ROW, physical relocation and impacts on encroaching residences cannot be entirely excluded
- (xvi) Road safety during both the construction and operational phases
- (xvii) Temporary labor influx, as contractors might need to lodge some of the workers at existing facilities, such as at hotels or rented houses. The labor influx might cause illicit behavior, sexual exploitation and abuse and sexual harassment (SEA/SH), as well as potentially increasing the propagation of transmittable diseases, including COVID-19.

The bulk of the ESHS risks and impacts is directly associated with the activities of the contractors who will upgrade, rebuild, and maintain the targeted roads and facilities. Although the risk profile might differ between specific activities, the overall risk profiles of these activities.

The bulk of the Project environmental and social risks and impacts are related to Contractor activities. Whereas UNOPS and RAP will directly manage the risks related to the selection, design of activities, UNOPS and RAP must cascade environmental and social requirements to all contracted entities (Contractors). UNOPS will mitigate the environmental and social risks and impacts of Contractors by requiring them to meet a detailed set of **Environmental, Social, Health, and Safety (ESHS) requirements<sup>1</sup> that directly match the identified risks and impacts.**

The ESHS requirements are organized in 10 sections or sub-plans:

- (i) General Provisions
- (ii) ESHS Training
- (iii) Construction Site Management
- (iv) Occupational Health and Safety (OHS)
- (v) Road safety and Traffic Safety
- (vi) Chance Find Procedures
- (vii) Emergency Preparedness and Response
- (viii) Stakeholder Engagement
- (ix) Labor force management, including the Code of Conduct
- (x) Contractor Environmental and Social Reporting

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<sup>1</sup> The ESHS requirements are broadly based on the General EHS Guidelines of the World Bank Group, and other World Bank Guidelines

### ***Procedures to Address Environmental and Social Risks***

The ESSOs will screen all subproject proposals prepared by UNOPS and its Implementing Partners to: (i) determine the environmental and social issues that might be triggered by the subproject, (ii) identify the relevant Environmental and Social Standards (ESS); (iii) determine the appropriate Environmental and Social risk rating for the subproject, and; (iv) specify the type of environmental and social assessment required, including specific instruments/plans.

Subprojects that cause significant environmental and social impacts will require a full ESIA and ESMP, and might require a Resettlement Plan. Guidance for resettlement planning is detailed in the Project's Resettlement Framework.

UNOPS will prepare proportionate ESMPs for subprojects not requiring a full ESIA and ESMP, according to the following table of content:

- Summary Sheet
- Subproject Description
- Environmental and Social Baseline
- Consultations
- Mitigation Instruments

UNOPS and RAP will incorporate environmental and social requirements for contractors in tender documentation and contract documents, so that potential bidders are aware of environmental and social performance requirements expected from them and are able to reflect that in their bids. The cost to contractors of meeting the ESHS requirements will be included in their respective contracts. UNOPS and its Implementing Partners will enforce compliance by contractors with these requirements.

UNOPS and RAP will apply the World Bank's requirements for consultation and disclosure, as detailed in the Project Stakeholder Engagement Plan. Consultations will be initiated as soon as subprojects screening has been completed and consultation records will be kept in the Project Office. Consultations will take into consideration the sociocultural context of Yemen, as well as the ongoing COVID-19 epidemic.

UNOPS and RAP will establish a Grievance Mechanism (GM), as detailed in the Project Stakeholder Engagement Plan that will be used for environmental, resettlement and social issues. The ESSO in UNOPS and the Implementing Partners will handle Project activity-related complaints.

### ***Monitoring and Reporting***

UNOPS will monitor and report on implementation of the ESMF, with inputs from implementation partners and the TPM agent. The UNOPS ESSO will ensure that safeguards monitoring is included in the Project's quarterly reports to the World Bank.

UNOPS will notify the World Bank of any incident or accident related to the Project, which has, or is likely to have, a significant adverse effect on the environment, the targeted communities, the public or contracted workers and consultants including security incidents, sexual exploitation and abuse and sexual harassment (SEA/SH) among others, within 48 hours after learning of the incident or accident, followed by an initial report.

### ***Capacity***

158. UNOPS will maintain or recruit qualified staff and resources to support the management of the Environmental, Social, Health, and Safety (ESHS) risks and impacts of the Project, including one Environmental and Social Safeguards Officer (ESSO), one Gender Mainstreaming and GBV Officer, and one Health and Safety Officer, all with qualifications and experience acceptable to the Association

UNOPS is fully covering, as part of the fee that it will charge the Bank, the cost of the ESSO, the Gender Mainstreaming Office, the health and Safety Officer, as well as any associated operational costs.

The Implementing Partners are covering the cost of their respective ESSOs and Health and Safety Officers as part of their respective Project Cooperative Agreement (PCA) with UNOPS.

The cost of due diligence for specific subprojects (preparation of the screening form, consultations, GM, preparation of ESMPs, and monitoring) are included in the costs/budget for each subproject.

## Chapter 1.

# Introduction and Background

## 1.1 Introduction

1. This Environmental and Social Management Framework (ESMF) was prepared by UNOPS to meet the requirements of the World Bank's Environmental and Social Framework (ESF), as well as national environmental laws and regulations, for Yemen Emergency Lifeline Connectivity Project YELCP, P177053). The use of an ESMF is appropriate and necessary, given that the Project consists of a large number of subprojects in many different localities, and that the specific locations and activities of each subproject will only be determined during implementation.
2. The Project ESMF will guide UNOPS and its Implementing Partners, to ensure that all subprojects meet the requirements of the ESF, including the preparation of subproject specific Environmental and Social Management instruments in accordance with the ESF. For this purpose, the ESMF details how UNOPS will screen each subproject to assess its environmental and social risks and impacts, identify the necessary mitigation measures, and monitor ESMP implementation, most particularly the environmental and social performance of Project contractors.
3. UNOPS has in parallel prepared a Labor Management Procedure (LMP) to meet the requirements of ESS2, a SEA/SH Action Plan and a Security Management Plan (SMP) to meet the requirements of ESS4, a Resettlement Framework to meet the requirements of ESS5, and a preliminary Stakeholder Engagement Plan, to meet the requirements of ESS10.

## 1.2 Background<sup>2</sup>

### 1.2.1 Country Context

4. The ongoing conflict in Yemen has made the country the worst humanitarian crisis spot. Since March 2015, Yemen has descended into a full-fledged military conflict focused on its major population centers where half of the country's 29.8 million people reside, resulting in significant loss of life, internal displacement, infrastructure destruction, and disruptions in service delivery throughout key sectors. The conflict caused an estimated 233,000 deaths, of which 131,000 from indirect causes such as lack of food, health services and infrastructure<sup>3</sup>. By 2020, more than 3.6 million civilians have been displaced due to the conflict, including at least 158,000 in 2020 when the fighting intensified.
5. Provision of emergency physical access to basic needs is critical in the fight against the looming famine. More than 16 million people<sup>4</sup>, mostly women and children are food insecure, of which about 15 million are suffering from acute hunger<sup>5</sup>. Low food availability is caused by a combination of high dependency on food imports, high food prices, and considerably reduced household income. Due to the violence, key lifeline

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<sup>2</sup> The Background section is borrowed from the Project Appraisal Document

<sup>3</sup> <https://gho.unocha.org/yemen>

<sup>4</sup> <https://www.wfp.org/countries/yemen>

<sup>5</sup> <https://www.wfp.org/countries/yemen>

corridors and important rural linkages have deteriorated, limiting the ability to deploy humanitarian aid to those who need it most. Fuel shortages exacerbated the humanitarian situation, reducing essential services and the transport of essential goods, constraining access to income opportunities and restricting the humanitarian operation. Compounded by low purchasing power of households to buy daily food needs, unhindered access to people mean famine is a possibility for millions of people, mostly women and children who are already hungry<sup>6</sup>. Because of transportation issues, most malnutrition cases from distant locations did not survive<sup>7</sup>. Because their normal routes have been cut off by the war, they are frequently forced to travel other routes that are longer, tougher, and more hazardous.

### 1.3 Lessons learned

6. Labor-intensive road maintenance through microenterprises is a pathway to promote entrepreneurship and ensure sustainability. Past maintenance, schemes used labor-intensive methods, but barely designed to promote entrepreneurship of the labor group engaged in the project. The proposed project will create a platform for local laborers to form microenterprises, which will be trained and supported to contractually engage in long term performance-based maintenance contracts on project roads. The MEs could then keep the entity to extend their experiences to upcoming similar road projects or public works even outside the road sector. Being part of the beneficiary communities served by the roads they maintain, MEs have a great sense of ownership for maintaining the asset not just as a source of livelihood but also a lifeline to their socio-economic needs. Experience in FCS shows, such schemes are likely to divert the susceptible youth from joining illicit activities for living, hence enhances social stability.

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<sup>6</sup><https://www.wfp.org/countries/yemen>

<sup>7</sup> Abdul Malik Al-Wahidi, a doctor at the malnutrition ward in Sanaa's Al Sabeen Hospital.

## Chapter 2.

# Project Description<sup>8</sup>

## 2.1 Project Development Objective

7. The proposed project development objectives are to provide climate resilient road access, employment and entrepreneurship opportunities to food insecure rural population of Yemen.

### 2.1.1 PDO Level Indicators

- (i) Decreased *transport prices of food* and essential commodities to villages connected by the project and the nearest market (percent);
  - (ii) Reduced *travel time* to the nearest center for humanitarian food aid center, market, school (Percent)
  - (iii) Number of rural populations with *all-weather access to markets and critical social services* due to Project interventions (number- female/male);
  - (iv) Number of labor days generated through direct employment by the Project (number- female/male/ female headed household);
  - (v) Reduced *fatalities* along project roads (Percent)
8. The project seeks to contribute toward addressing road access to food and other humanitarian needs, and employment, whilst laying the foundation to (i) build resilience to climate change induced vulnerabilities, (ii) reduce gender gaps, and (iii) build the capacities of the Road Access Program (RAP) and the Road Maintenance Fund (RMF) through a dedicated capacity building program.

## Component 1 Rural and Village Access Roads Improvement and Maintenance

- **Component 1.A. Rehabilitation of Lifeline Rural Access Roads (US\$ 29 million).** This component seeks to improve the resilience of the targeted rural roads to climate change, the road network that sustains rural population's access to markets, social services and connectivity. The focus is on achieving safe and reliable flow of goods and passengers. The proposed upgrading and rehabilitation interventions would include upgrading the pavement surface to asphalt standards, the construction of new, or the rehabilitation of existing drainage structures, such as stone-masonry and reinforced concrete culverts, protection works, rip-rap, stone-paving of ditches and shoulders utilizing locally available construction materials to maximize job creation, improve sustainability and minimize life-cycle maintenance costs and to strengthen their resilience to climate change and extreme weather events. The subcomponent will finance the following:
  - (i) Rural access road (RAR) upgrading (150 km)
  - (ii) Construction of market stalls for potential roadside vendors
  - (iii) Studies, designs, production of tender documents and independent supervision of the civil works.

The Project will upgrade existing earthen rural access roads to a 6 m wide asphalt concrete surfaced roads. The works will be executed within the right-of-way of existing roads and will include: (i) paving road surfaces and building granular shoulders, (ii) providing new or

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<sup>8</sup> This Chapter is based on the Project description in the Project Appraisal Document (PAD) dated 10 April 2021 that was shared by the World Bank. It is not the final version.

upgrading existing longitudinal and transverse drainage structures, (iii) treating slopes with bioengineering solutions, maintaining and rehabilitating stone masonry and building concrete protection structures and retaining walls.

- **Component 1.B. Employment-Intensive Road Maintenance (US\$ 8 million).** This component would support:
    - (i) creation/strengthening of microenterprises (ME)
    - (ii) training MEs
    - (iii) labor-intensive maintenance of rural and village access roads through MEs (about 60 km village access roads (VAR) and 150 km rural roads)
    - (iv) consultancy services for studies, preparation of training modules, designs, production of tender documents and independent supervision linked to the civil works.
9. The Project will introduce a labor-intensive approach using Micro Enterprises (MEs) to carry out to routine maintenance of the RARs and the VARs using a simplified performance-based contracts for a period of two years. The technical standards of the maintenance and rehabilitation works are designed to maximize the labor content while also ensuring quality of works and the use of established standards. The estimated labor content of road works, as a %age of contract value, ranges between 12-20 % for roadway surface works, 20-30 % for drainage and protection works, and could reach 50-60 % for routine maintenance and slope stabilization works. To operationalize the approach, the project will mobilize local communities to form MEs and provide it with training on entrepreneurship, road routine maintenance requirements, and bidding and contract management. The implementation of this activity would be in collaboration with the Small and Microenterprise Promotion Service (SMEPS).
10. The selection of activities will be based on a multi-criteria selection and prioritization framework, developed by RAP. The selection parameters include, level of accessibility, population, poverty, cost/benefit, per capita cost. The proposed project will consider vulnerability to climate change, food security and conflict (FCV) to refining the currently prioritized list of road projects.

## **Component 2 Strengthening Management Capacity of Transport Sector Public Institutions (US\$ 3.5 million)**

11. Building on the recent assessment of Yemen's national institutions to support transition to national project implementation, this subcomponent would finance:
- (i) Strengthen project management capacities of the Road Management Fund (RMF) and the Rural Access Program (RAP), aiming to progressively takeover implementation responsibilities
  - (ii) Support RAP to revive its Management Informant System (MIS)
  - (iii) Support RMF to reactivate its Road Asset Management System (RAMS) and tools, strengthening RAP's and RMF's capacity to predict, respond and design resilient roads infrastructure to extreme climate events such as floods, to assess vulnerability of infrastructure assets and prepare and implement resilient investment plans. This will be done through a technical assistance consultancy including targeted training, as well as equipment and knowledge acquisition.
12. To ensure the long-term sustainability of project investments, adaptation measures to climate change impacts, such as more frequent extreme heat, drought and extreme precipitation/flooding events, which are likely to take place in Yemen, would be mainstreamed into infrastructure design, management and maintenance.

### **Component 3 Project Implementation and Monitoring Support, Studies and Preparatory Activities (US\$ 9.50 million)**

13. This component would support project management, monitoring and evaluation (M&E) to ensure that the Project is successfully and efficiently implemented and various studies and analytical works that will inform and underpin future sector investments. The component would finance: (i) UNOPS' general management support (indirect) costs and direct project management and oversight costs, (ii) cost of an independent technical audit consultant (TAC), (iii) project monitoring and evaluation activities by Third Party Monitoring Agent (TPMA), and (iv) sector studies and other preparatory activities of potential follow-on operations to scale up the proposed project and the ME approach, and other sectoral investments.

### **Component 4 Contingent Emergency Response (to be capitalized in case of emergency)**

14. The objective of this component is to improve the country's response capacity in the event of an emergency, following the procedures governed by paragraph 12 of the World Bank Policy on Investment Policy Financing (Rapid Response to Crises and Emergencies). There is a possibility that, during project implementation, a natural disaster, epidemic, or another emergency may occur, which would cause a major adverse economic and/or social impact. In anticipation of such an event, the Contingent Emergency Response Component (CERC) allows UNOPS to receive support by reallocating funds from other project components or serving as a conduit to process additional financing from other funding sources for eligible emergencies to mitigate, respond to, and recover from the potential harmful consequences arising from the emergency. Disbursements under this subcomponent will be subject to the declaration of emergency by the Republic of Yemen, the international community, or the United Nations (UN).

## **2.2 Project Beneficiaries**

15. Beneficiaries include physically isolated rural population who have been denied access to income opportunities, food, and humanitarian support, thereby suffering from lack of access to food and essential commodities. The project beneficiaries will be: (a) Rural poor village populations connected by project roads, a large fraction of whom are women living in areas which currently suffer from a lack of access to food, humanitarian support, facilities and economic developmental options (b) women and children in rural areas, through reductions in transport and time and costs needed to meet basic human needs, such as food, motherhood and childhood clinics, and accessing education and health facilities; moreover, improved roads will facilitate the distribution of gas cylinders to remote areas, thereby reducing the time spent on, and demand for, environment-damaging collection of firewood, (c) rural shopkeepers and traders, through improved access to wholesalers, through more reliable transport and lower transport costs. It is to be noted that these short-haul carriers are already highly competitive; this makes it likely that transport savings will actually be passed on to the consumer, (d) road users and small transporters serving the rural areas, through improved travel conditions, time savings and reduced vehicle operating costs, (e) private sector contractors and consultants, who will benefit from business opportunities provided by the project, and project-sponsored capacity-building activities; and (f) the rural population at large, through better access to markets and services and lower transport costs.

## Chapter 3.

# Institutional and Implementation Arrangements

### 3.1 Institutional and Implementation Arrangements

16. The Project is an emergency operation processed under OP 2.30 (Development Cooperation and Conflict) and OP 10.00 Section III Paragraph 12 (Projects in Situations of Urgent Needs of Assistance and Capacity Constraints). Considering the emergency nature of the operation and the country's security situation, the United Nations Office for Project Services (UNOPS) will receive the IDA grant for the benefit of Republic of Yemen and will act as implementing agency of the Project, while partnering with the Rural Access Program (RAP) - the agency responsible for the development and management of the rural roads network.

17. UNOPS will:

- (i) take responsibility for project implementation
- (ii) monitor the project targets and results in coordination with the local partners
- (iii) handle relevant procurement, financial management, Monitoring and Evaluation, and disbursement management including the preparation of withdrawal applications under the project
- (iv) enter contractual arrangements with service providers and third-party monitors (TPM)
- (v) ensure that all reporting requirements for the Bank are met per the Project Financing Agreement. UNOPS will decide on the appropriate procedures for selecting contractors, consultants, and implementation partner(s) in accordance with its own operational guidelines.

18. UNOPS's role as the recipient of the Bank funds for the benefit of Yemen Republic and alternative implementation agency on an exceptional basis is in line with the Financial Management Framework Agreement (FMFA) between the World Bank and UN agencies. The financial management arrangements will be governed by the FMFA, which provides for the use of the UN's Financial Regulations. UNOPS will follow its own procurement procedures as Alternative Procurement Arrangements allowed by the World Bank's Procurement Framework Policy, Section III.F.

19. UNOPS will implement the Project through its Yemen Country Office in Sana'a and the Operational Hub in Amman. Project management, technical aspects, procurement, financial management and financial sector aspects, communications, monitoring and evaluation, safeguards, logistics, administration, IT, and security will be handled by the Sana'a Office with close support on a day-to-day basis from Amman. UNOPS global staff will be drawn in on a need basis. The core project management and implementation support team from UNOPS would include a project manager, an operations specialist, local engineers, IT and MIS Specialist, an environmental specialist, a social and communication specialist (with skills and experience in gender based violence issues, gender mainstreaming in infrastructure projects), community mobilizer in SME centered schemes, an M&E specialist, two procurement specialists and an assistant, three financial management specialists and an assistant, and an administrative assistant.

20. UNOPS has a regional structure with the regional office and hub based in Amman, Jordan. This structure has an established capacity in the areas of finance, procurement, safeguards, human resources, IT, and security which will provide support and advice as needed. In addition, a Regional Oversight and Management Advisor oversees the operations in the region and provides management advice to the Regional Director. The Regional Office is supported from the UNOPS headquarters, based in Copenhagen, Denmark.
21. UNOPS will partner with RAP to provide enhanced implementation support to the project. RAP will provide enhanced implementation support to the project based on its assessed capacity. A Capacity Building Consultant will be hired by UNOPS to assess RAP's initial capacity, identify needs, and prepare and implement a program of capacity building to RAP. As RAP's capacity grows and meets certain triggers set in the capacity building program, the CBC will assess and recommend to UNOPS and the World Bank's considerations for increased level of implementation support by RAP. The tasks to be supported by RAP would be limited to coordinating with local stakeholders, preliminary assessment of bids, post qualification of bidders, possession of sites to contractors, construction quality oversight, monitoring construction schedules, reviewing change requests including designs and specifications, review of contractors claims and recommend to UNOPS, review of engineering designs, studies, technical reports. The final decisions on all these remain with UNOPS. UNOPS will retain bid advertising, bid receipt, price evaluation, negotiations and award of contracts, issuing change orders, receiving interim/final payment certificates, certifying payments, and signing off studies and reports.

### ***3.1.1 World Bank implementation support and oversight***

22. The World Bank task team, in close coordination with the Yemen Country Management Unit, will conduct scheduled implementation support through UNOPS in Amman for the Project. The World Bank team will closely coordinate with UNOPS on a regular basis for the implementation and overall oversight of the Project, and will: (a) review implementation progress and achievement of the PDO and intermediate indicators; (b) provide technical support related to implementation, achievement of results, and capacity building; (c) closely coordinate with UNOPS to ensure that adequate oversight mechanisms are in place; (d) discuss relevant risks and mitigation measures; and, (e) monitor the overall project performance through progress reports, financial reports, and "reverse" implementation support mission with UNOPS Amman and its local partners. Additionally, regular video conferences will be conducted to coordinate project management. Bank supervision will be enhanced through multipronged approach that enables it to verify outputs to an acceptable degree of confidence as it were on-the-ground supervision. The approaches include: (i) engaging independent Third-Party Monitoring Agent (TPMA); (ii) conducting more frequent reverse and virtual missions, (iii) deploying state of the art technologies to better monitor technical and fiduciary aspects of the project remotely; including the use of 360-degree geocoded video recording (VR), Geocoded surface condition measurement, Geocoded photos of Core tests, FieldSight monitoring platform being developed by UNOPS, etc. Project reports from UNOPS and the TPM agent would include geotagged visuals in the form of photographs, videos and 3D images to demonstrate the changes before and after project interventions.

## **3.2 Results Monitoring and Evaluation Arrangements**

23. UNOPS will be responsible for results monitoring, hence will put in place an adequate

system and procedures to ensure regular monitoring and reporting of project implementation and results. Monitoring would be through field visits to project sites, quality control, regular follow-up with local partners, progress review meetings, data collection and verification, and documenting progress towards achieving results and reporting in line with the results framework. Given the evolving conflict and security situation in Yemen, UNOPS will ensure that results monitoring is responsive to the changing circumstances on the ground. As part of the reporting process, UNOPS will provide updated GIS maps of the Project areas to help monitor progress towards infrastructure-related activities. UNOPS will submit to the Bank technical and financial progress reports on Project activities every three months in accordance with an agreed schedule and template. The technical part of the report will include: (a) a summary of the progress and the context within which the Project is implemented; (b) ongoing and completed activities carried out during the reporting period; (c) any challenges encountered and measures taken; (d) changes introduced during implementation, including changes in the budget; (e) achievements and results of the Project with reference to identified indicators; and (f) the work plan for the subsequent reporting period.

### **3.2.1 Third Party Monitoring**

24. UNOPS will engage a Third-Party Monitoring (TPM) agent will be engaged to undertake independent results verification of project outcomes leading to documenting achievement of the PDO. The TPM agent will also verify on the ground report on status of activities and outputs, namely employment opportunities created, km of roads rehabilitated and/or maintained, capacity development of RMF and RAP achieved through collecting data on outcome and intermediate results indicators, and monitor compliance of fiduciary and safeguard processes by the local partners. As an extended supervision arm to the Bank, the TPM shall be provided by UNOPS and its contractors, subcontractors and supervision consultants, with unlimited access to all relevant project information and documents, whenever convenient to the TPM, attend project meetings as observer. The Bank will also conduct comprehensive Technical Audit and include an analysis of the entire implementation process of selected subcomponents of the project (both completed and in progress). This will include examination of the quality of designs and studies; quality of works; procurement of goods and consulting services, conformance with quality norms and with performance criteria as described in the relevant project documents. The technical auditor will visit selected project sites at least once every 6-9 months, one of which should be no more than two months after the closure of the annual fiscal budget.

### **3.2.2 Technology Support for Monitoring**

25. UNOPS shall deploy a digital platform to collect project data and information on project progress, quality, safeguards, grievances, Occupational Health and Safety (OHS), safety against gender-based violence (GBV), road traffic safety, etc. The platform should have the capability to produce reports with geotagged photos, videos, and 3-D displays demonstrating changes before and after sub-project interventions. UNOPS shall provide the World Bank team and the TPM with full access rights to the platform for viewing and downloading project information to enable remote monitoring. Regular progress reports (quarterly) will be prepared by UNOPS and independently by the TPM.

### **3.2.3 Citizen's Monitoring**

26. UNOPS will mobilize beneficiary communities to elect their representatives (community

monitors (CM)) to monitor the implementation of project within the community framework agreement (CFA). The community monitors will be trained on monitoring of the civil works on adherence to local social norms based on very less technical perspectives of the contracts performance and provide feedbacks for UNOPS's consideration. Citizen's feedback will form part of the monitoring mechanism on the digital platform and be accessible to the Bank's and TPM's review.

## Chapter 4.

# Legal and Regulatory Framework

27. This ESMF is prepared to:

- (xviii) Meet the requirements of the World Bank's Environment and Social Standards (ESS), including the World Bank Group Environment, Health and Safety (EHS) Guidelines, and other guidelines and guidance
- (xix) Comply with national environmental and social laws and regulations.

## 4.1 World Bank Requirements

### 4.1.1 *World Bank Environmental and Social Framework*

28. The World Bank Environmental and Social Framework (ESF) sets out the World Bank's Commitment to sustainable development. It includes a set of ten Environmental and Social Standards that establish the mandatory requirements that the Borrower and the projects must meet through the project life cycle:

- **Environmental and Social Standard 1.** Assessment and Management of Environmental and Social Risks and Impacts
- Environmental and Social Standard 2. Labor and Working Conditions
- **Environmental and Social Standard 3.** Resource Efficiency and Pollution Prevention and Management
- **Environmental and Social Standard 4.** Community Health and Safety
- **Environmental and Social Standard 5.** Land Acquisition, Restrictions on Land Use and Involuntary Resettlement
- **Environmental and Social Standard 6.** Biodiversity Conservation and Sustainable Management of Living Natural Resources
- **Environmental and Social Standard 7.** Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities
- **Environmental and Social Standard 8.** Cultural Heritage
- **Environmental and Social Standard 9.** Financial Intermediaries
- **Environmental and Social Standard 10.** Stakeholder Engagement and Information Disclosure.

29. All of the above standards are relevant to the Project, except for ESS7 and ESS9. The standards establish objectives and requirements to avoid, minimize, reduce and mitigate environmental and social risks and impacts, and to compensate for or offset any residual impacts. In the context of YELCP, UNOPS shall address the Project's environmental and social risks as part of the environmental and social assessment process, in accordance with ESS1. ESS2–10 set out the obligations of UNOPS in identifying and addressing environmental and social risks and impacts that may require particular attention.

### 4.1.2 *Environmental and Social Risk Classification*

30. The World Bank classifies all projects into one of four classifications: High Risk, Substantial Risk, Moderate Risk or Low Risk. This classification takes into account relevant issues, such as the type, location, sensitivity, and scale of the project; the nature and magnitude of the potential environmental and social risks and impacts; and the capacity and commitment of the Borrower (including any other entity responsible for the

implementation of the project) to manage the environmental and social risks and impacts in a manner consistent with the ESSs. Other areas of risk may also be relevant to the delivery of environmental and social mitigation measures and outcomes, depending on the specific project and the context in which it is being developed. These could include legal and institutional considerations; the nature of the mitigation and technology being proposed; governance structures and legislation; and considerations relating to stability, conflict or security.

31. The World Bank has classified the environmental and social risks of YELCP as high; environmental risks are substantial, while social risks are high. It will review the risk classification on a regular basis during implementation, and will change the classification where necessary, to ensure that it continues to be appropriate. Any change to the classification will be disclosed on the World Bank's website.

#### **4.1.3 Environmental and Social Commitment Plan**

32. In the context of YELCP, UNOPS developed and will implement an Environmental and Social Commitment Plan (ESCP), which sets out the measures and actions required for the project to achieve compliance with the ESSs. The ESCP forms part of the legal agreement.
33. The ESCP took into account the findings of the environmental and social assessment, the World Bank's environmental and social due diligence, and the results of engagement with stakeholders. It is an accurate summary of the material measures and actions required to avoid, minimize, reduce or otherwise mitigate the potential environmental and social risks and impacts of the project. A completion date for each action is specified in the ESCP.
34. UNOPS will diligently implement the measures and actions identified in the ESCP in accordance with the timeframes specified, and will review the status of implementation of the ESCP as part of its monitoring and reporting.
35. UNOPS will notify the World Bank promptly of any proposed changes to the scope, design, implementation or operation of the project that are likely to cause an adverse change in the environmental or social risks or impacts of the project. The updated ESCP will be disclosed.

#### **4.1.4 Labor Management Procedures**

36. Under ESS2 on Labor and Working Conditions, UNOPS is required to develop labor management procedures (LMP) for YELCP. The LMP was prepared as a standalone document according to the established template.
37. The purpose of the LMP is to facilitate planning and implementation of the project. The LMP identifies the main labor requirements and risks associated with the Project, and help UNOPS determine the resources necessary to address Project labor issues. The LMP is a living document, which is initiated early in project preparation, and is reviewed and updated throughout the development and implementation of the project.
38. A concise and up to date LMP will enable different project-related parties, for example, staff of the project implementing unit, contractors and sub-contractors and project workers, to have a clear understanding of what is required on a specific labor issue. The level of detail contained in the LMP will depend on the type of project and information available. Where relevant information is not available, this should be noted and the LMP should be updated as soon as possible.

39. In preparing and updating the LMP, Borrowers refer to the requirements of national law and ESS2 and the Guidance Note to ESS2.

#### **4.1.5 Environment, Health and Safety Guidelines**

40. The ESF also requires all projects to apply the relevant requirements of the World Bank Group Environmental, Health and Safety Guidelines (EHSs)<sup>9</sup>. These are technical reference documents, with general and industry specific examples of Good International Industry Practice (GIIP). They define acceptable pollution prevention and abatement measures and emission levels in World Bank financed projects.
41. The EHS Guidelines contain the performance levels and measures that are generally considered to be achievable in new facilities by existing technology at reasonable costs. Application of the EHS Guidelines to existing facilities may involve the establishment of site-specific targets, with an appropriate timetable for achieving them.
42. The application of the Guidelines to existing facilities may involve the establishment of site-specific targets with an appropriate timetable for achieving them. The environmental assessment process may recommend alternative (higher or lower) levels or measures, which, if acceptable to the World Bank, become project - or site-specific requirements.
43. If less stringent levels or measures than those provided in the EHS Guidelines are appropriate, in view of specific project circumstances, a full and detailed justification for any proposed alternatives is needed as part of the site-specific environmental assessment. This justification should demonstrate that the choice for any alternate performance levels is protective of human health and the environment. When host country regulations differ from the levels and measures presented in the EHS Guidelines, projects are expected to achieve whichever is more stringent.
44. In the context of YELCP, UNOPS will use the General EHS Guidelines<sup>10</sup> and the Construction Materials Extraction EHS Guidelines<sup>11</sup>. The General Guidelines cover environmental, occupational health and safety, and community health and safety related risks. Section 1.6 of the General Guidelines covers Waste Management

#### **4.1.6 Environmental and Social Management Framework**

45. The ESMF examines the risks and impacts when a project consists of series of subprojects, and their risks and impacts cannot be determined until the subproject details have been identified during implementation. The ESMF:
- sets out the principles, rules, guidelines, and procedures to assess the environmental and social risks and impacts of subprojects
  - contains measures and plans to reduce, mitigate and/or offset adverse risks and impacts, provisions for estimating and budgeting the costs of such measures, and information on the agency or agencies responsible for addressing project risks and impacts, including on its capacity to manage environmental and social risks and impacts

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<sup>9</sup> A complete list of industry-sector guidelines can be found at:

[www.ifc.org/ifcext/enviro.nsf/Content/EnvironmentalGuidelines](http://www.ifc.org/ifcext/enviro.nsf/Content/EnvironmentalGuidelines).

<sup>10</sup>

<https://www.ifc.org/wps/wcm/connect/e22c050048855ae0875cd76a6515bb18/Final%2B-%2BWater%2Band%2BSanitation.pdf?MOD=AJPERES>)

<sup>11</sup>

<https://www.ifc.org/wps/wcm/connect/dad17995-66be-4280-86da-b438cf9fbefc/Final%2B-%2BConstruction%2BMaterials%2BExtraction.pdf?MOD=AJPERES&CVID=nPtfjTM&id=1323162191491>

- includes adequate information on the area in which subprojects are expected to be sited, including any potential environmental and social vulnerabilities of the area; and on the potential impacts that may occur and mitigation measures that might be expected to be used.

46. In the context of YELCP and given the conflict circumstances, the World Bank will review and approve all instruments prepared under the ESMF.

#### **4.1.7 Stakeholder Engagement and Information Disclosure**

47. In the context of YELCP, UNOPS, in consultation with the World Bank, have developed and will implement a Stakeholder Engagement Plan (SEP) proportionate to the nature and scale of the project and its potential risks and impacts. The SEP must:

- Describe the timing and methods of engagement with stakeholders throughout the life cycle of the project, distinguishing between project-affected parties and other interested parties.
- Describe the range and timing of information to be communicated to project-affected parties and other interested parties, as well as the type of information to be sought from them.
- Take into account the main characteristics and interests of the stakeholders, and the different levels of engagement and consultation that will be appropriate for different stakeholders.
- Set out how communication with stakeholders will be handled throughout project preparation and implementation.
- Describe the measures that will be used to remove obstacles to participation, and how the views of differently affected groups will be captured. Where applicable, the SEP will include differentiated measures to allow the effective participation of those identified as disadvantaged or vulnerable. Dedicated approaches and an increased level of resources may be needed for communication with such differently affected groups so that they can obtain the information they need regarding the issues that will potentially affect them.

48. When the stakeholder engagement with local individuals and communities depends substantially on community representatives, UNOPS will make reasonable efforts to verify that such persons do, in fact, represent the views of such individuals and communities, and that they are facilitating the communication process in an appropriate manner.

49. The SEP for YELCP is a standalone document that is disclosed separately.

#### **4.1.8 Grievance Mechanism**

50. ESS10 requires that UNOPS propose and implement a grievance mechanism to receive and facilitate resolution of concerns and grievances of project-affected parties related to the environmental and social performance of the project in a timely manner.

51. The grievance mechanism required by ESS10 must *be proportionate to the potential risks and impacts of the project and will be accessible and inclusive. Where feasible and suitable for the project, the grievance mechanism will utilize existing formal or informal grievance mechanisms, supplemented as needed with project-specific arrangements.*

- The grievance mechanism is expected to address concerns promptly and effectively, in a transparent manner that is culturally appropriate and readily accessible to all project-affected parties, at no cost and without retribution. The mechanism, process or procedure will not prevent access to judicial or administrative remedies. The Borrower will inform the project-affected parties about the grievance process in the course of its community engagement activities, and will make publicly available a record documenting the responses to all grievances received
- Handling of grievances will be done in a culturally appropriate manner and be discreet, objective, sensitive and responsive to the needs and concerns of the project-affected

parties. The mechanism will also allow for anonymous complaints to be raised and addressed.

#### **4.1.9 Information Disclosure**

52. The World Bank requires that all documents provided to it by UNOPS meet the requirements of the World Bank Policy on Access to Information.
53. The World Bank will require UNOPS to provide sufficient information about the potential risks and impacts of the project for UNOPS' consultations with its stakeholders. Such information will be disclosed in a timely manner, in an accessible place, and in a form and language understandable to project-affected parties and other interested parties as set out in ESS10, so they can provide meaningful input into project design and mitigation measures.
54. The World Bank will disclose documentation relating to the environmental and social risks and impacts of YELCP prior to project appraisal. This documentation will reflect the environmental and social assessment of the project, and be provided in draft or final form (if available). The documentation will address, in an adequate manner, the key risks and impacts of the project, and will provide sufficient detail to inform stakeholder engagement and World Bank decision making. Final or updated documentation will be disclosed when available.

#### **4.1.10 Contingent Emergency Response Components (CERC)<sup>12</sup>**

55. The World Bank requires all activities financed through the CERC to meet ESF requirements, keeping in mind that this requirement only applies once the CERC is triggered. CERC activities will rely as much as possible on the Project's environmental and social instruments.
56. If the CERC is activated, the World Bank will advise UNOPS on the following elements:
  - Confirming which activities can proceed on the basis of the provisions of the CERC-ESMF, with no additional environmental or social assessment, and which ones require assessment (and at what level) prior to being initiated.
  - Rapidly assessing the environmental and social baseline of the planned CERC activities and locations based on readily available information.
  - Determining the sequencing and implementation plan for:
    - Mobilizing technical assistance and funding to prepare any additional safeguard instruments, e.g., Environmental and Social Management Plan, Resettlement Action Plan, etc.
    - Preparing the safeguards instruments and carrying out their Bank review, revisions, clearance, and approval.
    - Consultations and disclosure.
    - Establishing roles and responsibilities for safeguards implementation, and monitoring.
    - Estimating the costs for safeguards preparation and implementation.
57. In the event that CERC activities exceed the scope of the original PDO and thus this ESMF, UNOPS might be called on to prepare a supplemental CERC-ESMF as part of an eventual Project restructuring. The CERC-ESMF would include a screening process for the potential activities, the institutional arrangements for environmental and social due diligence and monitoring, any needed capacity-building measures, and generic guidance

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<sup>12</sup> This section is based on Paragraphs 17 of the World Bank Guidance on Contingent Emergency Response Components (CERC) (16 October 2017)

on emergency small-scale civil works. It would also indicate which kinds of emergency response actions can proceed with no additional environmental or social assessment, and which ones would require assessment (and at what level) prior to being initiated. It may also identify trade-offs, where required short-term responses could create longer-term risks that need to be managed.

58. Given the uncertainties and rapid changes inherent in emergency situations and responses, the CERC-ESMF would be built around a flexible, “adaptive management” approach, i.e., with emphasis on monitoring of key outcomes and mechanisms to feed information rapidly and effectively into decision-making and management.
59. UNOPS will use the same institutional framework and the same screening process and criteria for the CERC as for the other Project components.

## 4.2 UNOPS Requirements

60. UNOPS is in the process of developing a comprehensive set of environmental and social safeguards that will be applicable to all of the Project’s it implements. The safeguards will be based on the Model Approach to Environmental and Social Standards for UN Programming<sup>13</sup>. The Model Approach represents a key step in moving towards a common approach among UN entities for addressing environmental and social standards for UN programming.
61. UNOPS has already adopted a policy on Health & Safety and Social & Environmental (HSSE) Management, and developed a General Environmental Management (GEM) Guidelines<sup>14</sup>, a General Health and Safety (GHS) Guidelines<sup>15</sup>, and accompanying templates. It has also set up an HSSE Unit based in Copenhagen.
62. When applied to contractors, the GEM and GHS can provide clear and comprehensive instructions to contractors, particularly regarding work safety issues. The templates accompanying the guidelines are practical and can easily be operationalized. Overall, the guidelines are more than equivalent with the EHS Guidelines where they overlap.

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<sup>13</sup> [https://unemg.org/wp-content/uploads/2019/07/FINAL\\_Model\\_Approach\\_ES-Standards-1.pdf](https://unemg.org/wp-content/uploads/2019/07/FINAL_Model_Approach_ES-Standards-1.pdf)

<sup>14</sup> The 6 UNOPS Environmental Management Guidelines are:

- GEM 01 Generic Register of Environmental Impacts
- GEM 02 Waste Management and Hazardous Substances
- GEM 03 Protection of Water
- GEM 04 Wastewater
- GEM 05 Borrow Pit Management
- GEM 06 Preservation of Historical, Archeological and Cultural Remains

<sup>15</sup> The 14 UNOPS Health and Safety Guidelines are:

- GHS 01 General Site Rules
- GHS 02 Lifting
- GHS 03 Electrics
- GHS 04 Excavation
- GHS 05 Fire Safety
- GHS 06 Noise
- GHS 07 Scaffold
- GHS 08 Underground Services
- GHS 09 Working at Heights
- GHS 10 Significant Accident or Incident Response
- GHS 11 Confined Space
- GHS 12 Site Establishment
- GHS 13 Welfare Facilities
- GHS 14 Construction Camp

63. The available UNOPS guidelines do not yet cover certain critical issues, such as Labor Management, Sexual Exploitation and Sexual Harassment (SE/SH), Community Health and Safety, and Stakeholder Engagement and Disclosure. They are also not yet publicly available. In addition, although the UNOPS guidelines are referenced in the bidding document for the contracts that UNOPS manages, they are generally not included as technical clauses of contracts. As a consequence, UNOPS will default for the purpose of this Project to a set of Environment, Social (including labor), health, and safety requirements derived from World Bank requirements and guidelines (see Annex 5) that UNOPS will include as technical clauses in the contracts they prepare for this Project. The option is available for UNOPS to use some of their procedures at the operational level, where they go beyond Bank requirements.

### **4.3 National Requirements and Policies**

64. The Republic of Yemen (RoY) has drafted policies, developed sectoral legislation and implementation procedures, established institutions responsible for environmental management, and joined international conventions. The ongoing conflict has considerably weakened the capacity of the assigned institutions to implement policies and existing laws. As a consequence, the use of Yemen's environmental and social management framework is not considered for the Project.

#### **4.3.1 National Environmental Action Plan**

65. The foundational document for environmental management in Yemen is the National Environmental Action Plan (NEAP) that the ROY prepared in 1995, with the support of the UNDP and the World Bank. The NEAP defines priority actions regarding key environmental issues such as water resources, land resources, natural habitats, and waste management.

#### **4.3.2 Environmental Protection Law**

66. The Environmental Protection Law (Law 26/1995; EPL), was enacted in 1995 in the wake of the NEAP. It constitutes the framework environmental legislation for Yemen, including provisions for environmental protection, the issuance of permits, and the requirement to prepare Environmental Impact Assessments (EIAs). The provisions of the law are implemented through By-Law 148/000.

67. The law is also designed to: (i) incorporate environmental considerations in economic development plans at all levels and stages of planning, (ii) protect the national environment from activities practiced beyond national boundaries, and; (iii) implement international commitments ratified by the RoY in relation to environmental protection, pollution control, the conservation of natural resources, and global environmental issues such as the depletion of the ozone layer depletion and climate change.

#### *Environmental Protection Authority<sup>16</sup>*

68. The EPL established an Environmental Protection Council (EPC) and granted it power to take all measures necessary to protect and improve the quality of environment and to prevent pollution of the environment. Decree 101/2005 established the Public Environmental Protection Authority (EPA) to replace the EPC and lays down its objectives, tasks and management. The functions assigned to the EPA include:

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<sup>16</sup> The information regarding the Environmental Protection Authority is purely indicative, as the EPA will not play any role during Project implementation.

- preparing and executing appropriate policies/strategies/plans to protect the environment
- conducting environmental surveys
- assessing areas/resources/species to be protected through necessary measures conserving the ecosystem including flora and fauna, wild and marine life as per existing laws and monitoring their application
- developing legislative proposals for environment protection in coordination with other agencies involved
- developing a National Emergency Plan to combat natural disaster and environmental pollution in consultation with the agencies concerned implementing environmental protection law and other relevant laws/regulations
- reviewing EIA studies for public /private sector projects for giving clearance and monitoring their execution
- coordinating relevant programs/activities with national, regional and international agencies and organizations
- recommending necessary laws, regulations and systems to protect the environment, in accordance with regional and international agreements on environmental protection.
- collecting data, assessing and evaluating the status of the environment, and setting up suitable monitoring systems
- laying down appropriate standards for protecting the environment from pollution and formulating policy guidelines to combat industrial pollution and protect animal, plant and marine ecology

#### *Environmental Impact Assessments*

69. The EPL requires the preparation of EIAs for projects proposed by the public and private sectors. The proponent is responsible to undertake the EIA, but the report may be prepared by the proponent or the competent authority or both. Line ministries and Government bodies commission EIA studies at the request of funding agencies and seek the advice of the EPA.
70. The EPA is responsible for implementing screening procedures, assisting in scoping, evaluation and approval of the Environmental Impact Statement (EIS). However, there is still no regulatory framework to support the implementation of the EPL and the provision of undertaking EIAs for projects is not strictly enforced, particularly for project that are not internationally funded.
71. Given the current context, modifications to the EIA procedures are not expected during the project. Current procedures will be taken into account, but there is no expectation at this point that the EPA will review the Project's safeguard instruments.

#### *National Environmental Standards and Specifications*

72. The former Environment Protection Council (EPC) issued environmental standards and specifications as annexes to the Executive Regulations, covering potable water quality, wastewater quality for agriculture, and ambient air quality, emissions, noise, biodiversity and protected areas. These include standard application forms intended for use by all relevant government bodies.
73. The EPC has released draft standards for wastewater quality and air quality but a comprehensive set of standards is not yet available. In their place international standards, primarily those of the World Health Organization (WHO) are used.
74. Decree 148/2000 sets permissible limits for pollutants for use by all government bodies (see Annex 2).

### 4.3.3 Water Law<sup>17</sup>

75. The Water Law (Law 33/2002, updated by Law 41/2006)) regulates water supply and sanitation. The structure of water sector institutions consists of two national-level ministries (MoWE and MAI) and an intermediate-level water authority (NWRA). According to the amended water law and its by-law, the MoWE/NWRA are jointly responsible for organizing and developing water resources. The MAI is responsible for formulating policies and legislation that regulate the use of the irrigation water in line with the national water policies and plans and under the umbrella of the National Water Sector Strategy and the Investment Program (NWSSIP). The MoWE is the lead ministry for the oversight of water resources and water service provision, including in rural areas. The MoWE also supervises local water companies/corporations (public utilities) and all water suppliers (including private) to the domestic and industrial sectors.

#### *Water Supply*

76. Under Article 54 of the updated Water Law, MoWE has *“the authority to protect the water resources from contamination, preserve its standard quality, and prohibit activities that lead to its contamination or deterioration of its standards and combat cases of emergency contamination in cooperation with the relevant and competent authorities.”*
77. The Water Law also *“provides a legal basis for controlling groundwater abstractions. It includes measures like licensing and registration requirements for wells and rigs, and more strict control regimes in water stressed catchments. The Water Law also supports decentralization in the form of encouraging the formation of basin committees and requires working closely with Local Councils in implementation of water management measures.”* The government has worked to put in place a system of water rights, and to enforce contracts involving voluntary transfers of such rights between consenting parties. The NWRA (through its branch offices) is authorized to implement water laws and regulation and to allocate surface and groundwater resources to the most compelling needs.

#### *Wastewater*

78. The Water Law specifies that treated wastewater shall not be disposed of or allowed to be used except after coordination with the MoWE and the relevant authorities, and after consultation and coordination with its users and those who are affected by its use.
- Article
79. Article 54 of the Water Law indicates that the concerned competent agencies shall, in coordination with the MoWE, issue licenses for; (i) the disposal of waste, sludge, waste water, oils and specify locations and methods of their disposal and construction of their facilities; (ii) reuse of treated water sewerage effluents according to the approved standards and specifications, and; (iv) construction of sewerage networks and desalination plants according to the relevant laws
80. The NWSSIP Update defines acceptable sanitation systems, taking into account that Yemeni topography, and the low flow of waste water can make centralized sewage treatment systems uneconomic.

### 4.3.4 Resettlement

81. The law most directly relevant to Project resettlement issues is the Public Eminent

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<sup>17</sup> Based on the National Water Sector Strategy and Investment Program (original NWSSIP, 2004), and Dire Straits: The Crisis Surrounding Poverty, Conflict, and Water in the Republic of Yemen (World Bank, 2017)

Domain Law (Law 1/1995), most particularly Articles 12-16 on temporary acquisition, and Articles 21-27 defining provisions for land acquisition. The Yemeni laws and regulatory framework are presented extensively in the Resettlement Framework (RF), which outlines the key issues and procedures for involuntary land acquisition under this Law.

#### **4.3.5 Labor**

82. The Labor Law (Law 5/1995) requires employers to address Occupational Health and Safety issues, including ventilation and lighting of workspaces; protection from emissions (gas, dust, etc.) hazards; protection from machine accidents and hazards; provision of gender-specific toilet facilities; provision of safe drinking water for workers; basic firefighting equipment and emergency exits; provision of appropriate personal protection equipment; fair compensation; access to periodic medical examinations; availability of first aid.
83. The Labor Law regulates the rights and wages of workers, their protection, occupational health and safety. In addition, the Social Insurance Law regulates retirement compensation.

#### *Gender*

84. The Labor Law states that women are equal to man in all aspects without any discrimination, and that equality should be maintained between women and men workers in recruitment, promotion, wages, training, social insurance. It also regulates work time for pregnant women.
85. Yemen also ratified the Convention on Elimination of all Forms of Discriminations Against Women (CEDAW) in 1984, and prepared a National Strategy for Women Development in 1997, which was updated in 2015. Implementation of CEDAW is delegated to relevant ministries and authorities (Decree 55/2009). Based on amendments proposed by the Women National Committee, 24 laws were amended to ensure building gender balance in accordance with the convention.

#### *ILO Fundamental Conventions*

86. Yemen has ratified ILOs eight “fundamental” Conventions, covering subjects that are considered to be fundamental principles and rights at work:
  1. Freedom of Association and Protection of the Right to Organize Convention, 1948 (No. 87)
  2. Right to Organize and Collective Bargaining Convention, 1949 (No. 98)
  3. Forced Labour Convention, 1930 (No. 29) (and its 2014 Protocol)
  4. Abolition of Forced Labour Convention, 1957 (No. 105)
  5. Minimum Age Convention, 1973 (No. 138)
  6. Worst Forms of Child Labour Convention, 1999 (No. 182)
  7. Equal Remuneration Convention, 1951 (No. 100)
  8. Discrimination (Employment and Occupation) Convention, 1958 (No. 111)
87. Law 7/2001 ratified ILO Convention Number 138 on Minimum Age for Admission to Employment. ILO Convention 182 on the Worst Forms of Child Labor refers to child labor as work that is mentally, physically, socially or morally dangerous and harmful to children; and interferes with their schooling by depriving them of the opportunity to attend school, by obliging them to leave school prematurely; or by requiring them to attempt to combine school attendance with excessively long and heavy work. Nonetheless, drawing a line between “acceptable” forms of work by children and child labor can prove difficult, as it depends on the child’s age, the types of work performed,

the conditions under which it is performed and national.

#### **4.3.6 International Conventions**

88. The RoY is party to a number of international environmental agreements, the most important of which are:

- World Heritage Convention (UNESCO)
- International Convention on Civil Liability for Oil Pollution Damage
- The Convention on Biodiversity (CBD)
- The Convention on the Conservation of Migratory Species (CMS)
- The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- The United Nations Framework Convention on Climate Change (UNFCCC)
- Kyoto Protocol (Yemen is not yet a party to the Paris Climate Agreement)
- The Environmental Modification Convention (ENMOD)
- The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal
- Convention on Wetlands of International Importance Especially as Waterfowl Habitat
- Law of the Sea
- The Montreal Protocol on Substances that Deplete the Ozone Layer
- Stockholm Convention on Persistent Organic Pollutants

In general, national agencies are not currently in a position to handle the technical complexities and reporting requirements of international agreements. Project activities are not expected to be in breach of any international agreement to which the RoY is a party.

#### **4.4 Comparison between World Bank Requirements and Yemeni Requirements**

89. The following table compares World Bank environmental and social requirements with Yemeni Requirements, identifies gaps and suggests recommended actions.

**Table 1. Comparison of World Bank and Yemeni environmental and social requirements relevant to the Project**

<i>World Bank Requirements</i>	<i>Yemeni Requirements</i>	<i>Recommended Action</i>
<b>ESS1. Environmental Assessment</b>		
Identify, evaluate and manage the environment and social risks and impacts of the project in a manner consistent with the ESSs.	<p>The Environment Protection (EPL, 26/1995) requires the preparation of an EIA during the preparation of all projects and the inclusion of mitigation measures in the project's capital and recurrent costs (Cabinet Decree 89/1993). The EIA should describe: (i) proposed project activities, design of activity, the surrounding environment that may be affected, including a land use map of the adjacent areas, the requirement and types and source of energy, raw material and infrastructure services and roads emergency plan and safety, waste disposal etc.; (ii) and (iii) alternatives using less polluted inputs, as well as consideration of the 'no-project' alternative (EPL Article 37 Para (b)).</p> <p>The EIA guidelines require that ESIs consider the social acceptability or refusal of the local communities to the proposed project, with evidence and record of public consultations and, if it is accepted, should include baseline data, indicators and monitoring plan. It also includes requirements for monitoring, capacity building, verification of monitoring results and findings (EPL Article 60).</p>	National requirements and ESF objectives are aligned, and complement each other. UNOPS will apply both the ESF and national requirements
<p>To adopt a mitigation hierarchy approach to anticipate and avoid risks and impacts;</p> <p>Where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels;</p> <p>Once risks and impacts have been minimized or reduced, mitigate;</p> <p>Where significant residual impacts remain, compensate for or offset them, where technically and financially feasible.</p>	<p>Yemeni law has no equivalent to the mitigation hierarchy.</p> <p>National law gives priority to the principle of environmental protection and pollution prevention, and not only to the mitigation or compensation of impacts. All new projects must carry out EIAs to prevent adverse impact and must obtain an environmental permit. No project or new structure that could harm, pollute or deteriorate the environment and natural resources is allowed and all new projects should use best available practices for clean production and apply environment protection/pollution prevention measures.</p>	UNOPS will apply the ESF requirements
To adopt differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable, and they are not disadvantaged in sharing development benefits and opportunities resulting from the project.	Included in the EPL (26/1995)	National requirements and ESF objectives are aligned, an complement each other. UNOPS will apply both ESF and national requirements
To utilize national environmental and social institutions, systems, laws, regulations and procedures in the assessment, development and implementation of projects, whenever appropriate.	The Environmental Protection Council must inform the proposed projects proponents of the screening results within three months from submission of the project proposal and determines the appropriate EA instrument and required studies required to assess potential risks and impacts. The EIA guideline provides the possibility of using regional and international	UNOPS will take into account national laws and regulations when applying the ESF requirements

	assessment procedures and norms when applicable. If the project is rejected, the rejection note should indicate the basis for the rejection, as well as the relevant sections of the regulatory framework. The EIA guideline also provides the possibility for project proponents to contest any rejection and to appeal to the special court, within a period of 60 days. The court is required to make a final judgment within six months (Chapter 1 Article 3, EPL 26/1995 - By-law 148/2000).	
To promote improved environmental and social performance, in ways which recognize and enhance Borrower capacity.	Include in the Environmental Protection Law No. 26/1995.	UNOPS will take into account national laws and regulations when applying the ESF requirements
<b>ESS2. Labor and Working Conditions</b>		
No equivalent in ESS2	To provide every employee with written particulars of employment Included in Yemen Labour Law Number 5/1995, Articles Number 27, 28, 29, 30, 31, 32, 33, 34	Contractors will be required to comply with national legislation when recruiting workers.
To promote safety and health at work.	<p>Included in Yemen Labor Law Number 5/1995, Articles 113, 114, 115, 116, 117 and 118,</p> <p>Chapter 9 of the Labor Law (5/1995), Law Number 25/1997 and Law Number 25/2003 address Occupational Health and Safety and work environment in Articles 113 to 118. Chapter 10 covers worker's insurance.</p> <p>Employers are required to provide necessary occupational safety and health conditions, including: ventilation and lighting of workspaces; protection from emissions (gas, dust, etc.) hazards; protection from machine accidents and hazards; provision of gender-specific toilet facilities; provision of safe drinking water for workers; basic firefighting equipment and emergency exits; provision of appropriate personal protection equipment; fair compensation; access to periodic medical examinations; availability of first aid. The competent authority shall ensure the availability of the appropriate work environment and conditions for occupational safety and health. The Ministry of Labor is charged with advising employers in the field of occupational health and safety; organize and implement accident prevention training programs; exchange of technical information; identify and evaluate the means of accident prevention measures; etc.</p> <p>The Minister may establish sub-committees for occupational health and safety in the governorates and in the sectors and industries, which include the relevant bodies. The composition decision shall determine the functions of these committees, their terms of reference and the rules governing their work.</p> <p>Where employers fail to implement labor protection and labor safety regulations, they could receive a one week stop order from the Minister, until the reasons for the breach are explained. The Minister must refer the matter</p>	<p>Each contractor will be required to have an OHS Officer and First Aider.</p> <p>Contractors required to keep logs of incidents and should be reported and investigated regularly.</p> <p>Contractors will do daily toolkit talk, and UNOPS will conduct weekly induction talks to workers and contractors.</p>

	to the competent arbitration committee if the partial suspension is extended or if a total suspension is requested. If the risk is still not removed by the employer, the workers who have stopped working are entitled to full wages.	
To promote the fair treatment, non-discrimination and equal opportunity of project workers.	Included in Yemen Labor Law Number/1995, Articles 5, 42, and 67.	Contractors will be required to comply with national legislation when recruiting workers.
To protect project workers, including vulnerable workers such as women, persons with disabilities, children (of working age, in accordance with this ESS) and migrant workers, contracted workers, community workers and primary supply workers, as appropriate.	<p>Included in Yemen Labor Law Number (5/1995), Articles 5, 15, 42, 43, 44, 45, 46, 47a, 47b and 89; the Law for the Organization of Workers' Unions (35/2002); the Law for Social Insurance (26/1991).</p> <p>The Labor Law regulates the rights and wages of workers, their protection, occupational health and safety. In addition, the Social Insurance Law regulates retirement compensation.</p> <p><b>Gender</b></p> <p>Yemen ratified the Convention on the Elimination of all Forms of Discriminations Against Women (CEDAW) in 1984, and prepared a National Strategy for Women Development in 1997, which was updated in 2015. Implementation of CEDAW is delegated to relevant ministries and authorities (Decree 55/2009). Based on amendments proposed by the Women National Committee, 24 laws were amended to ensure building gender balance in accordance with the convention.</p> <p>The Labor Law (Law 5/1995) states that women are equal to man in all aspects without any discrimination, and that equality should be maintained between women and men workers in recruitment, promotion, wages, training, social insurance. It also regulates work time for pregnant women.</p>	<p>National legislation will be applied.</p> <p>However, the World Bank standards will be enforced where there are gaps.</p> <p>The higher standard between the national legislation and World Bank standards will always prevail in case of uncertainty in applicable requirements.</p>
To prevent the use of all forms of forced labor and child labor.	<p><b>Forced Labor</b></p> <p>Included in Yemen Labor Law Number 5/1995, Articles 55</p> <p><b>Child Labor</b></p> <p>Included in Yemen Labor Law Number 5 /1995, Article 49</p> <p>Yemen has also ratified ILO Convention Number 138 on Minimum Age for Admission to Employment (Law 7/2001). The Convention establishes a minimum age for admission to employment.</p> <p>Yemen has also ratified the ILO Convention 182 on the Worst Forms of Child Labor. It refers to child labor as work that is mentally, physically, socially or morally dangerous and harmful to children; and interferes with their schooling by depriving them of the opportunity to attend school, by obliging them to leave school prematurely; or by requiring them to attempt to combine school attendance with excessively long and heavy work.</p> <p>Drawing a line between "acceptable" forms of work by children and child labor can prove difficult, as it depends on the child's age, the types of work performed, the conditions under which it is performed.</p>	<p><b>Forced Labor</b></p> <p>Contractors will be required to comply with national legislation and as precautionary measure to conduct an induction and random inspection will be done on a regular basis to ensure compliance</p> <p><b>Child Labor</b></p> <p>Contractor will be prohibited to employ anyone under the age of 18 years.</p> <p>Monitoring will be done through the National ID system that every employee is required to produce on employment.</p> <p>If a contractor is found to have engaged under age children in the project: - a formal case will be reported and the contract will be terminated.</p>

To support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law.	Included in Yemen Labor Law (5/1995) Articles 151 and 152, and the Law for the Organization of Workers' Unions (35/2002)	Contractors must inform workers of their right to organize according to the law.
To provide project workers with accessible means to raise workplace concerns.	Included in Yemen Labor Law (5/1995) Articles 129, 130, 132 and 136.	Contractors will be required to comply with national legislation in this regard. Contractors will be required to have a grievance procedure and inform workers of the same during induction. UNOPS and TPM will require contractors to log worker's grievances in monthly reports
<b>ESS3. Resource Efficiency and Pollution Prevention and Management</b>		
To promote the sustainable use of resources, including energy, water and raw materials.	Included in the EPL, the Water Law (33/2002), the Law for Mines and Quarries (24/2002), the Electricity Law (1/2009), and the Renewable Energy Strategy.	National requirements and ESF objectives are aligned, and complement each other.
To avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities.	National law gives priority to the principle of environmental protection and pollution prevention, and not only to the mitigation or compensation of impacts. All new projects must carry out EIAs to prevent adverse impact and must obtain an environmental permit. No project or new structure that could harm, pollute or deteriorate the environment and natural resources is allowed and all new projects should use best available practices for clean production and apply environment protection/pollution prevention measures. Yemeni Law encourages related sectors and projects to provide institutional capacity and training for projects to enhance their capacity and knowledge in handling environmental issues. It also encourages research and development in all environmental aspects (EPL, Article 90).	UNOPS will apply both ESF and National requirements to the Project
To avoid or minimize project-related emissions of short and long-lived climate pollutants	Included in the EPL (26/1995), and is a Yemeni commitment under the Climate Change Convention.	Both World Bank ESF objectives and National requirements will apply to the Project
To avoid or minimize generation of hazardous and non-hazardous waste.	Included in the EPL (26/1995), the Pesticide Law (25/1999), the Public Cleaning Law (39/1999), and the Law Establishing Cleaning Funds (20/1999)	Both World Bank ESF objectives and National requirements will apply to the Project
To minimize and manage the risks and impacts associated with pesticide use	Included in the Pesticide Law (25/1999), and the EPL (26/1995)	Both World Bank ESF objectives and National requirements will apply to the Project
<b>ESS4. Community Health and Safety</b>		
To anticipate and avoid adverse impacts on the health and safety of project-affected communities during the project life cycle from both routine and nonroutine circumstances.	Yemeni Law does not specifically address community health and safety	UNOPS will follow ESF requirements
To promote quality and safety, and considerations	No equivalent in Yemeni law.	UNOPS will follow ESF requirements

relating to climate change, in the design and construction of infrastructure, including dams.	However, IPCC National Contribution commitments and other various national laws (EPL Chapter 2 Article 5 and 7) address global environmental concerns, such as the ozone layer and climate change	
To avoid or minimize community exposure to project-related traffic and road safety risks, diseases and hazardous materials.	No equivalent in Yemeni law	UNOPS will follow ESF requirements
To have in place effective measures to address emergency events	Included in Yemen Labour Law Number 5 for 1995, Articles 119, 121	National requirements and ESF objectives are aligned, and no significant gaps are noted. Both World Bank ESF objectives and National requirements will apply to the Project.
To ensure that the safeguarding of personnel and property is carried out in a manner that avoids or minimizes risks to the project-affected communities.	No equivalent in Yemeni Law	UNOPS will follow ESF requirements
<b>ESS5. Land Acquisition, Restrictions on Land Use and Involuntary Resettlement</b>		
To avoid involuntary resettlement or, when unavoidable, minimize involuntary resettlement by exploring project design alternatives	<p><b>Yemeni Constitution: article 7c:</b></p> <ul style="list-style-type: none"> <li>● Protection and respect for private ownership, which cannot be confiscated unless necessary in the public interest, in lieu of fair consideration and in accordance with Law.</li> </ul> <p><b>The Public Eminent Domain Law (Law 1 of 1995)</b></p> <ul style="list-style-type: none"> <li>● Property and/or land expropriation is to take place only when no suitable public land alternative is available and fair compensation should be provided.</li> </ul> <p><b>Civil Code no. 19 of 1992, Article 1166</b></p> <ul style="list-style-type: none"> <li>● No one can be deprived of property except according to various relevant laws and in exchange of fair compensation.</li> </ul>	Both ESF and national requirements will be applied
To avoid forced eviction	Included in the Yemeni Constitution, and Civil Law.	Both ESF and national requirements will be applied
To mitigate unavoidable adverse social and economic impacts from land acquisition or restrictions on land use by: (a) providing timely compensation for loss of assets at replacement cost and (b) assisting displaced persons in their efforts to improve, or at least restore, their livelihoods and living standards, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher	Public Eminent Domain Law addresses involuntary land taking resulting in relocation or loss of shelter and loss of assets or livelihood and fair and timely compensation.  There is no measure for livelihood restoration in Yemeni law.	UNOPS will follow ESF requirements
To improve living conditions of poor or vulnerable	Payment is made for disturbance, loss of accommodation, loss of profit and	UNOPS will follow ESF requirements

persons who are physically displaced, through provision of adequate housing, access to services and facilities, and security of tenure.	transport allowances. Compensation is on monetary basis only. Yemeni law does not recognize any vulnerable groups, but it does recognize squatters.	
To conceive and execute resettlement activities as sustainable development programs, providing sufficient investment resources to enable displaced persons to benefit directly from the project, as the nature of the project may warrant.	The Civil Law and Local Administration Law requires the prompt and fair payment of compensation on monetary basis to replace the lost land within a distance not more than 20 km from the project site. The governments in Sana'a and Aden provide adequate housing, access to service facilities, and security of tenure, to improve living conditions of poor and vulnerable persons who are physically displaced.	UNOPS will follow ESF requirements
To ensure that resettlement activities are planned and implemented with appropriate disclosure of information, meaningful consultation, and the informed participation of those affected.	In Yemeni law, PAPs must be informed about resettlement decisions through the compensation committees that negotiate with them and gather information about asset inventory, number of family members, etc. PAPs are to be informed about their rights, consulted on, provided FULL, FAIR and PROMPT compensation based on market value of the Property for lost assets attributable directly to the project. PAPs can dispute the amount to the Land Tribunal through the district commissioner to choose alternatives PAPs can first seek satisfaction through local customary practices for resolving conflicts. They can then initiate legal proceedings in accordance with national law.	UNOPS will follow ESF requirements
<b>ESS6. Biodiversity Conservation and Sustainable Management of Living Natural Resources</b>		
To protect and conserve biodiversity and habitats.	Included in the Environmental Protection Law No. 26/1995 and Yemen is a party in the Conservation of Biodiversity Convention.	No major gap between national, international requirements and ESF objectives. Both will be applied.
To apply the mitigation hierarchy and the precautionary approach in the design and implementation of projects that could have an impact on biodiversity.	Included in the Environmental Protection Law No. 26/1995 and Yemen is a party in the Conservation of Biodiversity Convention.	No major gap between national, international requirements and ESF objectives. Both will be applied.
To promote the sustainable management of living natural resources.	Included in the Environmental Protection Law No. 26/1995 and Yemen is a party in the Conservation of Biodiversity Convention.	No major gap between national, international requirements and ESF objectives. Both will be applied.
To support livelihoods of local communities, including Indigenous Peoples, and inclusive economic development, through the adoption of practices that integrate conservation needs and development priorities.	Included in the Environmental Protection Law No. 26/1995 and Yemen is a party in the Conservation of Biodiversity Convention.	No major gap between national, international requirements and ESF objectives. Both will be applied.
<b>ESS7. Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities</b>		
Not Relevant		
<b>ESS8. Cultural Heritage</b>		

<p>To protect cultural heritage from the adverse impacts of project activities and support its preservation.</p>	<p>EPL (26/1995, Chapter 3 Article 37) requires the establishment of a national list of all sites with important cultural heritage or environmental sensitivity such as wetland sites, coral reefs, protected areas and national parks.</p> <p>During projects planning in urban and rural areas, projects should plan for the protection of cultural heritage. If there is an indication of existence of any cultural heritage, the relevant authority must be consulted before commencement of project works. Project works should be located no closer than 500 m from the nearest known cultural heritage (Presidential Decree 21/1994, Parliament Decree 14/1994 and Law 8/1997 Amending the Antiquities Law 21/1994, Article 12).</p> <p>In the event of a chance find of above ground or underground cultural heritage, government authorities must be consulted and the site must be guarded safely until the related governmental authority experts came, investigate and have a hold on it, in return the finder is entitled to suitable reward regardless of the value and age of the cultural heritage.</p> <p>The General Organization for Antiquities and Museums (GOAM) has the mandate to stop any works that could damage antiquities and cultural heritage areas and to preserve cultural field work and excavation findings (Presidential Decree 21/1994, Parliament Decree 14/1994 and Law 8/1997 Amending article 9 of the Antiquities Law 21/1994).</p> <p>UNESCO, the Doha Office of GOAM and Oxford University agreed to jointly launch the Yemeni Heritage Management Platform Database in 2017</p>	<p>The Yemeni requirements are more specific. UNOPS will ensure that any cultural heritage encountered during the work will be reported to the GOAM and the Yemeni Heritage Management Platform Database</p> <p>National requirements and ESF objectives are aligned, and no significant gaps are noted. Both World Bank ESF objectives and National requirements will apply to the Project.</p>
<p>To address cultural heritage as an integral aspect of sustainable development</p>	<p>To conduct field-based surveys by specialists and describe the proposed site for project including map, borders and neighborhoods with design of infrastructures, facilities and services and all inputs and outputs (EPL and EIA Guideline).</p>	<p>National requirements and ESF objectives are aligned and complementary. UNOPS will apply both ESF and national requirements</p>
<p>To promote meaningful consultation with stakeholders regarding cultural heritage.</p>	<p>No comparable requirement under Yemeni law</p>	<p>UNOPS will apply ESF requirements</p>
<p>To promote the equitable sharing of benefits from the use of cultural heritage.</p>	<p>No comparable requirement under Yemeni law</p>	<p>UNOPS will apply ESF requirements</p>
<p><b>ESS9. Financial Intermediaries</b></p>		
<p>Not Relevant</p>		
<p><b>ESS10. Stakeholder Engagement and Information Disclosure</b></p>		
<p>To establish a systematic approach to stakeholder engagement that will help Borrowers identify stakeholders and build and maintain a constructive relationship with them, in particular project-affected parties.</p>	<p>Article 35 of the Yemeni Constitution declares that Environment protection is the responsibility of the state and the community and that it is a duty for every citizen. Community and NGO participation are considered an essential part of consultation while planning proposed projects, and is a continuous process before, during and after project implementation (EPA</p>	<p>UNOPS will follow ESF requirements</p>

	EIA Guideline). Furthermore, NGOs and individuals can directly sue any person or entity who causes harm to the environment and natural resources or participate in its deterioration and pollution (EPL Article 4, para 4 and Article 82).	
To assess the level of stakeholder interest and support for the project and to enable stakeholders' views to be taken into account in project design and environmental and social performance.	Included in the Local Administration Law	UNOPS will follow ESF requirements
To promote and provide means for effective and inclusive engagement with project-affected parties throughout the project life cycle on issues that could potentially affect them.	Included in the Local Administration Law	UNOPS will follow ESF requirements
To ensure that appropriate project information on environmental and social risks and impacts is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner and format.	ESIAs should include a reference list and a non-technical summary for public use and disclosure in a form and language understandable to general public (EPA EIA guideline).	National requirements and ESF objectives are aligned, and no significant gaps are noted. Both World Bank ESF objectives and National requirements will apply to the Project.
To provide project-affected parties with accessible and inclusive means to raise issues and grievances, and allow Borrowers to respond to and manage such grievances	Article 51 of the Constitution allows for recourse to the courts. The Public Eminent Domain Law and the Local Administration Law provide for the right of grievance before the Estimation Committee/courts. To address grievances, PAPs can first seek satisfaction through local customary practices for resolving conflict. They can then initiate legal proceedings in accordance with provincial national law.	National requirements and ESF objectives are aligned, and no significant gaps are noted. Both World Bank ESF objectives and National requirements will apply to the Project.

## Chapter 5.

# Environmental and Social Baseline

## 5.1 Roads Sector

90. The road networks of Yemen increased from 5,000 km in 1990 to about 16,000 km in 2015 including 5,500 km of paved rural access roads. Yet, only 47%<sup>18</sup> of Yemen's rural households are fortunate enough to live within 2 km of all-weather roads. The existing road network has in parts been damaged by the ongoing conflict, and neglect of maintenance has led to the continuous deterioration of key lifeline road corridors such as Al Hodeida-Sana'a, Aden-Sana'a, Aden-Taiz and Marib-Safar.
91. As a consequence, road transport costs in Yemen are high. The rural poor pay exorbitantly high fares to travel from villages to the nearest district centers. These fares can be as high as \$30 for a single using 4WD trucks required to negotiate the dilapidated road access. Despite being a domestically produced commodity, Liquefied Petroleum Gas (LPG) is more expensive in rural markets<sup>19</sup> due to the total damage to Marib-Safar Road, the only LPG supply corridor to the whole country. Similarly, the transport cost of 50 kg of wheat from the Al Hodeida port to Sana'a city, spiked more than 300% between 2015 and 2018, challenging the effort to reach out to as many food-insecure populations. Water supply systems have been shut down in many rural areas as a result of the fuel crisis.

### 5.1.1 Road safety

92. Data from 2013<sup>20</sup> indicates that Yemen road safety performance is poor. Mortality caused by road traffic injury (per 100,000 people) is 21.5<sup>21</sup>, and approximately 70% of road traffic injuries are persons less than 30 years old. Although no recent reliable data is available, the situation is expected to have worsened since the conflict broke in 2015, as road condition deteriorated, governance was compromised (weak enforcement of traffic rules and vehicles safety inspections), and the condition of vehicles was degraded.

### 5.1.2 Roads and gender

93. A 2011 study<sup>22</sup> on rural transport in Yemen indicates that men and women move differently. Whereas, men regularly use motorized means of transport to markets or district centers, women use them on an exceptional basis, and mainly to reach health care facilities or in case of health emergencies. The use of pick-up trucks, which are the most widely used convenient means of motorized transport in rural Yemen, is not socially acceptable for women, who prefer to use passenger cars. As a consequence, transport costs are 50% higher for women who usually need special seating conditions and are accompanied by a mehram.

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<sup>18</sup> <https://www.sum4all.org/gra-tool/country-performance/country/yem> (accessed on 8/26/2021)

<sup>19</sup> Food and Agriculture Organization (FAO) of the UN - Monthly Market Monitoring Bulletin

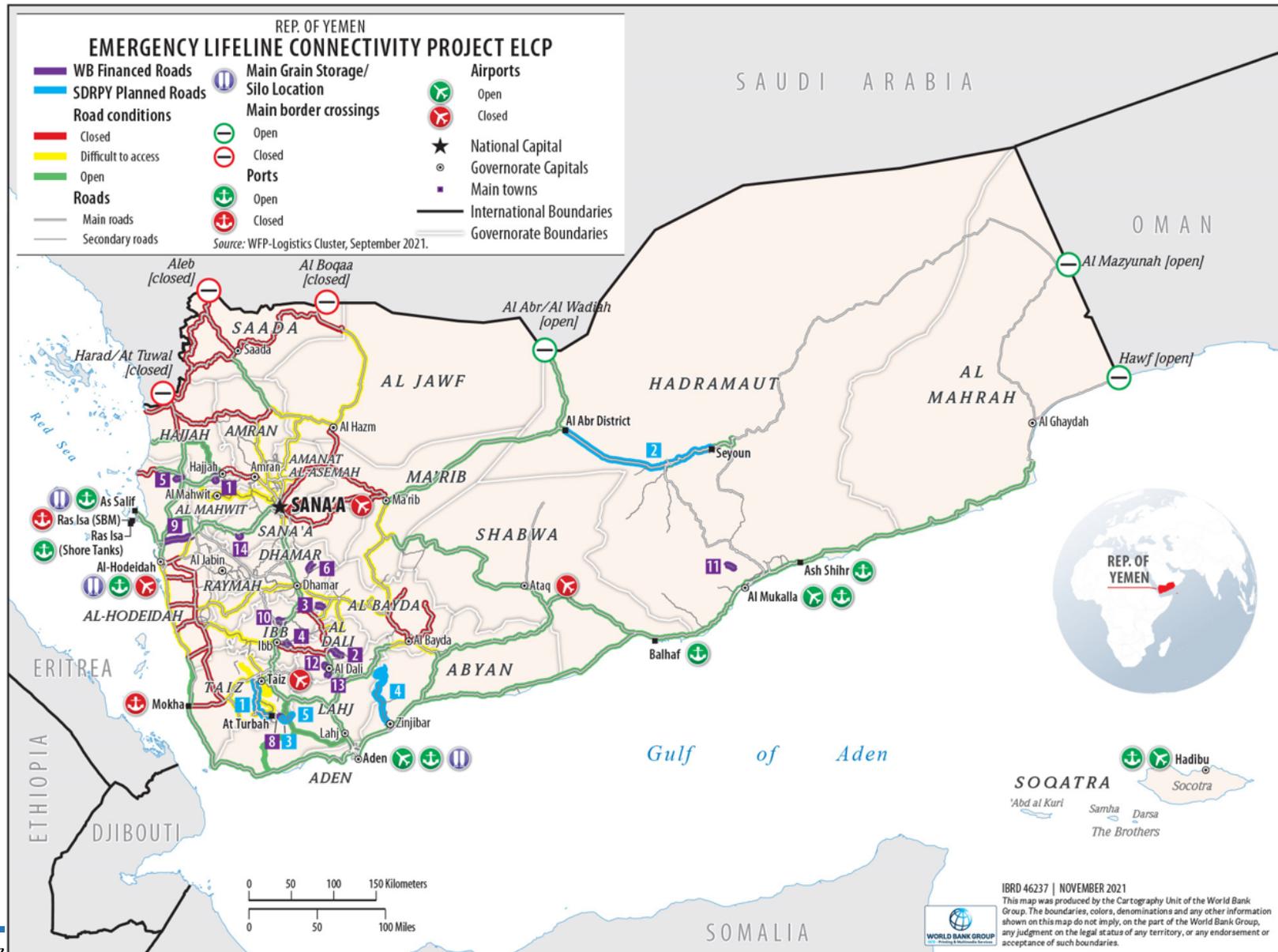
<sup>20</sup> Pattern of road traffic injuries in Yemen: a hospital-based study (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6057599/>) accessed on 08/27/2021

<sup>21</sup> SUM4ALL

<sup>22</sup> Gender and Transport in the Middle East and North Africa Region: Case studies from the West Bank and Yemen. 2011. Transport and Energy Unit. Middle East and North Africa Region. World Bank



Figure 1. Map of rural roads to be rehabilitated by the Project (from the Project Appraisal Document)



## 5.2 Main Physical Features

94. Yemen lies in the southwestern part of the Arabian Peninsula between latitude 12° 40' to 19° 00' North, and 42 ° 30' to 53 ° 05' East longitude. The country covers approximately 555,000 km<sup>2</sup>, with about 2,000 km of coastline along the Red Sea and the Gulf of Aden. Its altitudinal range extends from sea level up to 3,760 m.
95. The physiographic characteristics of Yemen are very diverse and consist of high, steep mountains, escarpments, deserts, costal plains and hundreds of Wadis running between the mountains and through the coastal plains (see Figure 2). Because of its proximity to the Red Sea Rift Fault system, Yemen is moderately seismically active.
96. The majority of the population concentrates in the Wadis and Highland Plateaus. Only three percent of the total area is cultivable (about 16,700 km<sup>2</sup>). Rangelands together with forest and woodlands comprise 40% of the area, and are grazed by 5 million sheep, 4.4 million goats and 1.4 million cattle (Source CSO 2001 Statistical Yearbook). The rest of the country is mostly desert with limited use potential

### 5.2.1 Temperature

97. The differences in elevation are responsible for the huge variations in temperature and climate over the different regions of the country. Mean annual temperatures range from less than 15°C in the highlands to 30°C along the coastal plains. Recorded temperatures may rise to 40°C during summer in the coastal plains and to over 40 °C in the desert plateau region. In contrast, winter temperatures may fall below freezing in the highlands, such as in Sana'a.

### 5.2.2 Rainfall

98. Rainfall varies from less than 50 mm in the coastal plains and desert plateaus, to more than 1,200 mm in the western mountainous highland region (see Figure 3). The highest and most consistent rainfall occurs in the southern highlands near Ibb/Taiz area. Rainfall is highly erratic in time, quantity, and location. It occurs in two periods, the first from March through May, and the second from July until September, which is the heaviest rainy season. Normally, there is little or no rain from November to February but there are exceptions in certain regions and years. In general, annual rainfall increases with distance from the Red Sea, reaching 150 mm in the Coastal Tihama Plain (Western coastal plain of the coastal plains region), and up to 300-400 mm on the foothills of the mountains. Again, the rainfall increases from south to north and in the western mountainous highlands. Then it decreases in the central highlands towards the capital, Sana'a where it averages to about 200 mm in the northern highlands, then, gradually increases from Sana'a towards Sa'dah.
99. Precipitation in Yemen generally occurs as rain though hail and mist are not uncommon. Snow may be observed in exceptional circumstances on the high peaks. Rain events are short, rarely extending beyond a few hours.
100. Rainfall intensities can be very high (though of short duration) and these combined with the small size of many mountain catchments can generate flash floods in extremely short time periods. For example, during April through May 2021, flash floods extensively damaged roads and bridges, rendering the movement of people and goods virtually impossible in several governorates. Such events are common in virtually all mountainous areas of Yemen, in a few wadis of the Eastern slopes, across the coastal plain to the south of Taiz and west of Aden and on active outwash fans elsewhere on the Coastal Plain.

Figure 2. Physical regions of Yemen

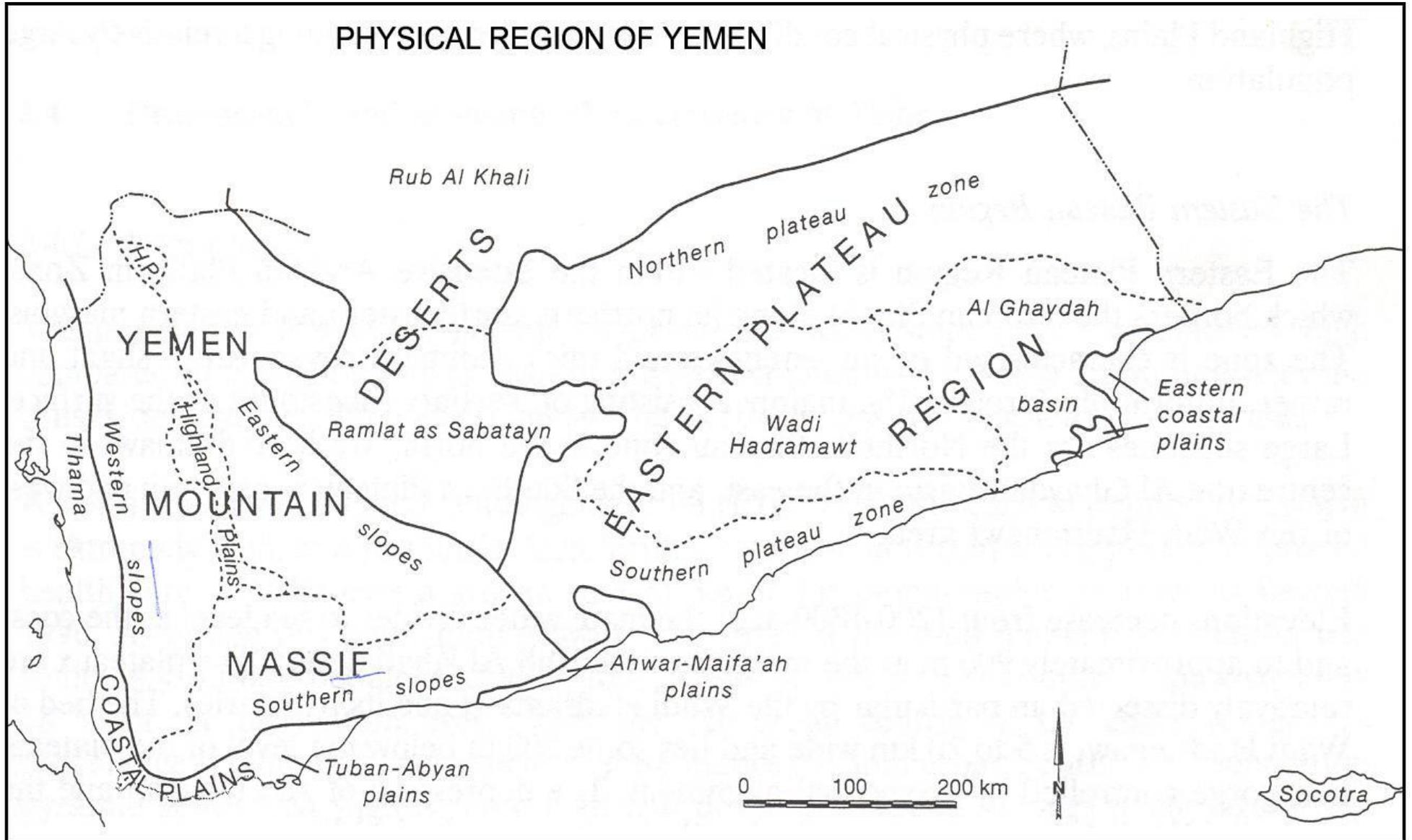
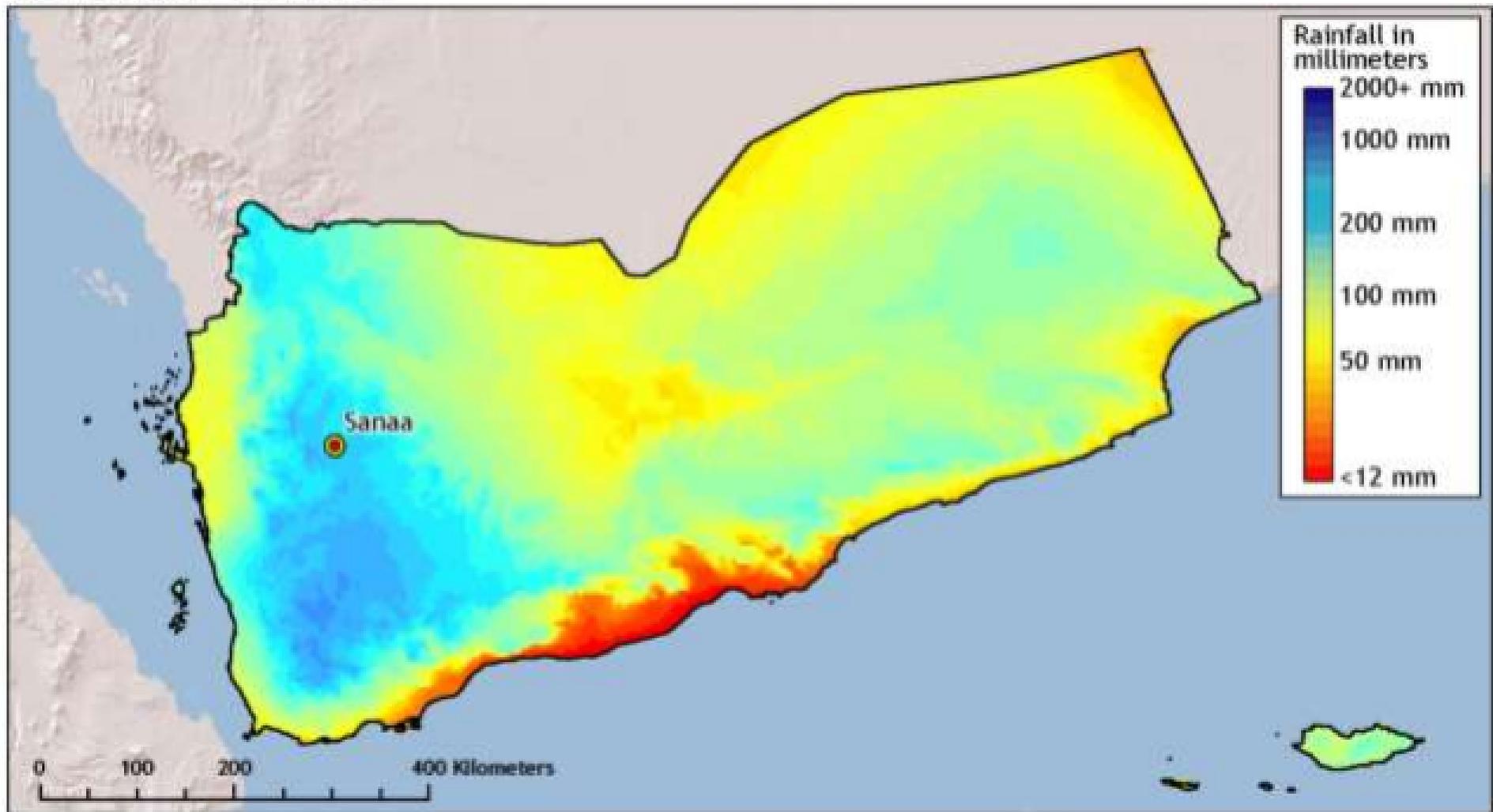


Figure 3. Mean annual precipitation<sup>23</sup>



<sup>23</sup> [https://climateknowledgeportal.worldbank.org/sites/default/files/2018-10/wb\\_gfdr\\_climate\\_change\\_country\\_profile\\_for\\_YEM.pdf](https://climateknowledgeportal.worldbank.org/sites/default/files/2018-10/wb_gfdr_climate_change_country_profile_for_YEM.pdf)

### 5.2.3 Climate Change

101. Climate change poses a significant threat to Yemen's development, including in the transport. Yemen is the 22nd most vulnerable country and the 14th least ready country to adapt<sup>24</sup>, indicating extreme vulnerability and low readiness to adapt to climate change.
102. According to the World Bank Climate Change Country Profile for Yemen, mean annual temperature is expected to increase by 1.2°C to 3.3°C by 2060, and the projected rate of warming is more rapid in the interior regions than in areas close to the coast.
103. Projections of future rainfall disagree, with some models projecting increases in rainfall while other models project decreases. These large uncertainties in future rainfall patterns are in part a function of differences in model behavior of the Inter-Tropical Convergence Zone over this region. The proportion of rainfall that falls in 'heavy' events shows an increase for autumn (September, October, and November) in most model projections.

## 5.3 Biological

### 5.3.1 Flora and fauna

104. The geographical position of Yemen and the diverse topographical features have given the country a great diversity of natural environments and a high level of biodiversity. The vegetation of Yemen is a mixture of the East African Highlands, Sahara-Arabian regions, the Mediterranean regions and has its own endemic flora. However, Yemen's fauna has historically been greatly depleted due to loss or transformation of habitats. According to IUCN's Red Data List, Yemen (excluding Socotra, which is not targeted by the Project) has two vulnerable species: the Yellow Shum Shum Lily, *Albuca yerburyi*, a small plant on inland cliffs and mountain peaks, and the Yemen Hawker, *Pinheyschna yemenensis*, a species of dragonfly found in mountain streams 2000 m above sea level. IUCN also labels 2 species of bats (*Hypsugo ariel* and *Asellia arabica*), 4 species of plants (*Polypogon schimperianus*, *Aloe mahraensis*, *Hyphaene reptans*, and *Schoenoplectiella proxima*) as data deficient. There are no Critically Endangered or Endangered species in the Red Data List for terrestrial Yemen.

### 5.3.2 Protected Areas

105. There are several protected areas in Yemen, mainly along the coast (also see Table 2).

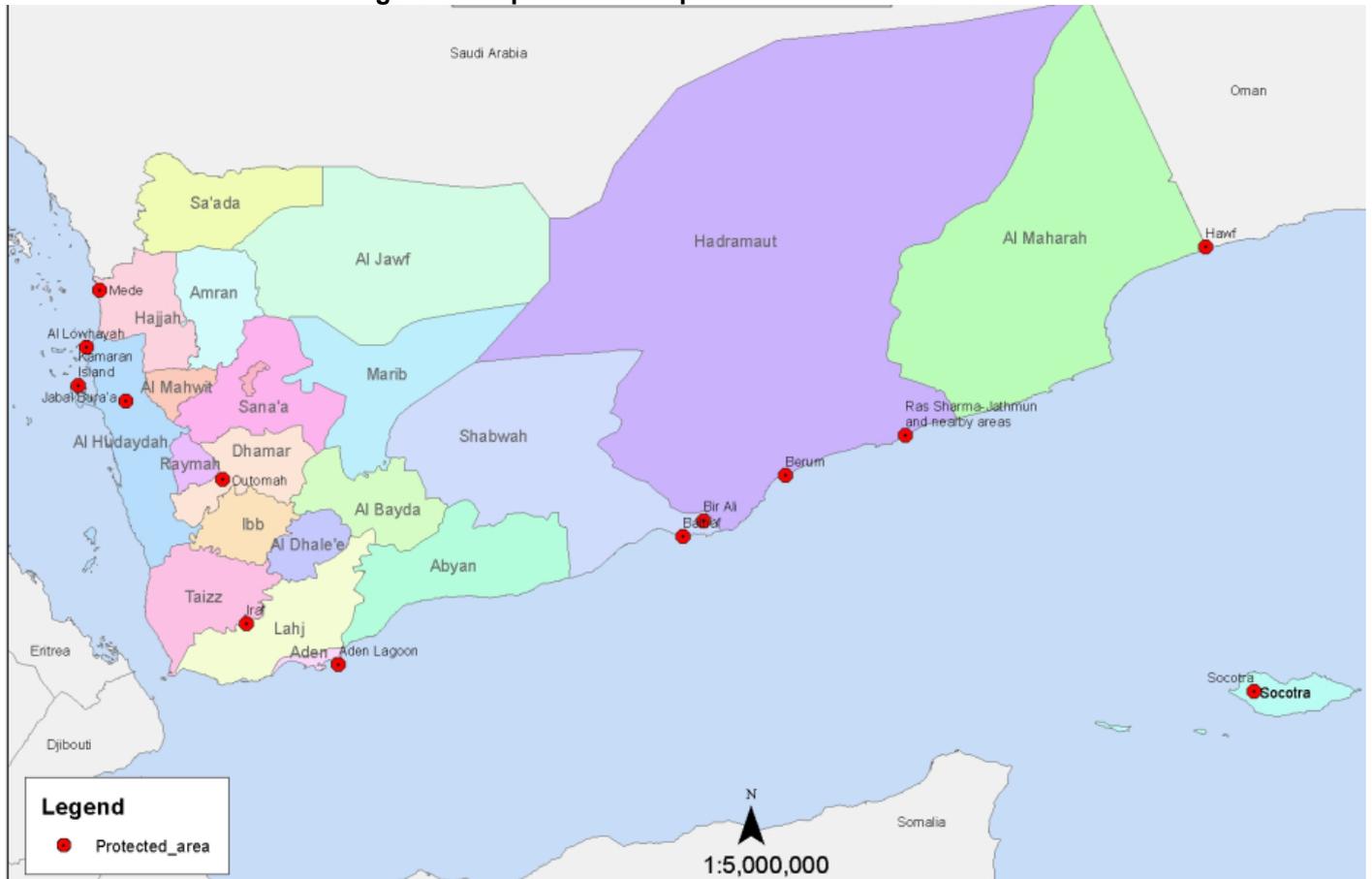
**Table 2. List of declared protected areas in Yemen**

No	Location	Characteristics	Governorate	Physical region
1	Hawf	Mountain Forest and Coastal	Al Mahra	Coastal Plains
2	Ras Sharma-Jathmun	Green Turtle Protected Area	Hadramout	Eastern Plateau
3	Berum	Coral Reef	Hadramout	Coastal Area
4	Bir Ali	Marine Protected Area + Birds	Shabwa	Eastern Plateau
5	Belhaf	Turtles	Shabwa	Coastal Area
6	Aden Lagoon	Wetland	Aden	Coastal Area
7	Iraf	Forest junipers	Lahej	Mountainous
8	Outomah	Protected Area	Dhamar	Mountainous
9	Jabal Bura'a	Protected Area Forest	Hodeida	Mountainous

<sup>24</sup> ND-Gain <https://gain.nd.edu/our-work/country-index/rankings/>

10	Kamaran Island	Mangrove + Coral Reef	Hodeida	Island
11	Al Lowhayah	Mangrove	Hodeida	Coastal Area
12	Mede	Mangrove	Hajjah	Coastal Area

**Figure 4. Map of declared protected areas in Yemen**



## 5.4 Social and economic

### 5.4.1 Population

106. At current rates of growth, Total population is expected to reach 36,8 million in 2030. The population growth rate is attributed to natural increases from the high fertility and decreasing mortality rates with improvement in health services. The total fertility rate (TFR) in Yemen is estimated at 6.48 in 1997 (Source 2001 Statistical Yearbook). Fertility in Yemen is not only one of the highest in the world but also shows that until recently it was increasing. A number of factors contribute to this high TFR; they include:

- Marriage is universal among women, and most marry at a young age, so that by the age of 40 nearly 98% have been married; the average marrying age is about 18 years
- Births usually follow in rapid succession of each other
- Women continue to bear children until the end of their reproductive life
- Contraceptive methods are not widely known or available and because of unfamiliarity with devices, they are often not properly used

107. Although mortality rates are declining the overall level is relatively high as compared with world average (Yemen's Infant Mortality Rate is 121 per 1000 live births); the associated life expectancy at birth is 50 years (NEAP, Policies and

Guidelines, 1995).

#### **5.4.2 Poverty**

108. Yemen is characterized by high levels of poverty and inequality. Yemen's economy has contracted by more than 50% since 2015, which has left 60% Yemenis households without a regular source of income. Severe shortages of food and fuel combined with the loss of value of Riyal and high commodity prices left many poor unprotected. Furthermore, the Conflict deprived millions of people of their livelihoods and drove poverty levels to above 80%. It has also damaged critical lifeline infrastructure, hindered access to basic needs, and increased the costs of transport and doing business; which in turn aggravated food insecurity. Movement restrictions because of COVID-19 and access restrictions to Al Hodeida port and the closure of the Sana'a international airport closure have aggravated the economic and food security crisis.
109. The conflict has led to widespread displacement, access constraints due to damages of transport infrastructure as well as fuel and supply chain disruptions. Since 2015, the prices of food and life support commodities has increased by more than 200% in some governorates. COVID-19 induced movement restrictions and intermittent blockage of fuel imports have led to logistics supply bottlenecks, contributing to further soaring food prices and constraining access to it. Furthermore, conflict caused damages to major roads, ports and airports have caused supply chain disruption for food imports and humanitarian assistance and a fuel supply crisis.

#### **5.4.3 Gender**

110. Women are more severely affected by the current crisis than men<sup>25</sup>, due to the lack of job opportunities and the high number of female-headed households that are particularly vulnerable to food insecurity. In addition, women are mostly excluded from commercial interactions in most local marketplaces. Mobility restrictions (for security and cultural reasons) are frequently an impediment to women and girls accessing humanitarian distribution locations.
111. The on-going conflict and the internal and external migration of rural male labor in search of income have forced rural women to take on more and more responsibilities. Yemen's rural communities have become heavily reliant on women for agricultural activities, for maintaining farms and for managing other demanding roles such as fetching water and collecting firewood.

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<sup>25</sup> CEN, Yemen FY20-FY21

## Chapter 6.

# Potential Environmental and Social Risks and Mitigation

112. This chapter identifies the potential Environmental, Social (including labor), Health, and Safety (ESHS) risks and impacts associated with Project activities, and the matching mitigation measures. Project activities will have strong positive environmental, social, and health impacts by rehabilitating rural roads. Health and environmental impacts are generally of moderate size and should cause only moderate negative environmental that can be readily addressed through proper design, construction, and operation and maintenance.
113. The Project will only upgrade, rebuild, restore, or rehabilitate existing infrastructure. There will be no expansion of existing facilities nor the creation of new ones, and rehabilitated facilities will be handed back to the competent authorities.
114. The Project will not finance activities that involve permanent land acquisition causing physical or economic displacement.
115. While at this stage, not associated facilities have been identified, it is possible that some activities may be considered as such in the framework of the multi-donor partnership for the Yemen Transport Sector that is currently being established. Any activities that satisfy all three criteria for Associated Facilities according to the ESF will have to apply the policy. The criteria and screening process to identify associated facilities will be included in the ESMF.

## 6.1 Risks and Impacts

### 6.1.1 Environmental and Social Risks

116. The Project's environmental risks and impacts were rated as substantial. They are expected to be site-specific, limited, reversible, and mitigatable. As described in the Project Appraisal Document, they include:
- (i) Work related accidents and injuries
  - (ii) Risks to workers from hazardous material used for construction such as acetylene, bitumen, petroleum, diesel, lubricating oil, paints and chemicals
  - (iii) Poor onsite sanitation or water supply, leading to illness and disease
  - (iv) Increased road traffic flows due to construction transport for road rehabilitation
  - (v) Increased levels of noise and vibration due to heavy vehicles and construction equipment, which are a nuisance to the communities affected
  - (vi) Air pollution due to emissions from construction vehicles and equipment
  - (vii) Creation of liquid wastes which might cause soil pollution; creation of solid, or potentially hazardous
  - (viii) Wastes from construction debris or the use of chemicals during construction
  - (ix) Bad odors
  - (x) Dust generation during excavation, backfilling, compaction, or transportation of construction materials
117. The project will have broad social benefits, such as facilitating all weather access to rural residents to economic opportunities, markets, services and emergency relief, and

enable job creation. Nonetheless, the social risks of the project were rated as high. The key social risks identified in the Project Appraisal Document are:

- (i) The potential for excluding vulnerable and disadvantaged groups and individuals -including IDPs, and elite capture when selecting roads to be rehabilitated or maintained or when awarding contracts for road maintenance
- (ii) Community health and safety during construction and operation
- (iii) Use of child labor
- (iv) Forced labor
- (v) Insecurity of Project workers and beneficiaries during Project implementation, given the conflict context
- (vi) Restriction on land use and involuntary resettlement, in particular impacts on livelihood of formal and informal street vendors and shops or fields along the selected roads. While physical relocation is expected to be limited given the nature of civils works, which will take place in-situ of the existing ROW, physical relocation and impacts on encroaching residences cannot be entirely excluded
- (vii) Road safety during both the construction and operational phases
- (viii) Propagation of communicable diseases, including COVID-19
- (ix) Temporary labor influx, as contractors might need to lodge some of the workers at existing facilities, such as at hotels or rented houses. The labor influx might cause illicit behavior, sexual exploitation and abuse and sexual harassment (SEA/SH), as well as potentially increasing the propagation of transmittable diseases, including COVID-19.

118. The Bank applied the SEA/SH screening tool to the Project and rated SEA/SH risks as moderate. The SEA/SH risks are mostly limited to the construction phase of the Project and can be partly managed through compensatory and supervisory measures.

## 6.2 Selection, design, and operation

119. A first tier of risks rests with UNOPS and RAP. They are related to the selection, design, and siting of subprojects. RAP must take into account the operation of the upgraded or rehabilitated infrastructure, whereas UNOPS will not be involved once the works are completed. The risks resting with UNOPS or RAP are described in the Table below:

**Table 3. Risks resting with UNOPS or RAP**

Risks	Mitigation measures
<b>Security Risks</b>	
<ul style="list-style-type: none"> <li>● Workers might be put in harm's way because of the ongoing security concerns in Yemen</li> </ul>	<ul style="list-style-type: none"> <li>● UNOPS will implement its Security Management Plan, a standalone document, including measures for Contractors to protect their workers</li> <li>● If necessary, UNOPS and RAP will not fund activities in insecure areas</li> </ul>
<b>Risks associated with the exclusion of disadvantaged and vulnerable, and with elite capture</b>	
<ul style="list-style-type: none"> <li>● Exclusion from project benefits due to gender, social and economic status</li> <li>● Possible tensions and even conflict among the beneficiaries, local communities and even districts or potential contractors and suppliers, because of insufficiently transparent processes, and inadequate disclosure of project information</li> </ul>	<ul style="list-style-type: none"> <li>● UNOPS and RAP will ensure that contracting is inclusive and transparent</li> <li>● UNOPS and RAP as part of SEP implementation, will ensure and confirm equal access to Project benefits</li> </ul>

<ul style="list-style-type: none"> <li>● Contract awards might disadvantage certain groups</li> <li>● Possible corruption and elite capture of Project benefits</li> </ul>	
<b>Landslides and Soil Erosion</b>	
<ul style="list-style-type: none"> <li>● Road maintenance, excavation and earth removal activities render slopes and top soils more vulnerable to landslides and erosion. Such landslides can damage agricultural land and endanger people and property. This is particularly true in mountainous areas</li> </ul>	<ul style="list-style-type: none"> <li>● UNOPS and RAP will ensure that road design reduces landslide risks, including: <ul style="list-style-type: none"> <li>○ Avoid waterlogging that might affect slope stability, the environment or livelihoods, but do not drain existing wetlands that do not affect slope stability</li> <li>○ Taking into account the nature of the terrain and its geology</li> <li>○ Adequate drainage systems for extreme events</li> <li>○ Increase of the mass thickness of the road rock fill and road bed to provide additional stability</li> <li>○ Where feasible, provision of an open area of at least 1 m wide behind the cut slope ditch, to accommodate fallen debris</li> <li>○ Cost-effective bioengineering measures for slope stabilization such as vegetation with indigenous species.</li> </ul> </li> <li>● Component 2 (iii) of the Project addresses the longer-term risk of landslides and erosion by strengthening RAP's and RMF's capacity to predict, respond and design resilient roads infrastructure to extreme climate events such as floods</li> </ul>
<b>Runoff</b>	
<ul style="list-style-type: none"> <li>● Roads tend to concentrate surface water runoff. Poorly designed management of runoff water can cause landslides and increase soil erosion</li> </ul>	<ul style="list-style-type: none"> <li>● UNOPS and RAP will ensure that road design include sufficient ditches and channels to handle even extreme runoff, and avoids the accumulation of water on the road surface</li> </ul>
<b>Biodiversity</b>	
<ul style="list-style-type: none"> <li>● Road intersections with existing animal pathways and amphibian crossing routes might lead to increased collisions with crossing animals.</li> <li>● Road design might require cutting a small number of trees</li> <li>● Noise from construction activities, can negatively affect birds or other wildlife communities that communicate by auditory signals. The noise impact on animal life will be sporadic and is not expected to have a lasting impact.</li> </ul>	<ul style="list-style-type: none"> <li>● RAP will minimize impact on animal and amphibian road crossings by reducing speed limits in critical areas</li> <li>● RAP will maintain clean culverts and maintain them as necessary to provide safe crossing for amphibians</li> <li>● UNOPS and RAP will ensure that 4 trees are planted for every tree cut because of the Project</li> </ul>

### 6.2.1 Road safety during operation

120. The Project applied the World Bank Road Safety Screening and Appraisal Tool (RSSAT) to assess the road safety impact of the proposed rehabilitation of the 14 rural roads targeted. Given the lack of relevant granular data, efforts focused on collecting, verifying, processing and coding data from various sources and based on good practices, including engineering pre-feasibility design studies, WHO estimates (2018), and speed

and traffic data from the Road Economic Decision Model (RED) were used. The estimated Project Safety Impact (PSI) score was calculated for each projected rural road. The PSI scores for the 14 roads are below 1 and the average estimated PSI is 0.74. To ensure a good final outcome, road safety is embedded in the project technical designs. The base designs include innovative safety design features such as: safety barriers near Wadi crossings and in hilly segments, installing of speed management facilities, protected pedestrian crossings and walking along facilities and adequate warning signs in populated areas and near schools, markets and health centers. The Road Safety benefits have been calculated as well.

### 6.3 Contractors

121. The bulk of the Project environmental and social risks and impacts are related to Contractor activities. Whereas UNOPS and RAP will directly manage the risks described in Section 6.2 above, UNOPS and RAP must cascade environmental and social requirements to all contracted entities (Contractors). The Table below provides a generic list of risks and impacts that Contractors must address. Some of the listed risks and impacts might only be relevant to some of the Project activities. The list anticipates the risks and impacts that might become relevant across the range of Project activities, but does not imply that any or all of the listed risks are likely to happen for a specific Project activity.

122. UNOPS will mitigate the environmental and social risks and impacts of Contractors by requiring them to meet a detailed set of **Environmental, Social, Health, and Safety (ESHS) requirements<sup>26</sup> (Annex 5) that directly match the risks and impacts listed in the Table**. Because the ESHS requirements are over 15 pages long, they are annexed rather added to the table as a column. The ESHS requirements are organized in 10 sections or sub-plans:

1. General Provisions
2. ESHS Training
3. Construction Site Management
4. Occupational Health and Safety (OHS)
5. Road safety and Traffic Safety
6. Chance Find Procedures
7. Emergency Preparedness and Response
8. Stakeholder Engagement
9. Labor force management, including the Code of Conduct
10. Contractor Environmental and Social Reporting

123. Given that Project activities range from advisory services, paving roads, spot improvements, or drainage structures, their environmental and social risk profiles will significantly vary, and some of the requirements will not be relevant for certain activities. This will be determined during the screening of activities (see Chapter 7), and UNOPS will apply the ESHS requirements to contracted entities in a manner that is proportional to their relevance for a particular set of activities.

**Table 4. Potential ESHS risks and impacts associated with the activities of contractors**

RISK or IMPACT	Relevant ESS
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<sup>26</sup> The ESHS requirements are broadly based on the General EHS Guidelines of the World Bank Group, and other World Bank Guidelines

<b>Construction Site Management</b>	
<b>Lack of Appropriate Area Signage</b>	
<ul style="list-style-type: none"> <li>The absence of appropriate signage and precautionary measures can lead to accidents at work sites</li> </ul>	ESS2, ESS4
<b>Vegetation</b>	
<ul style="list-style-type: none"> <li>Loss of small bush and trees along the roads may occur during construction. This impact is generally considered minor, except when it involves productive, ancient or other trees or vegetation considered important by the local community. Construction activities may also interfere with bird nests or small animal dens located in verges, quarries or borrow areas.</li> </ul>	ESS6
<b>Existing assets</b>	
<ul style="list-style-type: none"> <li>Existing installations, such as buildings, structures, works, pipes, cables, sewers, or other services may be damaged</li> <li>Road works might require the displacement or temporary shutdown of water supply systems often running parallel to existing roads or crossing underneath. These systems are invariably the only source of water available for certain regions and their displacement or temporary shutdown can deprive inhabitants from much needed water</li> <li>Owners, tenants, or occupiers of properties may be disturbed or inconvenienced by the construction works, including temporary loss of access to neighboring houses and traffic management challenges</li> </ul>	ESS4  ESS4
<b>Chance Finds of Cultural Heritage</b>	
<ul style="list-style-type: none"> <li>Project activities might damage cultural heritage</li> </ul>	ESS8
<b>Waste from Construction Activities</b>	
<ul style="list-style-type: none"> <li>The upgrade of roads in mountainous terrain will generate large amounts of spoils, cut materials and asphaltic waste. Construction waste or surplus fill that is dumped along the side of the road can kill or damage vegetation, contribute to erosion and slope stability problems, destroy terraces or other agricultural land, and contaminate groundwater. In view of the pervasiveness of terraced agriculture in Yemen, potential damage to terraces is a particularly important impact.</li> <li>Road rehabilitation works will result in the generation of soil. Improper waste disposal from works can potentially lead to the contamination of soils and watercourses.</li> <li>Transport of waste might litter roads</li> <li>Solid waste and debris might be disposed improperly</li> </ul>	ESS3, ESS4  ESS3  ESS3
<b>Air Pollution</b>	
<ul style="list-style-type: none"> <li>Air pollution due to emissions from construction vehicles and equipment</li> <li>Dust generation during excavation, backfilling, compaction, or transport of construction materials can affect the wellbeing of neighboring communities. In agricultural areas, emissions from construction equipment and excavation activities will deposit on nearby plants and vegetation along the road. The area impacted is typically be limited to less than 100 m wide corridor along the road</li> </ul>	ESS3 ESS4
<b>Hazardous and Toxic Waste</b>	
<ul style="list-style-type: none"> <li>The production of liquid wastes can lead to soil or groundwater pollution</li> <li>Hazardous, or potentially hazardous, wastes from construction debris or the use of chemicals can spill into the environment</li> </ul>	ESS3 ESS3
<b>Borrow Pits and Quarries</b>	
<ul style="list-style-type: none"> <li>Quarries used by primary suppliers could lead to the significant conversion or degradation of natural or critical habitats</li> <li>Improperly sited quarries can pollute the ground and surface water</li> <li>Unfenced borrow pits and quarries are a hazard to people and livestock</li> <li>Borrow pits and quarries can deface the landscape</li> <li>Poorly or illegally sourced materials might increase the risk of landslides, particularly in very steep terrain</li> </ul>	ESS6  ESS3 ESS4 ESS3, ESS4 ESS4

<b>Worker Facilities</b>	
<ul style="list-style-type: none"> <li>Poor management of worker facilities create health and environmental hazards</li> </ul>	ESS2, ESS3
<b>Decommissioning of Camps, Worksites and Plant</b>	
<ul style="list-style-type: none"> <li>Poorly decommissioned sites can create pollution and risks to neighboring communities</li> </ul>	ESS4
<b>Occupational Safety</b>	
<b>Severe Weather</b>	
<ul style="list-style-type: none"> <li>Lack of planning and protection during severe weather can lead to accidents and injuries</li> </ul>	ESS2, ESS4
<b>Lavatories and Showers</b>	
<ul style="list-style-type: none"> <li>Lack of lavatories and showers increases the risk of illness and disease</li> </ul>	ESS2
<b>Potable Water Supply</b>	
<ul style="list-style-type: none"> <li>Inadequate supply of potable water on site can lead to worker illness and disease</li> </ul>	ESS2
<b>Clean Eating Area</b>	
<ul style="list-style-type: none"> <li>The absence of clean eating areas can lead to worker illness and disease</li> </ul>	ESS2
<b>Personal Protective Equipment (PPE)</b>	
<ul style="list-style-type: none"> <li>The lack of appropriate PPE, and of training in its use, can lead to injuries</li> </ul>	ESS2
<b>Noise and Vibration</b>	
<ul style="list-style-type: none"> <li>High noise levels caused by heavy machinery can permanently affect the hearing of workers</li> <li>Increased levels of noise and vibration due to heavy machinery and construction equipment can be a significant nuisance to neighboring communities</li> </ul>	ESS2 ESS4
<b>Slips and Falls</b>	
<ul style="list-style-type: none"> <li>Slips and falls on the same elevation are among the most frequent cause of lost time accidents at construction sites</li> </ul>	ESS2
<b>Working at Heights</b>	
<ul style="list-style-type: none"> <li>Falls from elevation associated with working with ladders, scaffolding, and partially built or demolished structures are among the most common cause of fatal or permanent disabling injury at construction sites</li> </ul>	ESS2
<b>Struck by Objects</b>	
<ul style="list-style-type: none"> <li>Construction and demolition activities pose significant hazards related to the potential fall of materials or tools, as well as ejection of solid particles from abrasive or other types of power tools which can result in injury to the head, eyes, and extremities</li> </ul>	ESS2
<b>Welding/Hot Works</b>	
<ul style="list-style-type: none"> <li>Welding may seriously injure a worker's eyesight, and in extreme cases blindness may result.</li> </ul>	ESS2
<b>Health</b>	
<b>Injuries</b>	
<ul style="list-style-type: none"> <li>The absence of qualified on-site first and first aid planning can aggravate the outcome of work-related injuries</li> </ul>	ESS2
<b>Communicable Diseases</b>	
<ul style="list-style-type: none"> <li>Construction sites can facilitate the spread of communicable diseases</li> </ul>	ESS2, ESS4
<b>COVID-19</b>	
<ul style="list-style-type: none"> <li>Construction sites can increase the spread of COVID-19</li> </ul>	ESS2, ESS4
<b>Vector-Borne Diseases</b>	
<ul style="list-style-type: none"> <li>Poorly managed construction site can favor vector borne diseases, particularly if pools of stagnant water are not avoided</li> </ul>	ESS2, ESS4
<b>Road safety and Traffic Safety</b>	
<ul style="list-style-type: none"> <li>Project related traffic can cause accidents, injuring both works and community members</li> </ul>	ESS2, ESS4
<b>Emergency Preparedness and Response</b>	

<ul style="list-style-type: none"> <li>Lack of preparation can seriously increase the negative impact of an emergency, including spills and explosions</li> </ul>	ESS4
<b>Stakeholder Engagement</b>	
<ul style="list-style-type: none"> <li>The lack of engagement with neighboring communities affected by Project activities might cause tensions, and result in complaints</li> </ul>	ESS10
<b>Labor Force Management</b>	
<b><i>Inappropriate Working Conditions</i></b>	
<ul style="list-style-type: none"> <li>Contractors might not provide workers with the terms and conditions they are entitled to under Lebanese Labor Legislation (wages, leave and rest, overtime, maternity leave)</li> </ul>	ESS2
<b><i>Lack of Insurance</i></b>	
<ul style="list-style-type: none"> <li>Contractors might not compensate workers and their families for workplace injuries or deaths</li> </ul>	ESS2
<b><i>Grievance Mechanism for Workers</i></b>	
<ul style="list-style-type: none"> <li>Lack of a functioning worker GM, or contractors might not act on worker grievances</li> </ul>	ESS2
<b><i>Child Labor or Forced labor</i></b>	
<ul style="list-style-type: none"> <li>Contractors might unknowingly employ workers under the age of 18, or forced laborers</li> </ul>	ESS2
<b><i>Sexual Exploitation and Abuse</i></b>	
<ul style="list-style-type: none"> <li>Workers might sexually abuse or exploit women or children or might be exposed to SEA/SH</li> </ul>	ESS2, ESS4

### 6.3.1 Quarries

124. Given the limited nature of the proposed rehabilitation and maintenance activities, **contractors employed by UNOPS and RAP will not develop their own quarries**, but will instead rely on existing large quarries, or purchase rock fill from merchants supplied by these quarries. Aggregates for road construction are widely found and sands and gravels are also found in abundance throughout the governorates targeted by the Project. Shortages of either rock or gravel materials are therefore unlikely.
125. UNOPS's contractors will have limited knowledge of quarrying activities and even more limited leverage on activities within quarries.

## Chapter 7.

# Procedures to Address Environmental and Social Risks

126. This section sets out in detail the procedures to be followed in addressing the environmental and social risks and impacts of subprojects

### 7.1 Exclusion List<sup>27</sup>

127. The first step in addressing a subproject's environmental and social risks and impacts is for the ESSO to exclude as ineligible for UNOPS support all subprojects that include any of the following attributes:

- Activities that may cause long term, permanent and/or irreversible adverse impacts (e.g., loss of major natural habitat)
- Activities that involve the acquisition of private land through eminent domain
- New constructions or expansions that may involve significant physical relocation or private land acquisition or adverse impacts on cultural heritage
- Activities that have high probability of causing serious adverse effects to human health and/or the environment not related to treatment of COVID-19 cases
- Activities that may have significant adverse social impacts and may give rise to significant social conflict
- Activities that may adversely affect lands or rights of vulnerable minorities
- Activities that might involve significant impacts on biodiversity or living natural resources
- Activities that might have a significant impact on tangible or intangible cultural heritage

### 7.2 Screening

128. Within one week of receiving a draft subproject proposal from UNOPS' technical staff or UNOPS' Implementing Partners, the ESSO will prepare, sign, and pass on to the Project Manager, a subproject specific screening form (Template in Annex 1), indicating:

- (i) The proposed environmental and social risk rating (High, Substantial, Moderate or Low), with justifications
- (ii) The proposed environmental and social risk management instruments to be prepared.

129. Most importantly, the ESS Expert shall determine if the subproject requires a full Environmental and Social Impact Assessment (ESIA) and Environmental and Social Management Plan (ESMP), or a site-specific proportionate ESMP.

130. As necessary, the ESS Expert will visit the proposed site to confirm his conclusions.

### 7.3 Environmental and Social Risk Management Instruments

#### 7.3.1 *Subprojects requiring a full ESIA and ESMP*

131. If a subproject requires a full ESIA and ESMP, the ESSO within UNOPS will prepare draft ToRs for the ESIA and ESMP as per the templates in Annexes 3 and 4. He will then pass on the ToRs to the Program Manager who will submit them to the World

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<sup>27</sup> As indicated in Section 1.3 of the Project ESCP

Bank for review and clearance.

132. UNOPS will competitively select consultants to prepare full ESIA and ESMPs for subprojects that require them. The ESSO will supervise their preparation and interact with the consultants. On completion of the instruments, the Program Manager will submit the draft ESIA and ESMPs to the World Bank for their review, clearance and disclosure.

133. Given the type of activities described in the Project Appraisal Document, it is not expected that any full ESIA or ESMP will be required.

### 7.3.2 *Subprojects only requiring an ESMP*

134. The responsible ESSO will prepare proportionate ESMPs for subprojects not requiring a full ESIA and ESMP. These proportionate subproject ESMPs must be prior reviewed and cleared by the World Bank before a subproject can be implemented. The UNOPS ESSO will review and ensure the quality of all ESMPs before they are sent to the Bank by the Project Manager.

135. The proportionate ESMPs will consist of the set of mitigation, monitoring, and institutional measures to be taken during implementation and operation of a subproject to eliminate adverse environmental and social risks and impacts, offset them, or reduce them to an acceptable level. The proportionate ESMPs will meet the relevant ESF requirements, and also incorporate subproject specific measures arising from the LMP, the SEA/SH Prevention and Response Action Plan, and the SEP prepared for the Project.

136. The proportionate ESMPs will be prepared according to the following table of content:

#### Summary Sheet

<b>Subproject Name</b>	
<b>Subproject Location</b>	
<b>Implementing Partner</b>	
<b>Risk level (low, moderate, substantial or high)</b>	
<b>Date of the field visit</b>	
<b>Consultation Summary</b>	
<b>Observations/Comments</b>	
<b>Signature of responsible ESSO</b>	
<b>Date</b>	

#### Subproject Description

- Nature and scope of activities, particularly construction and rehabilitation works. Include all the technical details that are relevant to understand the environmental and social risks and impacts of the subproject
- Location, including a map. If the subproject includes multiple locations, then the particulars of each location must be provided.

#### Environmental and Social Baseline

- Provide all the necessary information required to understand the environmental and social risks and impacts of the subproject.
- Provide enough pictures to illustrate environmental and social issues, with appropriate legends.

#### Consultations

- Detail how UNOPS has engaged with affected and concerned stakeholders of the subproject, through the process of stakeholder engagement described in the Project (SEP).

In particular UNOPS will initiate consultations to inform stakeholders about the activities to be undertaken, their timetable and possible impacts, as well as the subproject specific grievance mechanism procedures.

The consultations shall include the communities and persons that might be negatively affected, and not only beneficiaries or interested and concerned parties.

The consultation process will take in account the sociocultural context of Yemen. Consultations can take the form of focus groups, discussions with elders/community leaders, or interviews. Separate consultations will be done for women in order to ensure that any special concerns and needs are taken into account during the preparation of the safeguard instruments. UNOPS will ensure that PAPs are not exposed to risks as part of their participation in subproject consultations, for example by not disclosing personal information/photos.

- Document all subproject specific consultations (date, location, list of participants, affiliations, topics discussed, issues raised, and conclusions).
- Indicate how stakeholder comments, suggestions, concerns, and expectations were addressed in the site-specific proportionate ESMP
- Join photos of the consultations
- Detail the grievance mechanism procedures specific to the subproject.

### **Mitigation Instruments**

- Refer to the Environment, Social (including labor), Health, and Safety requirements (Annex 5) and attach them to the ESMP
- Highlight the ESHS requirements to which subproject contractors must pay the greatest attention. If necessary, the ESMP will “proportionalize” the ESHS requirements<sup>28</sup> to the subproject’s nature, scope, the specific environmental and social risks, and the number of workers involved. For example, UNOPS might need to specify for small contracts the type of PPE, or the contents of First Aid Boxes.
- If necessary, indicate additional requirements that will be applicable to the subproject contractor.
- Indicate the mitigation measures that UNOPS and its Implementing Partners will be implementing to address the environmental and social risks and impacts not associated with contractors (see section 6.2 of this ESMF), including legacy issues, and technical assistance.
- Detail subproject specific measures required for the subproject to be in accordance to the Project Labor Management Procedures (LMP)
- Detail subproject specific measures required for the subproject to be in accordance with the Project SEA/SH Prevention and Response Action Plan
- Provide a subproject specific monitoring plan that indicates what parameters will be monitored, how they will be monitored, who will monitor them, and how frequently they will be monitored.
- Detail any training provided by UNOPS to the contractors and their workers.

### **Budget**

- Provide a budget for the mitigation measures to be implemented by UNOPS and its implementing partners. The cost to contractors of meeting the ESHS requirements will be included in their respective contracts.

## **7.4 Incorporating ESHS requirements in contracts<sup>29</sup>**

137. UNOPS or RAP will ensure that:

- Requests for Proposals reference the ESHS requirements.
- Bidders submit a preliminary environmental and social plan as part of their bids; describing the principles and methodology, they will use to address environmental, social, health and

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<sup>28</sup> The EHS Guidelines remain the document of reference to determine compliance

<sup>29</sup> UNOPS will also require all contractors to meet its GHS guidelines, although they might not be explicitly mentioned in contract conditions.

safety issues under the contract, and will include all costs associated with managing environmental and social issues in their bids.

- The quality of the preliminary environmental and social plan, the bidders' past environmental and social performance, and their ability to manage environmental and social issues will be considered in the selection of contractors.
- The selected contractors will prepare a Contractor Environmental and Social Management Plan (C-ESMP), detailing how the ESHS requirements will be implemented, including personnel
- It approves the C-ESMP before the start of activities
- C-ESMPs will serve as the benchmark for monitoring and evaluating the contractor's environmental and social performance.

## 7.5 Consultation and Disclosure Requirements

138. Despite the emergency situation and the current COVID-19 pandemic, UNOPS consulted with the Implementing Partner, to ensure that stakeholders are involved in project preparation. Further details regarding consultations during project preparation are found in the YELCP Stakeholder Engagement Plan (SEP).

139. For each subproject, the responsible ESSO will engage with affected communities, including host communities, through the process of stakeholder engagement described in the Project Stakeholder Engagement Plan (SEP). UNOPS and its Implementing Partner will initiate consultations with individuals and communities that might be affected by the subproject, as soon as subproject screening has been completed. The purpose of the consultations will be to: (i) inform them about the activities to be undertaken, their timetable and possible impacts, and; (ii) document and address their concerns. Consultation summaries should be included in safeguard instruments, including who was consulted, where and when, what concerns were expressed, and how these concerns were addressed. The records of consultations are kept in the Project Office.

140. The consultation process will take in account the sociocultural context of Yemen. Consultations can take the form of focus groups, discussions with elders/community leaders, or interviews. Separate consultations will be done for women in order to ensure that any special concerns and needs are taken into account during the preparation of the safeguard instruments. In light of the fragility, conflict, and violence (FCV) context, the ESSO of the concerned Implementing Partner will ensure that PAs are not exposed to risks as part of their participation in subproject consultations, for example by avoiding large meetings, and not disclosing personal information/photo.

### 7.5.1 Proposed Strategy for Information Disclosure<sup>30</sup>

141. UNOPS and RAP will disclose Project information to the targeted stakeholder audiences. Key dates for information disclosure are at the start of the project, at mid-term as well as at the end of the lifespan of the project. UNOPS will translate the SEP, as well as the Project Environmental and Social Management Framework (ESMF), the Resettlement Framework, the Labor Management Procedures (LMP), the Gender based violence (GBV) Prevention and Response Action Plan into Arabic, and make hard copies in English and Arabic publicly available at its Project Office in Sana'a, as well as the UNOPS Project website, and through the websites of the implementing partner (RAP). These documents will remain in the public domain throughout Project preparation and implementation.

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<sup>30</sup> This section is copied from the Project Stakeholder Engagement Plan section 4.3

142. The SEP will be updated as necessary during Project implementation to include any new stakeholders that might be identified, and to revise methods of engagement to maintain their effectiveness and relevance to the Project.

143. UNOPS and its implementing partner will disclose information using a combination of different channels, as found suitable for each specific subproject. These can include face-to-face meetings where applicable, accompanied by information shared via radio, television, newspapers, posters, brochures and leaflets as well as via websites and social media.

**Table 5. Project Strategy for Information Disclosure**

Stakeholders	Information to be Disclosed	Methods
<b><i>Prior to Project Appraisal</i></b>		
Government authorities and agencies	<ul style="list-style-type: none"> <li>● Project Summary</li> <li>● ESMF, SEP, LMP</li> <li>● Security Management Plan,</li> <li>● GBV Prevention and Response Action Plan</li> </ul>	<ul style="list-style-type: none"> <li>● Dissemination of the E&amp;S instruments (paper or electronic)</li> <li>● Access to UNOPS web site</li> <li>● In person or virtual meetings</li> <li>● Capacity building activities</li> </ul>
Non-governmental and community-based organizations (i.e. Beneficiaries Committees)	<ul style="list-style-type: none"> <li>● Project Summary</li> <li>● ESMF, SEP, LMP</li> <li>● GBV Prevention and response Action Plan</li> </ul>	<ul style="list-style-type: none"> <li>● Dissemination of hard copies at designated locations</li> <li>● Access to UNOPS web site</li> <li>● In person or virtual meetings</li> </ul>
General Public	<ul style="list-style-type: none"> <li>● Project Summary</li> <li>● ESMF, SEP, LMP</li> <li>● GBV Prevention and response Action Plan</li> </ul>	<ul style="list-style-type: none"> <li>● Access to UNOPS web site</li> <li>● Press releases in the local media</li> <li>● Information leaflets and brochures</li> <li>● Notification through local radio or TV News</li> <li>● Mosques</li> </ul>
Project direct workers	<ul style="list-style-type: none"> <li>● Project Operations Manual</li> <li>● Worker Grievance Procedure</li> <li>● GBV Prevention and response Action Plan</li> </ul>	<ul style="list-style-type: none"> <li>● Paper or electronic dissemination</li> <li>● In person or virtual meetings</li> </ul>
<b><i>Prior and during Subproject implementation</i></b>		
Local authorities, Beneficiaries Committees, and community leaders	<ul style="list-style-type: none"> <li>● Subproject proposal</li> <li>● Information required for the purposes of regulation and permitting.</li> <li>● ESHS requirements</li> <li>● ESMPs and any Resettlement Action Plans</li> <li>● SEP, including the Project Grievance Mechanism</li> </ul>	<ul style="list-style-type: none"> <li>● Paper or electronic dissemination</li> <li>● In person or virtual meetings</li> <li>● UNOPS web site</li> </ul>
Targeted beneficiaries and Project Affected Persons	<ul style="list-style-type: none"> <li>● Subproject proposal</li> <li>● Subproject ESMP</li> <li>● Resettlement Plan (if required)</li> <li>● LMP, SEP and GBV Prevention and Response Action Plan</li> <li>● Regular updates on Project development.</li> </ul>	<ul style="list-style-type: none"> <li>● Dissemination of hard copies at designated public locations.</li> <li>● In person consultation meetings.</li> <li>● Separate focus groups with vulnerable groups, as appropriate.</li> <li>● UNOPS web site</li> <li>● Press releases in the local media.</li> </ul>

		<ul style="list-style-type: none"> <li>● Information leaflets and brochures.</li> </ul>
Contractors and their workers	<ul style="list-style-type: none"> <li>● Tender/procurement announcements</li> <li>● Subproject ESMPs</li> <li>● ESHS requirements</li> <li>● Code of Conduct</li> <li>● Worker Grievance Mechanism</li> </ul>	<ul style="list-style-type: none"> <li>● UNOPS web site</li> <li>● In person or virtual meetings</li> <li>● In-person or virtual training</li> <li>● Signature of the Code of Conduct</li> </ul>
Related businesses and enterprises	<ul style="list-style-type: none"> <li>● Stakeholder Engagement Plan;</li> <li>● Public Grievance Procedure;</li> <li>● Updates on Project development and tender/procurement announcements.</li> </ul>	<ul style="list-style-type: none"> <li>● Electronic publications and press releases on the Project web-site.</li> <li>● Information leaflets and brochures.</li> <li>● Procurement notifications.</li> </ul>
<b>During Project Implementation</b>		
Government Authorities and Agencies	<ul style="list-style-type: none"> <li>● Regular updates on Project development</li> </ul>	<ul style="list-style-type: none"> <li>● In person or virtual meetings</li> <li>● Correspondence and emails</li> <li>● UNOPS web site</li> </ul>
Project Direct Workers	<ul style="list-style-type: none"> <li>● Project updates</li> </ul>	<ul style="list-style-type: none"> <li>● Emails to Project workers</li> <li>● Regular in person or virtual meetings</li> <li>● Posts on information boards.</li> <li>● Reports, leaflets.</li> </ul>
Non-governmental and community-based organizations (i.e. NGOs, CSOs and UN agencies)	<ul style="list-style-type: none"> <li>● Project updates</li> </ul>	<ul style="list-style-type: none"> <li>● Project status reports</li> <li>● In person or virtual meetings</li> </ul>

## 7.6 Grievance Mechanism

144. UNOPS will apply the Project Grievance Mechanism<sup>31</sup> detailed in Section 5 of the Project Stakeholder Engagement Plan, to all subprojects. Each ESMP will include a subproject specific Grievance Mechanism, with procedures relevant to its specific context.

145. Subproject related grievances can be brought up by affected people in case of: (i) non-fulfillment of contracts or agreements; (ii) compensation entitlements; (iii) types and levels of compensation; (iv) disputes related to destruction of assets or livelihoods; or (v) disturbances caused by construction activities, such as noise, vibration, dust or smell. Anonymous complaints will be admissible.

146. The UNOPS Program Manager based in the Sana'a Office will have the overall responsibility to address Project activity-related complaints and inquiries from Project affected communities or individuals regarding any environmental or social impacts due to subproject activities. The UNOPS ESSO in its Sana'a Office will handle Project activity-related complaints, who will be assisted by UNOPS' City Engineers in the target cities. The ESSO in each of the Implementing Partners will handle complaints related to their activities. UNOPS will coordinate with the local Implementing Partners and will set a unified timeframe for reporting grievances. UNOPS and the Implementing Partners will present and explain the mechanism to all subproject affected persons subproject

<sup>31</sup> The Project Grievance Mechanism described in the Project Stakeholder Engagement Plan (SEP) is distinct from the Workers Grievance Mechanisms described in the Project Labor Management Procedures (LMP).

preparation.

147. UNOPS is providing multiple access points to the ESSO for beneficiaries to voice their concerns. These access points will be advertised at subproject level, and include: complaint box at Project activity sites, at UNOPS' offices in Sana'a, Aden and Mukalla, by directly contacting Project affiliated staff, and by mail, telephone, email, and UNOPS' website:

Address	Haddah Street, former European Union Office Building, Sana'a
Telephone	+967 1 504914 and +967 1 504915 Toll Free 8000190
Email	<a href="mailto:gm-yemen@unops.org">gm-yemen@unops.org</a>
Website	<a href="http://www.unops.org">www.unops.org</a>

## **7.7 Implementation of Subproject Mitigation Measures**

148. UNOPS and the Implementing Partners are responsible for implementing the necessary mitigation measures that are beyond the control of contractors. In addition, subprojects should regularly consult with project affected persons and communities throughout subproject implementation, as indicated in the Project's Stakeholder Engagement Plan.

## Chapter 8.

# Monitoring and Reporting

### 8.1 Environmental and Social Database

149. The ESSO shall establish, maintain and regularly update a database of subprojects that will be shared with the Implementing Partners. The database will include for each subproject:

- (i) type of subproject, name of subproject, Implementing Partners
- (ii) environmental and social risk level
- (iii) timeline (clearance of screening form, clearance of ToRs, clearance of environmental and social risk management instruments)
- (iv) supervision reports during implementation
- (v) contractor reports
- (vi) noncompliance by contractors
- (vii) cross references to the Grievance Mechanism's log of complaints.

### 8.2 ESMF Reporting

150. The ESSO shall monitor the overall implementation of the ESMF by UNOPS and by RAP Implementing Partners, most particularly the:

- (i) Timely preparation of environmental and social screening forms for all subprojects
- (ii) Timely preparation and clearance of subproject ESMPs (list of instruments with dates)
- (iii) Management of prior reviews by the World Bank
- (iv) Status of subproject ESMP implementation.
- (v) Training of project staff and Implementing Partners (list of persons, dates and places).

151. The ESSO shall prepare:

- (i) bi-annual reports summarizing monitoring results, to be included in the project's bi-annual reports to the World Bank
- (ii) reports that aggregate and analyze monitoring results ahead of regular "reverse" World Bank implementation support missions with UNOPS
- (iii) an annual evaluation of all environmental and social monitoring activities, which will be submitted to the World Bank as part of overall project implementation reporting.

### 8.3 Monitoring and Reporting of Subproject Environmental and Social Performance

152. Monitoring and reporting on the environmental and social performance of Project activities will be done by the UNOPS ESSO, the UNOPS Health, Safety, Social and Environment Officer, supervision engineers recruited for UNOPS through a company for the duration of each subproject, the Third-Party Monitoring (TPM) agent, as well as by the ESSO and the Health, Safety, Social and Environment Officers in RAP.

153. The most frequent monitoring will be done by the supervision engineer as they are expected to visit active sites at least twice a week. The HSSE Officers are expected to visit active sites once a month. The ESSO might only visit at the beginning and at completion of subprojects

154. Monitoring will be done as detailed in the following tables.

**Table 6. List of indicators for monitoring the performance of subprojects**

Indicator	Frequency	Responsibility
<b>Security Risks</b>		
● Number and nature of security incidents	Every event reported within 24 hours	Supervision engineer
<b>Exclusion of disadvantaged and vulnerable, and with elite capture</b>		
● Number of consultation meetings with disadvantaged and vulnerable stakeholders	At the beginning and conclusion of subprojects	ESSO
● Number of complaints by stakeholders	Throughout through the Grievance Mechanism	ESSO
<b>Landslides and soil erosion</b>		
● Number and nature of landslides and extent of erosion related to Project activities	Throughout	Supervision engineer
● Visual confirmation that there are no landslide and soil erosion risks related to the Project activities,	Throughout	Supervision engineer
● Confirmation that suitable mitigation measures are in place	Monthly	HSSE Officer**
<b>Runoff</b>		
● Sufficient drainage installed	Subproject completion	HSSE Officer
<b>Biodiversity</b>		
● Speed limit signs installed in critical areas for biodiversity	Subproject completion	HSSE Officer
● Replacement trees planted	Subproject completion	HSSE Officer
● Confirmation that culverts are clean	Monthly	HSSE Officer

**Table 7. List of indicators for monitoring the performance of contractors relative to the ESHS requirements**

Indicator	Frequency	Responsibility
<b>General Provisions</b>		
● C-ESMP was prepared, submitted and approved prior to the start of major construction activities	Beginning of works	ESSO
● On site availability of Safety Officer (from time sheets)	Monthly	HSSE Officer
<b>ESHS Training</b>		
● Proof that all Contractor workers, including subcontractors, underwent ESHS training	Monthly	HSSE Officer
● Visitor logs show that all visitors were logged in and underwent orientation training	Monthly	HSSE Officer
<b>Construction Site Management</b>		
● Confirmation that all necessary permits were obtained	Beginning of activities and throughout	ESSO
<b>Signage</b>		
● Presence of appropriate signage	Throughout	Supervision engineer
<b>Vegetation</b>		

● Verification that there is no destruction, scarring or defacing of natural surroundings outside of designated work areas	Monthly	HSSE Officer
● Verification that damaged areas were revegetated or scarified to facilitate revegetation	Monthly	HSSE Officer
<b>Cultural Heritage</b>		
● Verification if tangible cultural heritage was found and affected	Monthly	HSSE Officer
<b>Waste from construction activities</b>		
● Records showing that all solid waste from excavations was transported to waste disposal sites approved by UNOPS	Monthly	HSSE Officer
● Records showing that the Contractor appropriately sanctioned workers and subcontractors who littered or inappropriately dumped waste materials	Monthly	HSSE Officer
<b>Air Quality</b>		
● Number and nature of complaints from affected populations regarding insufficient dust suppression on unpaved road surfaces	Monthly	HSSE Officer
● Maintenance records showing the regular and proper maintenance of diesel engines	Beginning of activities and throughout	Supervision engineer
<b>Hazardous and Toxic Materials</b>		
● Confirmation that all hazardous areas are marked according to international standards	Beginning of activities and throughout	Supervision engineer
● Confirmation that all vessels containing hazardous substances are labelled as to their content and hazard	Beginning of activities and throughout	Supervision Engineer
● Number and nature of recorded spills of hazardous or toxic waste	Monthly	HSSE Officer
● Confirmation that spill cleanup and containment equipment is available on site, and that staff were trained to handle spills	Monthly	HSSE Officer
<b>Borrow pits and Quarries</b>		
● Records of a necessary permits for borrow pits and quarries ( <b>most materials are expected to be purchased rather than extracted</b> )	Beginning of activities and throughout	Supervision engineer
● Confirmation that borrow pits and quarries are located away from watercourses, human habitations and historical or cultural sites, on land not used for agriculture, and properly fenced	Monthly	HSSE Officer
● Number and nature of complaints or incidents regarding borrow pits or quarries	Monthly	HSSE Officer
<b>Worker Camps</b>		
● Confirmation that worksites and plants were cleared of waste upon completion of works	At completion	HSSE Officer
<b>Occupational Safety</b>		
<b>Lavatories and Showers</b>		
● Availability of adequate lavatory facilities (toilets and washing areas) for the number of workers at the construction sites	Monthly	HSSE Officer
<b>Potable water supply</b>		
● Adequate supplies of potable drinking water is provided	Throughout	Supervision engineer
<b>Personal Protective Equipment (PPE)</b>		
● Availability and use of appropriate Personal Protective Equipment (PPE) at no cost for all workers	Throughout	Supervision engineer
<b>Noise</b>		
● Acoustical attenuation installed on construction equipment	Monthly	HSSE Officer

<b>Health</b>		
● On site availability of qualified first aid personnel	Monthly	HSSE Officer
● Records of the number and nature of accidents, injuries or illnesses	Monthly	HSSE Officer
● Records of the number and nature of health awareness and education initiatives	Monthly	HSSE Officer
● Confirmation that all serious injuries or disease were properly investigated and reported to UNOPS	Monthly	HSSE Officer
● Records of screening and monitoring of workers for communicable diseases	Monthly	HSSE Officer
● Preventive measures taken to avoid vector-borne diseases	Monthly	HSSE Officer
● Measures are in place to reduce COVID-19 spread	Monthly	HSSE Officer
<b>Road Safety</b>		
● Number and nature of traffic accidents involving project vehicles & equipment	Throughout	Supervision engineer
● Number and nature of accidents involving non-project vehicles or property	Throughout	Supervision engineer
● Overall condition of vehicles/equipment based on maintenance records and spot checks	Monthly	HSSE Officer
● Reports showing that the Contractor sanctioned all reported instances of speeding, inconsiderate and risky driving	Monthly	HSSE Officer
<b>Emergencies</b>		
● Records of any event triggering an emergency	Monthly	HSSE Officer
● Records of emergency drills	Monthly	HSSE Officer
<b>Labour Force Management</b>		
<b>Labor Conditions</b>		
● Confirmation that the Contractor transported workers to and from construction sites	Monthly	HSSE Officer
● Confirmation that workers were provided with opportunities to regularly return to their families	Monthly	HSSE Officer
● Records of substance abuse prevention and management programs	Monthly	HSSE Officer
● Proof that locals were employed to the extent possible	Beginning and throughout the subproject	ESSO and supervision engineer
● Records proving that the transfer of skills to local women was promoted through concrete measures, to facilitate their employment at Project sites	Beginning and end of subproject	ESSO
<b>Worker Grievance Mechanism</b>		
● Availability of a registry of complaints by workers	Monthly	HSSE Officer
● Number of worker grievances registered and resolved	Monthly	HSSE Officer
<b>Child Labor</b>		
● Verifiable documentation showing that no person under 18 is employed	Monthly	HSSE Officer
<b>Code of Conduct</b>		
● Records of training on the Code of Conduct	Monthly	HSSE Officer
● Signed Code of Conduct	Monthly	HSSE Officer
● The number and content of awareness training on sexual exploitation and abuse (SEA) and Sexual Harassment (SH) conducted by the Contractor	Monthly	HSSE Officer

● Records showing that the Contractor investigated and sanctioned all reported instances of SEA/SH by workers or Contractor staff, and subcontractor	Monthly	HSSE Officer
● Records showing that the Contractor summarily dismissed workers having proven inappropriate relations with children under the age of 18 (eighteen) or engaged in SEA/SH	Monthly	HSSE Officer
● Records showing that the Contractor fully cooperated with law enforcement agencies in investigating complaints about gender-based violence	Monthly	HSSE Officer
● Monthly reports show that Contractor reported all SEA/GBV instances and responses	Monthly	HSSE Officer
● Confirmation that the Contractor established and facilitated a confidential reporting system for SEA/SH complaints	Monthly	HSSE Officer
● Confirmation that the contractor provided a copy the Code of Conduct to all local communities in Arabic	Monthly	HSSE Officer
<b>Stakeholder Engagement</b>		
● Records showing that the Contractor provided all workers with culturally sensitive training regarding engagement with local communities, including positive examples of behavior towards local populations	Monthly	HSSE Officer
● Number and nature of documented stakeholder engagement activities	Monthly	HSSE Officer
● Number and nature of complaints targeted at the Contractor	Monthly	HSSE Officer
● Records showing that the Contractor satisfactorily resolved complaints	Monthly	HSSE Officer
<b>Environmental and Social Monitoring by Contractor</b>		
● Register of environmental and social issues maintained and sufficiently detailed	Monthly	HSSE Officer
● Reports provided by the Contractor	Throughout	ESSO

*\*\*HSSE Officer will also conduct random checks*

## 8.4 Third Party Monitoring Agent

155. Environmental and social risk management is also part of the scope of the Third-Party Monitoring (TPM) services TPM contracted by UNOPS. More specifically, TPM will monitor report on the compliance with environmental and social requirements during subproject implementation.

156. The TPM agent will need to verify the compliance with intervention's environmental and social management measures as provided in the ESHS requirements included in the contract and the Environmental and Social Management Plan (ESMP) following a three phased approach:

- Phase 1 includes compliance check with the environmental and social safeguards requirements as per sub-Project's relevant documents with regard to the sub-projects preparation/design as well as ensuring application of these requirements in the bid and contract documents and/ or other related implementation arrangements
- Phase 2 includes verification of conformity with safeguards requirements during implementation of subprojects; and compliance check with all environmental and social safeguards requirements per subproject's relevant documents
- Phase 3 includes the correction actions taken by contractors or UNOPS

## **8.5 Incidents and Accidents**

157. UNOPS will notify the World Bank of any incident or accident related to the Project, which has, or is likely to have, a significant adverse effect on the environment, the targeted communities, the public or contracted workers and consultants including security incidents, sexual exploitation and abuse and sexual harassment (SEA/SH) among others, within 48 hours after learning of the incident or accident, followed by an initial report, including a Root Cause Analysis, within 10 days indicating possible root causes and proposing possible corrective actions.
158. UNOPS will provide within 30 days after the notification details of the incident or accident, indicating immediate measures taken or that are planned to be taken to address it, and including any information provided by any contractor or supervising entity, as appropriate. Subsequently, as per the World Bank's request, UNOPS will prepare a Summary report on the incident or accident that includes: (i) a description of the incident or accident, (ii) the measures that UNOPS is taking or plans to take to address the incident or accident and to prevent any future similar event, and (iii) an identification of any part of the information for which confidentiality is required.

## Chapter 9.

# Capacity Building

159. This chapter reviews the capacity and skills available within UNOPS and its Implementing Partners to implement and monitor the ESMF, and proposes measures to enhance this capacity.

### 9.1 UNOPS

160. UNOPS will maintain or recruit qualified staff and resources to support the management of the Environmental, Social, Health, and Safety (ESHS) risks and impacts of the Project, including one Environmental and Social Safeguards Officer (ESSO), one Gender Mainstreaming and GBV Officer, and one Health and Safety Officer, all with qualifications and experience acceptable to the Association. The officers will be supported by an international expert who will be available on an as-needed basis to oversee the overall implementation, monitoring, and reporting of safeguards aspects.

161. UNOPS is already familiar with ESF requirements and will ensure that environmental and social issues will be addressed by qualified specialists.

#### 9.1.1 *Environmental and Social Standards Officer (ESSO)*

162. UNOPS' Environmental and Social Standards Officer (ESSO) based in UNOPS Sana'a Office will oversee the management of environmental and social risks for the Project. The ESSO will:

- Review and clear environmental and social screening forms for all subprojects
- Draft ToRs for any ESIA required as part of subproject preparation
- Submit to the World Bank, through the Project Manager, draft ToRs for subproject ESIA, for their prior review
- Supervise the preparation of ESMPs prepared for UNOPS or its Implementing Partners
- Provide draft subproject ESMPs to the World Bank for review and clearance
- Monitor subproject compliance with the ESMPs, including field visits and spot checks
- Work closely with UNOPS engineers and procurement officers to incorporate environmental and social requirements into subproject design, appraisal and resource mobilization
- Oversee and coordinate the ESSO in the Implementing Partners
- Compile quarterly, biannual and annual reports on safeguards performance of the project that will be incorporated into the project's M&E report
- Provide assistance and deliver capacity building trainings to UNOPS staff and Implementing Partners
- Organize and oversee the preparation, production and distribution of training manuals and awareness materials

#### 9.1.2 *Health, Safety, Social and Environmental Officer*

163. UNOPS Health, Safety, Social and Environmental (HSSE) Officer based in Sana'a will:

- Prepare and/or update health, safety, social and environmental management plans, review them on a regular basis and keep them up to date at all times
- Advise and instruct project staff, contractors, consultants and other stakeholders on various safety, health, social and environmental related matters related to project implementation

- Support the Project Manager in raising awareness on health and safety issues among project staff, consultants, contractors and other stakeholders and within UNOPS in general, working closely with all related sections
- Conduct risk assessment and enforce preventative measures on HSSE.
- Initiate, organize and conduct HSSE training for UNOPS project team, contractors, consultants and other stakeholders
- Inspect work sites and the work of personnel on a regular basis to identify issues or non-conformity, and enforce necessary actions where unsafe acts or processes that seem dangerous or unhealthy are detected
- Oversee installations, maintenance and disposal of substances, plant and equipment etc. to ensure they are done in conformity with applicable laws and industry best practice.
- Record and investigate incidents (including near misses) to determine the cause and to propose improvements to processes in the future.
- Prepare reports on incidents (including near misses) and compile statistical information to present to upper management on HSSE matters.
- Ensure a safe workplace environment is maintained at all times without risk to health and safety of everyone including workers, UNOPS staff, other stakeholders and general public.
- Ensure that all Health & Safety policies, procedures, rules and regulations are adhered to and are regularly reviewed, updated and communicated.
- Ensure the contractor meets its statutory obligations in all areas pertaining to health, safety and welfare at work, including statutory training and reporting.
- Ensure that safety inspections, risk assessments, working procedures are managed, and contractors and employees are aware of their responsibilities in relation to health and safety issues.
- Coordinate the development of HSSE policies, systems, procedures and guidelines.
- Ensure full and accurate health and safety training records are documented.
- Establish a full programme of documented HSSE inspections, audits and checks.
- Establish and conduct a structured programme of health & safety training (including a well-developed induction program) for project staff, contractors, consultants and other stakeholders.
- Establish an HSSE Committee, manage and devise the agenda for, chair and formulate & distribute minutes for the Health & Safety Committee meetings.
- Keep up to date with all aspects of relevant health, safety & welfare at work legislation and communicate relevant changes to the stakeholders.
- Provide regular reports to the Project Manager on relevant health and safety activities.

## **9.2 Rural Access Program**

164. The Rural Access Program (RAP) shall have in place an ESSO and Health and Safety retaining consultants and use site engineers/consultants as needed to monitor and report on ESHS performance. RAP currently employs two environmental and social experts who will serve as ESSOs. The ESSOs will prepare the environmental and social screening forms for all subprojects implemented by RAP, and monitor on-site contractor compliance with subproject ESMP requirements, including the Environmental and Social Requirements for contractors.

## **9.3 Capacity Development**

165. UNOPS will ensure that the ESSO, the Gender Mainstreaming Officer, and the Health and Safety Officer within UNOPS, as well as the ESSO and Health and Safety consultants within RAP receive training on the ESF and ESMF and their implementation.

166. The UNOPS ESSO, jointly with the RAP ESSOs, will organize training for the persons involved in project implementation, including:

- A launch workshop to operationalize the ESMF and agree on roles and responsibilities moving forward.
- A workshop with UNOPS engineers and technical staff to explain the ESMF and its implementation.
- Environmental and social risk management training and capacity enhancement for the Implementing Partner, participating contractors, and Local Councils.
- Toolbox talks for contractors to explain the ESMF, the ESHS requirements and the World Bank Group EHS Guidelines, including the grievance mechanism for workers, sexual exploitation and abuse (SEA)/sexual harassment (SH) and the associated grievance management, and worker OHS, including:
  - On-site risk identification and mitigation
  - Use of PPEs
  - Emergency Prevention and Preparedness
- Sessions to sensitize the local councils to the ESMF and its implementation
- Training of UNOPS staff and Implementing Partner on land acquisition and resettlement management.

167. UNOPS will also finance the production of training manuals and awareness materials as needed.

**Table 8. Indicative costs of capacity building activities**

Capacity Building Measures	Unit Cost (USD)	Costs (USD)
5 X 2-day training on ESMF for Implementing Partners and consultants	2,000/session	10,000
5 X 1-day consultation with local councils and key stakeholders	2,000/session	10,000
2 X 1-day training in Environmental and Social Safeguards for Implementing Partners.	1,000/session	2,000
40 X 1-day training on ESMP and contractual clauses for contractors	1,000/session	40,000
Production of environmental and social awareness materials (brochures, posters, fliers)	5,000	5,000
<b>TOTAL</b>		<b>67,000</b>

#### 9.4 Budget

- UNOPS is fully covering, as part of the fee that it will charge the Bank, the cost of the ESSO, the Gender Mainstreaming Officer, and the Health and Safety Officer, as well as any associated operational costs.
- RAP is covering the cost of their ESSOs and Health and Safety Officers as part of their respective Project Cooperative Agreement (PCA) with UNOPS.
- The cost of due diligence for specific subprojects (preparation of the screening form, consultations, GM, preparation of ESMPs, implementation of ESMPs, and monitoring) are included in the costs/budget for each subproject. These costs are scalable to the level and scope of the potential risks and impacts, and might include the costs of consultants recruited by UNOPS or the Implementing Partners to assist on specific tasks.

## Chapter 10.

# Public Consultations

168. UNOPS organized a public consultation on November 24, 2020 in Aden governorate with stakeholder representatives. The following participated in the consultation:

- The MoPIC General Directors of local offices
- Governors and their Deputies
- Local council members and local district General Directors
- Chief of Local Council of Road Maintenance Fund
- Deputy and Directors of Public Works and Highways (MoPWH) Ministry and its local offices
- Representatives of Rural Access Program (RAP)
- Representatives of local authority, civil society, and women associations including the National Network of Youth and Disabilities
- Local Internally Displaced Persons (IDPs) and beneficiaries

169. In conducting the consultation meeting, the required COVID-19 preventive measures were taken into account. The session was held in a hall where social distance between participants was maintained. Masks and hand sanitizers were distributed for participants. The meeting complied with the main principles of stakeholder engagement in the Project SEP, and ensured the disclosure of the necessary information regarding the Project.

### 10.1 List of Participants

**Table 9. List of UNOPS participants**

	Name	Title	Organization
1	Khaldoun Mohammed	Programme Advisor	UNOPS
2	Abeer Ahmed	Partnership Analyst	UNOPS
3	Fahmi AlAswari	OHS Officer	UNOPS
4	Housam Aboada	Logistics Associate - Aden	UNOPS
5	Ramsees Younes	City Engineer - Aden	UNOPS

**Table 10. List of stakeholders**

	Name	Title	Organization
1	Salem Akef Awad Mubarak	Chief of Zanzibar District	Local Authority
2	Ali Ahmed Hassen	General Director of Public Works and Highways Corporation	Public Works & Highways
3	Khaled Nasser Al-Houmaiqani	General Manager of Public Works Office in Abyan	Ministry of Public Works
4	Hisham Mohammed Al-Saqqaf	General Director of MoPIC Office - Lahj	MoPIC
5	Sulaiman Abdullah Nasser	Director of Governor's Office	Governor's Office in Abyan
6	Hassen Ali Ahmed Kanesh	Governor of Lahj Governorate	Lahj Governorate
7	Mohammed Mahmoud Al-Shaddadi	Public Relations Officer	Ministry of Local Authorities
8	Adnan Al Kaf	Deputy of Aden Governor / Director of Development Sector for Aden	Aden Governorate

		Governorate	
9	Awad Mashbah	Deputy of Local Administration Ministry	Local Administration Ministry
10	Essam Ali Mohammed	General Director of Designs & Studies of Road Sector	Ministry of Public Works
11	Mustafa Said Hassen	General Manager of Financial Evaluation	Ministry of Local Administration
12	Faez Ali Mohssen	General Manager of Local Administration Heads	Ministry of Local Administration
13	Abu Baker Hussien	Governor of Abyan Governorate	Governor's Office in Lahj
14	AbdulKareem Abdullah Abdo	Director of Public Works Office	Public Works Office in Lahj
15	Salah Al-Shawbaji	General Manager of Al Dale Governorate	Al Dale Governorate
16	Ali Moqbel Saleh	Governor of Al Dale Governorate	Al Dale Governorate
17	Akram Qassem Moqbel Saleh	Coordinator of Organizations Affairs	Al Dale Governorate
18	Nasser Abdullah Mohammed	General Manager of Local Authorities	Ghanfer District
19	Arwa Haidara Hassen	General Director of Partnership & Projects	MoPIC
20	Ahmed Awteel	General Manager in Dar Sa'ad	MoPIC
21	Massar Ali Mohammed	General Manager of Lahdha Organization	Lahdha Organization-Abyan Governorate
22	Maiad Ahmed Yasslim	Member of Lahdha Organization	Lahdha Organization-Abyan Governorate
23	Lamya Ali Ahmed	Member of Lahdha Organization	Lahdha Organization-Abyan Governorate
24	Mukhtar Ali Mohsen	General Manager of Technical Unit in Abyan	Technical Unit in Abyan
25	Ahmed Hussein AbdulKareem	General Director	MoPIC
26	Wadhah Ahmed Saif Ahmed	Director of UN Administration Unit	MoPIC
27	Sami Salem Saif	General Manager of Al Huta District	Local Authority in Lahj
28	Mohammed Aidroos	Member	Lahj Governorate
29	Ahmed Ali Mohammed Al-Dawoodi	Director of Al-Mansoura District	Aden Governorate
30	Wisam Mawaih Said	Director of Shaikh Awthman District	Aden Governorate
31	AbdulHakim	Governor's Counselor	Aden Governorate
32	Waleed Al-Sarari	General Manager of Public Works	Public Works
33	Walid Nasser	Deputy Assistant	Public Works
34	Katbi Amer Katbi	Director of Al-Tawahi District	Local Authority of Al-Tawahi District
35	Entesar Said Morshed	General Manager of Planning Office - Aden	Planning Office - Aden
36	Mohammed Fahed Faisal	General Manager of Coordination and Monitoring Unit	Ministry of Public Works
37	Mohammed Nabil Ahmed Moqbel	Projects Manager	Ministry of Public Works
38	Mohsen Mohammed Jaffer	Director of Tuban District	Lahj Governorate
39	Jaffer Mohssen Mohammed		
40	Awsan Mohammed	Governor's Counselor	
41	AbdulRaheem AbdulKareem Jawi	Director of Al-Muala District	Local Authority in Al-Muala District
42	Emad Yasser Fakher Al-Daeen	Director of Communication Office in Khor Makser	Local Authority
43	AbdulSalam Hael Sharef	Journalist	Aden Media
44	Wazira Mohammed Al-Sharmani	Deputy of Projects Unit of MoPIC	MoPIC
45	Fahman Hassen Saleh	Director of AlBouriqqa District	Local Authority

46	AbdulGalil Khaled Abdulgalil	Field Officer in Lahdha Organization	Lahdha Organization
47	Waleed Radman	Deputy of Public Works & Highways Ministry	Public Works & Highways Ministry
48	Moueen Mohammed Al-Mass	Chief of Local Council of Road Maintenance Fund	Road Maintenance Fund
49	Kamal Awbaid Hussain Yehia	Deputy of Districts Affairs	Local Authorities in Al Dale governorate
50	Walid Saleh Kahtan Muthana	Director of Governor's Office	Al Dale Governorate
51	Nabil Qassem Ahmed	Director of Planning Office	Planning Office - Al Dale Governorate
52	Ahmed Abdullah Ahmed Al-Wali	Governor's Counsellor	Aden Governorate
53	Ahmed Mohammed Mafeh	Public Works in Al Dale Governorate	Public Works in Al Dale Governorate
54	Qusai Nasser Abdullah	Director of Public Works	Public Works- Abyan
55	Mahdi Salem Saeed	Ministry of Planning	Ministry of Planning
56	Mouneer AbdulHadi Ali Saleh	Communication Officer	Dar Sa'ad District
57	Talal Qassem Moushli	Reporter for Aden Channel	Aden Channel
58	Wadhah Abdo	Reporter for Aden Channel	Aden Channel
59	Abdul Salam Hail Sharaf	Journalist	
60	Nabil Mohammed Ali Al-Jounaid	Journalist	Yemeni Channel
61	Zaki Ahmed Haider	Journalist	
62	Emad Yasser	Media Reporter	Khor Makser Media
63	Sadeq Ahmed Ali	Reporter for Yemen Channel	Yemen Channel
64	Salim Al-Mammari	Communication Officer	
65	Hamid Al-Sabri	General Manager of Monitoring in Public Works Ministry	Public Works Ministry
66	Najeeb Ali Hussain Qassem	Communication - Al Dale	
67	Mohammed Ali Mohammed Saif	Local Community	
68	Mahmoud Najeeb bin Garadi	Local Community	Local Authority

## 10.2 Main Discussion Points

170. The session started with highlighting the challenges being experienced due to the destruction of the main roads. Numerous accidents and huge difficulties in using roads, especially for trucks with heavy weights.

- Mohammed Ali Moqbel, Governor of Al Dale governorate expressed the challenges and tremendous needs for roads rehabilitation, particularly roads connecting Al Dale with other governorates in Yemen. He also indicated that water issues in Al Dale are still unsolved problems.
- Awad Mashbah, MoLA, thanked UNOPS for their valuable support through different interventions in various sectors. He also highlighted MoPIC's role in coordination for project implementations.
- Abu Baker Al Fadhili, Governor of Abyan expressed the negative impact of continued conflicts in Yemen where infrastructures have been significantly affected. Approximately, 269 road accidents have been reported as a result of the bad condition of Abyan-Aden Road. The road is damaged due to several reasons: i) the passage of truck with extra heavy weights, ii) sand hills, and iii) destruction caused by the conflict. WASH and solid waste concerns in Abyan were also raised; they are resulting in wide spreading diseases. Furthermore, Lawader district has about 80,000 IDPs and it is in urgent need of water.

- Adnan Al Kaf, Deputy of Governor / Director of Development Sector for Aden Governorate, emphasized that local authorities should coordinate with other ministries, apply the necessary criteria for project implementations and carry out the essential monitoring and evaluations throughout the project cycle.
- Wazeera Al-Sharmani, Deputy of Projects Unit of MoPIC stated that it is important for UNOPS to coordinate with the Ministry of Planning and International Cooperation (MoPIC) for priority areas selection.
- It was inquired about the potential investment with UNOPS since they are implementing projects in different sectors, Health, WASH, Roads... etc.
- It was highlighted that lists of roads were provided previously by the World Bank and most of the identified roads are in areas of no high priority.
- Latest interventions are being implemented without the involvement of the Local Offices of Public Works. It was also inquired how the project investment plan is being considered.
- The Road Maintenance Fund has to coordinate with offices of public works, planning, and local authorities. Needs priorities for planned projects are to be identified by the offices not to be imposed on them by the governor.
- Abyan governorate according to WB DNA assessment during previous years is one of the priority governorates; however, its allocation in the investment plan is only 3.2% compared to other governorates.
- Roads have defects and require maintenance. Furthermore, there should be an integrated approach to include other public utilities (i.e. water and telephone lines) in implementing road rehabilitation/maintenance.
- It was inquired if there are investment plans and fund allocation for Lahj governorate during 2022 for potential projects.
- Water pipelines have to be considered in projects related to roads rehabilitation.
- Contractors implementing projects have deficiency and are not qualified enough in understanding safety, social, environmental aspects. They should coordinate with the technical offices of local authorities and public works to ensure project efficiency. Involvement of public works offices in selecting contractors is essential since they have lists of qualified contractors as well as black lists.

### **10.3 Main Consultation Outcomes**

- Lists of qualified, eligible and ineligible contractors will be provided to UNOPS for consideration.
- Project-affected parties needed additional gender-sensitive engagements and consultations to enhance their awareness of the project institutional arrangements, needs selection and prioritization and the importance of the project GM and its confidentiality.
- Stakeholders appreciated the prior disclosure and dissemination of relevant project information and requested more consultations that support active and inclusive engagement with project-affected parties. UNOPS implementing partner (RAP) reaffirmed their understanding of the ESF objectives and their plans to have adequate resources to implement them.

### **10.4 Key Agreed Actions**

- Once the project is effective, UNOPS would ensure the distribution and the availability of the Project Information Booklet at the local offices of implementing partners, local authorities, MoPIC and SCHMCHA in targeted areas.
- UNOPS would carry out additional follow-up consultations with the project-affected parties including local CSOs to address received local feedback and comments. Additional

consultations would be planned to take place during the preparation of subprojects-specific ESMPs and through upcoming consultation workshops.

- UNOPS and its implanting partner would keep stakeholders informed as the project develops, including reporting on project environmental and social performance, and implementation of the stakeholder engagement plan and grievance mechanism through information disclosure through the UNOPS web site and public meetings.

## **10.5 Links of the broadcasted news on the consultation**

<https://adengad.net/posts/581757>

<https://www.alsahil.net/news15066.html>

<https://t.me/alsahilnet>

<https://www.cratar.net/archives/167386>

**Annex 1.**

# Template for Subproject Screening

## Screening Form for Potential Environmental and Social Issues

UNOPS will use this form to screen for the potential environmental and social risks and impacts of a proposed subproject. The form will allow UNOPS to: (i) identify the relevant Environmental and Social Standards (ESS); (ii) establishment an appropriate Environmental and Social risk for the subproject, and; (iii) specify the type of environmental and social assessment required, including specific instruments/plans.

*The Screening Form is not a substitute for subproject-specific environmental and social assessments or specific mitigation plans.*

<b>Subproject name</b>	
<b>Subproject location</b>	
<b>Implementing Partner</b>	
<b>Estimated Investment</b>	
<b>Was the site visited beforehand</b>	
<b>Estimated Start/Completion Date</b>	
<b>Observations/Comments</b>	
<b>Signature of UNOPS ESSO</b>	
<b>Signature of Program Manager</b>	

Question	Answer		ESS relevance	Due diligence/ Actions
	Yes	no		
Does the subproject involve civil works including new construction, expansion, upgrading or rehabilitation of existing infrastructure?			ESS1	ESIA/ESMP, SEP
Does the subproject involve land acquisition and/or restrictions on land use?			ESS5	Resettlement Plan, SEP
Is the subproject associated with any external waste management facilities such as a sanitary landfill, incinerator, or wastewater treatment plant?			ESS3	ESIA/ESMP, SEP
Does the subproject have an adequate system in place (capacity, processes and management) to address waste?			ESS1, ESS3	ESMP
Does the subproject involve the recruitment of workers including direct, contracted, primary supply, and/or community workers?			ESS2	LMP, SEP
Does the subproject have appropriate OHS procedures in place, and an adequate supply of PPE (where necessary)?			ESS2	LMP

Does the subproject have a GM in place, to which all workers have access, designed to respond quickly and effectively?			ESS10	SEP
Does the subproject involve use of security or military personnel during construction and/or operation of healthcare facilities and related activities?			ESS4	ESIA/ESMP, SEP
Is the subproject located within or in the vicinity of any ecologically sensitive areas?			ESS6	ESIA/ESMP, SEP
Is the subproject located within or in the vicinity of any known cultural heritage sites?			ESS8	ESIA/ESMP, SEP
Does the project area present potential Gender-Based Violence (GBV) and Sexual Exploitation and Abuse (SEA) risk?			ESS1	ESIA/ESMP, SEP

***Conclusions of the screening:***

1. **Indicate the proposed environmental and social risk ratings<sup>32</sup> (High, Substantial, Moderate or Low), and provide justifications.**
2. **Indicate the proposed environmental and social risk management instruments that must be prepared.**

<sup>32</sup> **High Risk** subprojects are likely to generate a wide range of significant adverse risks and impacts on human populations or the environment, because of the complex nature of the Project, their large to very large scale, or the sensitivity of the subproject locations. Impacts are likely to be long term, permanent, irreversible, and impossible to avoid entirely due to the nature of the Project

**Medium Risk** subprojects are likely to generate some significant adverse risks and impacts on human populations or the environment, because of their large to medium scale. They are not located in a highly sensitive area. Impacts are likely to be mostly temporary, predictable and reversible.

**Moderate Risk** subprojects have adverse risks and impacts on human populations and/or the environment that are not likely to be significant, because the subproject is not complex or large, do not involve activities that have a high potential for harming people or the environment, and are located away from environmentally or socially sensitive areas.

**Low Risk** subprojects have potential adverse risks to and impacts on human populations or the environment that are likely to be minimal or negligible. These subprojects do not require further ES assessment following the initial screening.

**Annex 2.**

# Yemeni Environmental Quality Standards

**Table 11. Permissible limits for key air pollutants**

Pollutant	Time Period	Value
Carbon Monoxide and Dioxide gas (CO/CO <sub>2</sub> )	8 hours	10 micrograms/m <sup>3</sup>
Nitrogen oxide (NO <sub>x</sub> )	24 hours	150 micrograms/m <sup>3</sup>
Sulphur oxide (SOX)	24 hours	250 micrograms/m <sup>3</sup>
Ozone (O <sub>3</sub> )	8 hours	120 micrograms/m <sup>3</sup>
Particulate Matter (PM)	24 hours	70 micrograms/m <sup>3</sup>
Lead (Pb)	Annually	1 micrograms/m <sup>3</sup>

The Yemeni standards for air quality do not specify sources of industrial emissions; they are also less strict than those in the World Bank Group EHS Guidelines.

**Table 12. Maximum noise level allowed in different environments (Decibel Unit dB)**

Environment	Time		
	7h00-18h00	18h00-23h00	23h00-07h00
Rural housing and entertainment places	45	40	25
Suburban housing areas	50	45	40
Urban housing areas	55	50	45
Housing areas in city centers	60	55	50
Industrial and commercial areas	70	70	70

**Table 13. Physical Characteristics of drinking water**

Characteristic	Unit	Optimal limit	Maximum limit
Taste		Acceptable to consumers	
Odor		Acceptable to consumers	
Color	Platinum Cobalt	5	25
Turbidity (NTU)	Turbidity Unit	1	5
Temperature	Degree Celsius	-	25
pH (Potential of hydrogen)		6.5-8.5	5.5- 9
Electrical Conductivity EC	Micro mohs/cm	450-1000	2500

**Table 14. Inorganic substances in drinking water**

Substance	Symbol	Optimal limit (mg/L)	Maximum limit (mg/L)
Total Dissolved Salts	TDS	650	1500
Bicarbonate	HCO <sub>3</sub>	150	500
Chloride	Cl <sup>-</sup>	200	600
Sulphate	SO <sub>4</sub>	200	600
Fluoride	F <sup>-</sup>	0.5	1.5
Calcium	Ca	75	200

Magnesium	Mg	30	30-150
Barium	Ba	0.1	0.15
Sodium	Na	200	400
Potassium	K	0-12	12
Nitrate	NO <sub>3</sub>	10	50
Iron	Fe	0.3	1
Manganese	Mn	0.1	0.5
Copper	Cu	0.1	1.5
Zinc	Zn	5	15
Total Hardness (as Calcium Carbonate)	TH	100	500
Aluminum	Al	0.2	0.3
Nickle	Ni	0.05	0.1
Boron	B	0.50	1
Silica	SiO <sub>2</sub>		40

Total residual chlorine concentration in treated water reaching the consumers should be between 0.2 to 0.5 ppm. It might be increased in the event of an epidemic to the level determined by the related authorities and international organizations.

**Table 15. Maximum limits for organic pollutants in drinking water**

Substance	Maximum limit (mg/L)
Aldrin	0.0002
Lindane	0.004
Methoxine	0.01
Toxaphene.	0.002
2,4 Dichlorophenoxy acetic acid	0.1
Propionic acid	0.01
Malathion	0.19
Parathion	0.035
Permethrin	0.01
Dimethoate	0.002
Diazinon	0.002

**Table 16. Maximum limits for toxic substances in drinking water**

Substance	Unit	Maximum limit
Lead (Pb)	mg/L	0.05
Selenium (Se)	//	0.01
Arsenic (As)	//	0.01
Chromium (Cr)	//	0.05
Cyanide (CN)	//	0.01
Cadmium (Cd)	//	0.005
Mercury (Hg)	//	0.001
Antimony (Sb)	//	0.005
Barium (Ba)	//	0.5-1.0
Silver (Ag)	//	0.01-0.1
Halogenated methane group (TTHM)	µg/L	150

includes: Chloroform, Bromoform, Bromodichloromethane and Dibromochloromethane		
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## Annex 3.

# Indicative Outline of Subproject ESIA

Where an environmental and social impact assessment (ESIA) must be prepared as part of the environmental and social assessment of a subproject, it will include the following:

### *Executive Summary*

- Concisely discusses significant findings and recommended actions.

### *Legal and Institutional Framework*

- Analyzes the legal and institutional framework for the project, within which the environmental and social assessment is carried out, taking into account in an appropriate manner all issues relevant to the project, including: (a) the country's applicable policy framework, national laws and regulations, and institutional capabilities (including implementation) relating to environment and social issues; variations in country conditions and project context; country environmental or social studies; national environmental or social action plans; and obligations of the country directly applicable to the project under relevant international treaties and agreements; (b) applicable requirements under the ESSs; and (c) the EHSGs, and other relevant GIIP.
- Compares the Borrower's existing environmental and social framework and the ESSs and identifies the gaps between them.
- Identifies and assesses the environmental and social requirements of any co-financiers.

### *Subproject Description*

- Concisely describes the proposed subproject and its geographic, environmental, social, and temporal context, including any offsite investments that may be required (e.g., dedicated pipelines, access roads, power supply, water supply, housing, and raw material and product storage facilities), as well as the project's primary suppliers.
- Through consideration of the details of the project, indicates the need for any plan to meet the requirements of ESS1 through 10.
- Includes a map of sufficient detail, showing the project site and the area that may be affected by the project's direct, indirect, and cumulative impacts.

### *Baseline Data*

- Sets out in detail the baseline data that is relevant to decisions about project location, design, operation, or mitigation measures. This should include a discussion of the accuracy, reliability, and sources of the data as well as information about dates surrounding project identification, planning and implementation.
- Identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions.
- Based on current information, assesses the scope of the area to be studied and describes relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the project commences.
- Takes into account current and proposed development activities within the project area but not directly connected to the project.

### *Environmental and Social Risks and Impacts*

- Takes into account all relevant environmental and social risks and impacts of the project. This will include the environmental and social risks and impacts specifically identified in ESS2–8, and any other environmental and social risks and impacts arising as a consequence of the specific nature and context of the project, including the risks and impacts identified in ESS1, paragraph 28.

### ***Mitigation Measures***

- Identifies mitigation measures and significant residual negative impacts that cannot be mitigated and, to the extent possible, assesses the acceptability of those residual negative impacts.
- Identifies differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable.
- Assesses the feasibility of mitigating the environmental and social impacts; the capital and recurrent costs of proposed mitigation measures, and their suitability under local conditions; and the institutional, training, and monitoring requirements for the proposed mitigation measures.
- Specifies issues that do not require further attention, providing the basis for this determination.

### ***Analysis of Alternatives***

- Systematically compares feasible alternatives to the proposed project site, technology, design, and operation—including the “without project” situation—in terms of their potential environmental and social impacts.
- Assesses the alternatives’ feasibility of mitigating the environmental and social impacts; the capital and recurrent costs of alternative mitigation measures, and their suitability under local conditions; and the institutional, training, and monitoring requirements for the alternative mitigation measures.
- For each of the alternatives, quantifies the environmental and social impacts to the extent possible, and attaches economic values where feasible.

### ***Design Measures***

- Sets out the basis for selecting the particular project design proposed and specifies the applicable EHSs or if the EHSs are determined to be inapplicable, justifies recommended emission levels and approaches to pollution prevention and abatement that are consistent with GIIP.

### ***Key Measures and Actions for the Environmental and Social Commitment Plan (ESCP)***

- Summarizes key measures and actions and the timeframe required for the project to meet the requirements of the ESSs. This will be used in developing the Environmental and Social Commitment Plan (ESCP).

### ***Appendices***

- List of the individuals or organizations that prepared or contributed to the environmental and social assessment.
- References—setting out the written materials both published and unpublished, that have been used.
- Record of meetings, consultations and surveys with stakeholders, including those with affected people and other interested parties. The record specifies the means of such stakeholder engagement that were used to obtain the views of affected people and other interested parties.
- Tables presenting the relevant data referred to or summarized in the main text.
- List of associated reports or plans.

## Annex 4.

# Indicative Outline of an ESMP

An ESMP consists of the set of mitigation, monitoring, and institutional measures to be taken during implementation and operation of a subproject to eliminate adverse environmental and social risks and impacts, offset them, or reduce them to acceptable levels. The ESMP also includes the measures and actions needed to implement these measures. UNOPS will (a) identify the set of responses to potentially adverse impacts; (b) determine requirements for ensuring that those responses are made effectively and in a timely manner; and (c) describe the means for meeting those requirements.

The content of the ESMP will include the following:

### ***Mitigation***

- The ESMP identifies measures and actions in accordance with the mitigation hierarchy that reduce potentially adverse environmental and social impacts to acceptable levels.
- The plan will include compensatory measures, if applicable. Specifically, the ESMP:
  - identifies and summarizes all anticipated adverse environmental and social impacts (including those involving indigenous people or involuntary resettlement);
  - describes - with technical details – each mitigation measure, including the type of impact to which it relates and the conditions under which it is required (e.g., continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate;
  - estimates any potential environmental and social impacts of these measures;
  - takes into account, and is consistent with, other mitigation plans required for the project (e.g., for involuntary resettlement, indigenous peoples, or cultural heritage).

### ***Monitoring***

- The ESMP identifies monitoring objectives and specifies the type of monitoring, with linkages to the impacts assessed in the environmental and social assessment and the mitigation measures described in the ESMP. Specifically, the monitoring section of the ESMP provides (a) a specific description, and technical details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions; and (b) monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) furnish information on the progress and results of mitigation.

### ***Capacity Development and Training***

- To support timely and effective implementation of environmental and social project components and mitigation measures, the ESMP draws on the environmental and social assessment of the existence, role, and capability of responsible parties on site or at the agency and ministry level.
- Specifically, the ESMP provides a specific description of institutional arrangements, identifying which party is responsible for carrying out the mitigation and monitoring measures (e.g., for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training).
- To strengthen environmental and social management capability in the agencies responsible for implementation, the ESMP recommends the establishment or expansion of the parties responsible, the training of staff and any additional measures that may be necessary to support implementation of mitigation measures and any other recommendations of the environmental and social assessment.

***Implementation Schedule and Cost Estimates***

- For all three aspects (mitigation, monitoring, and capacity development), the ESMP provides (a) an implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans; and (b) the capital and recurrent cost estimates and sources of funds for implementing the ESMP. These figures are also integrated into the total project cost tables.

***Integration of ESMP with Project***

- The Borrower's decision to proceed with a project, and the Bank's decision to support it, are predicated in part on the expectation that the ESMP (either stand alone or as incorporated into the ESCP) will be executed effectively. Consequently, each of the measures and actions to be implemented will be clearly specified, including the individual mitigation and monitoring measures and actions and the institutional responsibilities relating to each, and the costs of so doing will be integrated into the project's overall planning, design, budget, and implementation.

## Annex 5.

# Environmental and Social Requirements for Contractors

The Environmental, Social, Safety and Security (ESHS) requirements are a standard list of requirements that contractors must implement for most subprojects. The subproject specific ESMPs prepared by UNOPS will highlight the relevant requirements, but might also supplement the ESHS requirements, as needed, by defining additional requirements.

The ESHS requirements will be incorporated in the bidding documents and as technical clauses in contracts.

The ESHS requirements include 10 sections

1. General Provisions
2. ESHS Training
3. Construction Site Management
4. Occupational Safety
5. Health
6. Road safety and Traffic Safety
7. Emergency Preparedness and Response
8. Labor force management, including the Code of Conduct
9. Stakeholder Engagement
10. Contractor Environmental and Social Reporting

## General Provisions

### *Contractor Environmental and Social Management Plan (C-ESMP)*

The Contractor shall:

- Prepare and submit to UNOPS for approval a Contractor Environmental and Social Management Plan (C-ESMP), including the following sections or subplans:
  - ESHS training
  - Construction site management
  - Occupational Safety
  - Health
  - Road safety and Traffic Safety
  - Emergency Preparedness and Response
  - Labor force management, including the Code of Conduct
  - Stakeholder Engagement
  - Contractor Environmental and Social Reporting
- Include in the C-ESMP a detailed explanation of how the contractor's performance will meet the ESHS requirements as defined in the contract bidding documents
- Include in the C-ESMP an organization chart of the personnel assigned to environmental and social management
- Ensure that sufficient funds are budgeted to meet the ESHS requirements, and that sufficient capacity is in place to oversee, monitor and report on C-ESMP performance.
- Put in place controls and procedures to manage their ESHS performance

The C-ESMP will be a contractual document that will serve as a reference during the monitoring and

evaluation of the environmental and social performance of the Contractor.

### ***Compliance with Laws, Regulations, and National Standards***

The Company and its subcontractors must:

- Know, respect and apply the laws, regulations and standards in force in Cameroon relating to the environment, as well as social, health and safety aspects
- Assume full responsibility for any claim related to an activity under their control that does not comply with these laws, regulations, or standards

### ***Contractual Obligations***

The Contractor shall:

- Get prior written approval from UNOPS Engineers before starting any activities
- Designate a ESHS Officer who will ensure that ESHS requirements are rigorously followed by all and at all levels of execution, both by the Contractor's workers and by any persons in contact with the Contractor's activities
- Comply with ESHS requirements and its C-ESMP until final acceptance of the work by UNOPS
- Remedy any defect, failure, or non-performance of the ESHS requirements or its C-ESMP that is duly notified to it by UNOPS or its representative
- Assume the costs associated with any delay or interruption of works, as well as any additional work resulting from non-compliance with the ESHS requirements or its C-ESMP

In accordance with the contractual provisions, failure to comply with the ESHS requirements or the C-ESMP may be grounds for termination of the contract. The Contractor who has been terminated for failure to comply with ESHS requirements or its C-ESMP may be subject to sanctions up to and including suspension of the right to bid for a period determined by UNOPS, as well as a freeze on the holdback.

Failure by the Company to comply with one or more ESHS requirements or its C-ESMP may expose it to refusal of final acceptance of the work by UNOPS.

The Contractor's obligations with respect to ESHS requirements run until final acceptance of the contracted activity, which will only be given by UNOPS after all the measures required by the ESHS requirements have been met.

### **ESHS Training**

The Contractor shall

- Determine ESHS training needs in collaboration with UNOPS
- Maintain records of all ESHS training, orientation, and induction.
- Ensure, through appropriate contract specifications and monitoring that service providers, as well as contracted and subcontracted labor, are trained adequately before assignments begin.
- Demonstrate that its employees are competent to carry out their activities and duties safely. For this purpose, the Contractor shall issue a Competence Certificate for every person working on site (relative to trade and aspect of work assignment) that specifies which tasks can be undertaken by which key personnel.

### ***Orientation Training***

The Contractor shall:

- Provide ESHS orientation training to all employees, including management, supervisors, and workers, as well as to subcontractors, so that they are apprised of the basic site rules of work at/on the site and of personal protection and preventing injury to fellow employees.
- Training should consist of basic hazard awareness, site-specific hazards, safe work practices, and emergency procedures for fire, evacuation, and natural disaster, as appropriate. Any site-specific hazard or color coding in use should be thoroughly reviewed as part of orientation training.

### ***Visitor Orientation***

The Contractor shall:

- Establish an orientation program for visitors, including vendors, that could access areas where hazardous conditions or substances may be present.
- Visitors shall not enter hazard areas unescorted.
- Ensure that visitors shall always be accompanied by an authorized member of the contractor, or a representative of UNOPS or of its Implementing Partners, who has successfully fulfilled the ESHS orientation training, and who is familiar with the project site construction hazards, layout, and restricted working areas.

### ***New Task Employee and Contractor Training***

The Contractor shall:

- Ensure that all workers and subcontractors, prior to commencement of new assignments, have received adequate training and information enabling them to understand work hazards and to protect their health from hazardous ambient factors that may be present. The training should adequately cover the step-by-step process that is needed for Project activities to be undertaken safely, with minimum harm to the environment, including:
  - Knowledge of materials, equipment, and tools
  - Known hazards in the operations and how they are controlled
  - Potential risks to health
  - Precautions to prevent exposure
  - Hygiene requirements
  - Wearing and use of protective equipment and clothing
  - Appropriate response to operation extremes, incidents and accidents

## **Construction Site Management**

### ***General Provisions***

- Obtain all permits necessary to perform the work under the contract, including permits from local authorities, water departments, or the labor authorities
- Maintain a staff on call, every day of the week without exception, day and night for the duration of the contract, in order to ensure the guarding, surveillance and safety of its sites and installations, and to respond to any incident or accident likely to occur in connection with its activities

### ***Signage***

The Contractor shall:

- Appropriately mark hazardous areas
- Install warning signs in Arabic
- Ensure that signage is in accordance with international standards and is well known to, and easily understood by workers, visitors and the general public as appropriate.
- Demarcate work sites with safety tape, fencing or barricades, as appropriate, to prevent unauthorized access to the construction sites
- Safeguard public safety by covering holes and by installing guardrails along temporary pathways

### ***Vegetation***

The Contractor shall:

- Prevent any unnecessary destruction, scarring, or defacing of the natural surroundings in the vicinity of the construction site
- Protect all trees and vegetation from damage by construction operations and equipment, except where clearing is required for permanent works, approved construction roads, or excavation operations
- Revegetate damaged areas on completion of the Works, and for areas that cannot be revegetated, scarifying the work area to a condition that will facilitate natural revegetation, provide for proper drainage, and prevent erosion
- Avoid planting trees within 4 meters of rights of way (ROW)
- Use, as much as possible, endemic species for replanting, species that are not listed as a noxious weed, and species with minimal water demands
- Repair, replant, reseed or otherwise correct, as directed by UNOPS or its representative, and at the Contractor's own expense, all unnecessary destruction, scarring, damage, or defacing of the landscape resulting from the Contractors operations
- Transport labor and equipment in a manner to avoid as much as possible damage to grazing land, crops, and property

### ***Protection of the Existing Installations***

The Contractor shall:

- Safeguard all existing buildings, structures, works, pipes, cables, sewers, or other services or installations from harm, disturbance or deterioration during construction activities
- Coordinate with local authorities to identify existing infrastructure that might not be visible
- Repair any damage caused by the Contractor's activities, in coordination with concerned authorities.
- Take all reasonable precautions to prevent or reduce any disturbance or inconvenience to the owners, tenants or occupiers of properties to the construction activities, and more generally to the public
- Maintain safe access to public and private properties that might be affected by construction activities. If necessary, provide acceptable alternative means of passage or access to the satisfaction of the persons affected.
- Provide alternative water supply systems in the event that existing systems are displaced or temporary shutdown because of the works, to ensure that inhabitants' water needs are met
- Avoid working during night hours

### ***Cultural Heritage***

The Contractor shall:

- Avoid indirect damage to existing cultural heritage, such as affecting masonry through vibration

- Develop and adopt a chance find procedure that describes the steps to be taken if previously unknown cultural heritage is encountered during construction, including:
  - Determine in advance the possibility of finding physical cultural heritage during construction
  - Train construction crews and supervisors to spot potential archaeological finds
  - Keep a detailed record of findings and actions taken
  - Stop work in the affected area
  - Immediately notify the Department of Archaeology at the Ministry of Culture or a local university, for quick assessment and action
  - Take measures to protect the site to avoid any destruction, including the definition and the materialization of a protection perimeter
  - Suspend the works inside the protection perimeter until the national body responsible for historical and archaeological sites has given the authorization to continue them
  - Prohibit the removal and relocation of objects and remains
  - Define clear criteria for work stoppages required to address chance finds

### ***Waste from Construction Activities***

The Contractor shall:

- Collect and properly manage all solid wastes resulting from the construction activities, including construction debris and spoils, to prevent the contamination of soil and groundwater
- Remove unneeded excavation material from construction sites as soon as possible
- Agree with relevant municipalities about construction waste disposal
- Carefully select waste disposal sites, to be approved by UNOPS or its Implementing Partner
- Minimize littering of roads by ensuring that vehicles are licensed and loaded in such a manner as to prevent falling off or spilling of construction materials, and by sheeting the sides and tops of all vehicles carrying mud, sand, other materials or debris
- Transfer construction waste to assigned places in the selected waste disposal sites with documented confirmation.
- Properly dispose of solid waste and debris at designated permitted sites waste disposal sites allocated by the local authorities, and obtain a receipt of waste from the authorized landfill authority.

### ***Air Quality***

The most common pollutant involved in fugitive emissions is dust or particulate matter (PM) that is released during the transport and open storage of solid materials, and from exposed soil surfaces, including unpaved roads. Accordingly, the Contractor shall:

- Use dust control methods, such as covers, water suppression, or increased moisture content for open materials storage piles, or controls, including air extraction and treatment through a baghouse or cyclone for material handling sources, such as conveyors and bins;
- Use water suppression for control of loose materials on paved or unpaved road surfaces. Oil and oil by-products are not a recommended method to control road dust.
- Use wheel washes at quarries, ready-mix plants, construction sites, and other facilities to prevent track-out of mud, dust and dirt on to public road.
- Regularly clean road surfaces within the construction sites to remove accumulated fine material, and regularly clean transportation vehicles.
- Cover open bodied trucks handling sand, gravel or earth.
- Minimize smoke from diesel engines by regular and proper maintenance, in particular by ensuring that the engine, injection system and air cleaners are in good condition.

### ***Hazardous and Toxic Materials***

Toxic and deleterious wastes resulting from the Contractor's activities require special attention in order to forestall their introduction into the natural environment which could result in harm to people, aquatic life or natural growth of the area. Accordingly, the Contractor shall:

- Train workers regarding the handling of hazardous materials
- Label using easily understandable symbols, and provide material safety data sheets, for chemical substances and mixtures according to the Globally Harmonized System (GHS) of classification and labelling of chemicals.
- Store hazardous materials as per the statutory provisions of the Manufactures, Storage and Import of Hazardous Chemicals Rules (1989), under the Environment (Protection) Act, 1986.
- Provide adequate secondary containment for fuel storage tanks and for the temporary storage of other fluids such as lubricating oils and hydraulic fluids,
- Use impervious surfaces for refueling areas and other fluid transfer areas
- Train workers on the correct transfer and handling of fuels and chemicals and the response to spills
- Provide portable spill containment and cleanup equipment on site and training in the equipment deployment
- Deposit or discharge toxic liquids, chemicals, fuels, lubricants and bitumen into containers for salvage or subsequent removal to off-site locations.
- Treat hazardous waste separately from other waste
- Avoid the storage or handling of toxic liquid adjacent to or draining into drainage facilities.
- Keep absorbent materials or compounds on Site in sufficient quantities corresponding to the extent of possible spills.
- Locate landfill pits for the disposal of solid waste at least 100 m from water courses, and fencing them off from local populations.
- Ensure adequate primary treatment of sanitation effluents and installing septic tanks away from village watering points.

### ***Borrow Pits and Quarries***<sup>33</sup>

Materials required for site fill, backfill or the construction of permanent works that are not available from the surface will be obtained from borrow areas and quarries that the Contractor will identify, subject to approval by the UNOPS or its Implementing Partners.

The Contractor shall adhere to the following standards when siting, developing, operating, and reinstating borrow pits and quarries:

- Obtain all necessary permits for borrow pits and quarry operations.
- Locate quarry sites as far away from settlements as possible. Quarry operations will produce noise and dust that will impact on nearby inhabitants even if controls are imposed.
- Fence and secure quarry sites. Steep quarry faces are a hazard to people and livestock.
- Locate borrow pits and quarries at least 100 m from watercourses or human habitations.
- Avoid all use of explosives for stones quarrying
- Locate, to the extent possible, borrow pits on land that is not used for cultivation and is not wooded.
- Avoid areas of local historical or cultural interest and locate pits more than 25 m of grave sites.
- Hide, to the extent possible, pits from the road. Quarries and borrow pits should be designed to minimize visible scarring of the landscape.

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<sup>33</sup> Contractors should consider doing borrow pits on a willing-buyer willing-seller (renter) basis to avoid involuntary land acquisition.

- Develop a borrow pits and quarry management plan, including a plan to reinstate borrow pits and quarry sites as closely as possible to their original state

In addition, the Contractor shall:

- Ensure that the material for roadbeds will reduce the risk of landslides, particularly in very steep terrain.
- Aggregates for road construction are widely found and sands and gravels are generally found in abundance. Shortages of either rock or gravel materials are therefore likely to be very localized.

### ***Location of Worker Camps***

The Contractor shall:

- Consult and negotiate with local stakeholders before proposing a location for its camps.
- Submit the proposed locations to UNOPS or RAP for approval, including a justification for their location, as well proposed measures to mitigate the environmental and social risks and impacts around the camp and to enhance social benefits.

### ***Decommissioning of Camps, Worksites and Plant***

The Contractor shall:

- Clear construction sites of any equipment or waste, and ensuring that the sites are free from contamination.
- Dispose of or recycle any equipment or waste in an appropriate and environmentally sound manner.
- Hand construction sites over to the original owners, taking into account his/her wishes and national legislation.

## **Occupational Safety**

Contractors will collaborate with other contractors in applying health and safety requirements, when workers from more than one contractor are working together in one location, without prejudice to the responsibility of each party for the health and safety of its own workers.

### ***Severe Weather and Facility Shutdown***

The Contractor shall:

- Design and build work place structures to withstand the expected elements for the region and designate an area designated for safe refuge, if appropriate.
- Develop Standard Operating Procedures (SOPs) for project or process shut-down, including an evacuation plan.

### ***Lavatories and Showers***

The Contractor shall:

- Provide adequate lavatory facilities (toilets and washing areas) for the number of people expected to work at the construction sites, and make allowances for segregated facilities, or for indicating whether the toilet facility is “In Use” or “Vacant”.
- Provide toilet facilities with adequate supplies of hot and cold running water, soap, and hand drying devices.
- Where workers may be exposed to substances poisonous by ingestion and skin contamination may occur, provide facilities for showering and changing into and out of street and work clothes.

### ***Potable Water Supply***

The Contractor shall:

- Provide adequate supplies of potable drinking water from a fountain with an upward jet or with a sanitary means of collecting the water for the purposes of drinking
- Ensure that water supplied to areas of food preparation or for the purpose of personal hygiene (washing or bathing) meets drinking water quality standards

### ***Clean Eating Area***

The Contractor shall:

- Where there is potential for exposure to substances poisonous by ingestion, make suitable arrangements to provide clean eating areas where workers are not exposed to the hazardous or noxious substances

### ***Personal Protective Equipment (PPE)***

The Contractor shall:

- Identify and provide at no cost appropriate PPE to workers, the workers of subcontractors, as well as to visitors, which gives adequate protection without incurring unnecessary inconvenience to the individual
- Ensure that the use of PPE is compulsory.
- Provide sufficient training in the use, storage and maintenance of PPE to its workers and workers of its subcontractors.
- Properly maintain PPE, including cleaning when dirty and replacement when damaged or worn out;
- Determine requirements for standard and/or task-specific PPE based on of Job specific Safety Analysis (JSA);
- Consider the use of PPE as a last resort when it comes to hazard control and prevention, and always refer to the hierarchy of hazard controls when planning a safety process.

### ***Noise***

The Contractor shall institute appropriate measures to reduce the exposure of workers to construction noise, including but not limited to:

- Avoid exposure to a noise level greater than 85 dB(A) for a duration of more than 8 hours per day without hearing protection. In addition, no unprotected ear should be exposed to a peak sound pressure level (instantaneous) of more than 140 dB(C).
- Enforce the use of hearing protection should be enforced actively when the equivalent sound level over 8 hours reaches 85 dB(A), the peak sound levels reach 140 dB(C), or the average maximum sound level reaches 110 dB(A).
- Provide hearing protective devices capable of reducing sound levels at the ear to at most 85 dB(A).
- Reduce the “allowed” exposure period or duration by 50 percent for every 3 dB(A) increase in in excess of 85 dB(A).
- Perform periodic medical hearing checks on workers exposed to high noise levels.
- Rotate staff to limit individual exposure to high levels.
- Install practical acoustical attenuation on construction equipment, such as mufflers.
  - Use silenced air compressors and power generators
  - Keep all machinery in good condition
  - Install exhaust silencing equipment on bulldozers, compactors, crane, dump trucks,

excavators, graders, loaders, scrapers and shovels.

- Post signs in all area where the sound pressure level exceeds 85 dB(A).
- Shut down equipment when not directly in use
- Provide advance notice to occupants if an activity involving high level impact noise is in close proximity to buildings.

### ***Slips and Falls***

Slips and falls on the same elevation associated with poor housekeeping, such as excessive waste debris, loose construction materials, liquid spills, and uncontrolled use of electrical cords and ropes on the ground, are also among the most frequent cause of lost time accidents at construction and decommissioning sites.

To prevent slips and falls from, or on, the same elevation, the Contractor shall

- Implementing good house-keeping practices, such as the sorting and placing loose construction materials or demolition debris in established areas away from foot paths
- Clean up excessive waste debris and liquid spills regularly
- Locate electrical cords and ropes in common areas and marked corridors
- Ensure that workers use slip retardant footwear

### ***Working at Heights***

The contractor shall implement fall prevention and protection measures whenever a worker is exposed to the hazard of falling more than two meters, or through an opening in a work surface. The Contractor shall:

- Install guardrails with mid-rails and toe boards at the edge of any fall hazard area
- Train workers on the proper use of ladders and scaffolds
- Install fall prevention devices, including safety belt and lanyard travel limiting devices to prevent access to fall hazard area, or fall protection devices such as full body harnesses used in conjunction with shock absorbing lanyards or selfretracting inertial fall arrest devices attached to fixed anchor point or horizontal life-lines
- Train workers in the use, serviceability, and integrity of the necessary PPE
- Include rescue and recovery plans, and equipment to respond to workers after an arrested fall

### ***Struck By Objects***

The Contractor shall:

- Use a designated and restricted waste drop or discharge zones, and/or a chute for safe movement of wastes from upper to lower levels
- Conduct sawing, cutting, grinding, sanding, chipping or chiseling with proper guards and anchoring as applicable
- Maintain clear traffic ways to avoid driving of heavy equipment over loose scrap
- Use temporary fall protection measures in scaffolds and out edges of elevated work surfaces, such as hand rails and toe boards to prevent materials from being dislodged
- As necessary, require workers to wear appropriate PPE, such as safety glasses with side shields, face shields, hard hats, and safety shoes

### ***Welding/Hot Work***

The contractor shall:

- Provide proper eye protection such as welder goggles and/or a full-face eye shield for all personnel involved in, or assisting, welding operations. Additional methods may include the use of welding barrier screens around the specific work station (a solid piece of light metal, canvas, or plywood)

### ***First Aid and Accidents***

The Contractor shall:

- Ensure that qualified first-aid by qualified personnel is always available. Appropriately equipped first-aid stations should be easily accessible throughout the place of work.
- Provide workers with rescue and first-aid duties with dedicated training so as not to inadvertently aggravate exposures and health hazards to themselves or their co-workers. Training would include the risks of becoming infected with blood-borne pathogens through contact with bodily fluids and tissue.
- Provide eye-wash stations and/or emergency showers close to all workstations where immediate flushing with water is the recommended first-aid response.
- Provide dedicated and appropriately equipped first-aid room(s) where the scale of work or the type of activity being carried out so requires.
- Equip first aid stations and rooms with gloves, gowns, and masks for protection against direct contact with blood and other body fluids.
- Make widely available written emergency procedures for dealing with cases of trauma or serious illness, including procedures for transferring patient care to an appropriate medical facility.
- Immediately report all accidental occurrences with serious accident potential such as major equipment failures, contact with high-voltage lines, exposure to hazardous materials, slides, or cave-ins to UNOPS.
- Immediately investigate any serious or fatal injury or disease caused by the progress of work by the Contractor, and submit a comprehensive report to UNOPS.

### ***Communicable Diseases***

Sexually-transmitted diseases (STDs), such as HIV/AIDS, are the communicable diseases of most concern because of labor mobility. Recognizing that no single measure is likely to be effective in the long term, the Contractor shall implement a combination of behavioral and environmental modifications to mitigate communicable diseases:

- Provide treatment through standard case management in on-site or community health care facilities.
- Ensure ready access to medical treatment, confidentiality and appropriate care, particularly with respect to migrant workers.
- Promote collaboration with local authorities to enhance access of workers families and the community to public health services and ensure the immunization of workers against common and locally prevalent diseases.
- Provide basic education on the conditions that allow the spread of other diseases such as COVID-19, Lassa Fever, Cholera and Ebola. The training should cover sanitary hygiene education.
- Prevent illness in immediate local communities by:
  - Training health workers in disease treatment
  - Conducting immunization programs for workers in local communities to improve health and guard against infection
  - Providing health services

### ***COVID-19<sup>34</sup>***

In the context of the COVID-19 pandemic, Contractors shall develop and implement measures to prevent or minimize an outbreak of COVID-19, and develop procedures indicating what should be

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<sup>34</sup> Based on the World Bank COVID-19 LMP Template, April 16, 2020

done if a worker gets sick. The Contractor shall:

- Assess the characteristics of the workforce, including those with underlying health issues or who may be otherwise at risk
- Confirm that workers are fit for work, including temperature testing and refusing entry to sick workers
- Consider ways to minimize entry/exit to site or the workplace, and limit contact between workers and the community/general public
- Train workers on hygiene and other preventative measures, and implement a communication strategy for regular updates on COVID-19 related issues and the status of affected workers
- Treat workers who are or should be self-isolating and/or are displaying symptoms
- Assess risks to continuity of supplies of medicine, water, fuel, food and PPE, taking into account international, national and local supply chains
- Reduce, store and dispose of medical waste
- Adjust work practices to reduce the number of workers and increase social distancing
- Expand health facilities on-site compared to usual levels, develop relationships with local health care facilities and organize for the treatment of sick workers
- Build worker accommodations further apart, or have one worker accommodation in a more isolated area, which may be easily converted to quarantine and treatment facilities, if needed
- Establish a procedure to follow if a worker becomes sick (following WHO guidelines)
- Implement a communication strategy with the community, community leaders and local government in relation to COVID-19 issues on the site.

### ***Vector-Borne Diseases***

Reducing the impact of vector-borne disease on the long-term health of workers is best accomplished by implementing diverse interventions aimed at eliminating the factors that lead to disease. The Contractor, in close collaboration with community health authorities, shall implement an integrated control strategy for mosquito and other arthropod-borne diseases that includes the following measures:

- Prevent of larval and adult propagation through sanitary improvements and elimination of breeding habitats close to human settlements
- Eliminate unusable impounded water
- Increase water velocity in natural and artificial channels
- Consider the application of residual insecticide to dormitory walls
- Implement integrated vector control programs
- Promote the use of repellents, clothing, netting, and other barriers to prevent insect bites
- Use chemoprophylaxis drugs by non-immune workers and collaborating with public health officials to help eradicate disease reservoirs
- Monitor and treat circulating and migrating populations to prevent disease reservoir spread
- Collaborate and exchange in-kind services with other control programs in the project area to maximize beneficial effects
- Educate project personnel and area residents on risks, prevention, and available treatment
- Monitor communities during high-risk seasons to detect and treat cases
- Distribute appropriate education materials
- Follow safety guidelines for the storage, transport, and distribution of pesticides to minimize the potential for misuse, spills, and accidental human exposure

### **Road safety and Traffic Safety**

The Contractor shall ensure traffic safety by all project personnel during displacement to and from the workplace, and during the operation of project equipment on private or public roads. The Contractor shall adopt best transport safety practices across all aspects of project operations with the goal of preventing traffic accidents and minimizing injuries suffered by project personnel and the public,

including:

- Emphasize safety aspects among drivers
- Improve driving skills and requiring licensing of drivers
- Institute defensive driving training for all drivers prior to starting their job
- Adopt limits for trip duration and arranging driver rosters to avoid overtiredness
- Avoid dangerous routes and times of day to reduce the risk of accidents
- Use speed control devices (governors) on trucks, and remote monitoring of driver actions
- Require that drivers and co-passengers wear seatbelts, and duly sanction defaulters.
- Regularly maintain vehicles and use manufacturer approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure.

Where the project may contribute to significant changes in traffic along existing roads the Contractor shall:

- Commence activities that affect public motorways and highways, only after all traffic safety measures necessitated by the activities are fully operational.
- Arrange diversions for providing alternative routes for transport and/or pedestrians
- Minimize pedestrian interaction with construction vehicles, particularly at crossing points to schools, markets, and any animal crossing points of significance, through appropriate signage, engineered footpaths or traffic slowing devices.
- Organize meaningful road accident awareness events at all roadside schools and communities within 150 meters of the road centerline, covering safe road crossing, road accident hazards from weather conditions and vehicle roadworthiness, overloading and driver alertness, dangers posed by parked and broken-down vehicles, etc.
- Collaborate with local communities and responsible authorities to improve signage, visibility and overall safety of roads, particularly along stretches located near schools or other locations where children may be present.
- Collaborate with local communities on education about traffic and pedestrian safety (e.g., school education campaigns).
- Coordinate with emergency responders to ensure that appropriate first aid is provided to all affected persons in the event of accidents.
- Use locally sourced materials, whenever possible, to minimize transport distances, and locate associated facilities such as worker camps close to project sites.
- Employ safe traffic control measures, including road signs, traffic cones, removable barriers, and flag persons to warn of dangerous conditions.

## **Emergency Preparedness and Response**

The Contractor shall:

- Establish and maintain an emergency preparedness and response system, in collaboration with appropriate and relevant third parties including to cover: (i) the contingencies that could affect personnel and facilities of the project to be financed; (ii) the need to protect the health and safety of project workers; (iii) the need to protect the health and safety of the Affected Communities. The emergency preparedness and response system shall include:
  - Identification of the emergency scenarios
  - Specific emergency response procedures
  - Training of emergency response teams
  - Emergency contacts and communication systems/protocols (including communication with Affected Communities when necessary)
  - Procedures for interaction with government authorities (emergency, health, environmental authorities)
  - Permanently stationed emergency equipment and facilities (e.g., first aid stations,

firefighting equipment, spill response equipment, personal protection equipment for the emergency response teams)

- o Protocols for the use of the emergency equipment and facilities
- o Clear identification of evacuation routes and muster points
- o Emergency drills and their periodicity based on assigned emergency levels or tiers
- o Decontamination procedures and means to proceed with urgent remedial measures to contain, limit and reduce pollution within the physical boundaries of the project property and assets to the extent possible.

## **Labour Force Management**

### ***Labour Influx***

The Contractor shall:

- Establish worker camps when accommodation supply is insufficient for workers, including subcontractors and associated support staff
- Locate worker camps away from environmentally sensitive areas
- Build additional/separate roads to project and workers' camp sites
- Organize the commute from camp to project to reduce traffic
- Ensure workers' camp and associated facilities are connected to a septic tank or other wastewater systems that are appropriate and of sufficient capacity for the number of workers and local conditions
- Avoid contamination of fresh water sources
- Provide opportunities for workers to regularly return to their families
- Provide opportunities for workers to take advantage of entertainment opportunities away from rural host communities
- Ensure that children and minors are not employed directly or indirectly on the project, and keep registration and proof of age for all employees on-site.
- Pay adequate salaries for workers to reduce incentive for theft
- Pay salaries into workers' bank accounts rather than in cash
- Get an appropriate mix of locally and non-locally procured goods to allow local project benefits while reducing risk of crowding out of and price hikes for local consumers
- Create supervised leisure areas in workers' camp;
- Establish substance abuse prevention and management programs
- Hire workers through recruitment offices, and avoid hiring "at the gate" to discourage spontaneous influx of job seekers
- Identify authorized water supply source and prohibiting use from other community sources;
- Separate service providers for community and workers' camp/construction site;
- Put in place measures to reduce water and electricity consumption;
- Employ locals to the extent possible;
- Develop and adopt a Gender Action Plan to promote the transfer of construction skills to local women, to facilitate their employment at the Project site, including training and recruitment targets.

### ***Labor Conditions***

The Contractor shall:

- Implement the measures and commitments defined in the Project Labor Management Procedures.
- Provide all workers with terms and conditions that comply with Yemeni Labor Legislation, most particularly Decree 5/1995) and applicable International Labour Organization conventions on workplace conditions.

- Put in place workplace processes for project workers to report work situations that they believe are not safe or healthy, and to remove themselves from a work situation which they have reasonable justification to believe presents an imminent and serious danger to their life or health. Project workers who remove themselves from such situations will not be required to return to work until necessary remedial action to correct the situation has been taken. Project workers will not be retaliated against or otherwise subject to reprisal or negative action for such reporting or removal.
- Avoid all forms of forced or compulsory labor, i.e., all work or service which is exacted from any person under the threat of a penalty and for which the person has not offered himself or herself voluntarily.

### ***Insurance***

The Contractor shall:

- Protect the health of workers involved in onsite activities, as indicated in Chapter X of Yemen's Labor Code
- Compensate any employee for death or injury

### ***Grievance Mechanism for Workers***

The Contractor shall put in place a Grievance Mechanism for its workers and the workers of its subcontractors that is proportionate to its workforce. The GM for workers shall be distinct from the Project level Grievance Mechanism described in the Project Stakeholder Engagement Plan (SEP) for affected individuals and communities, and shall adhere to the following principles:

- *Provision of information.* All workers should be informed about the grievance mechanism at the time they are hired, and details about how it operates should be easily available, for example, included in worker documentation or on notice boards.
- *Transparency of the process.* Workers must know to whom they can turn in the event of a grievance and the support and sources of advice that are available to them. All line and senior managers must be familiar with their organization's grievance procedure.
- *Keeping it up to date.* The process should be regularly reviewed and kept up to date, for example, by referencing any new statutory guidelines, changes in contracts or representation.
- *Confidentiality.* The process should ensure that a complaint is dealt with confidentially. While procedures may specify that complaints should first be made to the workers' line manager, there should also be the option of raising a grievance first with an alternative manager, for example, a human resource (personnel) manager.
- *Non-retribution.* Procedures should guarantee that any worker raising a complaint will not be subject to any reprisal.
- *Reasonable timescales.* Procedures should allow for time to investigate grievances fully, but should aim for swift resolutions. The longer a grievance is allowed to continue, the harder it can be for both sides to get back to normal afterwards. Time limits should be set for each stage of the process, for example, a maximum time between a grievance being raised and the setting up of a meeting to investigate it.
- *Right of appeal.* A worker should have the right to appeal to the World Bank or national courts if he or she is not happy with the initial finding.
- *Right to be accompanied.* In any meetings or hearings, the worker should have the right to be accompanied by a colleague, friend or union representative.
- *Keeping records.* Written records should be kept at all stages. The initial complaint should be in writing, if possible, along with the response, notes of any meetings and the findings and the reasons for the findings. Any records on SEA shall be registered separately and under the strictest confidentiality.

- *Relationship with collective agreements.* Grievance procedures should be consistent with any collective agreements.
- *Relationship with regulation.* Grievance processes should be compliant with the national employment code.

### ***Protection from Child Labor***

The Contractor shall:

- Verify that workers are older than 18 when hiring
- Exclude all persons under the age of 18.
- Review and retain copies of verifiable documentation concerning the age of workers

### ***Protection from Sexual Exploitation and Abuse***<sup>35</sup>

The Contractor shall:

- Provide repeated training and awareness raising to the workforce about refraining from unacceptable conduct toward local community members, specifically women
- Inform workers about national laws that make sexual harassment and gender-based violence a punishable offence which is prosecuted
- Prohibit its employees from exchanging any money, goods, services, or other things of value, for sexual favors or activities, or from engaging any sexual activities that are exploitive or degrading to any person.
- Develop a system to capture gender-based violence, sexual exploitation and workplace sexual harassment related complaints/issues.
- Adopt a policy to cooperate with law enforcement agencies in investigating complaints about gender-based violence.

### ***Code of Conduct***

The Contractor shall ensure that all employees, including those of subcontractors, are informed about and sign the following Code of Conduct:

#### **CODE OF CONDUCT FOR CONTRACTOR'S PERSONNEL**

We the Contractor [enter name of Contractor] have signed a contract with UNOPS for [enter description of the activities]. These activities will be carried out at [enter the Site and other locations where the activities will be carried out]. Our contract requires us to implement measures to address environmental and social risks related to the activities, including the risks of sexual exploitation and assault and gender-based violence.

This Code of Conduct is part of our measures to deal with environmental and social risks related to the activities. It applies to all our staff, including laborers and other employees at the at all the places where the activities are being carried out. It also applies to the personnel of every subcontractor and any other personnel assisting us in the execution of the activities. All such persons are referred to as "Contractor's Personnel" and are subject to this Code of Conduct.

***This Code of Conduct identifies the behavior that we require from all Contractor's Personnel.***

Our workplace is an environment where unsafe, offensive, abusive or violent behavior will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation.

#### **Required Conduct**

Contractor's Personnel shall:

1. carry out his/her duties competently and diligently;

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<sup>35</sup> UNOPS has prepared a Sexual Abuse and Exploitation (SEA) and Sexual Harassment (SH) Prevention and Response Plan for the Project

2. comply with this Code of Conduct and all applicable laws, regulations and other requirements, including requirements to protect the health, safety and well-being of other Contractor's Personnel and any other person;
3. maintain a safe working environment including by:
4. ensuring that workplaces, machinery, equipment and processes under each person's control are safe and without risk to health;
5. wearing required personal protective equipment;
6. using appropriate measures relating to chemical, physical and biological substances and agents; and
7. following applicable emergency operating procedures.
8. report work situations that he/she believes are not safe or healthy and remove himself/herself from a work situation which he/she reasonably believes presents an imminent and serious danger to his/her life or health;
9. treat other people with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers or children;
10. not engage in any form of sexual harassment including unwelcome sexual advances, requests for sexual favors, and other unwanted verbal or physical conduct of a sexual nature with other Contractor's or Employer's Personnel;
11. not engage in Sexual Exploitation, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another. In Bank financed projects, sexual exploitation occurs when access to or benefit from Bank financed Goods, Works, Consulting or Non-consulting services is used to extract sexual gain;
12. not engage in Sexual Assault, which means sexual activity with another person who does not consent. It is a violation of bodily integrity and sexual autonomy and is broader than narrower conceptions of "rape", especially because (a) it may be committed by other means than force or violence, and (b) it does not necessarily entail penetration.
13. not engage in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage;
14. complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, and Sexual Exploitation and Assault (SEA);
15. report violations of this Code of Conduct; and
16. Not retaliate against any person who reports violations of this Code of Conduct, whether to us or the Employer, or who makes use of the Grievance mechanism for Contractor's Personnel or the project's Grievance Mechanism.

### **Raising Concerns**

If any person observes behavior that he/she believes may represent a violation of this Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done in either of the following ways:

1. Contacting the Individual designated by the Contractor [enter name of Contact)
  2. In writing at this address [ ]
  3. By telephone at [ ]
  4. In person at [ ]
  5. Calling [ ] to reach the Contractor's hotline and leave a message (if available)

The person's identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all due and appropriate consideration. We take seriously all reports of possible misconduct and will investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate.

There will be no retaliation against any person who raises a concern in good faith about any behavior prohibited by this Code of Conduct. Such retaliation would be a violation of this Code of Conduct.

### Consequences of Violating the Code of Conduct

Any violation of this Code of Conduct by Contractor's Personnel may result in serious consequences, up to and including termination and possible referral to legal authorities.

### For Contractor's Personnel

I have received a copy of this Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this Code of Conduct, I can contact [enter name of Contractor's contact person with relevant experience in handling gender-based violence] requesting an explanation.

Name of Contractor's Personnel: [insert name]

Signature: \_\_\_\_\_

Date: (day month year): \_\_\_\_\_

Countersignature of authorized representative of the Contractor:

Signature: \_\_\_\_\_

Date: (day month year): \_\_\_\_\_

A copy of the code shall be displayed in a location easily accessible to the community and project affected people. It shall be provided in languages comprehensible to the local community, Contractor's personnel (including sub-contractors and day workers), and affected persons.]

### Stakeholder Engagement

As part of the overall Project Stakeholder Engagement<sup>36</sup>, the Contractor will undertake a process of stakeholder engagement with representative persons and communities directly affected by the activities it undertakes, including, if necessary, the public disclosure of its C-ESMP. The Contractor shall also maintain throughout the Project good relations with local communities and will give these communities prior notice of plans and schedules as they might affect local people.

The stakeholder engagement process will also be applicable in the event of land acquisition associated with changes in the footprint of activities.

### Contractor Environmental and Social Reporting

The Contractor shall report major work-related incidents, accidents or loss of life to UNOPS or the relevant Implementing Partner **within 24 hours** of their occurrence.

The Contractor shall monitor, keep records and report on the following environmental and social issues:

- *Safety*: hours worked, lost time injury (LTI), lost workdays, recordable incidents and corresponding Root Cause Analysis (lost time incidents, medical treatment cases), first aid cases, high potential near misses, and remedial and preventive activities required (for example, revised job safety analysis, new or different equipment, skills training, and so forth).
- *Environmental incidents and near misses*: environmental incidents and high potential near misses and how they have been addressed, what is outstanding, and lessons learned.
- *Major works*: those undertaken and completed, progress against project schedule, and key work fronts (work areas).
- *ESHS requirements*: noncompliance incidents with permits and national law (legal noncompliance), project commitments, or other ESHS requirements.
- *ESHS inspections and audits*: by the Contractor, UNOPS and its Implementing Partners, or others—to include date, inspector or auditor name, sites visited and records reviewed, major findings, and actions taken.

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<sup>36</sup> The overall process of stakeholder engagement is described in the Project Stakeholder Engagement Plan (SEP)

- *Workers*: list of workers at each site, confirmation of ESHS training, indication of origin (expatriate, local, nonlocal nationals), gender, age with evidence that no child labor is involved, and skill level (unskilled, skilled, supervisory, professional, management).
- *Training on ESHS issues*: including dates, number of trainees, and topics.
- *Footprint management*: details of any work outside boundaries or major off-site impacts caused by ongoing construction—to include date, location, impacts, and actions taken.
- *External stakeholder engagement*: highlights, including formal and informal meetings, and information disclosure and dissemination—to include a breakdown of women and men consulted and themes coming from various stakeholder groups, including vulnerable groups (e.g., disabled, elderly, children, etc.).
- *Details of any security risks*: details of risks the Contractor may be exposed to while performing its work—the threats may come from third parties external to the project.
- *Worker grievances*: details including occurrence date, grievance, and date submitted; actions taken and dates; resolution (if any) and date; and follow-up yet to be taken—grievances listed should include those received since the preceding report and those that were unresolved at the time of that report.
- *External stakeholder grievances*: grievance and date submitted, action(s) taken and date(s), resolution (if any) and date, and follow-up yet to be taken—grievances listed should include those received since the preceding report and those that were unresolved at the time of that report. Grievance data should be gender-disaggregated.
- *Major changes to Contractors environmental and social practices*.
- *Deficiency and performance management*: actions taken in response to previous notices of deficiency or observations regarding ESHS performance and/or plans for actions to be taken should continue to be reported to UNOPS until it determines the issue is resolved satisfactorily.

**Annex 6.**

# Grievance Complaint, and Suggestion Form

## Documenting and Monitoring Complaints Form of Beneficiaries of Yemen Emergency Lifeline Connectivity Project

			الاسم الثلاثي للمستفيد Beneficiary Name
	رقم الهاتف للمتابعة Tel No. for follow up		رقم البطاقة الشخصية ID No.
			العنوان الدائم Permanent Address
			(اسم النشاط المنفذ (مركز/وحدة) Name of activity under implementation
المحافظة: Governorate	المديرية: District	القرية: Village	مكان تنفيذ النشاط Place of activity under implementation

أخرى Other	مالية Financial	فنية Technical	إدارية Administrative	نوع الشكوى Complaint Type
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**موضوع الشكوى**
**Complaint Subject**

		الوضع الحالي Current Situation
		أسباب المشكلة Reason of the problem
	توقيع صاحب الشكوى Complainant Signature	التاريخ Date

- UNOPS/Sana'a – Tel: 01 504914/915 - SMS:739888388 Email: GRM.yemen@unops.org

The entity which the complaint should be forwarded to:

الرأي في جدية الشكوى:.....

Opinion on the seriousness of the complaint

الجهة المحول لها الشكوى:.....

The complaint transferred to

المدة الزمنية اللازمة للبت في الشكوى - :.....

Time required for response

مدى رضى المستفيد عن الاستجابة لحل شكواه:.....

Satisfaction of beneficiary in responding to his/her complaint

		الإجراءات المتخذة : Action taken
	التاريخ: Date	ما ترتب عليها من نتائج The results of the action taken

اسم مستلم الشكوى ووظيفته : .....

Name of person received the complaint and his/her position

التاريخ Date : .....

توقيع الموظف المختص / Signature