

General Project Information

Project Information

Project Title:	: Support the urgent UN-brokered SAFER Salvage Operation to prevent an environmental, humanitarian and economic oil spill disaster in the southern Red Sea		
Region:	Yemen	GEF Project ID:	11056
Country(ies):	Yemen	Type of Project:	FSP
GEF Agency(ies):	UNDP	GEF Agency Project ID:	9483
Project Executing Entity(s):	UNDP (Direct Implementation)	Project Executing Type:	GEF Agency
	UNDP		GEF Agency
GEF Focal Area (s):	Biodiversity	Submission Date :	6/13/2023
Type of Trust Fund:	GET	Project Duration (Months):	12
GEF Project Grant: (a)	4,016,210.00	GEF Project Non-Grant: (b)	0.00
Agency Fee(s) Grant: (c)	381,540.00	Agency Fee(s) Non-Grant: (d)	0.00
Total GEF Financing: (a+b+c+d)	4,397,750.00	Total Co-financing:	55,500,000.00

PPG Amount: (e)	550,000.00	PPG Agency Fee(s): (f)	52,250.00
Total GEF Resources: (a+b+c+d+e+f)	5,000,000.00		
Project Tags:	CBIT: No NGI: No SGP: No Innovation: No		
Project Sector (CCM Only):			
Taxonomy:	Focal Areas, Biodiversity, Protected Areas and Landscapes, Coastal and Marine Protected Areas, Productive Seascapes, Biomes, Mangroves, Coral Reefs, Sea Grasses, Wetlands, Mainstreaming, Infrastructure, Extractive Industries, Influencing models, Strengthen institutional capacity and decision-making, Convene multi-stakeholder alliances, Stakeholders, Type of Engagement, Participation, Communications, Public Campaigns, Private Sector, SMEs, Large corporations, Capacity, Knowledge and Research, Capacity Development		
Rio Markers			
Climate Change Mitigation:	<input checked="" type="checkbox"/> No Contribution (0)	<input type="checkbox"/> Significant Objective (1)	<input type="checkbox"/> Principal Objective (2)
Climate Change Adaptation:	<input checked="" type="checkbox"/> No Contribution (0)	<input type="checkbox"/> Significant Objective (1)	<input type="checkbox"/> Principal Objective (2)
Biodiversity:	<input type="checkbox"/> No Contribution (0)	<input type="checkbox"/> Significant Objective (1)	<input checked="" type="checkbox"/> Principal Objective (2)
Land Degradation:	<input checked="" type="checkbox"/> No Contribution (0)	<input type="checkbox"/> Significant Objective (1)	<input type="checkbox"/> Principal Objective (2)

Project Summary

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is

to provide a short, coherent summary for readers. (max. 250 words, approximately 1/2 page)

The Floating Storage and Offloading (FSO) vessel SAFER containing an estimated 1.148 million barrels of light crude oil is moored approximately 8 km off the coast of Yemen and 50 km northeast off the port of Hodeida. FSO SAFER has been under the control of the de facto authorities (DFA) in Sana'a since March 2015.

SAFER's age and lack of maintenance have deteriorated its structural integrity putting it at risk of spilling oil due to leakages, an explosion from the accumulation of volatile explosion gases, or a strike from a floating sea mine, which would unleash a humanitarian and ecological catastrophe on a country already decimated by more than seven years of war. Significant spill could occur at any time along Yemen's Red Sea coastline and towards its neighbouring countries. Heavy contamination and pollution could extend as far as the Bab-El-Mandab strait, with some oil passing beyond the Gulf of Aden. Disaster would quickly surpass national capacity and resources to respond effectively, directly affecting the lives and livelihoods of up to 12 million people, with the unique environment of the Red Sea experiencing enormous damage above and below the water. Recovery from a potential oil spill could take up to 3 years and potentially cost USD 20 billion and life below water could require 25 years to recover. In addition, one of the world's major shipping lanes could be affected, impacting many more people globally.

The Government of Yemen and its international partners aim to prevent a catastrophic oil spill occurring in the Red Sea and its potentially disastrous impacts. This will be achieved through the UN-brokered SAFER Salvage Operation, which will mobilise salvage assets including a Very Large Crude Carrier (VLCC) and install a Catenary Anchor Leg Mooring (CALM) Buoy, offloading the oil from FSO Safer to the VLCC, placing an oil-spill contingency response on standby.

The present UNDP-GEF project will support the urgent salvage operation to prevent the imminent environmental, humanitarian and economic oil spill disaster in the southern Red Sea, safeguarding globally important marine and coastal biodiversity, as well as fisheries-dependent livelihoods of potentially affected communities.

Project Description Overview

Project Objective

To protect globally important marine biodiversity by supporting the UN-brokered salvage plan for the FSO SAFER

Project Components	Component Type	Project Outcomes	Project Outputs	Trust Fund	GEF Project Financing(\$)	Co-Financing(\$)
1. Support purchase of replacement VLCC	Investment	1.1 Replacement Very Large Crude Carrier purchased to enable the SAFER Salvage Operation	1.1.1 Replacement Very Large Crude Carrier purchased	GET	3,991,210.00	51,008,790.00

Project Components	Component Type	Project Outcomes	Project Outputs	Trust Fund	GEF Project Financing(\$)	Co-Financing(\$)
2. SAFER Salvage Operation	Investment	2.1 Capacity and risk management enhanced to mitigate environmental and humanitarian risks during the SAFER Salvage Operation	<p>2.1.1 Environmental and marine biodiversity expertise mobilised to inform FSO SAFER Salvage Operation Phases 1 and 2 planning and execution</p> <p>2.1.2 Capacity building provided to government and technical stakeholders involved in FSO SAFER Salvage Operation Phases 1 and of the 2, including to ensure compliance with MARPOL convention requirements</p> <p>2.1.3 FSO SAFER oil spill contingency planning (national, regional, UN) enhanced with inputs from</p>	GET		3,941,210.00

Project Components	Component Type	Project Outcomes	Project Outputs	Trust Fund	GEF Project Financing(\$)	Co-Financing(\$)
			international oil spill preparedness and response experts			
			2.1.4 Local, national and transboundary emergency response workplan prepared and emergency readiness organised, with procurement and emplacement of contingency equipment (boats, pumps, booms)			

Monitoring and Evaluation (M&E)

M&E	Technical Assistance	3.1 Terminal Evaluation duly implemented; indicated by TE quality rating of S or better	3.1.1 Terminal Evaluation duly prepared	GET	20,000.00	
Sub Total (\$)					4,011,210.00	54,950,000.00

Project Management Cost (PMC)

GET	5,000.00	550,000.00
Sub Total(\$)	5,000.00	550,000.00
Total Project Cost(\$)	4,016,210.00	55,500,000.00

Please provide justification

PROJECT OUTLINE**A. PROJECT RATIONALE**

Describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it.

(Approximately 3-5 pages) See guidance here

Acronyms

ACAPS	Assessment Capacities Project
BPPS NCE	Bureau for Policy and Programme Support, Nature, Climate and Energy
CALM	Catenary Anchorage Leg Mooring
CTA	Chief Technical Advisor
DFA	De Facto Authorities in Sanaa
FSO	Floating (Oil) Storage and Offloading Vessel
FSP	Full Sized Project
GEF	Global Environment Facility
GEFSEC	Global Environment Facility Secretariat
IMO	International Maritime Organisation
IRG	Internationally Recognised Government of Yemen
KSA	Kingdom of Saudi Arabia
OCHA	United Nations Office for the Coordination of Humanitarian Affairs

PIF	Project Identification Form
PIR	GEF Project Implementation Report
PM	Project Manager
POPP	Programme and Operations Policies and Procedures
PPG	Project Preparation Grant
PSF (SC)	Peace Support Fund (Steering Committee)
RC/HC	Resident Coordinator / Humanitarian Coordinator
RCOY	Resident Coordinator Office in Yemen
SDG(s)	Sustainable Development Goal(s)
SEPOC	SAFER Exploration & Production Operation Company
SSOP	SAFER Salvage Operation Project
STAP	GEF Scientific Technical Advisory Panel
UAE	United Arab Emirates
UNDP-COY	UNDP Country Office in Yemen
UNDP	United Nations Development Programme
UNDP-GEF	UNDP Global Environmental Finance Unit
UNEP	United Nations Environment Programme
UNSG	United Nations Secretary-General
VLCC	Very Large Crude Carrier

1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)

Geographic and environmental context

1. Yemen is located at the southern tip of the Arabian Peninsula, between Saudi Arabia to the north and Oman to the east. Its coastline is 1906 km long and faces the Red Sea to the west (c. 30% of the coastline) as well as the Gulf of Aden/Arabian Sea to the south (c. 70% of the coastline). The 26 km-wide Bab-el-Mandeb Strait represents the border between the Red Sea and the Gulf of Aden/Arabian Sea and is one of the most active and strategic shipping bottlenecks in the world, with 21,000 ships annually and 10% of the

world's seaborne petroleum crossing the strait. Both the Red Sea and the Gulf of Aden are designated 'special areas' under the international MARPOL convention.

2. Yemen has over 186 islands in its maritime zone, with distinct climatic and natural characteristics. This includes the Socotra Archipelago (the 'Galapagos of the Indian Ocean'), located c. 350 km off the coast of Yemen near the tip of the Horn of Africa in the Indian Ocean. In the Red Sea, Yemen counts more than 150 islands, including i) a complex chain of near-coastal islands stretching northwards from the Ras Isa peninsula and the larger Kamaran Island to the Farasan Islands of Saudi Arabia, ii) the offshore Zubair Islands group, iii) the offshore Hanish Islands group (with the islands of Zuqur and Al Kabir) more to the south and halfway to Eritrea, and iv) Mayoon Island located in the Bab-el-Mandeb Strait between Yemen and Djibouti.

3. The Red Sea and Gulf of Aden regions of Yemen represent a complex and unique tropical marine ecosystem with extraordinary biodiversity and a remarkably high degree of endemism. Yemen's coastal waters are rich in fish and crustaceans of commercial importance and support an important artisanal fishery. The great productivity of the Arabian Sea, Gulf of Aden and southern Red Sea, caused by upwellings of cold, nutrient-rich waters during the summer monsoon, together with the presence of numerous offshore islands, create ideal feeding and breeding areas for many seabirds. BirdLife International has identified 57 Important Bird Areas in Yemen (Evans, 1994), which includes 12 coastal zone wetlands in addition to a number of rocky offshore islands and marine areas important for pelagic seabirds including *Bulweria fallax*, *Puffinus persicus*, *Phaethon aethereus*, *Sula dactylatra*, *S. leucogaster*, *Phalacrocorax nigrogularis*, *Phalaropus lobatus*, *Larus hemprichii*, *L. leucophthalmus*, *Sterna bergii* and *S. repressa*.



ibas in Yemen (<http://datazone.birdlife.org/country/yemen>)

4. Yemen has designated a number of Protected Areas (PAs) from amongst 40 environmentally sensitive places, according to the Environment Protection Law No. 26 of 1995 and the Bylaw No. 148 of 2000. This includes the terrestrial Bura'a PA, Hawf PA and Utoma PA, the terrestrial/coastal Aden wetlands PA, the terrestrial/coastal/marine Socotra Archipelago PA and in the Red Sea the terrestrial/coastal/marine

Kamaran Island/Ras Isa PA (10,670 ha) and terrestrial/coastal/marine Zuqur Island PA (12,140 ha, legal status uncertain) for a total area of 22,810 ha in the Red Sea.

Environmental and development challenge: imminent oil spill from FSO SAFER

5. The marine and coastal environment as well as the economies and humanitarian situation of Yemen and its neighbouring countries in the southern Red Sea are at risk from a catastrophic oil spill from the rapidly decaying Floating Oil Storage and Offloading Vessel (FSO) SAFER (called FSO SAFER or SAFER henceforth).

6. Constructed in 1976 as a supertanker and converted in 1987 to be a floating storage facility, the SAFER is single-hulled and 362 meters in length. It is moored about 4.8 nautical miles off the northwestern coast of Yemen, next to the Ras Isa peninsula, 30 nm NNW of the important port city of Hodeidah, and 78 nm from the Saudi Arabian border. The SAFER holds an estimated cargo of 1.14 million barrels of extra-light crude oil (Marib Light), four times the amount spilled by the Exxon Valdez in Alaska in 1989.

7. The SAFER has been under the control of the Sana'a de facto authorities (DFA) since March 2015, and the production, offloading and maintenance operations on the SAFER have since been suspended due to the war. SAFER's age and lack of maintenance have resulted in significant deterioration of its structural integrity, and all assessments indicate that the vessel is beyond repair. The safety systems, gas monitoring and systems required to pump inert gas into its tanks ceased functioning in 2017. The FSO's insurance cover has lapsed and its certificate of seaworthiness has expired. An oil spill could occur at any time, from corrosion to the hull, an explosion aboard the vessel, or a strike from a drifting sea mine.

8. The resulting oil spill from the SAFER would lead to a humanitarian and ecological disaster. A large incident would quickly surpass national capacities of a country already embroiled in war for over seven years, limiting an effective spill response. Several scenarios (especially RiskAware & ACAPS 2020-2021; IMO 2021) have analysed the potential impacts. The extent of pollution resulting from an incident would be driven by its type (spill, burning) and magnitude, as well as by the season, prevailing winds and currents. In a worst case scenario, an oil spill would affect the seas and coasts of Yemen and nearby Saudi Arabia, Eritrea, Djibouti and Somalia. The IMO 2021 Worst Case Scenario 4, predicts the following:

- *Sea Surface:* An oil spill at any time of year is likely to impact the sea areas of Eritrea, Saudi Arabia, in addition to Yemen. An oil spill between April and December is also likely to impact the sea areas of Djibouti and Somalia. Spilled oil could travel up to 700 km from release, apart from January to March where the oil is most likely to remain in closer proximity to the release location traveling up to 220 km away. Oil is likely to impact the sea areas of neighbouring countries within days (Djibouti (7 days), Eritrea (5 days 15 hours), Saudi Arabia (4 days, 9 hours), and Somalia (11 days, 15 hours)). Oil of thickness ?Continuous true? may be found up to ~150 km away (January to March), metallic and rainbow sheen may be observed up to ~700 km (April to June) from the release location.

- *Shoreline:* Heavy shoreline oiling will likely impact the Yemeni coastline and moderate to light oiling of sections of coastline in Djibouti, Eritrea and Saudi Arabia may appear. Heavy oiling could be found up to ~280 km from release location. Oil could impact the Yemen coast within as little as 3 hours of release.

9. In the worst-case oil spill and fire scenario (explosion and fire, spill of the entire oil cargo on SAFER, unfavourable weather conditions), the livelihoods, health as well as food and water security of the entire population of Yemen would be affected for many months if not years, through a loss of fisheries, pollution

of agricultural soils near the coasts, closure of key water desalination plants providing water to millions of people, and closure due to pollution of key ports (Hodeidah, Salif) on the west Yemen coast that are key for trade and the entry of humanitarian aid. Fuel imports and supply chains and routes would be altered. More fuel would be sold through the black market, and prices would likely rise by up to 200%. This would impact electricity production, health services, and transportation provision across the country. Food imports and supply chains would stagnate. The cost to the fishing industry from the environmental impact would be US\$30 million per year. The estimated loss in agricultural production could be US\$ 70 million. Pollution from the oil spill, whether by evaporation or smoke following fire/explosion, would cause cardiovascular and respiratory health issues overwhelming an already struggling healthcare system. Coastal communities involved in clean up operations could be exposed to life-threatening toxins. Up to 60 humanitarian agencies could suspend services due to unsafe air, cutting services to millions of Yemenis in affected areas.

10. Populations in nearby Saudi Arabia, Djibouti, Eritrea and Somalia could experience similar impacts at a smaller scale.

11. In addition, in terms of macro-economic impacts, the clean-up alone is estimated at US \$20 billion (ACAPS, 2021) based on Exxon Valdez extrapolation, and shipping through the Bab-el-Mandeb Strait to/from the Suez Canal could be disrupted for several weeks or months, with knock-on effects to global shipping, costing billions of dollars of trade losses every day (perspective is provided by the EverGiven container ship in the Suez Canal, which froze US\$10 billion of trade in a single day).

12. And importantly, the unique marine and coastal biodiversity and ecosystems of the southern Red Sea described above, especially the marine life including coral reefs, coastal wetlands including life-supporting mangroves, and seabird breeding islets would suffer severe and large-scale damage above and below water. Life below water and fisheries could take 25 years to recover. This is especially important given that the Red Sea corals have been considered the most resilient genetic reserve for coral survival in the face of climate change.

13. See Annex E for further details on the potential impacts including maps.

The solution

14. The solution to the risk posed by the FSO SAFER is to urgently transfer its oil cargo into a safe replacement storage vessel, to prevent the imminent disastrous oil spill and its severe humanitarian, socio-economic and environmental impacts, including the devastation of marine and coastal ecosystems and biodiversity in the southern Red Sea.

Key past and ongoing interventions

15. Awareness about the threat posed by the FSO SAFER grew only gradually after 2015, and no action was possible or taken in the first years, except for a too-limited maintenance operation by the SAFER Exploration & Production Operation Company (SEPOC) accepted by the Sana'a authorities. Yet in early 2018, the Sana'a and Aden authorities wrote separately to the UN Secretary General (UNSG), asking for assistance with addressing the growing SAFER crisis. The UNSG tasked the Office for the Coordination of Humanitarian Affairs (OCHA) to seek a solution to the situation. Working with the UNSG's Special Envoy for Yemen and UNOPS, an agreement was reached in mid 2019 to organise a technical inspection and light maintenance mission to the SAFER. The mission was however cancelled at short notice.

16. At the same time, work on a regional contingency plan for an oil spill disaster was initiated under the Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA) together with UNEP and IMO.

17. In May 2020, seawater leaked into the SAFER's engine room, threatening to destabilise and sink the entire vessel, and potentially releasing all the oil into the sea. A temporary fix by Yemen operators succeeded in containing the leak, however the severity of the threat became more apparent.

18. By late 2020, the Yemeni company Fahem Group proposed to contract an expert salvage company to offload the oil from the SAFER into a new storage vessel. The SAFER would be scrapped, with proceeds used to reimburse costs of the operation. The focus was on solving the environmental risk while avoiding controversial issues between the parties involved.

19. In consequence, a new UN-led approach was adopted to expedite progress. In September 2021, the UNSG designated the Yemen Resident Coordinator as UN system-wide lead on the SAFER in-country. UNDP was designated to manage the proposed salvage operation on behalf of the Yemen government as well as the wider UN, UN member states and donors. The UN would be able to include the private salvage operator under its security umbrella. In parallel to the salvage operation, the UN would strengthen support for regional and in-country contingency planning and response in the event of an incident, including for an in-country response in the event of an oil spill incident.

20. **The resulting SAFER Salvage Operation Project (SSOP, or SAFER Salvage Operation) is the baseline project to the present GEF project. It has the support of all key stakeholders and parties to the conflict.** The Sana'a authorities, who control the area where the SAFER is located, signed a Memorandum of Understanding (MoU) with the UN on 5 March 2022 establishing a framework for cooperation and committing to facilitating the success of the project. The Internationally Recognised Government of Yemen (IRG) also agrees with the solution, recognising the common interest in preventing an oil spill. The consent of the Saudi-led Coalition has also been obtained.

21. The UN-led SSOP will be a two-phase intervention. In **Phase 1**, it will facilitate the ship-to-ship transfer of oil from the FSO SAFER as soon as possible to address the immediate environmental and humanitarian threats. This involves the following five main activities:

- Activity 1) FSO SAFER oil spill contingency plan.
- Activity 2) preparatory works (including the procurement of a Very Large Crude Carrier (VLCC));
- Activity 3) the mobilization of salvage assets to the work site;
- Activity 4) the ship-to-ship (STS) transfer of oil from the FSO SAFER to a replacement VLCC, followed by tank cleaning and de-mucking, thereby eliminating the environmental hazard;
- Activity 5) the inspection of subsea structures, closing of PLEM (Pipeline End Manifold), disconnecting of risers and removal of FSO SAFER.

22. In **Phase 2**, the SSOP will facilitate the installation of a replacement option for the FSO SAFER. Based on extensive technical consultations and on political engagement with Yemeni governance institutions, the UN has proposed a floating CALM Buoy, attached to the replacement VLCC following modifications to be an FSO, as the optimal long-term solution in the Ras Issa environment. The CALM buoy with a permanently

attached double-hull VLCC as FSO is the safest, fastest and most flexible option. The CALM buoy can be attached and detached from the FSO should the vessel need to be replaced or drydocked. It can also be used to load oil directly to tankers from an onshore storage facility. The system is proven safe in use by the industry as a long-term FSO solution. The CALM buoy system is more compatible with other storage options that may be possible in the future, such as connection to onshore storage (i.e. tank farm). Phase 2 of the operation involves the following main activities:

- Activity 1) Procurement of CALM buoy;
- Activity 2) Installation of CALM Buoy and connection of risers;
- Activity 3) Scrapping of FSO SAFER;
- Activity 4) Handover of the replacement VLCC and CALM buoy with maintenance plan.

23. Successful implementation of Phase 1 activities will remove the risk of an oil spill from the FSO SAFER and the associated environmental, socio-economic and humanitarian consequences and contribute toward Sustainable Development Goals (SDGs) 14, 15 and beyond. Successful implementation of Phase 2 activities will provide a replacement option for the FSO SAFER. The results of this phase will deliver the potential for economic and industrial dividends to benefit the Yemeni people and can incentivise parties to reach agreement as part of a formal peace process.

24. At the time of writing, Phase 1 has progressed substantially:

- UNDP has recruited a team managing the operation, and which receives support from dedicated staffing in UNDP headquarters and the UN Resident Coordinator's Office in Yemen.
 - A coordination group involving various UN agencies and the authorities in Yemen has been set up and is functional.
 - International oil spill preparedness and response experts have been contracted and fielded to assist the Sana'a and Aden authorities in further assessments of the possible impacts of an oil spill/fire, in the development of a national contingency plan and defining contingency equipment requirements, and in combining this information into a coherent plan. This builds on the detailed transboundary oil spill scenarios and tactical response plans for the case of an incident prepared by RiskAware, Catapult and ACAPS in 2020-2021 and IMO in 2021. The oil spill experts have also delivered a first series of capacity development workshops to the authorities and to selected coastal communities potentially affected by an oil spill and involved in any cleanup.
 - The VLCC to be purchased has been identified as the NAUTICA. It will be purchased from the private company EURONAV, the largest NYSE listed independent crude oil tanker company in the world^[1]. EURONAV will also be in charge of the management, crewing, adaptation and transfer of the ship until its delivery in Yemen.
-

- The private company SMIT Salvage[2]² has been selected to lead the core salvage operation ? the transfer of the oil cargo from FSO SAFER to the NAUTICA. SMIT has been a key player in risk assessment, operational contingency planning, contingency oversight and capacity development complementing the work of IMO, PERSGA and oil spill experts.

25. Phase 1 of the emergency operation, aimed to mitigate the immediate environmental threat and scheduled at PIF stage to be completed within 10 months, could therefore now be completed within 3-6 months.

26. The SAFER Salvage Operation acknowledges the pledges of support from its numerous donors (see the list in the table in Section 2. Stakeholders). However, the current pledges amount only to about USD 114 million (USD 114,172,312). Noting that the cost of the replacement VLCC is significantly higher than planned ? USD 55 million rather than the originally budgeted USD 30 million ? an important funding gap of about USD 15 million remains for the first emergency phase, especially for the purchase of the replacement VLCC, and especially because several pledges have been earmarked for contingency planning and equipment.

Barriers to achieving the solution

27. The **following barrier** impedes the achievement of the solution in a timely enough manner to prevent an imminent catastrophic oil spill from FSO SAFER:

- Insufficient funding to allow completion of the purchase of the replacement VLCC (NAUTICA) from EURONAV, to trigger the subsequent urgent steps, namely the full contracting of the salvage operator SMIT, and the start of the salvage operation (ship-to-ship oil transfer) in Yemen.

Changes compared to the PIF under this section (systems description):

28. There are changes to the systems description. Firstly, the degree of progress under the baseline SAFER Salvage Operation since the submission of the PIF in November 2022. Secondly, the scope and depth of risk assessments, risk management and contingency planning and measures already emplaced or being prepared, which was not sufficiently appreciated at PIF stage. And thirdly, the significant, unexpected and continuing shortage of financial resources to successfully engage and deliver the urgent core salvage operation ? the purchase of the replacement VLCC and the subsequent ship-to-ship transfer of the SAFER?s cargo oil ? while sufficient pledges have been received to cover the contingency planning and measures. These changes in the baseline situation have led to a redefinition of the barriers and project strategy.

2) the baseline scenario and any associated baseline projects

29. The baseline scenario for this GEF project consists of the baseline FSO SAFER Salvage Operation described above with the USD 114 million of pledges received to date. USD 55.5 million of the baseline are considered co-financing to the GEF project. The cost of the replacement VLCC (NAUTICA) amounts to 55 million, to which the GEF grant will be primarily assigned.

Changes compared to the PIF under this section (baseline scenario)

30. There is a significant change to the baseline scenario: on the one hand, a nominal growth of pledges from 77 million (at PIF stage) to USD 114 million (USD 114,172,312); yet on the other hand, an unexpected and continuing shortage of financial resources to successfully engage and deliver the urgent core salvage operation ? the purchase of the replacement VLCC and the subsequent ship-to-ship transfer of the SAFER?s cargo oil ? while sufficient pledges have been received to cover the contingency planning and measures.

[1] www.euronav.com

[2] <https://smit.com>

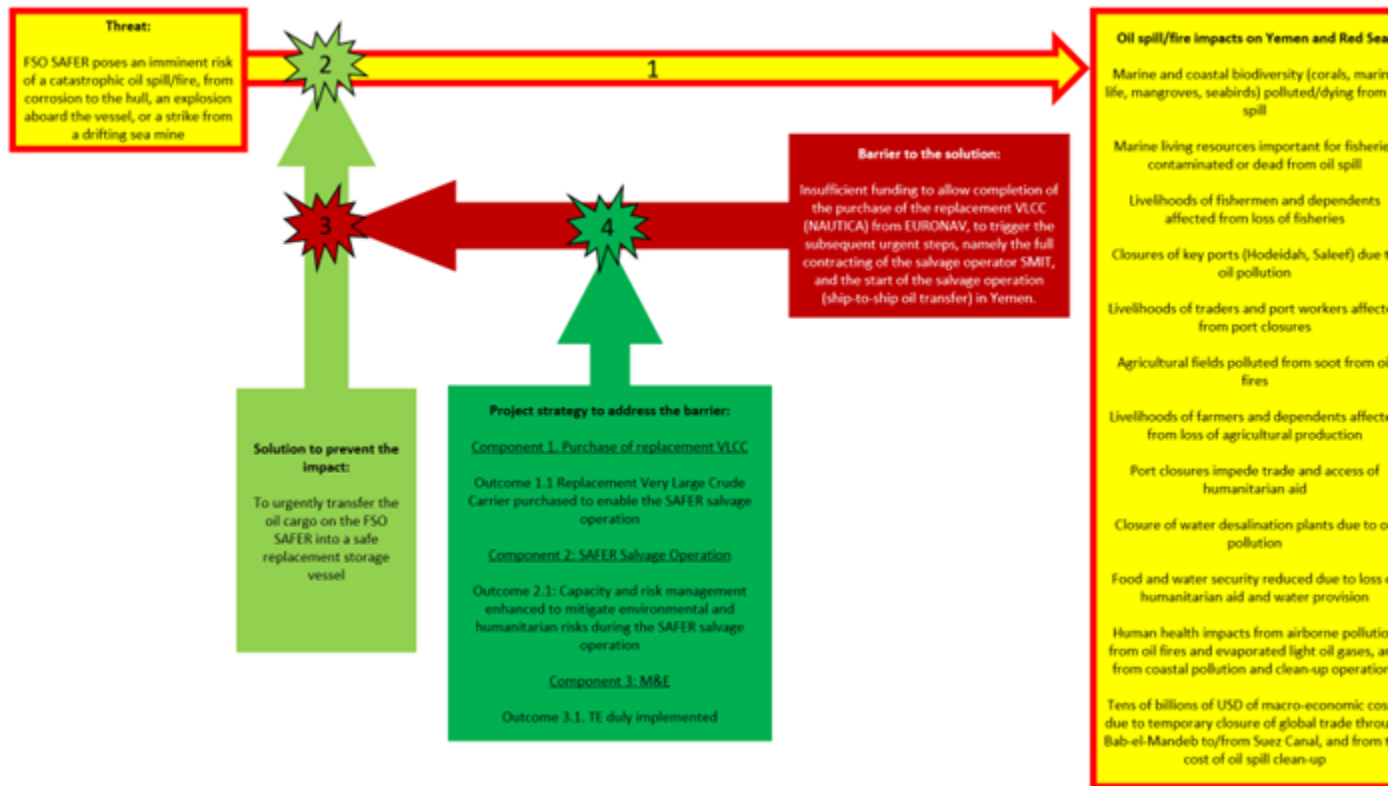
B. PROJECT DESCRIPTION

This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the guidance document.(Approximately 3-5 pages) see guidance here

3) the proposed alternative scenario with a brief description of expected outcomes and components of the project

The proposed alternative scenario, with a Theory of Change

1. The above sections describe the threat situation and the projected impacts on the ecosystems and people in Yemen and neighbouring countries in the southern Red Sea. To address these challenges, a solution is given as are the barriers to its achievement. In conjunction with the baseline scenario, the project is based on a project strategy that will work through the components outlined in this section. The following diagramme shows how the solution prevents the impacts, how the barriers impede this solution, and how the project strategy addresses these barriers:



Theory of Change

- The overall objective of the GEF project is to **protect globally important marine biodiversity by supporting the UN-brokered salvage plan for the FSO SAFER**. The project will thereby contribute to protecting globally important marine and coastal biodiversity as well as the livelihoods of potentially affected communities.
- The project will work towards the following Components, Outcomes and Outputs:
 - Component 1: Support purchase of replacement VLCC**
 - Outcome 1.1: Replacement Very Large Crude Carrier purchased to enable the SAFER Salvage Operation**
 - To deliver this outcome, the project will deliver a single Output 1.1.1 *Replacement Very Large Crude Carrier purchased*. The activities still required here ? and overseen by the umbrella SAFER Salvage Operation ? are the confirmation of the suitability of the targeted vessel, the VLCC NAUTICA, as well as of its adaptation to become an FSO, the confirmation of the pre-identified supplier EURONAV, and the completion of the contracting and procurement with the related legal requirements. The VLCC to be purchased has been identified ? the NAUTICA. It will be purchased from the private company EURONAV, the largest NYSE listed independent crude oil tanker company in the world. EURONAV will also be in charge of the management, crewing, adaptation and transfer of the ship until its delivery in Yemen.

- **Component 2: SAFER Salvage Operation**

- *Outcome 2.1: Capacity and risk management enhanced to mitigate environmental and humanitarian risks during the SAFER Salvage Operation*

- *Outcome 2.2: Phase 1 of SAFER Salvage Operation (ship to ship oil transfer) concluded successfully*

- To deliver the two outcomes under this component, which is financed entirely by non-GEF resources, the umbrella SAFER Salvage Operation will work through the following outputs:

? *Output 2.1.1 Environmental and marine biodiversity expertise mobilised to inform FSO SAFER Salvage Operation Phases 1 and 2 planning and execution.* The project team with the ongoing support from oil spill experts and SMIT will use existing environmental and biodiversity assessments and recommendations, including especially the tactical response planning prepared by IMO in 2021, to identify the most important and vulnerable marine areas to be prioritised for protection and clean-up in the case of an oil spill incident; and ensure that environmental and biodiversity considerations are integrated in the two phases of the salvage operation. This concerns the transfer and anchoring of the replacement VLCC, the conduct of the ship-to-ship oil transfer and incident readiness, the demucking, removal and dismantling of the SAFER, and the deployment of the replacement infrastructure under Phase 2.

? *Output 2.1.2 Capacity building provided to government and technical stakeholders involved in FSO SAFER Salvage Operation Phases 1 and of the 2, including to ensure compliance with MARPOL convention requirements.* The project team with the ongoing support from oil spill experts have already delivered a series of capacity development workshops to the authorities and will continue to do so during the coming months, working with both the Aden and the Sana'a authorities. This focuses especially on a possible oil spill/fire incident, yet also looks at the maintenance of the replacement infrastructure after the closure of the umbrella SAFER Salvage Operation.

? *Output 2.1.3 FSO SAFER oil spill contingency planning (national, regional, UN) enhanced with inputs from international oil spill preparedness and response experts.* International oil spill preparedness and response experts have been contracted and are assisting the Sana'a and Aden authorities in further assessments of the possible impacts of an oil spill/fire, and in the development of a national contingency plan and defining contingency equipment requirements. This builds on the detailed transboundary oil spill scenarios and tactical response plans for the case of an incident prepared by RiskAware, Catapult and ACAPS in 2020-2021 and IMO in 2021. The experts are also assisting in the review and finalisation of UN and regional contingency plans.

? *Output 2.1.4 Local, national and transboundary emergency response workplan prepared and emergency readiness organised, with procurement and emplacement of contingency equipment (boats, pumps, booms).* By the start of the core salvage operation, the essence of the different contingency plans will have been consolidated into a coherent emergency response workplan, integrating the role and capacity of the salvage company SMIT immediately at the work site, the role of national counterparts, and international assistance via PERSGA, IMO and Djibouti. The emergency equipment will have been defined and the necessary minimum will have been procured to launch a local and national-level emergency response immediately in the case of an incident. A chain of command/coordination from the work site through national counterparts, international experts located in strategic sites, UN agencies, IMO and PERSGA will have been established.

- **Component 3: M&E**

- *Outcome 3.1: Terminal Evaluation duly implemented, indicated by TE quality rating of S or better*
- To deliver this outcome, the project will deliver a single Output 3.1.1: *Terminal Evaluation duly prepared*. The activities under this Output entail the procurement of an independent evaluator, or team of independent evaluators, who will then conduct the mandatory UNDP / GEF Terminal Evaluation

Changes compared to PIF

4. There are consequential changes to the logic and scope of the project, which is reflected in changes of the title, components, outcomes and outputs. The change of the SAFER Salvage Operation's baseline situation, namely the lack of sufficient financial resources for the urgent core salvage operation while sufficient resources are available for contingency planning and measures, asked for a shift of the project's focus on a key element: enabling the purchase of the replacement VLCC.

5. The following table contrasts the PIF and CEO-ER with regard to the elements of the project description: project title, objective, components with assigned budgets, outcomes and outputs:

Comparative analysis of changes	
Project Title in PIF	Project Title in CEO Endorsement Request
Managing Biodiversity and Environmental Risks Associated with the SAFER Salvage Operation in the Red Sea	<u>Changed to:</u> Support the urgent UN-brokered SAFER Salvage Operation to prevent an environmental, humanitarian and economic oil spill disaster in the southern Red Sea <u>Comment:</u> This was considered a more appropriate title given the project's adapted focus
Project Objectives in PIF	Project Objectives in CEO Endorsement Request
To protect globally important marine biodiversity by supporting the UN-brokered salvage plan for the FSO SAFER.	<u>Maintained:</u> To protect globally important marine biodiversity by supporting the UN-brokered salvage plan for the FSO SAFER.
Components, Budgets, Outcomes and Outputs in PIF	Components, Budgets, Outcomes and Outputs in CEO ER
	<u>Added:</u> COMPONENT 1. Support purchase of replacement VLCC. <u>GEF budget:</u> USD 3,991,210 <u>Comment:</u> Enabling the SAFER Salvage Operation through the purchase of the replacement VLCC was considered the foremost priority at this stage for the use of GEF resources, to prevent the imminent oil spill disaster

	<p><u>Added</u>: OUTCOME 1.1 Replacement Very Large Crude Carrier purchased to enable the SAFER Salvage Operation</p> <p><u>Comment</u>: See above</p>
	<p><u>Added</u>: OUTPUT 1.1.1 Replacement Very Large Crude Carrier purchased</p> <p><u>Comment</u>: See above</p>
<p>COMPONENT 1. Enhancing risk management for the prevention of adverse impacts during the FSO SAFER Salvage Operation.</p> <p>GEF budget: USD 2,810,000</p>	<p><u>Changed to</u>: COMPONENT 2. SAFER Salvage Operation.</p> <p><u>GEF budget</u>: USD 0</p> <p><u>Comment</u>: Original component title used in formulation of new/changed Outcome 2.1</p>
<p>OUTCOME 1.1. Risk management and biodiversity mainstreaming measures integrated in Phase 1 (ship-to-ship (STS) transfer of oil from the FSO SAFER) to mitigate environmental and humanitarian risks.</p>	<p><u>Changed to</u>: OUTCOME 2.1 Capacity and risk management enhanced to mitigate environmental and humanitarian risks during the SAFER Salvage Operation</p>
<p>OUTPUT 1.1.1. Environmental and marine biodiversity expertise mobilized to contribute to the FSO SAFER oil spill contingency and emergency preparedness plan</p>	<p><u>Changed to</u>: OUTPUT 2.1.1 Environmental and marine biodiversity expertise mobilised to inform FSO SAFER Salvage Operation Phases 1 and 2 planning and execution</p>
<p>OUTPUT 1.1.2. Provision of associated additional measures in the contingency plan (such as equipment ? boats, pumps, booms).</p>	<p><u>Changed to</u>: OUTPUT 2.1.4 Local, national and transboundary emergency response workplan prepared and emergency readiness organised, with procurement and emplacement of contingency equipment (boats, pumps, booms).</p>
<p>OUTPUT 1.1.3. Capacity building support provided to technical stakeholders involved in Phase 1 salvage operations to ensure compliance with environmental requirements under International Convention for the Prevention of Pollution from Ships (MARPOL).</p>	<p><u>Changed to</u>: OUTPUT 2.1.2 Capacity building provided to government and technical stakeholders involved in FSO SAFER Salvage Operation Phases 1 and of the 2, including to ensure compliance with MARPOL convention requirements</p>
<p>OUTPUT 1.1.4. Capacity building for clean-up by local stakeholders and communities with emergency livelihood measures in place.</p>	<p><u>Dropped</u></p> <p><u>Comments</u>: Already delivered by the umbrella SAFER Salvage Operation</p>
<p>OUTCOME 1.2. Risk management and biodiversity mainstreaming measures integrated in Phase 2 (installation of safe long-term replacement capacity for the FSO SAFER) to mitigate environmental and humanitarian risks.</p>	<p><u>Merged</u> into the new/changed OUTCOME 2.1, see above</p>
<p>OUTPUT 1.2.1. Environmental and marine biodiversity expertise mobilized to contribute to Activity 5 (inspection of subsea structures, closing of Pipeline End Manifold (PLEM), disconnect risers), Activity 6 (installation of CALM buoy), and Activity 7 (removal and support of FSO SAFER sale) of Phase 2 of the emergency plan.</p>	<p><u>Merged</u> into the new/changed OUTPUT 2.1.1, see above</p>

OUTPUT 1.2.2. Provision of associated additional measures required to ensure that the replacement capacity does not harm biodiversity, particularly ensuring ecosystem restoration to hedge against future risks (such as equipment, training)	<u>Dropped</u> <u>Comments:</u> Avoiding harm to biodiversity from replacement capacity is captured in the new/changed OUTPUT 2.1.1. Ecosystem restoration was dropped because not considered relevant at this time.
OUTPUT 1.2.3. Capacity building support provided to technical stakeholders involved in Phase 2 operations to ensure compliance with environmental requirements under MARPOL.	<u>Merged</u> into the new/changed OUTPUT 2.1.2, see above
COMPONENT 2. Capacity strengthening of the Ministry of the Environment and Ministry of Oil and Minerals to integrate biodiversity considerations into the operations of the oil sector. GEF budget: USD 710,000	<u>Dropped</u> <u>Comment:</u> Not considered the most urgent priority at this time
OUTCOME 2.1. Ministry of the Environment and Ministry of Oil and Minerals integrate biodiversity considerations into oil sector planning and operations.	<u>Dropped</u> <u>Comment:</u> Not considered the most urgent priority at this time
OUTPUT 2.1.1. Review of existing national oil spill contingency plan, environmental management and operations, within the oil sector, including assessment of capacity gaps in relation to biodiversity mainstreaming	<u>Changed to:</u> OUTPUT 2.1.3 FSO SAFER oil spill contingency planning (national, regional, UN) enhanced with inputs from international oil spill preparedness and response experts
OUTPUT 2.1.2. Training program provided for the ministries and institutions based on review and assessments under 2.1.1.	<u>Merged</u> into the new/changed OUTPUT 2.1.2, see above
OUTPUT 2.1.3. Review of maritime routes to reduce shipping impact on key biodiversity areas and integration of no-go zones in important marine habitats	<u>Dropped</u> <u>Comment:</u> Not considered the most urgent priority at this time
OUTPUT 2.1.4. Development of marine spatial plans that reduce shipping impacts, including oil transport and tanker traffic on key biodiversity areas	<u>Dropped</u> <u>Comment:</u> Not considered the most urgent priority at this time
OUTPUT 2.1.5. In collaboration with Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA), the transboundary risk mitigation mechanism is strengthened	<u>Merged</u> into the new/changed OUTPUT 2.1.4, see above
COMPONENT 3. M&E. GEF budget: USD 313,000	<u>Maintained:</u> COMPONENT 3. M&E. GEF budget: USD 20,000 <u>Comment:</u> M&E was limited to the Terminal Evaluation because project duration was reduced from 24 months to 12 months, and also because some aspects of M&E, reporting and communications are budgeted for under the umbrella SAFER Salvage Operation.

<p>OUTCOME 3.1 Adaptive management of project activities in line with UNDP and GEF M&E and SES policies</p>	<p><u>Changed to:</u> OUTCOME 3.1 Terminal Evaluation duly implemented; indicated by TE quality rating of S or better</p> <p><u>Comment:</u> The M&E was limited to the Terminal Evaluation because project duration was reduced from 24 months to 12 months, and also because some aspects of M&E, reporting and communications are budgeted for under the umbrella SAFER Salvage Operation.</p>
<p>OUTPUT 3.1.1 M&E plan developed and under implementation</p>	<p><u>Changed to:</u> OUTPUT 3.1.1 Terminal Evaluation duly prepared</p> <p><u>Comment:</u> The M&E was limited to the Terminal Evaluation because project duration was reduced from 24 months to 12 months, and also because some aspects of M&E, reporting and communications are budgeted for under the umbrella SAFER Salvage Operation.</p>
<p>OUTPUT 3.1.2 Social and environmental safeguards plan (including gender considerations) developed and under implementation</p>	<p><u>Dropped</u></p> <p><u>Comments:</u> Under the full responsibility of the umbrella SAFER Salvage Operation</p>
<p>PROJECT MANAGEMENT COSTS GEF budget: USD 183,210</p>	<p>PROJECT MANAGEMENT COSTS GEF budget: USD 5,000</p> <p><u>Comment:</u> PMC will be covered by co-financing from the umbrella SAFER Salvage Operation, except for the mandatory financial audit for the GEF-financed component/project.</p>
<p>CO-FINANCING USD 77,000,000</p>	<p>CO-FINANCING Reduced to USD 55,500,000</p>

5) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, and co-financing

Baseline scenario	Alternative scenario and increment
<p>The baseline scenario for this GEF project consists of the baseline FSO SAFER Salvage Operation described above with the USD 114 million of pledges received to date.</p> <p>Under the baseline scenario, a lack of resources could delay or impede the purchase of the replacement VLCC, and thereby cause a potentially critical further delay in the urgently required SAFER Salvage Operation, after several years of failed prior efforts.</p> <p>Should the SAFER break up or explode before the successful conclusion of the salvage operation, a vast area of globally important marine and coastal ecosystems and biodiversity in the southern Red Sea and Gulf of Aden, within the territorial waters of Yemen and beyond, could be affected. The severely affected surface area was estimated to 3,800,000 ha ? corresponding to the area of the ?metallic surface? oil spill extent in the IMO worst case Scenario 4.</p> <p>The livelihoods, health as well as food and water security of the entire population of Yemen would be affected for many months if not years, and neighbouring countries would also be affected, even if to a lesser degree.</p>	<p>Under the alternative scenario, the GEF contribution of USD 3.99m unlocks the purchase of the replacement VLCC, allowing the SAFER Salvage Operation to proceed rapidly and to conclude the core salvage operation within 3-6 months.</p> <p>Of the baseline of USD 114 million, USD 55,000,000 are considered co-financing to the GEF project, including USD 51,008,790 for the VLCC purchase.</p> <p>The additionality is the safeguarding of the entire area of the southern Red Sea (3,800,000 ha) that could have potentially been severely affected, enabling the global environmental benefits described in the following Section 6) global environmental benefits (GEFTF), as well as the humanitarian and economic benefits described in Section 10. Benefits.</p>

Changes compared to PIF

6. There are changes to this section, i) resulting from the decision to allocate the GEF resources primarily to the purchase of the replacement VLCC NAUTICA, as a fundamental contribution to the overall SAFER Salvage Operation; ii) because a more appropriate and accurate approach to estimate the global environmental benefits was used during the PPG (compared to the PIF stage GEB estimate); and iii) co-financing was reduced from USD 77,000,000 to USD 55,500,000.

6) global environmental benefits (GEFTF)

7. By supporting the immediate purchase of the replacement VLCC NAUTICA with GEF resources, the project will enable the subsequent steps under the umbrella SAFER Salvage Operation ? most importantly the full contracting of the salvage company SMIT, the ship-to-ship transfer of the SAFER?s oil cargo to the NAUTICA in Yemen, and the dismantling of the SAFER. The project therefore enables the prevention of an imminent oil spill disaster that would severely impact globally important marine and coastal ecosystems and biodiversity over a vast area in the southern Red Sea and Gulf of Aden, within the territorial waters of Yemen and beyond. The surface area to benefit was estimated to 3,800,000 ha ? corresponding to the area (Google Earth shapefile calculation) of the ?metallic surface? oil spill extent in the IMO worst case Scenario 4.

8. The project would thus contribute to safeguarding a large and important portion of the Red Sea Large Marine Ecosystem from pollution, including globally significant coral reef habitats and their marine life, most notably those along the chain of near-coastal islands stretching northwards from the Ras Isa peninsula

and the larger Kamaran Island (located in the immediate vicinity of the SAFER) to the Farasan Islands of Saudi Arabia, as well as the Zubair and Hanish Islands to the south. The project would also safeguard a number of coastal wetlands with mangroves, and rocky offshore islands and marine areas important for pelagic seabirds. This is especially important given that the Red Sea corals have been considered the most resilient genetic reserve for coral survival in the face of climate change ?? no fewer than seven of the coral reefs prioritized for conservation by the 50 Reefs Initiative are in the Red Sea; two of those are in the near vicinity of the SAFER.

9. The project's contributions to the targets under the Global Biodiversity Framework are described under Table E *Project's Target Contributions to GEF 7 Core Indicators* above.

10. While the project does not explicitly work on protected areas, and no PA management indicators are included in either the core indicators or the project results framework, it should be noted that the project will implicitly safeguard also several marine and coastal PAs in the region, including:

- In Yemen, the Kamaran Island/Ras Isa PA (10,670 ha) and Zuqur Island PA (12,140 ha) for a total area of 22,810 ha.
- In Saudi Arabia, the Farasan Islands PA (540,800 ha).
- In Djibouti, the Sept-Freres Islands/Ras Syan and Khor Angar marine/coastal PA (20,000 ha), in addition to a series of both old and recently designated MPAs in the Gulf of Tadjourah.
- In Eritrea, the Haleb and Barasole PAs, and to a less likely extent the more important northward-lying Dahlak Island and Buri-Irrori Hawakil PAs (all of which are merely proposed and/or without management).

Changes compared to PIF

11. In the PIF, the area benefitting from the project was estimated more crudely to 9,082,237 ha, per 1/6 of Yemen's EEZ (55,266,900 ha) minus 773,480 ha of marine protected areas. This was changed to a more precise 3,800,000 ha corresponding to the area (Google Earth shapefile calculation) of the ?metallic surface? oil spill extent in the IMO worst-case Scenario 4 prepared by IMO.

12. In addition, in the PIF, protected areas had been explicitly included in the global environment benefits and core indicators, as follows: Socotra Archipelago World Heritage Site 410,400 ha, Socotra Island 362,500 ha, Detwah Lagoon 580 ha, for a total of 773,480 ha. This was removed from this submission.

7) innovativeness, sustainability and potential for scaling up. ?

13. Sustainability: this project is first and foremost a contribution to preventing an environmental, humanitarian and economic oil spill disaster in the southern Red Sea that would undermine decades of ecosystem conservation and also human development work in several countries ? and jeopardise future such work for many years if not decades. Sustainability aspects are essentially embedded in the immediate preservation of the ecosystems across the large area that would be affected by a worst-case scenario oil spill, which is prone to occur at any moment. In addition, noting that the Bab-el-Mandeb Strait is one of the busiest shipping routes in the world where incidents could happen anytime, the project has and continues to build institutional capacity in Yemen on how to deal with an oil spill from SAFER and beyond, including through

the preparation of a best-practice national oil spill contingency plan. The SSOP will also under Phase 2, beyond the scope of this GEF project, emplace a replacement infrastructure that is more advanced and safer.

14. The project is innovative in that it is the first time that the UN or UNDP will engage in such a large-scale undertaking and equipment / oil tanker purchase, which is a reflection of the uniqueness of the situation. It is also innovative in that the Sana'a and Aden authorities agreed to cooperate on the salvage operation, for the benefit of Yemen, its environment, people and economy.

15. In terms of potential for scaling up, the desire should be that such interventions need not be repeated, or upscaled. However, the lessons ? in case of success or failure ? will be helpful for any similar situation, with IMO a key recipient and conduit for knowledge management under this project.

Changes compared to PIF

16. There are changes to this section, because the PIF-stage outputs on marine spatial planning and biodiversity mainstreaming into oil sector planning were removed, wherefore there are fewer elements that qualify as being innovative, contributing to sustainability, or having a potential for scaling up.

1b. Project Map and Geo-Coordinates. Please provide geo-referenced information and map where the project interventions will take place.

17. Please see in Annex E. There are no changes to the intervention area, which focuses on the area where the FSO SAFER is moored as well as on the marine and coastal areas of western Yemen and neighbouring countries in the southern Red Sea exposed to a potential oil spill. The maps and diagrammes have been updated and expanded.

1c. Child Project? If this is a child project under a program, describe how the components contribute to the overall program impact.

18. Not applicable

2. Stakeholders. Please provide the Stakeholder Engagement Plan or equivalent assessment. In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement.

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; contractor;

Co-financier;

Member of project steering committee or equivalent decision-making body;

Executor or co-executor;

Other (Please explain)

19. There are several levels of stakeholder engagement that are relevant, which are discussed in the following:

Consultation of stakeholders in the design of the present GEF project

20. A range of stakeholders were consulted during the development of the PIF, as required per GEF policy, and the roles in the project and a plan to develop a Stakeholder Engagement Plan during the PPG had been clearly articulated in the PIF. However, consultations during the PPG quickly showed the need to refocus on the most urgent need: the decision to allocate the GEF resources primarily to the purchase of the replacement VLCC NAUTICA, as a fundamental contribution to the overall SAFER Salvage Operation. This reduced the scope of further required stakeholder consultation towards the GEF project, while the wider consultation of stakeholders is being and will continue to be handled by the umbrella SAFER Salvage Operation.

21. The following stakeholders were consulted in the design (PIF and PPG) of the GEF project:

- a. Aden authorities (IRG), including the GEF OFP
- b. Sana'a authorities (DFA)
- c. UN & International Agencies: UNDP (UNDP Yemen, UNDP Regional Bureau for Arab States, UNDP Nature, Climate and Energy, SSOP Management Team), UN Resident Coordinator Office in Yemen, IMO, PERSGA.
- d. Private Sector: SMIT Salvage, salvage operator; I.R. Consilium; Fahem Group; Tahma Group
- e. Civil Society Organisations: Greenpeace International, ACAPS
- f. Independent Expertise: Dr. David Hugh Vousden, Chair, UN Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection & Senior Consultant to the United Nations on Ocean and Coastal Management; Kevin O'Connell and Joseph Small, oil spill preparedness and response experts.

Engagement and roles of stakeholders during project implementation

As GEF resources are used primarily for the purchase of the replacement VLCC under Project Component 1, there will be no need for a separate dedicated stakeholder engagement plan under the GEF project. The engagement of stakeholders is being handled by the umbrella SAFER Salvage Operation Project, in a large ongoing undertaking that will continue until at least the completion of Phase 2. The following outlines stakeholders relevant for the GEF project and the umbrella SSOP:

Stakeholder and Mandate	Engagement and role in project
UNDP Country Office in Yemen (UNDP-COY)	The UNDP-COY is mandated to manage the SSOP including the GEF project. This includes hosting the project team, procuring (contingency equipment, replacement VLCC, CALM buoy, etc.) contracting services (SMIT, maintenance, insurance, etc.), sign contribution agreements, oversee, report and account. It also implies the conduct of the necessary due diligence, working together with UNDP HQ. UNDP Yemen operates under the Direct Implementation modality per agreement with the IRG, underpinning the request of the Yemen GEF OFP for Direct Implementation also of the GEF resources.
UN Resident Coordinator/ Humanitarian Coordinator (RC/HC) / UN Resident Coordinator Office in Yemen (RCOY)	The RC/HC in Yemen is responsible for interacting with the IRG, the DFA and various regional stakeholders. He endeavours to maintain the full agreement of parties with the underlying proposal. In addition, the RC/HC will interact with potential donor countries to ensure sufficient funding for the proposal in order to start on time.
Aden authorities (IRG)	Key stakeholder consulted and involved in all aspects of the SSOP. Consulted in the context of shared decision-making for the VLCC purchase, adaptation and transfer to Yemen.
Sana'a authorities (DFA)	Key stakeholder consulted and involved in all aspects of the SSOP. Consulted in the context of shared decision-making for the VLCC purchase, adaptation and transfer to Yemen.
SMIT Salvage, a leading dredging and offshore contractor and maritime services provider, providing a full range of salvage services across the globe. SMIT has experience in similar oil tanker salvage operations	SMIT has been advising on the purchase of the replacement VLCC and its adaptation. Most importantly, SMIT will lead and execute the salvage operation under Phase 1: risk assessment, operational safety and local contingency planning, provide salvage equipment and crew on-site, securing the SAFER, mooring the NAUTICA, ship-to-ship oil transfer with tank cleaning and de-mucking, inspection of subsea structures, closing of pipeline, disconnecting of FSO SAFER.
Oil spill preparedness and response experts	Lead and/or support national, regional and UN contingency planning, defining contingency equipment needs and sourcing, capacity development at national and local levels. Advise on the purchase of the replacement VLCC and its adaptation.
IMO	IMO has been involved in the SAFER situation for years and will continue to do so, advising on the entire salvage operation, procurement of experts and contractors, advise on the purchase of the replacement VLCC and its adaptation, the contingency and tactical response planning with environmental and biodiversity safeguards, etc. IMO would also play a critical role in international/transboundary mobilisation in the case of an incident requiring an international emergency response.
UNOPS	Under the RCOY-led UN coordination including the SAFER Technical Committee, informed about if not involved in all decisions.
UNEP	Under the RCOY-led UN coordination including the SAFER Technical Committee, informed about if not involved in all decisions.
WFP	Under the RCOY-led UN coordination including the SAFER Technical Committee, informed about if not involved in all decisions. Offered support under contingency planning. Offered guidance and support due its sea transportation department and experience with relevant insurance policies

PERSGA	Technical inputs, led the development of the regional contingency plan, will play a critical role in international/transboundary mobilisation in the case of an incident requiring an international emergency response.
Donors: Netherlands, Germany, Kingdom of Saudi Arabia, UK, USA, EU, Sweden, Qatar, Norway, Canada, France, Finland, Denmark, Switzerland, Luxemburg, Japan, Cyprus, Greece, Italy, Kuwait, Trafigura Foundation, International Association of Oil and Gas Producers, HSA Group, Octavia and Calvalley, and crowdsourced contributions from 2,000 individual donors.	Financial resources/co-financing have been provided towards the full scope of the SSOP, including the purchase of the VLCC NAUTICA.
Government of Djibouti	Has for years advocated for a solution to be found for the SAFER crisis. Djibouti will be the primary hub for international technical support during the salvage operation and for an international response in case of an incident.
Government of Saudi Arabia	The KSA will help facilitate a secure working environment for the arrival of the NAUTICA, during the salvage operation, and the subsequent departure of the SAFER for dismantling. It has been a donor to the SSOP and also committed important resources for a national emergency response to mitigate the impacts of any incident.
EURONAV, the largest NYSE listed independent crude oil tanker company in the world	Owner/seller of the replacement VLCC NAUTICA to be purchased. EURONAV will also be in charge of the management, crewing, adaptation and transfer of the ship until its delivery in Yemen.
SAFER Exploration & Production Operation Company (SEPOC), a Yemeni state company headquartered in Ma'rib, (original) legal owner of the SAFER	Guidance on the specifics about FSO SAFER including oil cargo, structural status and ongoing maintenance. Key stakeholder regarding the future ownership of the replacement VLCC and infrastructure.
Fahem Group ?[Abdullah Mohamed Fahem & Co Ltd, AMF / Faheem Industries]. A major Yemeni company with extensive assets around Hodeidah and Saleef ports that would be affected by any disaster	The Fahem Group signed an MoU with the UN/RC for potential in-kind support such as through the use of their storage facilities

3. Gender Equality and Women's Empowerment. Provide the gender analysis or equivalent socio-economic assessment. Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women's empowerment? (yes /no) If yes, please upload gender action plan or equivalent here.

22. The project through its contribution to the prevention of an environmental, humanitarian and economic disaster caused by an oil spill and/or oil fire, will benefit up to an estimated 5 million women and girls in Yemen directly and 13 million in Yemen, Djibouti, Eritrea, Saudi Arabia and Somalia indirectly (see the

Project Results Framework in Annex A), who would likely face more significant impacts from the disaster than other groups in light of their already vulnerable status. They would otherwise be exposed to severe health hazards (including premature birth, miscarriage, birth defects and gestational diabetes) and to food insecurity because of the closure of ports and trade triggered by the oil pollution (Huynh et al., 2021). More than a million pregnant and lactating women would suffer from acute malnutrition (OCHA, 2021). Success in the project will prevent such impacts from occurring, maintaining the flow of humanitarian aid to communities including women and girls. The project engages government authorities and local communities in oil spill contingency planning. The project therefore has gender sensitive indicators.

If possible, indicate in which results area(s) the project is expected to contribute to gender equality:

closing gender gaps in access to and control over natural resources;

x improving women's participation and decision making

x generating socio-economic benefits or services for women.

Does the project's results framework or logical framework include gender-sensitive indicators? (yes /no)

4. Private Sector Engagement. Elaborate on the private sector's engagement in the project, if any.

23. The private sector will have two roles in the project. Firstly, as a key service provider: GEF resources will be used for the purchase of the replacement VLCC NAUTICA, from the private company EURONAV, the largest NYSE listed independent crude oil tanker company in the world[1]. EURONAV will also be in charge of the management, crewing, adaptation and transfer of the ship until its delivery in Yemen.

24. Secondly, as a provider of key private sector expertise and services. The private company SMIT Salvage[2] will be in charge of the core salvage operation ? the transfer of the oil cargo from FSO SAFER to the NAUTICA ? and is a key player in risk assessment, operational contingency planning, contingency oversight and capacity development complementing the work of IMO, PERSGA and oil spill preparedness and response experts, all under the umbrella SAFER Salvage Operation.

8. Knowledge Management. Elaborate the ?Knowledge Management Approach? for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

25. Knowledge management **has been and** will continue to be applied throughout the umbrella SAFER Salvage Operation involving government, private sector and local populations.

26. The project has drawn knowledge from individual oil spill disaster experts and leading organisations in the field, including IMO and SMIT, in the design of the project, and will work with these throughout all its stages. The selection and acquisition of the new VLCC from a globally leading oil tanker fleet agency equally follows best practices.

27. The project is using PPG resources to assess the feasibility over the coming weeks/months of designating and registering the Red Sea Large Marine Ecosystem (LME # 33) as an OECM and on WDPA, during the project's lifetime, which would presumably require an inter-governmental process. This would be accompanied by: i) an assessment of capacity and resource needs to enable enhanced cooperation between countries on the overall management of the Red Sea LME, considering also the differences in capacities and

resources across countries; and an assessment focused on the needs and opportunities for enhancing marine conservation in Yemen for the post-salvage period, whether under an OECM or a more regular marine PA approach. These knowledge products will be made available to national and regional stakeholders including PERSGA, and inform the wider SAFER Salvage Operation baseline project or future follow-up work financed by GEF or others.

28. The project has in parallel also been delivering awareness, communication and donor materials that have been prominent globally on media outlets at regular intervals. UNDP, IMO and SMIT (under its parent company Boskalis) are providing regular updates on the status of the salvage operation: <https://twitter.com/beleefboskalis>, <https://boskalis.com/safer>, <https://www.imo.org/en/MediaCentre/HotTopics/Pages/FSO-SAFER-oil-spill-risk.aspx>, <https://www.undp.org/press-releases/un-operation-underway-prevent-catastrophic-oil-spill-red-sea>.

29. Importantly, the SAFER Salvage Operation and its partners will capture and analyse the lessons learnt during this globally visible and relevant salvage operation. The experience gathered by the Aden and Sana'a authorities in Yemen in oil spill prevention will be written up, identifying gains in capacity, structures and equipment, and remaining gaps will be identified. IMO, the standard organization involved in oil spill interventions, as well as the salvaging contractor SMIT, will compile their detailed analyses of the conduct of this complex and high-risk salvage operation, which could be applied in similar situations in the future.

30. In addition, to bring the voice of the Yemen authorities to global and regional fora, the SSOP will explore opportunities for meaningful participation in specific events where UNDP could support engagement with the global development discourse on oil spill prevention and disaster management. The SSOP furthermore cooperates with countries in the Red SEA and Gulf of Aden that are all exposed to the large vessel traffic to and from the Suez Canal and resulting oil spill risks.

31. At the end of the GEF-financed project, an independent Terminal Evaluation (TE) will be conducted, and through this, knowledge, experiences and lessons learned will be captured and analyzed in a TE report. This report will become globally available through the UNDP and GEF websites. The lessons from this will also be shared as communication pieces (e.g., blogs, stories, op-eds, through internal UNDP webinars) and become available that are accessible to the public.

9. Monitoring and Evaluation. Describe the budgeted M & E plan.

32. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the [UNDP POPP](#) (including guidance on GEF project revisions) and [UNDP Evaluation Policy](#). **The UNDP Country Office is responsible for ensuring full compliance with all UNDP project M&E requirements including project monitoring, UNDP quality assurance requirements, quarterly risk management, and evaluation requirements.**

33. Additional mandatory GEF-specific M&E requirements will be undertaken in accordance with the [GEF Monitoring Policy](#) and the [GEF Evaluation Policy](#) and other relevant GEF policies[3]3. The M&E plan and budget included below will guide the GEF-specific M&E activities to be undertaken by this project.

34. In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed, as required.

Minimum project monitoring and reporting requirements

Written Updates in lieu of Inception Workshop and Report

35. Given the limited duration of the project, the Inception Workshop will be dropped. Instead, written updates will be prepared for upload to the UNDP project information management system once the project started and once the replacement VLCC was purchased. These will also be provided to GEF.

GEF Project Implementation Report (PIR)

36. Given the short duration of the project (12 months), the preparation of annual GEF PIRs is not expected. In the unlikely event of significant project implementation delays, annual PIRs covering the reporting period July (previous year) to June (current year) will be completed for each year of project implementation, as required. UNDP will undertake quality assurance of the PIR before submission to the GEF.

GEF Core Indicators

37. The GEF Core indicators included as Annex will be used to monitor global environmental benefits and will be updated for reporting to the GEF prior to the Terminal Evaluation. Note that the project team is responsible for updating the indicator status. The updated monitoring data should be shared with the Terminal Evaluation consultants at the start of the evaluation. The methodologies to be used in data collection have been defined by the GEF and are available on the GEF [website](#).

Independent Mid-term Review (MTR)

38. Given the short duration of the project (12 months), no MTR will be conducted.

Independent Terminal Evaluation (TE)

39. An independent Terminal Evaluation (TE) will take place upon completion of all major project outputs and activities. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance for GEF-financed projects available on the [UNDP Evaluation Resource Center](#). TE should be completed 3 months before the estimated operational closure date, set from the signature of the ProDoc and according to the duration of the project. Provisions will be taken to complete the TE in due time to avoid delay in project closure.

40. The evaluation will be ?independent, impartial and rigorous?. The evaluators that UNDP will hire to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project being evaluated.

41. The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the BPPS/NCE-VF Directorate.

42. The final TE report and TE TOR will be publicly available in English and posted on the UNDP ERC by 30 June 2024. A management response to the TE recommendations will be posted to the ERC within six weeks of the TE report's completion.

Agreement on intellectual property rights and use of logo on the project's deliverables and disclosure of information

43. To accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy[4]4 and the GEF policy on public involvement[5]5.

Monitoring Plan

44. The project results, corresponding indicators and mid-term and end-of-project targets in the project results framework will be monitored and evaluated periodically by the Project Management Unit during project implementation. If baseline data for some of the results indicators is not yet available, it will be collected during the first year of project implementation. Project risks, as outlined in the risk register, will be monitored quarterly.

45. Please refer to the Project Results Framework with Monitoring Plan in Annex A below.

Monitoring and Evaluation Budget for project execution

GEF M&E requirements to be undertaken by Project Management Unit (PMU)	Indicative costs (US\$)	Time frame
Inception Workshop and Report	0	
M&E required to report on progress made in reaching GEF core indicators and project results included in the project results framework	0 (covered by co-financing)	Annually if needed because of project delays, and for the Terminal Evaluation.
Preparation of the annual GEF Project Implementation Report (PIR)	0 (covered by co-financing)	Annually typically between June-August
Monitoring of Risk and SESP	0 (covered by co-financing)	On-going
Supervision missions	0 (covered by co-financing)	Annually

Learning missions	N/A	
Independent Mid-term Review (MTR)	N/A	
Independent Terminal Evaluation (TE)	20,000	Completed and uploaded by 30 June 2024
TOTAL indicative COST	20,000	

-

Annex B: Response to Project Reviews (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion, and responses to comments from the Convention Secretariat and STAP at PIF).

#	GEF-SEC Comment	Response
1	<p>10/17/2022: Gender has been adequately addressed. However, it is noted that gender equality and women's empowerment is described in a separate paragraph, instead of weaving it into the project description and inclusion in project components.</p> <p>During project preparation and in preparing the gender analysis and gender action plan, the Agency is reminded of the requirement to weave in / mainstream gender considerations in the description of the project components (for example, in preparedness plans, knowledge and information products, training and capacity-building, etc.) and disaggregate data or include gender-related indicators.</p>	<p>With the change of focus in the use of GEF resources ? now assigned primarily to the purchase of the replacement VLCC ? there was no opportunity to integrate gender further into the project, also as gender matters are covered by the umbrella SSOP.</p> <p>At the same time, the project through its contribution to the prevention of an environmental, humanitarian and economic disaster caused by an oil spill and/or oil fire, will benefit up to an estimated 5 million women and girls in Yemen directly and 13 million in Yemen, Djibouti, Eritrea, Saudi Arabia and Somalia indirectly (see the Project Results Framework in Annex A), who would likely face more significant impacts from the disaster than other groups in light of their already vulnerable status. They would otherwise be exposed to severe health hazards (including premature birth, miscarriage, birth defects and gestational diabetes) and to food insecurity because of the closure of ports and trade triggered by the oil pollution. More than a million pregnant and lactating women would suffer from acute malnutrition. Success in the project will prevent such impacts from occurring, maintaining the flow of humanitarian aid to communities including women and girls. The project engages government authorities and local communities in oil spill contingency planning. The project therefore has gender sensitive indicators.</p>
2	<p>10/17/2022: A theory of change is not required in the given context; the project logic and rationale for action has been adequately described.</p>	<p>A Theory of Change was added following STAP's request</p>
3	<p>10/17/2022: the intended UNDP execution support through DIM project execution modality is considered justified. It will be considered at CEO endorsement stage for approval, based on a formal OFP request.</p>	<p>A DIM request letter from the Yemen GEF OFP is included in the submission</p>

4	10/17/2022: Key risks to the project have been described. The project is a high risk operation, despite the mitigation measures being in place. Further risks and safeguard assessments will be conducted during the PPG, with additional funding being requested due to the specific context.	With the change of focus in the use of GEF resources ? now assigned primarily to the purchase of the replacement VLCC ? the project?s risk profile has changed significantly. There are no social and environmental safeguards risks linked directly to the GEF-financed purchase of the replacement VLCC. The safeguards screening conducted for the GEF-financed aspects of the project have been assessed to be ?low risk?, therefore requiring no further risk assessments. All the downstream social and environmental risks associated with the use of the VLCC in the salvage operation will be managed by the umbrella SAFER Salvage Operation.
5	10/17/2022: A first screening has been done. Further ESS documents will be prepared during PPG and presented at CEO endorsement.	See under # 4 above. Given that there are no social and environmental safeguards risks resulting directly from the GEF-financed purchase of the replacement VLCC, no further ESS documents had to be prepared under the PPG.
#	STAP Comment	Response
6	The proposal makes a strong case for urgent and critical action to support the SAFER Salvage Operation in the Red Sea and avoid loss of biodiversity in the region. In terms of the salvage operation, the proposal is well constructed and provides a clearly defined plan to tackle this specific issue.	No response required
7	The rationale for mainstreaming biodiversity into decisions relating to the oil sector is scientifically and technically sound, and there is a clear benefit to avoided impacts of oil spills.	No response required
8	However the proposal does not explain clearly how mainstreaming will actually be integrated into the project activities.	PIF-stage outcomes and outputs on mainstreaming biodiversity into Yemen?s oil sector including via marine spatial planning ? which had been included to add a mid to long term perspective to the project ? were dropped. The main vehicle through which biodiversity is mainstreamed into the salvage operation is via the oil spill contingency planning and related tactical response planning, aimed at protecting the most important marine ecosystems.

9	Likewise, there are some other areas of the proposal that are not as clear (i.e. the outputs and outcomes) and some missing elements of good project design. STAP recommends a Theory of Change, particularly in this case, to map out the project logic and to be more clear about the outcomes and assumptions. The proposal is generally very clear regarding assumptions, risks, and stakeholder involvement in the salvage component but not for the mainstreaming and planning component. For example, there seems to be the assumption that developing marine spatial plans and increasing capacity will result in uptake by the Ministry to reduce shipping impacts, but there is a leap from doing spatial planning to having those plans integrated into sector decisions and ultimately altering shipping routes. If the intention of the project is just to get the planning phase completed, then that should be more clearly spelled out.	A Theory of Change was added that explains the logical steps from threats through solution and barrier to the focus of the project intervention. The items of concern to STAP, on mainstreaming biodiversity into the oil sector and marine spatial planning, were dropped from the project, in light of the change of focus in the use of GEF resources ? now assigned primarily to the purchase of the replacement VLCC.
10	Other key elements of good project design are also not covered consistently in the project description, and their inclusion would strengthen the project design. For example, a critical aspect for this project should be to ensure a durable outcome so that the same situation does not arise in 10-20 years? time. To some extent, component 2 addresses this issue, but it is not reflected in this way, and the durability of project outcomes is not dealt with in any other way.	There are consequential changes to the logic and scope of the project, which is reflected in changes of the title, components, outcomes and outputs. The change of the SAFER Salvage Operations?s baseline situation, namely the shortage of financial resources to successfully engage and deliver the urgent core salvage operation, asked for a shift of the project?s focus on a key element: enabling the purchase of the replacement VLCC, to trigger the subsequent urgent steps, namely the full contracting of the salvage operator SMIT, and the start of the salvage operation (ship-to-ship oil transfer) in Yemen. This emergency situation leaves no resources for seeking an outcome that ensures that the same situation does not arise again in the future. Phase 2 of the SSOP will emplace replacement infrastructure and hand over maintenance plans to national stakeholders, however, their implementation will depend on the security/ conflict situation in Yemen, which the SSOP is unable to influence in a meaningful way.
11	STAP recommends that the project proposal is revised based on the comments provided with specific reference to the Theory of Change, which should be used as a connecting framework for all the other elements.	A Theory of Change was added that explains the logical steps from threats through solution and barrier to the focus of the project intervention. Also the title, components, outcomes and outputs were modified.

12	The project rationale and description are sound and provide a clear explanation of the issues that the project intends to tackle and how these will be addressed, especially for the urgent actions relating to the salvage operation. The proposed interventions and related actions are clearly sequenced and provide clear pathways of how the two different project phases will be implemented.	No response required
13	The proposal provides a good description of the socio-economic, infrastructure, and environmental elements of the system, which encompasses the decaying oil storage facility that needs to be decommissioned and replaced; it also provides a couple of alternative scenarios that could be realized and how the problem situation may evolve and deteriorate if the project activities are not implemented.	No response required
14	The proposal does not include a theory of change and has some weaknesses in the description of the outputs and outcomes, which in places are not structured logically or sequenced coherently, the latter also being compounded by the lack of a ToC.	See response under # 11
15	The relevant institutional factors are discussed and referenced appropriately and the proposal is supported by a very good range of technical data and references, which include academic literature, technical reports from related initiatives, and other projects in the same field.	No response required
16	The project in itself provides a high level of additionality because it aims to address an urgent environmental security issue and avoid an impending environmental catastrophe that would not be addressed otherwise because the full amount of necessary funding has not been made available until now.	No response required

17	<p>In STAP's view, the proposed intervention does address policy coherence to a certain extent as it tackles different aspects of the problem (i.e. conflict, instability, political, institutional, economic and environmental), although the proposal does not provide an explicit of how domestic policies will be harmonized, and only provides very scant details on how the project will engage different institutional stakeholders to ensure this is implemented effectively. The information is also more strongly presented for the component focusing on salvage compared to the component focusing on spatial planning and mainstreaming.</p>	<p>The PIF-stage outcomes and outputs of primary concern to STAP, on mainstreaming biodiversity into the oil sector and marine spatial planning, were dropped from the project, in light of the change of focus in the use of GEF resources ? now assigned primarily to the purchase of the replacement VLCC.</p> <p>The main vehicle through which biodiversity is mainstreamed into the salvage operation is via the oil spill contingency planning and related tactical response planning, aimed at protecting the most important marine ecosystems. This is being achieved with support from international oil spill experts who work with the authorities in Yemen (Aden and Sana'a) to ensure consistency and ownership.</p>
----	---	--

18	<p>Due to the scope of the intervention proposed, the project does not aim to be innovative or transformative, although the spatial planning component could be one step towards transforming the actions of the oil sector to minimize impacts on marine biodiversity. On the other hand, risk management and mitigation are central to the project's core objectives, and the subject of risk is addressed conspicuously throughout the proposal, which describes extensively how to address different types (e.g. environmental and political) and levels of risk. However, STAP also noted that some categories of risk (i.e. operational and technical design) were not addressed as thoroughly as others and overall not sufficiently.</p>	<p>With the change of focus in the use of GEF resources ? now assigned primarily to the purchase of the replacement VLCC ? the project's risk profile has changed significantly. There are no social and environmental safeguards risks linked directly to the GEF-financed purchase of the replacement VLCC. The safeguards screening conducted for the GEF-financed aspects of the project have been assessed to be ?low risk?, therefore requiring no further risk assessments. All the downstream social and environmental risks associated with the use of the VLCC in the salvage operation will be managed by the umbrella SAFER Salvage Operation ? building on a plethora of risk assessments, risk management and contingency planning and measures already emplaced or being prepared, which was not sufficiently appreciated at PIF stage. This includes technical and operational risks, through the ongoing support from international oil spill preparedness and response experts and especially the private company SMIT Salvage, which will be in charge of the core salvage operation ? the transfer of the oil cargo from FSO SAFER to the NAUTICA ? and is a key player in risk assessment, operational contingency planning and contingency oversight, all under the umbrella SAFER Salvage Operation.</p>
19	<p>STAP recognizes that this is a good proposal, which aims to tackle a pressing problem that needs to be addressed urgently. Overall, the supporting arguments were well constructed, and the proposal made a strong case for intervention. However, our review identified a few areas in the proposal that needed further attention:</p> <p>1. All of the project outcomes should be fully aligned with the outputs. Outcomes 1.1, 1.2, and 2.1 should be fully aligned with their relevant outputs, and the references to mainstreaming biodiversity should be reflected through the outputs and further explained in the main text of the proposal.</p>	<p>The components, outcomes and outputs were modified and are now more clearly aligned.</p> <p>As explained in prior answers above, the references to mainstreaming biodiversity into Yemen's oil sector were removed.</p>

20	2. Similarly, in Outcome 3.1, the references to adaptive management should be reflected in the related outputs and further explained/discussed in the proposal. Finally project output 3.1.2 should be more coherently aligned with outcome 3.1.	Outcome 3.1 was simplified and the reference to adaptive management was dropped. Output 3.1.2 was moved under the edited Outcome 2.1 <i>Capacity and risk management enhanced to mitigate environmental and humanitarian risks during the SAFER Salvage Operation</i> , ensuring better alignment.
21	3. The project proposal should include a Theory of Change (ToC), which should ideally also be accompanied by a ToC diagram; this should include all the main elements required of a ToC (e.g. outputs, outcomes and impact), as well as ancillary elements such as assumptions, barriers and enablers.	A Theory of Change was added that explains the logical steps from threats through solution and barrier to the focus of the project intervention. At the same time, the refocused project is fundamentally a simplified emergency intervention supporting the umbrella SAFER Salvage Operation that was requested by the UN Secretary General and UN Security Council, with endorsement from all the parties to the Yemen conflict.
22	4. The risk assessment section should include provisions to address operational and technical design risk and be more clear about risks to Component 2.	See response under # 18
23	It should also include a dedicated section on climate risk screening and mitigation.	Climate risks and risk mitigation have been discussed in the risk table

#	GEF Council Comment	Response
24	<p>UK, Finland and Norway were concerned on project #11056 in Yemen on the risk mitigation strategies that GEF and UNDP have in place as this project is in a conflict setting.</p> <p>GEFSEC Response: Noted that working in difficult and fragile areas is a risk for the GEF and they are working closely with the UNDP to estimate the risks that the Yemen project may present. This project was provided a larger PPG which was needed for increased due diligence measures. They are confident that UNDP has this high on their agenda and will use risk resources to address risks. The GEF mentioned that they were also talking with neighboring countries to provide STAR funding to this initiative.</p>	<p>With the change of focus in the use of GEF resources ? now assigned primarily to the purchase of the replacement VLCC ? the project?s risk profile has changed significantly. There are no social and environmental safeguards risks linked directly to the GEF-financed purchase of the replacement VLCC. The safeguards screening conducted for the GEF-financed aspects of the project have been assessed to be ?low risk?, therefore requiring no further risk assessments. All the downstream social and environmental risks associated with the use of the VLCC in the salvage operation will be managed by the umbrella SAFER Salvage Operation ? building on a plethora of risk assessments, risk management and contingency planning and measures already emplaced or being prepared, which was not sufficiently appreciated at PIF stage. This includes risks related to the security setting such as sea mines, attacks and kidnapping, which were <i>inter alia</i> analysed by a risk assessment expert agency. These risks are managed at the highest political and operational level with support from the UN Resident Coordinator in Yemen, all under the umbrella SAFER Salvage Operation.</p>
25	<p>France inquired as to why UNDP had not involved UNEP in the Red Sea project in Yemen</p>	<p>As UNDP already clarified during the November 2022 GEF Council, the GEF project will be part of the umbrella SAFER Salvage Operation, led and coordinated by the UN through the Office of the UN Resident Coordinator in Yemen, who convenes, informs and consults all relevant UN agencies including UNEP. It involves also other donors who committed to address this challenge. The project moreover builds upon work by UNEP in prior years.</p>

<p>26</p>	<p>Switzerland Comments, 8 December 2022</p> <p>Can you please respond to the below mentioned questions?</p> <ol style="list-style-type: none"> 1. What are the plans to close the existing funding gap of the overall UN project? 2. What are the expected longer-term impacts of the GEF funded activities (beyond the salvage operation) in relation to the different stakeholder(groups)? 3. What kind of mechanisms are being deployed in the GEF part of the project that the provided capacity building is actually well received and stays within the capacitated entities/ministries ? how is ?internal? knowledge management and transfer ensured, beyond the GEF intervention? 	<p>1: The UN Resident Coordinator for Yemen and UNDP have over the past months worked together intensely in fundraising efforts at the highest possible level (involving UNDP Headquarters including the Administrator), to close the funding gap for the SAFER Salvage Operation. A Senior Coordinator at the UN-RC Office for Yemen coordinates these efforts, organising outreach and feedback to donors including via several donor roundtables, and preparing the necessary supporting materials and communication pieces that have been prominent globally on media outlets at regular intervals.</p> <p>2) and 3): With the change of focus in the use of GEF resources ? now assigned primarily to the purchase of the replacement VLCC ? there are no GEF resources left for actively pursuing longer-term impacts beyond the prevention of an imminent disaster.</p> <p>However, assuming that the overall Salvage Operation can be successfully concluded, the following longer-term impacts are expected to result from co-financed activities, and PPG resources for the different stakeholder groups:</p> <ul style="list-style-type: none"> - Aden and Sana?a authorities: enhanced awareness about the humanitarian, economic and environmental risks from ship traffic and oil sector infrastructure; capacity built on oil spill prevention and management, through participatory planning and participation in the actual salvage operation led by international contractors and agencies; upgraded national oil spill contingency planning documents, structures and equipment. - Selected coastal communities most at risk from SAFER oil spill: enhanced awareness about the humanitarian, economic and environmental risks from ship traffic and oil sector infrastructure; initial capacity built on (best-practice) oil spill management. - Regional stakeholders, incl. PERSGA and neighbouring country governments (especially Djibouti and
-----------	--	---

		<p>Saudi Arabia): existence of a regional/transboundary oil spill contingency plan and more clearly defined and rehearsed response roadmaps and command flowcharts for the case of an oil spill disaster.</p> <ul style="list-style-type: none">- Countries sharing the Red Sea Large Marine Ecosystem: from the GEF PPG resources conducting feasibility of enhancing the protection of the Red Sea through cooperative means, starting with listing it as an OECM (Other Effective Conservation Measures) with a view to enabling future long-term investments in enhanced protection.- Science and disaster management and prevention community: further enhanced awareness (including after the March 2021 blockage of the Suez Canal by the Ever Given container ship) of the importance and vulnerability of the Red Sea maritime traffic bottlenecks, with quantitative impact scenarios.- IMO and SMIT: further hands-on experience/learning with a salvage operation in a complex and high-risk environment (recent warfare, sea mines, human security concerns in addition to the more standard oil tanker salvage operation), in terms of careful planning and execution, together with the UN, that could be applied in similar situations in the future .
--	--	--

27	<p>Germany Comments, 19 Dec 2022</p> <p>Germany approves the PIF in the work program but asks that the following comments are taken into account:</p> <p>Suggestions for improvements to be made during the drafting of the final project proposal:</p> <p>? Germany welcomes the forward-looking characteristic of the project which is to mitigate potential environmental risks arising from the Safer Salvage Operation in the Red Sea.</p> <p>? Germany considers the activities planned under component 2 as vital for mainstreaming biodiversity considerations into the oil sector. It is important that activities planned under this component have a lasting and long-term impact on governmental stakeholder, regulation and sectoral plan. Germany therefore asks that review of any contingency plans, marine special plan and other strategies will result in the revision and official adoption of documents, including environmental risk mitigation and safeguards for biodiversity.</p>	<p>With the change of focus in the use of GEF resources ? now assigned primarily to the purchase of the replacement VLCC ? the scope of the work on mainstreaming biodiversity into the oil sector and marine spatial planning under Component 2 was reduced. This is explained briefly under response #10 above and in greater depth in the CEO Endorsement Request submission.</p> <p>The main vehicle through which biodiversity is mainstreamed into the salvage operation is via the oil spill contingency planning and related tactical response planning, aimed at protecting the most important marine ecosystems; which is being delivered with the co-financing mobilised under the wider SAFER Salvage Operation. This is being achieved with support from international oil spill experts who work with the authorities in Yemen (Aden and Sana'a) to ensure consistency and ownership. The National Oil Spill Contingency Plan was developed in close cooperation with the Aden and Sanaa authorities and is fully owned by these.</p>
----	--	---

[1] www.euronav.com

[2] <https://smit.com>

[3] See https://www.thegef.org/gef/policies_guidelines

[4] See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/

[5] See https://www.thegef.org/gef/policies_guidelines

Institutional Arrangement and Coordination with Ongoing Initiatives and Project.

Please describe the Institutional Arrangements for the execution of this project, including financial management and procurement. If possible, please summarize the flow of funds (diagram),

accountabilities for project management and financial reporting (organogram), including audit, and staffing plans. (max. 500 words, approximately 1 page)

6a. Institutional Arrangements. Describe the institutional arrangement for project implementation.

1. The SSOP is under Direct Implementation Modality by UNDP, with a dedicated project implementation team accountable to the Project Board. The Project Board is co-chaired by the Director of the Regional Bureau for Arab States (RBAS), the Director of the Bureau for Management Services (BMS) and the RC/HC, and includes the UNDP Resident Representative in Yemen. The Board provides overall direction to the project mainly through the weekly Project Board meeting.
2. The SSOP implementation team is headed by a senior Project Manager (D1), supported by a Deputy Project and Operations Manager (P5). The team receives direction from the Project Board and provides updates and reports to the Project Board in the pursuit of project objectives, timeframes, and partnerships. The fiduciary accountability for the project remains with the Yemen Resident Representative as a member of the Project Board and who provides delegation of authority to the Project Manager regarding the management and implementation of the SSOP project.
3. On behalf of the Board, the RBAS Chief of Country Support and Oversight provides project and quality assurance to the SSOP project. Oversight on the operational front e.g., legal, financial and procurement is provided by BMS.
4. The RC/HC for Yemen was appointed by the UN Principals as the UN system-wide lead on the FSO SAFER operation. The RC/HC has an overarching coordination role to bring the full strength of the UN system together and interface with Yemeni authorities.
5. UNDP RR, Special Envoy of the UN Secretary-General to Yemen as well as donor representation will support the HC/RC in overseeing implementation of the SSOP and provide advice when required to ensure timely implementation of the project. The senior political and security advisor will provide political and security advice to the project board and SSOP. UNDP CO will provide quality assurance. The SSOP project team will report directly to the Project Board.

The Project Board for the SSOP will serve as the decision-making structure (Project Board) for the GEF-financed project as well, and the GEF Operational Focal Point will be co-opted into this Project Board as necessary, to represent the government's interest in the GEF-financed part of the operation. The UNDP Country Office (UNDP Resident Representative) will also ensure that all necessary information and updates are shared with the GEF OFP via other means, including exchange of letters and reports outside of Project Board meetings.

Will the GEF Agency play an execution role on this project? Yes

If so, please describe that role here and the justification.

Please see the above entry and refer to the Request Letter from the GEF OFP uploaded to the Roadmap.

Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing (max. 500 words, approximately 1 page)

6b. Coordination. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

1. This project is a contribution to a short-term salvage operation with few direct linkages to other projects, GEF-financed or not. It falls under the wider UN/UNDP-managed SAFER Salvage Operation, which builds on prior work led by UNEP, UNOPS, IMO and PERSGA on the FSO SAFER, all of which remain involved via UN coordination. PERSGA ? which was operationalised many years ago inter alia by GEF-financed interventions ? plays a role in transboundary regional contingency planning and mobilisation in the case of an incident.

2. Neighbouring countries have expressed their concerns about the situation and risk of a major oil spill, including the fact that it could undermine past and ongoing efforts in marine conservation, such as under the Djibouti project ?Mitigating Key Sector Pressures on Marine and Coastal Biodiversity and Further Strengthening the National System of Marine Protected Areas in Djibouti? (GEF ID 9215).

Core Indicators

Indicator 2 Marine protected areas created or under improved management

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
773,480.00	0.00	0.00	0.00

Indicator 2.1 Marine Protected Areas Newly created

Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0.00	0.00	0.00	0.00

Name of the Protected Area	WDP A ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
----------------------------	----------	---------------	----------------------------	--	----------------------------	---------------------------

Indicator 2.2 Marine Protected Areas Under improved management effectiveness

Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
773,480.00	0.00	0.00	0.00

Name of the Protected Area	WDP A ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
			773,480.00	0.00					

Indicator 5 Area of marine habitat under improved practices to benefit biodiversity (excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
9,082,237.00	3,800,000.00		

Indicator 5.1 Fisheries under third-party certification incorporating biodiversity considerations

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Type/name of the third-party certification

Indicator 5.2 Large Marine Ecosystems with reduced pollution and hypoxia

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (achieved at MTR)	Number (achieved at TE)
0	1	0	0

LME at PIF	LME at CEO Endorsement	LME at MTR	LME at TE
	Red Sea		

Indicator 5.3 Marine OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
Red Sea LME	not available		3,800,000.00		

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	1,100,000	1,100,000		
Male	1,100,000	1,100,000		
Total	2200000	2200000	0	0

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

The project will generate global environmental benefits within the wider project zone as follows: ? Core Indicator ?5) Area of marine habitat under improved practices (excluding protected areas): 3,800,000 ha, corresponding to the area (Google Earth shapefile calculation) of the shape of the ?metallic surface? oil spill extent in the IMO worst case Scenario 4. The area falls under Red Sea Large Marine Ecosystem (<https://iwlearn.net/resolveuid/742e58c4-6ad7-46fe-9fa5-cc58d8ee2aab>), in line with the ?Guidelines on the implementation of the GEF-8 Results Measurement Framework?, which state that ?this indicator can include implementation of one or more of the following approaches: marine habitat under Integrated Coastal Management, Locally Managed Marine Area, Marine Spatial Plan, and/or Large Marine Ecosystem (LME)?. It was listed under Sub-indicator ?5.3 Area of marine OECMs supported?. ? The complete Core Indicator Reporting Template (Excel) moreover includes a value of ?1? under Sub-indicator ?5.2 Large marine ecosystems with reduced pollution and hypoxia?, indicating that in the Red Sea LME pollution will have been reduced through the FSO SAFER Salvage Operation. ? Core Indicator ?11) People benefiting from GEF-financed investments?: 2,200,000 direct beneficiaries (1,100,000 women, 1,100,000 men). The fisheries sector represents a main source of food security, income and employment in Yemen. It provides job opportunities for more than half a million individuals who in turn support 1.7 million people, forming 18 percent of the coastal communities? population of 9.4 million. [Al-Fareh, ?The Impact of War?, LSE 2018]

Risks to Project Implementation

Summarize risks that might affect the project implementation phase and what are the mitigation strategies the project will undertake to address these (e.g. what alternatives may be considered during project implementation-such as in terms of delivery mechanisms, locations in country, flexible design elements, etc.). Identify any of the risks listed below that would call in question the viability of the project during its implementation. Please describe any possible mitigation measures needed. (The risks associated with project design and Theory of Change should be described in the ?Project description? section above).

The risk rating should reflect the overall risk to project outcomes considering the country setting and ambition of the project. The rating scale is: High, Substantial, Moderate, Low.

Risk Categories	Rating	Comments
------------------------	---------------	-----------------

<p>Climate</p>	<p>Low</p>	<p>Risk 6: Low / I 1 / L 1. Risks from climate change. Yemen is projected to be severely affected by climate change. Already, it is a highly arid 'hot desert' country, and the projections are that rainfall will become more erratic and temperatures high more extreme. In consequence, water resources are expected to become even scarcer. The risk of cyclones is and will remain low. The impact of climate change on the GEF-financed purchase of the replacement VLCC will be negligible. Impacts on the umbrella SAFER Salvage Operation are also more limited, however an extreme heat event during the actual salvage operation in mid 2023 could pose an increased risk of explosion from oil gases in the SAFER tanks; similarly, an extreme monsoon storm during the actual salvage operation could lead to a breakup of the SAFER. A severe oil spill/fire could further undermine the already weak socio-economic resilience against climate change of human populations in Yemen and neighbouring countries, by reducing access to water, food and energy. It would also severely affect the health and climate resilience of marine life and especially coral in the southern Red Sea. Risk 6 MITIGATION: The GEF project does not need a management response to the climate change risk. The umbrella SAFER Salvage Operation has under its operational and contingency planning fully considered the risk of explosion due to heat/fire/spark - one of the first issues to be dealt with in the salvage operation is the removal of explosive gas from the SAFER, before the arrival of the replacement VLCC; operational and contingency planning also contains plans to adapt the salvage operation and especially the mooring of the replacement VLCC alongside the SAFER such that risks from storms and high waves are limited to the best possible degree. A successful salvage operation would remove the risk of further harm to the climate resilience of human populations in Yemen and neighbouring countries. A successful salvage operation would also allow the maintenance of the health and resilience of coral communities in the southern Red Sea, which are deemed the most resistant to rising sea temperatures and therefore a key genetic reserve for long term coral survival.</p>
<p>Environment and Social</p>	<p>Low</p>	<p>There are no social and environmental safeguards risks linked directly to the GEF-financed purchase of the replacement VLCC under the GEF project. The safeguards screening conducted for the GEF-financed aspects of the project have been assessed to be 'low risk', therefore requiring no further risk assessments. All the downstream social and environmental risks associated with the use of the VLCC in the salvage operation will be managed by the umbrella SAFER Salvage Operation.</p>

Political and Governance	Substantial	<p>Risk 3: Low / I 2 / L2. The unprecedented purchase of an oil tanker leads to a public backlash against UN, UNDP and GEF. Risk 3 MITIGATION: The UNRCO and UNDP have mobilised dedicated communication experts to manage such as scenario, and media engagement about the FFSO has been strong with several positive headline articles and regular updates in the media showing the importance of the intervention. Risk 4: Substantial / I 5 / L 2. UNDP procurement and due diligence processes cause delays in the purchase of the VLCC ? in the worst case to the point that the FSO SAFER breaks up or explodes before the salvage operation can be completed. Risk 4 MITIGATION: UNDP has fielded a large effort/team to fast-track the purchase, engaging legal and procurement experts. The preparatory work is already largely concluded.</p>
Macro-economic		
Strategies and Policies		
Technical design of project or program	Moderate	<p>Risk 2: Moderate / I 5 / L1. The replacement VLCC (NAUTICA) cannot be purchased, because the provider (EURONAV) blocks its sale, goes out of business, etc. Risk 2 MITIGATION: UNDP and project partners (SMIT, IMO) have a strong enough network to identify another vessel, and a backup plan exists. Risk 5: Moderate / I 5 / L1. The COVID-19 pandemic could lead to delays in the purchase of the VLCC. Risk 5 MITIGATION: The COVID pandemic has largely ended, and there have been no impediments to the implementation of the umbrella SAFER Salvage Operation. The purchase of the VLCC will be completed as soon as the GEF resources are released.</p>
Institutional capacity for implementation and sustainability		
Fiduciary: Financial Management and Procurement		
Stakeholder Engagement		

Other	Substantial	Risk 1: Substantial / I 5 / L 3. Unrealised funding pledges and/or unfavourable exchange rates lead to a financing gap that impedes or significantly delays the completion of the purchase of the VLCC ? in the worst case to the point that the FSO SAFER breaks up or explodes before the salvage operation can be completed. Risk 1 MITIGATION: The UNRCO and UNDP have emplaced a resource mobilisation team/effort that continues to seek new pledges and secure the release of existing pledges
Financial Risks for NGI projects		
Overall Risk Rating		

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Explain how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this. (max. 500 words, approximately 1 page)

4) alignment with GEF focal area and/or Impact Program strategies:

1. The project will contribute to the prevention of an imminent transboundary environmental disaster caused by an oil spill and/or fire, and thus improve the outcomes of oil sector operations in Yemen, for biodiversity and beyond. The project therefore aligns with the GEF-8 Biodiversity Focal Area Objective 1 ?To improve conservation, sustainable use, and restoration of natural ecosystems (Goals A and B of the GBF)?, and more specifically the Focal Area outcome ?Biodiversity Mainstreaming in Priority Sectors?, and it falls under financing an activity type under ?Improving and changing production practices to be more biodiversity-positive and to promote sustainable use of biodiversity as appropriate with a focus on sectors that have significant biodiversity impacts (agriculture, forestry, fisheries, tourism, extractive industries (gas, oil, and mining) and infrastructure development).?

Changes compared to PIF

2. The project?s overall alignment is the same as in the PIF. However it does not anymore support activity types that fall under ?Spatial planning to ensure that land, freshwater, and marine resource use is optimized without undermining or degrading biodiversity? and ?Developing policy and regulatory frameworks that protect biodiversity and incentivising biodiversity-positive resource use?.

Alignment with Global Biodiversity Framework:

The project will support actions towards several targets under the Global Biodiversity Framework, most importantly:

- Target 3: *Ensure and enable that by 2030 at least 30 per cent of terrestrial and inland water areas, and of marine and coastal areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such*

areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories

- Target 7: *Reduce pollution risks and the negative impact of pollution from all sources by 2030, to levels that are not harmful to biodiversity and ecosystem functions and services, considering cumulative effects, including: (a) by reducing excess nutrients lost to the environment by at least half, including through more efficient nutrient cycling and use; (b) by reducing the overall risk from pesticides and highly hazardous chemicals by at least half, including through integrated pest management, based on science, taking into account food security and livelihoods; and (c) by preventing, reducing, and working towards eliminating plastic pollution*

7. Consistency with National Priorities. Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions from below:

3. The project is fully aligned with the 2017 NBSAP (National Biodiversity Planning to Support the implementation of the CBD 2011-2020 Strategic Plan in Yemen), which seeks to protect, recover and restore coastal, marine and terrestrial biodiversity, and requests that "To reduce adverse impacts of current production patterns on ecosystems, the NBSAP-2 calls for implementation of sustainable development strategies and promotion of green technology into development sectors, mainly into mining; oil and gas; manufacturing industry; infrastructure & road; energy production; urban planning; and tourism sectors.". It asks under Output 3.4 for "Strengthening Preparedness Against Anthropogenic Waste & Hazards" Important plans to be implemented include contingency plans dedicated for protection & rehabilitation of contaminated basins in addition to oil pollution contingency plan to control & reduce sea-based sources of pollutants."

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment:

We confirm that gender dimensions relevant to the project have been addressed during Project Preparation as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

1) Does the project expect to include any gender-responsive-measures to address gender gaps or promote gender equality and women's empowerment?

Yes

If the project expects to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment, please indicate in which results area(s) the project is expected to contribute to gender equality:

Closing gender gaps in access to and control over natural resources;

Improving women's participation and decision-making; and/or

Yes

Generating socio-economic benefits or services for women.

Yes

2) Does the project's results framework or logical framework include gender-sensitive indicators?

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during Project Preparation as required per GEF policy, their relevant roles to project outcomes has been clearly articulated in the Project Description (Section B) and that a Stakeholder Engagement Plan has been developed before CEO endorsement.

Yes

Select what role civil society will play in the project:

Consulted only; Yes

Member of Advisory Body; Contractor;

Co-financier; No

Member of project steering committee or equivalent decision-making body;

Executor or co-executor;

Other (Please explain)

Private Sector

Will there be private sector engagement in the project?

Yes

And if so, has its role been described and justified in the section B "project description"?

Yes

Environmental and Social Safeguards

We confirm that we have provided information regarding Environmental and Social risks associated with the proposed project or program, including risk screenings/ assessments and, if applicable, management plans or other measures to address identified risks and impacts (this information should be presented in Annex E).

Yes

Please provide overall Project/Program Risk Classification

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
High or Substantial	Low		

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described during Project Preparation in the Project Description and that these activities have been budgeted and an anticipated timeline for delivery of relevant outputs has been provided.

Yes

Socio-economic Benefits

We confirm that the project design has considered socio-economic benefits to be delivered by the project and these have been clearly described in the Project Description and will be monitored and reported on during project implementation (at MTR and TER).

10. *Benefits.* Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

1. The socio-economic benefits will consist in the prevention of a range of severe socio-economic impacts. In the worst-case oil spill and fire scenario (explosion and fire, spill of the entire oil cargo on SAFER, unfavourable weather conditions), the livelihoods, health as well as food and water security of the entire population of Yemen would be affected, through a loss of fisheries, pollution of agricultural soils near the coasts, closure of key water desalination plants, and closure of several ports on the west Yemen coast that are key for trade and humanitarian aid. Populations in nearby Saudi Arabia, Djibouti, Eritrea and Somalia would experience similar impacts at a smaller scale.

2. In macro-economic terms, the salvage operation will prevent impacts on the shipping through the Bab al-Mandab Strait to/from the Suez Canal, which could be disrupted for several weeks or months, costing billions of dollars of trade losses every day. Complementing the cost of cleanup that is estimated at USD 20 billion and would need to be shouldered by the international community.

ANNEX A: FINANCING TABLES

GEF Financing Table

Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

GEF Agency	Trust Fund	Country/Regional/Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant(\$)	Agency Fee(\$)	Total GEF Financing(\$)
UNDP	GET	Yemen	Biodiversity	BD STAR Allocation: BD-1	Grant	4,016,210	381,540	4,397,750.00
Total GEF Resources(\$)						4,016,210.00	381,540.00	4,397,750.00

Project Preparation Grant (PPG)

Was a Project Preparation Grant requested? **true**

PPG Amount (\$)

550,000

PPG Agency Fee (\$)

52,250

GEF Agency	Trust Fund	Country/Regional/Global	Focal Area	Programming of Funds	PPG(\$)	Agency Fee(\$)	Total PPG Funding (\$)
UNDP	GET	Yemen	Biodiversity	BD STAR Allocation: BD-1	550,000	52,250	602,250.00
Total PPG Amount(\$)					550,000.00	52,250.00	602,250.00

Please provide justification

There are significant safeguards risks associated with this initiative, specifically in relation to Principle 3: Environmental Sustainability ? notably Standard 1: BD conservation and natural resource management; Standard 3: Community Health, Safety & Working Conditions; Standard 4: Cultural Heritage; and Standard 7: Pollution Prevention. A rating of ?High Risk? is therefore likely. Given that the project is being prepared under major time constraints due to urgent action required, and noting serious concerns related to the condition of the FSO Safer and risks associated with the recently announced UN-led salvage operation, the full Safeguards assessment and screening will take place during the PPG. Additional resources (US\$400,000 (excluding agency fees) for Safeguards assessment) are therefore requested to complete all necessary safeguards related risk analysis and planning for the project including the oil transfer operation as a whole, during project development. These resources will permit the recruitment of a specialist Safeguards team, including international and national consultants, to assess risks and identify mitigation measures based on a two field missions and detailed consultations with national and local stakeholders. The Safeguards team will work in close coordination with the PPG team comprising but not limited to an International (IC) PPG Team Leader, IC Oil Spill Expert, National (NC) Oil Spill Specialist, IC Biodiversity Specialist and NC counterpart, NC Livelihoods Specialist, and NC Gender Specialist, to be recruited with the additional requested PPG funds (additional US\$150,000, making total US\$550,000 for PPG).

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Sources of Funds	Total(\$)
UNDP	GET	Yemen	Biodiversity	BD STAR Allocation	4397750
Total GEF Resources(\$)					4,397,750.00

Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing(\$)	Co-financing(\$)
BD-1-4	GET	4,016,210.00	55,500,000.00
Total Project Cost (\$)		4,016,210.00	55,500,000.00

Confirmed Co-financing for the project, by name and type

Please include evidence for each co-financing source for this project in the tab of the portal

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)	Upload letters of co-finance
GEF Agency	Donors via UNDP	Grant	Investment mobilized	55,500,000.00	
Total Co-financing(\$)				55,500,000.00	

Please describe the investment mobilized portion of the co-financing

The entire financing mobilised for the FSO SAFER Salvage Operation, including the co-financing for the purchase of the replacement VLCC, was raised by the UN and Yemen authorities specifically for this emergency intervention. No recurrent financing was available or is included in the co-financing.

ANNEX B: ENDORSEMENT

GEF Agency(ies) certification

GEF Agency Coordinator	Date	Project Contact Person	Telephone	Email
GEF Agency Coordinator	6/13/2023	Pradeep Kurukulasuriya	0019174987221	pradeep.kurukulasuriya@undp.org

Record of Endorsement of GEF Operational Focal Point(s) on Behalf of the Government(s) :

Please attach the Operational Focal Point endorsement letter(s) with this template.

Name of GEF OFP	Position	Ministry	Date (Month, day, year)	
Faisal Al Thalabi	Acting Chairman of EPA	Ministry of Water and Environment	10/18/2022	<input type="checkbox"/>

ANNEX C: PROJECT RESULTS FRAMEWORK

Please indicate the page number in the Project Document where the project results and M&E frameworks can be found. Please also paste below the Project Results Framework from the Agency document.

The M&E Framework was included in the Project Description portal entry above, and can also be found on page 22 of the PRODOC.

Project Results Framework with Monitoring Plan:

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target	Monitoring Plan
--	---	-----------------	------------------------	------------------------------	------------------------

<p>Project Objective:</p> <p>To protect globally important marine biodiversity by supporting the UN-brokered salvage plan for the FSO SAFER</p>	<p>Mandatory Indicator 1: direct project beneficiaries disaggregated by gender (individual people) [equivalent to GEF Core Indicator 11: # people (female/ male) benefiting from GEF-financed investments]</p>	<p>2,200,000 inhabitants of Yemen (1,100,000 women / 1,100,000 men) at risk of direct catastrophic health and economic impacts from an oil spill from FSO SAFER: The fisheries sector represents a main source of food security, income and employment in Yemen. It provides job opportunities for more than half a million individuals who in turn support 1.7 million people, forming 18 percent of the coastal communities? population of 9.4 million. [Al-Fareh, ?The Impact of War?, LSE 2018]</p>	<p>N/A</p>	<p>2,200,000 inhabitants of Yemen (1,100,000 women / 1,100,000 men) saved/protected from direct catastrophic health and economic impacts from an oil spill from FSO SAFER</p>	<p><u>Data source & Means of Verification:</u></p> <p>If there is no incident: SSOP Project Reports. In the event of an oil spill/fire incident: Humanitarian and Disaster Management Reports from UN agencies (IMO, UNRC, UNDP, etc.) and Yemen Government.</p> <p><u>Responsible for data collection:</u></p> <p>If there is no incident: SSOP Project Manager. In the event of an oil spill/fire incident: UNDP Yemen CO, UNDP Crisis Bureau, UNDP RBAS; UN Resident Coordinator Office.</p> <p><u>Data collection frequency:</u></p> <p>If there is no incident: at Terminal Evaluation. In the event of an oil spill/fire incident: continuous until TE and project closure.</p> <p><u>Risks/Assumptions:</u></p> <p>The baseline assumption is that without the SAFER Salvage Operation, up to 10 million people in Yemen are at imminent risk of direct impacts from a catastrophic oil spill/fire incident. Only a success of the salvage operation will prevent these impacts.</p>
---	---	---	------------	---	---

	<p><u>Mandatory Indicator 2:</u> # indirect project beneficiaries disaggregated by gender (individual people)</p>	<p>26,000,000 (13,000,000 women / 13,000,000 men). The total of the remaining population of Yemen (22m of 32m) in addition to 4m (2m women / 2m men) of inhabitants of Djibouti, Eritrea, Saudi Arabia and Somalia indirectly at risk of catastrophic health and economic impacts from an oil spill from FSO SAFER</p>	<p>N/A</p>	<p>26,000,000 (13,000,000 women / 13,000,000 men) inhabitants of Yemen, Djibouti, Eritrea, Saudi Arabia and Somalia saved/protected from indirect catastrophic health and economic impacts from an oil spill from FSO SAFER</p>	<p><u>Data source & Means of Verification:</u> As above <u>Responsible for data collection:</u> As above <u>Data collection frequency:</u> As above <u>Risks/Assumptions:</u> As above, for up to 26 million people in Yemen and adjacent countries</p>
--	--	--	------------	---	---

	<p>Mandatory Indicator 3: GEF Core Sub-Indicator 5.3: Area of marine habitat under improved practices to benefit biodiversity: area of marine OECMs supported</p>	<p>3,800,000 ha of marine habitats in the Red Sea Large Marine Ecosystem at risk of catastrophic oil spill from FSO SAFER</p>	<p>N/A</p>	<p>3,800,000 ha of marine habitats wholly and successfully safeguarded from oil spills from FSO SAFER</p>	<p><u>Data source & Means of Verification:</u> If there is no incident: SSOP Project Reports. In the event of an oil spill/fire incident: Disaster assessment and management reports from UN agencies (IMO, UNDP, etc.), PERSGA, international NGOs, Yemen Environment Agency. <u>Responsible for data collection:</u> If there is no incident: SSOP Project Manager. In the event of an oil spill/fire incident: SSOP Project Manager, SMIT, UN agencies (IMO), PERSGA. <u>Data collection frequency:</u> If there is no incident: at Terminal Evaluation. In the event of an oil spill/fire incident: continuous until TE and project closure. <u>Risks/Assumptions:</u> The baseline assumption is that without the SAFER Salvage Operation, a vast marine area is at imminent risk of a catastrophic oil spill/fire incident. Only a success of the salvage operation will prevent these impacts.</p>
	<p>Mandatory Indicator 4: GEF Core Sub-Indicator 5.2: Large marine ecosystems with reduced pollution and hypoxia</p>	<p>0 LME: the Red Sea LME at risk of a catastrophic oil spill from FSO SAFER, which holds an estimated 1.14 million barrels of light crude oil</p>	<p>N/A</p>	<p>1 LME: the Red Sea LME wholly and successfully safeguarded/protected from oil spills from FSO SAFER</p>	<p>As above</p>
<p>Project component 1: Support purchase of replacement VLCC</p>					

<p>Project Outcome 1.1: Replacement Very Large Crude Carrier purchased to enable the SAFER Salvage Operation</p>	<p>Indicator 5: Status of completion of purchase process for VLCC by UNDP</p>	<p>VLCC not fully purchased by UNDP</p>	<p>N/A</p>	<p>VLCC fully purchased by UNDP, and ready for the ship-to-ship transfer of oil from the FSO SAFER</p>	<p><u>Data source & Means of Verification:</u> Report and images from the SSOP and/or the salvaging company (SMIT); VLCC purchase contract.</p> <p><u>Responsible for data collection:</u> SSOP Project Manager</p> <p><u>Data collection frequency:</u> Once, at Terminal Evaluation</p> <p><u>Risks/Assumptions:</u> VLCC can travel safely and successfully to Yemen and moor next to FSO SAFER for the operation to proceed</p>
<p>Outputs to achieve Outcome 1</p>	<p>1.1.1 Very Large Crude Carrier purchased</p>				

Project component 2: SAFER Salvage Operation

<p>Project Outcome 2.1: Capacity and risk management enhanced to mitigate environmental and humanitarian risks during the SAFER Salvage Operation</p>	<p>Indicator 6: Status and quality of oil spill contingency planning for FSO SAFER</p>	<p>A national FSO SAFER oil spill contingency plan exists yet it is dated, lacks operational aspects and does not integrate specific planning for vulnerable ecosystems</p>		<p>National, regional and UN FSO SAFER oil spill contingency plans are updated to international level, integrated into an operational plan, and integrate specific planning for vulnerable ecosystems</p>	<p><u>Data source & Means of Verification:</u> The national, regional and UN contingency plans and the operational plan/chart prepared with support from the international oil spill experts, received from the SSOP Project Manager. <u>Responsible for data collection:</u> SSOP Project Manager <u>Data collection frequency:</u> Once, at Terminal Evaluation <u>Risks/Assumptions:</u> Contingency planning will be duly implemented in case of oil spill incident VLCC can travel safely and successfully to Yemen and moor net to FSO SAFER for the operation to proceed</p>
	<p>Indicator 7: Availability of adequate first-response contingency equipment by the time of arrival of the replacement VLCC in Yemen</p>	<p>Contingency equipment is being procured, and the salvage operator SMIT is tasked to cover contingency equipment at the work site</p>		<p>Adequate contingency equipment was procured and deployed on time to key sites in Yemen by the project including SMIT</p>	<p><u>Data source & Means of Verification:</u> Report and images from the SSOP and the salvaging company (SMIT); equipment purchase invoices. <u>Responsible for data collection:</u> SSOP Project Manager <u>Data collection frequency:</u> Once, at Terminal Evaluation <u>Risks/Assumptions:</u> Equipment can be procured and delivered on time to the key sites in Yemen</p>

Outputs to achieve Outcome 2.1	<p>2.1.1. Environmental and marine biodiversity expertise mobilised to inform FSO SAFER Salvage Operation Phases 1 and 2 planning and execution</p> <p>2.1.2 Capacity building provided to government and technical stakeholders involved in FSO SAFER Salvage Operation Phases 1 and of the 2, including to ensure compliance with MARPOL convention requirements</p> <p>2.1.3 FSO SAFER oil spill contingency planning (national, regional, UN) enhanced with inputs from international oil spill preparedness and response experts</p> <p>2.1.4 Local, national and transboundary emergency response workplan prepared and emergency readiness organised, with procurement and emplacement of contingency equipment (boats, pumps, booms).</p>				
Project component 3: M&E					
Project Outcome 3.1: Terminal Evaluation duly implemented; indicated by TE quality rating of S or better	Indicator 8: TE quality rating	N/A	N/A	TE quality rating of S or better	<u>Data source & Means of Verification:</u> Report of routine independent TE quality assessment <u>Responsible for data collection:</u> UNDP RBAS Evaluation Officer, UNDP BPPS/NCE RTA <u>Data collection frequency:</u> Once, after Terminal Evaluation <u>Risks/Assumptions:</u> TE will be completed on time before closure and independent assessment of TE will be done soon after
Outputs to achieve Outcome 3	3.1.1 Terminal Evaluation duly prepared				

[1] 1.6 million people affected from the marine and coastal effects of oil spill ? fishermen and dependents, impacts from port closures; and 8.4 million exposed to very high air pollution from atmospheric dispersion of oil evaporates (Catapult & AWACS 2020)

ANNEX D: STATUS OF UTILIZATION OF PROJECT PREPARATION GRANT (PPG)

Provide detailed funding amount of the PPG activities financing status in the table below:

Project Preparation Activities Implemented	GET/LDCF/SCCF Amount (\$)		
	Budgeted Amount	Amount Spent To date	Amount Committed
Gender and Environmental and Social Safeguards analyses: Safeguards Expert	9,000.00	4,500.00	4,500.00
Stakeholder consultations, engagement and participation, workshops, travel	69,240.00	17,310.00	51,930.00
Consultancies and contracts to develop program and/or project options (national, regional, international, baseline and feasibility studies, project design): PPG Lead Consultant; Senior Stakeholder Coordinator; Communications and KM; OECM Feasibility/Registration	471,760.00	58,970.00	412,790.00
Total	550,000.00	80,780.00	469,220.00

ANNEX E: PROJECT MAP AND COORDINATES

Please provide geo-referenced information and map where the project interventions will take place

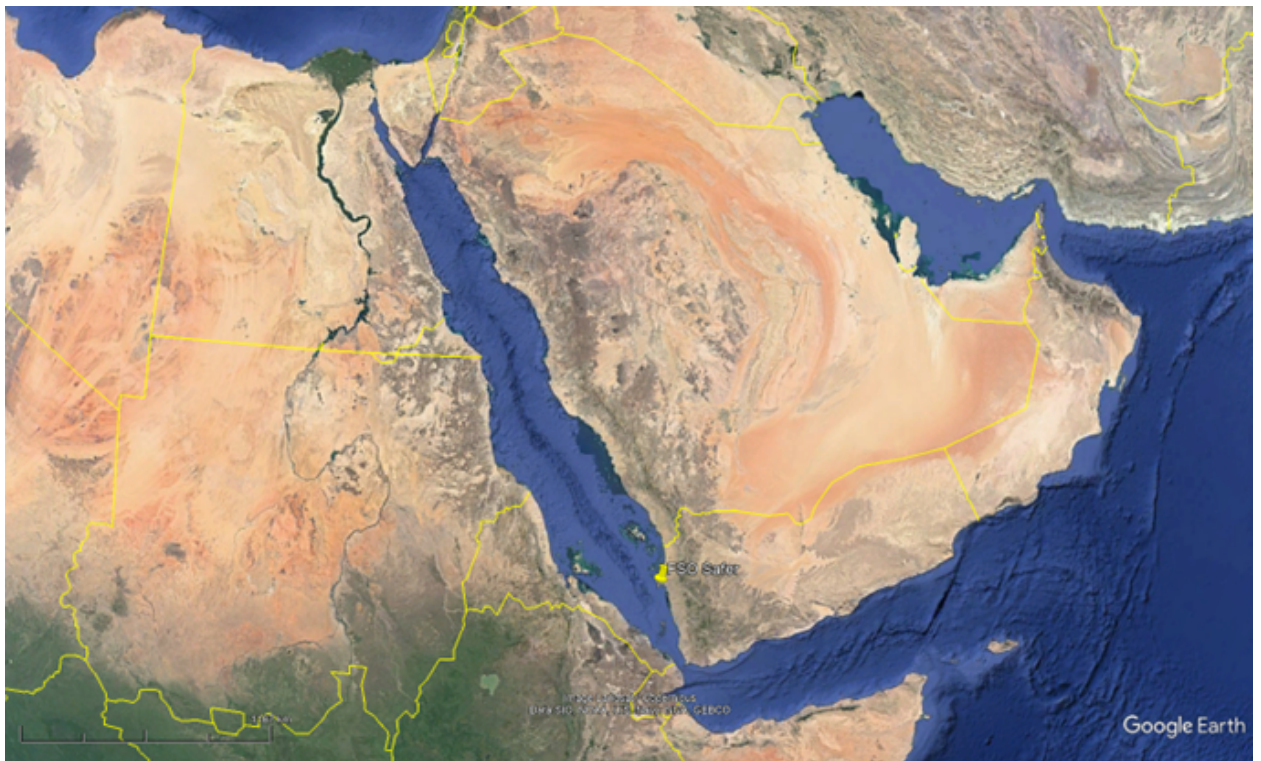
GEO LOCATION INFORMATION

The Location Name, Latitude and Longitude are required fields insofar as an Agency chooses to enter a project location under the set format. The Geo Name ID is required in instances where the location is not exact, such as in the case of a city, as opposed to the exact site of a physical infrastructure. The Location & Activity Description fields are optional. Project longitude and latitude must follow the Decimal Degrees WGS84 format and Agencies are encouraged to use at least four decimal points for greater accuracy. Users may add as many locations as appropriate. Web mapping applications such as [OpenStreetMap](#) or [GeoNames](#) use this format. Consider using a conversion tool as needed, such as: <https://coordinates-converter.com> Please see the Geocoding User Guide by clicking [here](#)

Location Name	Latitude	Longitude	Geo Name ID	Location & Activity Description
FSO SAFER	15.101175 N	42.593611 E		<input type="checkbox"/>

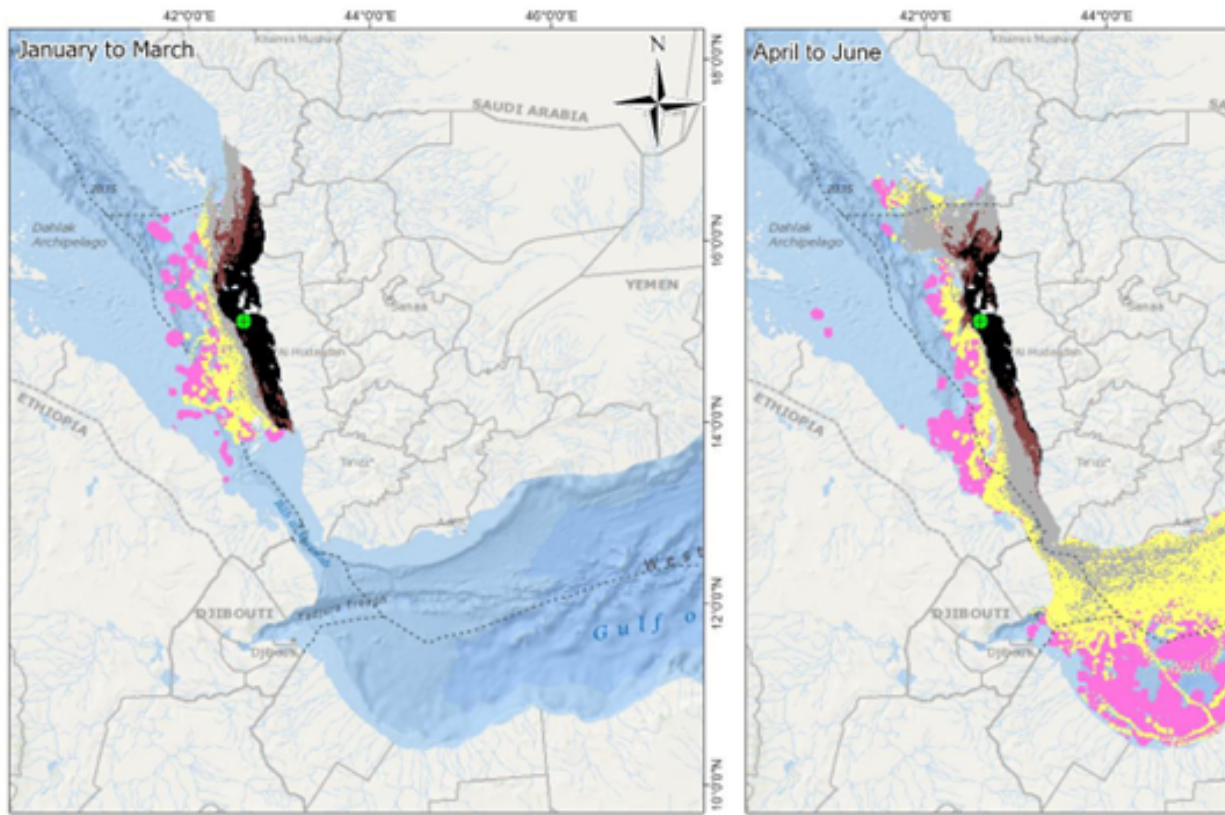
Please provide any further geo-referenced information and map where project interventions are taking place as appropriate.

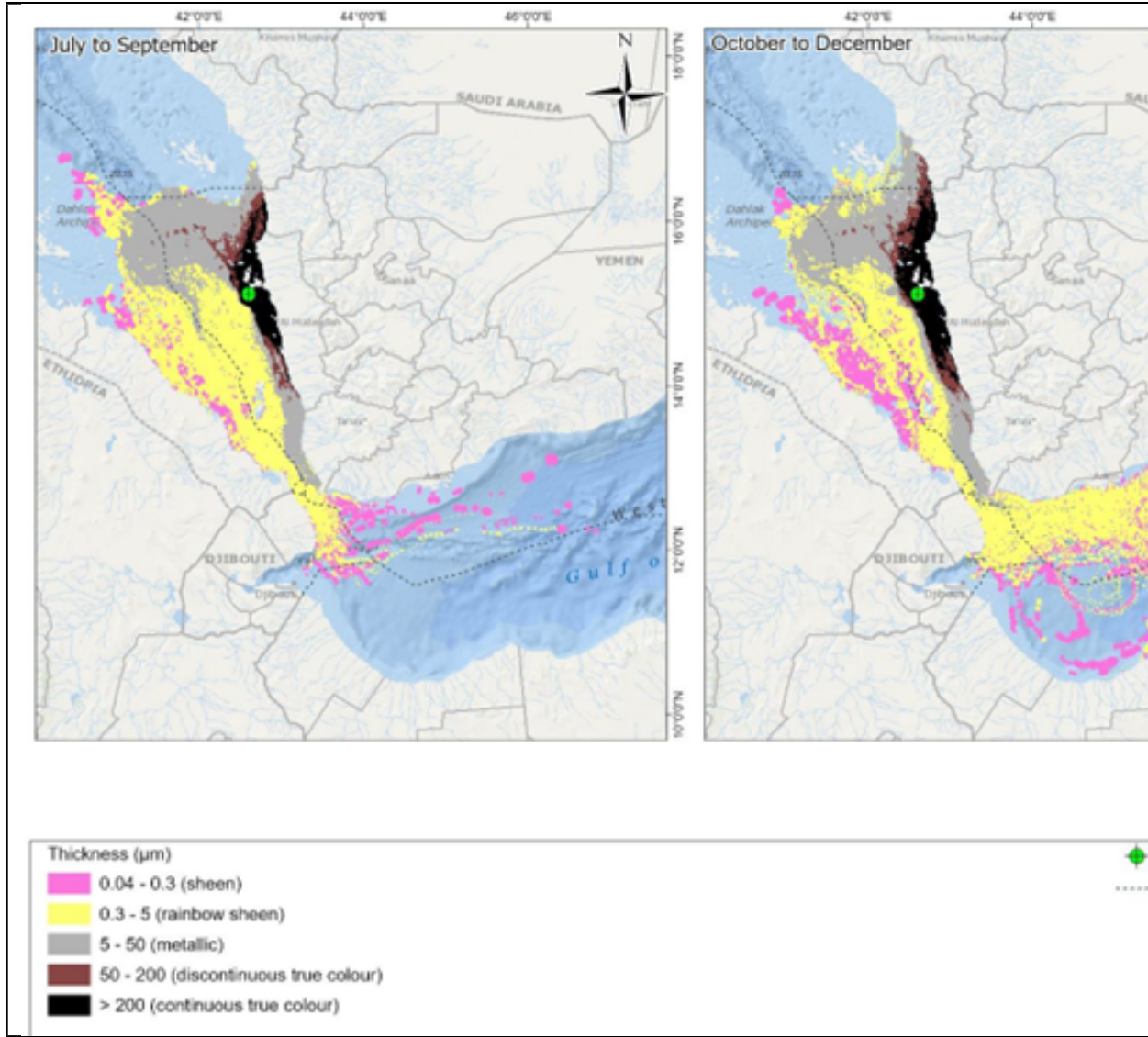
The FSO SAFER is moored about 4.8 nautical miles off the coast of Hodeidah governorate in Yemen, at approximately 15°06' N and 42°35' E.



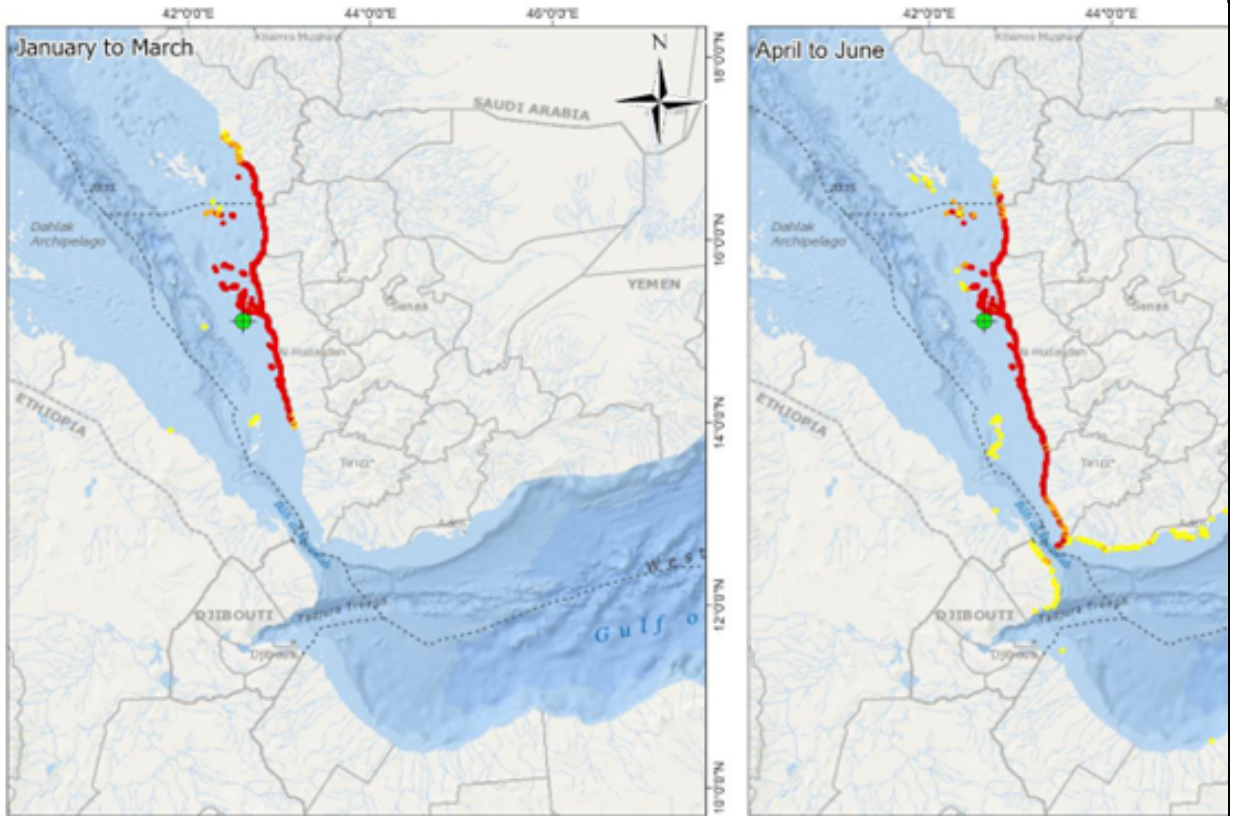


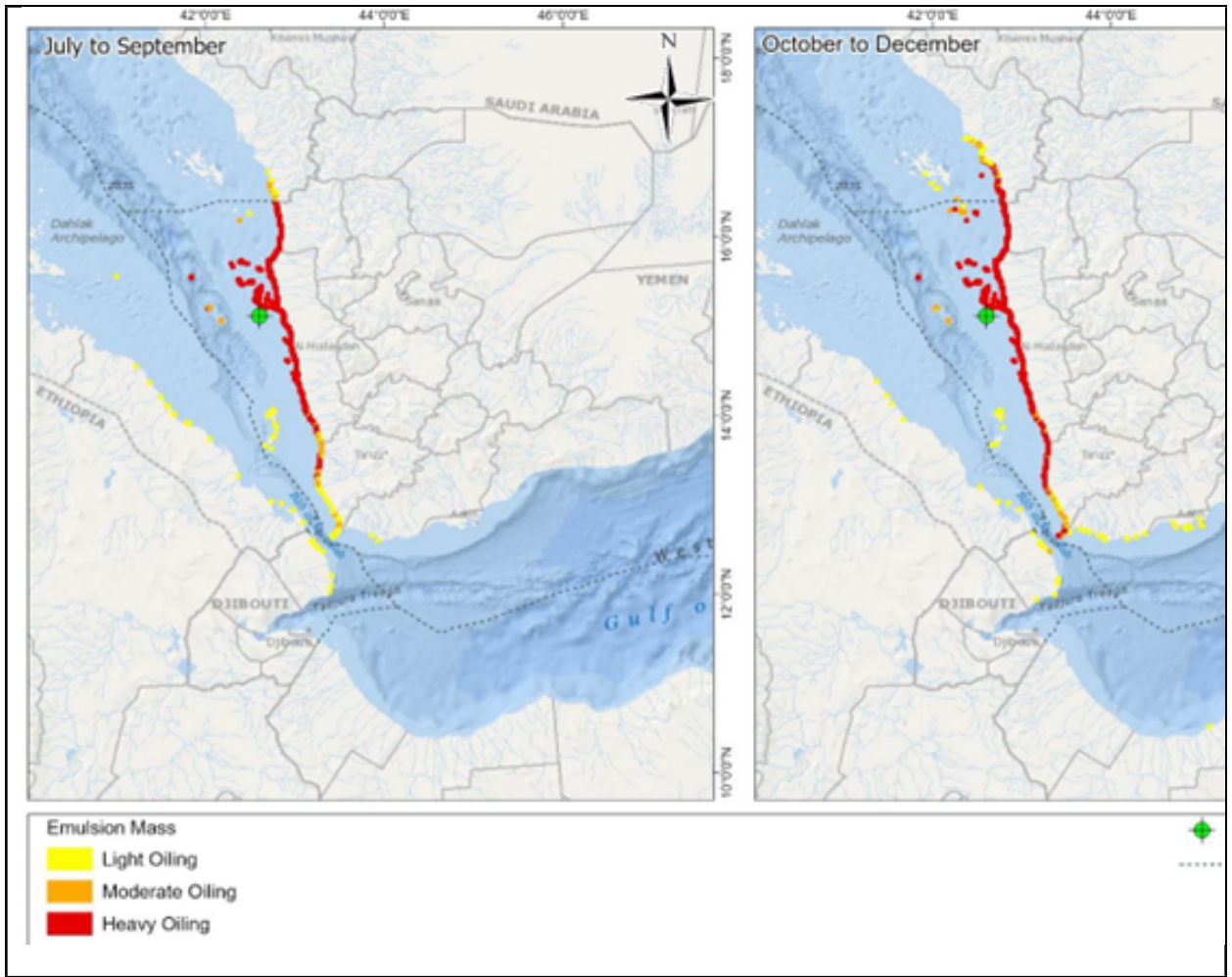
Maximum emulsion thickness of surface oil, by season, worst case scenario (IMO, 2021)





Shoreline contamination based on emulsion mass by season, worst case scenario (IMO, 2021)





Scenario 3: Oil Spill: July-September

Risk Summary

Risk of contamination to islands to the north of SAFER less than that of other months, but still very high probability of contamination at some islands (>80%). Greatly increased risk of heavy contamination in waters near the western Yemeni shore to the south of SAFER, and the associated coastline. High probability (~50%) that this contamination extends as far as the Bab-el-Mandeb Strait, with some oil passing beyond into the Gulf of Aden.

Human Impact

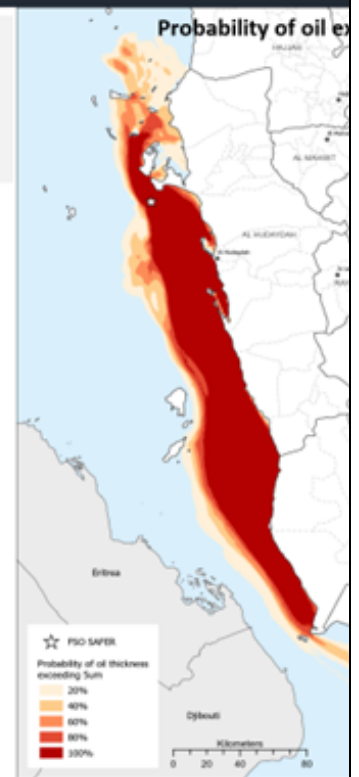
- Over 1.6m people likely to be affected.
- More than 1.4m people in need (PiN) and over 460,000 IDPs impacted.
- Taizz, Hodeidah and Hajjah affected governorates .

Estimate of the average speed of oil slick progression:

- Northward: ~0.5 km/h
- Southward: ~2 km/h

Economic Impact

- 100% fisheries affected costing \$1.5 billion over 25 years.
- Al Hodeida port closure for 5-6 months could result in 200% increase in fuel prices for several months. Food prices will likely double and traders partially shift to operations to Aden.
- Approx 682 large ships normally traverse these waters per week



Scenario 3: Atmospheric Dispersion: July-September

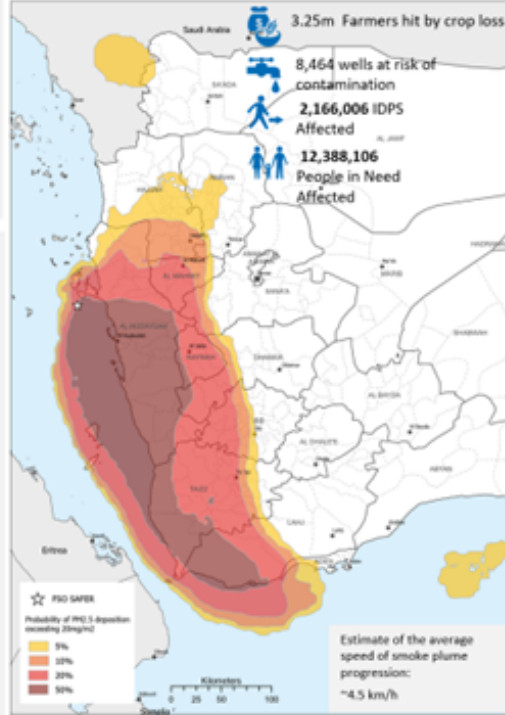
Risk Summary

Risk to areas to the north much reduced from the previous quarter. High probability (>50%) of very high pollution levels extending south from SAFER along the western Yemeni coast, extending as far as the Bab-el-Mandeb Strait. Possible, though less likely (~10% probability), that harmful levels extend as far as Aden.

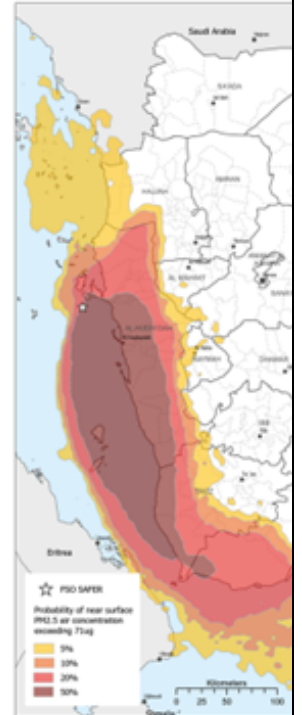
Economic and human impact

- Over 8.4m people exposed to very high air pollution.
- Ibb, Taiz, Hajjah, Hodeidah, Dhahar, Sana'a, Aden, Lahj, Al Mahwit, Raymah affected.
- 500 km² agricultural land in Yemen affected. \$70 million loss in production. 3.25m farmers hit by crop loss.
- Over 8,000 wells at risk of contamination.

Soot harms agriculture (PM2.5 above 20mg/m3)



Very High Air pollution



ANNEX F: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

Attach agency safeguard datasheet/assessment report(s), including ratings of risk types and overall project/program risk classification as well as any management plans or measures to address identified risks and impacts (as applicable).

Title

[UNDP 9483 GEF 11056_Yemen FSO SAFER_SESP_signed](#)

ANNEX G: BUDGET TABLE

Please upload the budget table here.

Title

[Annex J GEF Budget Template 9483_YEMEN](#)

Please explain any aspects of the budget as needed here

Expenditure	Detailed Descripti	Component (USDeq.)	Total (USDe	Responsi ble Entity
-------------	--------------------	--------------------	-------------	---------------------

Category	on	Component 1	Component 2	Component 3	Sub-Total	M&E	PMC	q.)	(Executing Entity receiving funds from the GEF Agency)[1]
		Sub-component 1.1	Sub-component 2.1	Sub-component 3.1					
Equipment- vehicle	Contribution to the purchase of the Very Large Crude Carrier replacing the FSO SAFER in Yemen	3,991,210			3,991,210			3,991,210	UNDP
International Consultants	International consultant for Terminal Evaluation - Output 2.1.1 (\$600*20 days = \$12,000)			12,000	12,000			12,000	UNDP
Local Consultants	Local consultant for Terminal Evaluation - Output 2.1.1 (\$400*20 days = \$8,000)			8,000	8,000			8,000	UNDP
Other Operating Costs	Professional services for financial audit				-		5,000	5,000	UNDP
Grand Total		3,991,210		20,000	4,011,210		5,000	4,016,210	