Deep-sea Fisheries under the Ecosystem Approach (DSF project)

Part I: Project Information

Name of Parent Program

Common Oceans - Sustainable utilization and conservation of biodiversity in areas beyond national jurisdiction

GEF ID
10623

Project Type
FSP

Type of Trust Fund
GET

CBIT/NGI
  CBIT **No**
  NGI **No**

Project Title
Deep-sea Fisheries under the Ecosystem Approach (DSF project)

Countries
Global

Agency(ies)
FAO

Other Executing Partner(s)
Global Fisheries Commission for the Mediterranean (GFCM)

Executing Partner Type
Others

GEF Focal Area
International Waters

Taxonomy

Focal Areas, Biodiversity, Species, Threatened Species, Mainstreaming, Fisheries, International Waters, Marine Protected Area, Areas Beyond National Jurisdiction, Climate Change, Climate Change Adaptation, Ecosystem-based Adaptation, Climate information, Influencing models, Transform policy and regulatory environments, Strengthen institutional capacity and decision-making, Demonstrate innovative approache, Stakeholders, Communications, Awareness Raising, Behavior change, Type of Engagement, Information Dissemination, Partnership, Private Sector, Large corporations, Gender Equality, Gender Mainstreaming, Sex-disaggregated indicators, Gender results areas, Participation and leadership, Capacity, Knowledge and Research, Knowledge Exchange, Knowledge Generation, Enabling Activities, Innovation, Capacity Development, Learning, Adaptive management, Indicators to measure change, Theory of change, Targeted Research

Sector

Rio Markers
Climate Change Mitigation
Climate Change Mitigation 0

Climate Change Adaptation
Climate Change Adaptation 1

Submission Date
11/24/2021

Expected Implementation Start
6/1/2022

Expected Completion Date
5/31/2027

Duration
60In Months

Agency Fee($)
399,344.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount($)	Co-Fin Amount($)
IW-2-4	ABNJ sustainably managed	GET	4,437,156.00	52,803,000.00

Total Project Cost($) 4,437,156.00   52,803,000.00

B. Project description summary

Project Objective

To ensure that DSF in the ABNJ are managed under an ecosystem approach that maintains demersal fish stocks at levels capable of maximizing their sustainable yields and minimizing impacts on biodiversity, with a focus on data-limited stocks, deepwater sharks and vulnerable marine ecosystems.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
COMPONENT 1: Governance-strengthening and implementing regulatory frameworks. TARGET CI 5: 3,200,000 million ha of marine habitat in 4 RFMOs under improved practices.	Technical Assistance	Outcome 1.1: Wider adoption, enforcement and compliance of international obligations relating to sustainable fisheries (stocks and impacts) with 4 RFMOs and states having adopted new measures that improve the management of data-limited stocks and/or reduce impacts on bycatch species.	Output 1.1.1: Gaps in regional obligations to (i) manage fish stocks and (ii) reduce fisheries impacts on biodiversity identified (updated) and corrective measures proposed through at least one workshop and one report. Output 1.1.2: Actions to address RFMO and national legal and regulatory gaps in uptake of international obligations related to fisheries management identified through participation of at least 20 government officials. Output 1.1.3: Gaps in existing capacity to strengthen compliance	GET	546,800.00	6,507,024.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
COMPONENT 2: Strengthening effective management of DSF. TARGET CI 8: 50 000 extra metric tons of catch (25% of 2016 catch) coming from stocks identified as sustainably fished during project period - TARGET CI 11: 800 females and 1,200 males directly benefiting as co-benefit of GEF investment - TARGET CI 2: 42 million ha (i.e. 35% of the VME area) with new and/or improved measures to protect VMEs from bottom fishing impacts.	Technical Assistance	Outcome 2.1: Effective decision making strengthened to increase sustainability and reduce impacts with three RFMOs having frameworks for more effective implementation of the PA and ecosystem approach to fisheries EAF and three new and innovative technologies used to monitor fisheries incorporated in scientific programs or compliance monitoring. Outcome 2.2: Improved advice supporting science-based fisheries management with two RFMOs having adopted TAC management measures and five stocks with improved assessments and reference points adopted.	Output 2.1.1: Frame works to improve science-management interface and exchange strengthened in two RFMOs. Output 2.1.2: Frameworks to improve industry contributions to sustainable DSF developed in two RFMOs. Output 2.1.3: One platform for sharing new and innovative technologies for improved monitoring, reporting and information sharing developed and operational. Output 2.2.1: Ecosystem and stock productivity models developed to support scientific advice (including demersal and	GET	2,685,156.00	31,953,867.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 3: Improving understanding and management of cross-sectoral interactions on DSF.	Technical Assistance	Outcome 3.1: Improved integration of cross-sector activities to maintain biodiversity and resource sustainability with mechanisms developed in collaboration with relevant sectoral agencies to mitigate and manage cross-sectoral impacts to DSF in two RFMOs.	Output 3.1.1: Interactions on sustainable DSF from other sectors operating in the deep seas identified and information made available with three current and future opportunities and threats from other ?sectors? to DSF identified and information collected to allow for impact analyses. Output 3.1.2: One framework to better mitigate and manage cross-sector interactions on DSF developed.	GET	269,550.00	6,131,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 4: Knowledge management, communication and M&E. TARGET CI 7: Engagement in IW Learn products and conferences.	Technical Assistance	Outcome 4.1: Knowledge generated and shared to raise awareness of project objectives, activities and achievements in three RFMOs among stakeholders and target audiences.	Output 4.1.1: Key successes in achieving the project objective?s focal areas identified and messaging disseminated through at least 4 knowledge products and experience notes and 1% allocated to IW:Learn activities. Output 4.1.2: An operational project M&E system implemented with at least 23 reports and other products developed.	GET	725,650.00	5,712,069.00
			Sub Total ($)		**4,227,156.00**	**50,303,960.00**
Project Management Cost (PMC)						
			GET		210,000.00	2,499,040.00
			Sub Total($)		**210,000.00**	**2,499,040.00**
			Total Project Cost($)		**4,437,156.00**	**52,803,000.00**

Please provide justification

C. Sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
GEF Agency	Food and Agriculture Organization of the United Nations (FAO)	Grant	Investment mobilized	1,000,000.00
GEF Agency	Food and Agriculture Organization of the United Nations (FAO)	In-kind	Recurrent expenditures	6,145,000.00
Other	North East Atlantic Fisheries Commission (NEAFC)	In-kind	Recurrent expenditures	2,026,000.00
Other	Northwest Atlantic Fisheries Organization (NAFO)	In-kind	Recurrent expenditures	3,032,000.00
Other	General Fisheries Commission for the Mediterranean (GFCM)	In-kind	Recurrent expenditures	500,000.00
Other	North Pacific Fisheries Commission (NPFC)	In-kind	Recurrent expenditures	1,500,000.00
Other	International Council for the Exploration of the Sea (ICES)	In-kind	Recurrent expenditures	3,000,000.00
Private Sector	Southern Indian Ocean Deepsea Fishers Association (SIODFA)	In-kind	Recurrent expenditures	20,000,000.00
Private Sector	International Coalition of Fisheries Associations (ICFA)	In-kind	Recurrent expenditures	5,000,000.00
Other	National Oceanic and Atmospheric Administration (NOAA)	In-kind	Recurrent expenditures	6,400,000.00
Other	South East Atlantic Fisheries Organisation (SEAFO)	In-kind	Recurrent expenditures	1,700,000.00
Other	Southern Indian Ocean Fisheries Agreement (SIOFA)	In-kind	Recurrent expenditures	1,000,000.00

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Other	South Pacific Regional Fisheries Management Organisation (SPRFMO)	In-kind	Recurrent expenditures	1,500,000.00

Total Co-Financing($) **52,803,000.00**

Describe how any "Investment Mobilized" was identified

FAO Grant co-financing comprises relevant elements (between 1% and 25% of the budgets were considered) of voluntary cash contributions by various donors to FAO?s activities related to (and in line with the objectives of) the project. Calculations are based on project budgets for 2021 and 2022 and projected over the length of the project.

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

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
FAO	GET	Global	International Waters	International Waters	4,437,156	399,344	4,836,500.00
				Total Grant Resources($)	**4,437,156.00**	**399,344.00**	**4,836,500.00**

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required   **true**

PPG Amount ($)

150,000

PPG Agency Fee ($)

13,500

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
FAO	GET	Global	International Waters	International Waters	150,000	13,500	**163,500.00**
				Total Project Costs($)	**150,000.00**	**13,500.00**	**163,500.00**

Core Indicators

Indicator 2 Marine protected areas created or under improved management for conservation and sustainable use

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0.00	42,010,000.00	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	12,000,000.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
Akula National Park All VMEs	125689	SelectHabitat/ Species Management Area		12,000,000.00		☐

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)
0.00	30,010,000.00	0.00	0.00

Name of the Protected Area	WDPA 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)

Name of the Protected Area	WDPA 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)
Akula National Park GFCM VMEs	**125689**	**Select**Habitat/Species Management Area		400,000.00			52.00		
Akula National Park NAFO VMEs	**125689**	**Select**Habitat/Species Management Area		7,100,000.00			71.00		
Akula National Park NEAFC VMEs	**125689**	**Select**Habitat/Species Management Area		9,300,000.00			69.00		
Akula National Park NPFC VMEs	**125689**	**Select**Habitat/Species Management Area		10,000.00			61.00		
Akula National Park SEAFO VMEs	**125689**	**Select**Habitat/Species Management Area		12,600,000.00			63.00		

Name of the Protected Area	WD PA 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)
Akula National Park SIOF A VMEs	**125 689**	**Select**Habitat/Species Managem ent Area		600,000.0 0			51.00		☐

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)

Indicator 5.1 Number of fisheries that meet national or international third party certification that incorporates biodiversity considerations

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
	3,200,000		

Type/name of the third-party certification

Indicator 5.2 Number of Large Marine Ecosystems (LMEs) with reduced pollutions and hypoxia

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

LME at PIF	LME at CEO Endorsement	LME at MTR	LME at TE

Indicator 5.3 Amount of Marine Litter Avoided

Metric Tons (expected at PIF)	Metric Tons (expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 7 Number of shared water ecosystems (fresh or marine) under new or improved cooperative management

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Shared water Ecosystem		Global		
Count	0	1	0	0

Indicator 7.1 Level of Transboundary Diagonostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation (scale of 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)

Indicator 7.2 Level of Regional Legal Agreements and Regional management institution(s) (RMI) to support its implementation (scale of 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)

Indicator 7.3 Level of National/Local reforms and active participation of Inter-Ministeral Committees (IMC; scale 1 to 4; See Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)

Indicator 7.4 Level of engagement in IWLEARN throgh participation and delivery of key products(scale 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)
Global		3		☐
Select SWE				

Indicator 8 Globally over-exploited fisheries moved to more sustainable levels

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
	50,000.00		

Fishery Details

The indicator asks that stocks are moved to more sustainable levels. However, stocks can be fished at sustainable levels regardless of the current status of the stock biomass. This statistic is a combination of current fishing mortality, current stock biomass, and changes in these occurring over time. UNCLOS and UN FSA requires stocks to be at levels that produce MSY or are managed to restore stocks to these levels. Annual yields, often used as a proxy for the state of the stocks, is again complex, as annual yields can increase due to high fishing effort or to recovering biomass. The former being undesirable and the later desirable. This and related topics has been recently reviewed by Hilborn (2020, in ICES JMS) and Cochrane (2020, in Fish and Fisheries). The approach used in this DSF Project will be a little more fundamental and look at the type of assessments that can be conducted on deep sea fish stocks and the resultant stock status and exploitation rates that can be calculated/estimated/determined. The target for this core indicator is that 50,000t of annual yield will come from stocks that are more sustainably managed, and that this is determined from improved assessments and changes to stock management practices. An initial assessment of the status of deep sea stocks in the ABNJ was undertaken in 2019 for the Worldwide review of Bottom Fisheries (FAO, 2020). Details about the calculation made to determine the Metric Tons indicated under core indicator 8 are provided in the Annex F attached to the roadmap of the submission. The Annex includes tables that cannot be pasted into this box due to the limitations of the Portal.

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female		800		
Male		1,200		
Total	0	2000	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

Part II. Project Justification

1a. Project Description

Project Description

The Program ?Common Oceans - Sustainable utilization and conservation of biodiversity in areas beyond national jurisdiction? reflects the shifting scenario on the management of the areas beyond national jurisdiction (ABNJ). The Program has been developed to demonstrate and promote more comprehensive processes and integrated approaches to the sustainable use and management of the ABNJ. It will take into account the likely demands of ongoing processes such as the development of a new biodiversity in areas beyond national jurisdiction (BBNJ) Agreement, build on the results and lessons of the GEF-5 Global sustainable fisheries management and biodiversity conservation in the Areas Beyond National Jurisdiction (ABNJ) Program and complement the efforts of various partners and parallel initiatives including the GEF multi-country Large-Marine Ecosystem (LME) approach and Regional Seas Programs.

The BBNJ negotiations started in 2017 to develop an implementing agreement under the framework of UNCLOS to address the sustainable utilization and conservation of biodiversity in the areas beyond national jurisdiction - often referred to as the BBNJ Agreement. The final text is expected to be ready in 2022, after negotiations are resumed after the pandemic hiatus.

The Program consists of five child projects. Two global projects will promote more sustainable management of tuna and deep-sea fisheries (fisheries sector focus). A third project seeks to build capacity to improve cross-sectoral collaboration and coordination on key ABNJ issues at global level (thematic focus), and a fourth project examines multi-sectoral governance (stewardship) in a pilot area, the Sargasso Sea (geographical focus). Finally, the fifth child project will ensure effective coordination, communication, partnerships, lesson learning and knowledge management between the other child projects and support innovative financing initiatives for sustainable use of ABNJ resources across the Program (program level focus).

The GEF7 Common Oceans - Sustainable utilization and conservation of biodiversity in areas beyond national jurisdiction Program (GEF ID 10548)			
Child Project	**GEF ID**	**GEF Agency**	**GEF Grants**
Sustainable management of tuna fisheries and biodiversity conservation in the areas beyond national jurisdiction	10622	FAO	14,378,000
Deep-sea Fisheries under the Ecosystem Approach	10623	FAO	4,437,156
Building and Enhancing Sectoral and Cross-Sectoral Capacity to Support Sustainable Resource Use and Biodiversity Conservation in Areas Beyond National Jurisdiction	10697	UNEP	2,500,000
Strengthening the stewardship of an economically and biologically significant high seas area ? the Sargasso Sea	10620	UNDP	2,652,294
Global Coordination Project of the Common Oceans ABNJ Program	10626	FAO	2,752,294

The Program was developed through collaboration between three GEF Agencies ? FAO, UNDP, UNEP ? and the GEF Secretariat. These three agencies will collaborate in the implementation of the Program. Other GEF Agencies such as World Wildlife Fund (WWF-US), Conservation International, and a wide array of interested stakeholders, including the private sector, will also take part in the Program?s implementation. Initial work on the development of the Program included a review and analysis of the current situation facing ABNJ, and the development of a framework to address the issues affecting the sustainable use of ABNJ. The result of this work was captured in a Theory of Change for the Program, and followed by the development of concepts/proposals to address the key challenges facing ABNJ, as well as actions needed to deliver sustainable management of ABNJ resources.

Special consideration has been given to opportunities for cross-fertilization and collaboration across child projects and between stakeholders to address the different issues identified in the Theory of Change and working towards programmatic outcomes that would amplify the possible contributions of the individual projects. The two fisheries projects will collaborate directly in activities of common interest and scope. The cross-sectoral project will provide capacity building to countries participating in the future BBNJ Agreement and contribute to disseminate information about the agreement to stakeholders of the other projects. The Sargasso Sea project (10620) will demonstrate a possible structure for management of ecosystems impacted by human activities, while the coordination project will provide a space to construct a common narrative to track the progress towards the desired outcomes from a programmatic perspective and to enable coordinated and consistent outreach to target audiences.

The project document presented below describes the background, objective, design, budget and implementation arrangements for the Deep-sea Fisheries under the Ecosystem Approach (DSF) project.

a.Global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)

The legal framework for the management of fisheries, mining and shipping in the ABNJ is under UNCLOS (1995) whereby appropriate international organisations coordinate activities though their relevant member states. The organisations that coordinate this are the RFMOs for fisheries, the ISA for mining, and the IMO for shipping. They are all intergovernmental organisations with the IMO also being a specialized agency of the United Nations. FAO has no responsibilities for the management of marine fisheries. The BBNJ negotiations concern, amongst other issues, the conservation of biodiversity and possible mechanisms to coordinate this. The details of how this will be achieved are under discussion at the UNGA. The RFMOs, ISA and IMO all have responsibilities to reduce or prevent impacts on biodiversity from fishing, mining and shipping, respectively. There is no formal link between these organisations, except through common member countries, and there is no formal mechanism of coordination among these organisations. This is a particular concern in the BBNJ negotiations.

The FAO is a technical agency of the United Nations that supports fisheries but has no management responsibilities. It has no formal links with the RFMOs beyond having ?observer? status at their meetings. It does have a special relationship with fisheries organisations, including RFMOs, globally and serves, through the FAO Code of Conduct for Responsible Fisheries, the FAO Port State Measures Agreement, and other binding and voluntary instruments, to support their actions in achieving sustainable fisheries and safeguard the environment.

The RFMOs are codified under UNCLOS and can be conveniently divided into deep sea (DS) RFMOs that manage species not covered by other organisations, tuna RFMOs that manage tuna and tuna-like

species, and specialist RFMOs that manage particular species or taxa. The DSF Project (10623), with its focus on bottom fisheries, is relevant to the dsRFMOs with some potential overlap with the tuna RFMOs.

The following ABNJ regions have dsRFMOs: North Pacific (NPFC), South Pacific (SPRFMO), Northwest Atlantic (NAFO, Northeast Atlantic (NEAFC), Mediterranean and Black Sea (GFCM), Southeast Atlantic (SEAFO), and the Southern Indian Ocean (SIOFA). There are also intergovernmental regional fisheries bodies (RFBs) that act in an advisory capacity that cover some regions that lack RFMOs: western central Atlantic (WECAFC) and eastern Central Atlantic (CECAF). These two regions have almost no ABNJ small pelagic and bottom fisheries. CCAMLR was formed under the Antarctic Treaty and is not an RFMO. It has a wider remit than the RFMOs and manages resources and ecosystems in the Southern Antarctic Ocean.

There are also other organisations that operate in the oceans and in particularly in the EEZs. Perhaps most notable are the Regional Seas Programmes (RSPs) under the UN Environment Programme (UNEP). These are largely administered and supported by UNEP though the details vary. Some RSPs have legal jurisdiction and, through their membership, can address issues like protected areas and land-based pollution. OSPAR and CCAMLR (which is included under RSPs on the UNEP website) are the only RSPs that have significant coverage in the ABNJ. The RSPs (with the exception of CCAMLR that operates under the Antarctic Treaty) and UNEP have no jurisdiction over fisheries in the high seas.

Large Marine Ecosystems (LMEs) have been developed by NOAA (US) and are productive transitional regions of the world?s oceans typically lying between the coastal margins to the limit of the continental shelf. LMEs are not organisations, though they may have large projects attached to them. LMEs are important for understanding transboundary resources issues and many have received substantial support from the GEF. They generally do not include waters in the ABNJ.

Another strong initiative was the EBSA programme of the CBD that was established in 2008 under COP 9. The principal purpose was to identify and describe ecological and biological significant areas throughout the oceans. The criteria for identifying EBSAs are superficially similar to those used to identify VMEs by RFMOs. However, there are some important differences, notably that VMEs are principally a fisheries management tool to protect vulnerable sedentary benthic habitats from possible impacts from fishing with bottom-contact gears. EBSAs cover an enormous range of habitat types and the listings are descriptive without any direct links to management actions (though initially Annex II of COPD IX/20 outlines a process whereby EBSAs could form part of a network of MPAs).

The issues to be addressed by the RFMOs, in line with their mandate according to their conventions, is the sustainable management of harvested fish stocks whilst minimising or preventing impacts on associated and dependent species. However, over the last 10?20 years, the RFMOs are increasingly judged on their ability to protect biodiversity, which is not within the mandate of RFMOs. Nevertheless, the RFMOs have made considerable progress in protecting biodiversity from adverse fisheries impacts, and as such need to be recognised for this. This DSF Project (10623) aligns with the objectives of RFMOs in sustainable fisheries management and preventing impacts.

Although some deep-sea stocks are relatively productive and are now managed more sustainably, one of the main challenges to the sustainable management of DSF and biodiversity conservation is limited information and knowledge about the biology and distribution of the fished stocks and deep-sea

ecosystems, and the impacts from fisheries and other activities. A 2016 survey of 51 targeted and fished deep-sea stocks found that the status of some 50% of the stocks was ?unknown?3. In the same survey, only ten of these stocks was assessed as overfished or depleted.

The extent of DSF impacts on benthic habitats and vulnerable marine ecosystems (VMEs) and on certain slow-growing bycatch species, such as deepwater sharks, is also still largely unknown. A further, and largely unknown and unstudied effect on fish stocks and biodiversity comes from external threats like climate change and new activities such as mineral extraction.

In order to transform DSF into sustainable systems and protect vulnerable marine ecosystems, a number of barriers would need to be addressed.

Barrier 1: Gaps in the adoption, enforcement and compliance of international obligations relating to sustainable fisheries management.

Managing the oceans requires a strong international legal framework that is incorporated into national regulations. Not all countries have fully integrated international obligations, and opportunities exist for coastal States to play a more active role within the RFMOs.

In terms of illegal, unreported and unregulated (IUU) fishing, illegal fishing, though hard to monitor, is believed to be low for most high seas DSF. Unreported catches, or more commonly under-reporting of catches, continues and new initiatives and incentives to improve reporting are required. Unregulated or poorly regulated DSF are also common and covers about half of the fished stocks, typically assessed as data-limited. Significant effort is required to bring these stocks under a stricter management regime, in order to understand stock status and, if required, to mitigate against impacts on the stock, bycatch and incidental species.

Barrier 2: Limited data and information on stocks and impacts on VMEs. As mentioned, this is one of the biggest constraints in implementing the Ecosystem Approach to Fisheries (EAF) in DSF, along with weak science-management interface and application of the precautionary approach at regional and national levels. Many RFMO-member States lack the extensive science-management frameworks and networks available to developed and wealthy fishing nations.

Assessments of ecosystem health and impacts on VMEs and bycatch species from DSF is scientifically challenging. Cost-effective technologies and tools need to be developed. There are also barriers to understanding the effects of climate change and other sectors on the flora and fauna of the deep oceans at 200?2000 m depth. These factors limit the capacity to implement EAF in some regions and among some countries, especially in the newer RFMOs and developing country coastal states.

Barrier 3: Lack of information, and poor communication and collaboration, on impacts by fisheries and other sectors in the high seas.

The use of the high seas is multi-sectoral; shipping and transport fall under the International Maritime Organization (IMO) and mineral resources fall under the International Seabed Authority (ISA). Fisheries in the high seas has, for the past 10 or so years, increased its efforts to mitigate against adverse impacts on biodiversity, with for example many new measures in place to sustainably harvest stocks and protect vulnerable marine ecosystems. However, the impacts on high seas fish stocks and

VMEs from cross-sectoral activities such as deep-sea mining, are poorly understood and require the development of new science-based methodologies and precautionary management regimes.

Efforts are being made by regional fisheries bodies, regional seas programmes, fishing industry partners and international organizations, to address these barriers. Some of these baseline activities and investments are briefly described below.

b.Baseline scenario and any associated baseline projects

Extensive details of the baselines by outcome and output included in the results framework (Annex A1) are provided in Annex M. The Terminal Evaluation of the GEF-5 Deep-seas Project (4660) is given in Annex R.

The management of fisheries in the high seas, and the fishing vessels operating in the high seas, is the responsibility of the vessel?s flag state. Fisheries in the ABNJ are usually managed through a cooperative arrangement by RFMOs, which have been typically called tuna-RFMOs (managing tuna and tuna-like species), deep-sea or general RFMOs (managing demersal and small pelagic species), and specialist RFMO (manging specific species). The DSF Project (10623) is concerned principally with bottom fisheries and has all the deep-sea RFMOs as partners. Some deep-sea RFMOs (NEAFC, NAFO, GFCM) were formed in the mid-1900s, but RFMOs only took on a recognised management role at the conclusion of the UNCLOS negotiations around 1979. To date, there are seven RFMOs under UNCLOS (NEAFC, NAFO, GFCM, SEAFO, NPFC, SPRFMO, SIOFA) and one under the Antarctic Treaty (CCAMLR). Three ocean regions are without RFMOs. The eastern and western central Atlantic regions have advisory bodies (WECAFC, CECAF), and there is no international coordinating organisation in the southwest Atlantic.

The terminal evaluation of the GEF-5 Deep-seas Project (4660) provided recommendations for the development of a second phase. The DSF Project (10623) can be considered as a second phase, but the emphasis has been shifted further towards fisheries management owing to it falling under the international waters focal area. Funding under the biodiversity focal area, that was present in the GEF-5 DS project (4660), is missing from the GEF-7 project. However, there is still a strong biodiversity focus regarding the management of DSF to avoid both unsustainable impacts on target species and significant adverse impacts on associated and dependent species. The TE made a number of recommendations, some of which have assisted in the design of the DSF Project (10623). The TE noted the success with biodiversity protection through protecting VMEs, but suggested much greater emphasis be placed on consulting and working with biodiversity organisations in the second phase. Biodiversity expertise has been steadily increasing within national fisheries laboratories, and their advice feeds directly into the RFMOs. There are currently few organisations with expertise in protecting biodiversity in the ABNJ, and until the BBNJ negotiations conclude it seems unlikely any will develop. RFMOs, as recognised in the TE, have developed a suit of measures to protect VMEs from bottom-fisheries impacts and this work will be continued in the second phase. Additionally, the second-phase will include work on the protection of deepwater sharks, which is seen as potentially vulnerable to impacts from DSF.

The TE also made a recommendation regarding the extent and control of DSF, indicating ?134. While deep-sea fisheries on the high seas were seen as a major problem when the project was implemented, and there was indeed governance and monitoring control and enforcement issues, these are now largely resolved.?. The TE also under-estimated the extent of DSF, indicating ?Recommendation 2. Most deep-sea fisheries, except in the Northwest Atlantic Fisheries Organization (NAFO) area, are now inside exclusive economic zone (EEZ) ? only about 6 tonnes were caught in the ABNJ in the North East Atlantic Fisheries Commission (NEAFC) area in 2018.? (pages x & 33). The distribution of DSF did not change significantly during the GEF-5 DS project (4660) period, and the 2019 ABNJ/EEZ catches for the north-east Atlantic were 3 600/17 000 tonnes for demersal species and 800 000/3 000 000 tonnes for small pelagic species[1][1] (not 6 tonnes as stated in the TE). Further, whereas improvements are continuously being seen, the issues have certainly not been resolved.

The management of fisheries in the ABNJ varies greatly according to the region. This is because of differences in:

- the nature and history of the fisheries,
- the development stage of the RFMO (many were established recently),
- the contracting parties making up the RFMOs,
- the balance between ?ecological? and ?social and economic? considerations.

In general, though hard to quantify, there may be an increasing disconnect between the management and science committees, along with an increasing complexity in the role of RFMOs who work with stock sustainability and biodiversity protection in times with greater stakeholder interest and involvement. This is why an output on the science-management interface has been included in the DSF Project (10623).

The DFS Project undertook five baseline consultancies by independent consultants, which supplemented studies undertaken during the GEF-5 DS project (4660). These are listed below and are elaborated in Annex M that provides details on baselines by outcomes and outputs:

Unpublished baselines for GEF-7 DSF Project (10623)

- Current technologies for recording information on-board fishing vessels
- Deep-Sea Fisheries under the Value Chain Approach
- Catch, bycatch and discard reporting and the collection of biological information on commercial vessels
- Vulnerable marine ecosystems: identification, impacts and health
- Report on the findings of cross-sector impacts relevant to deep sea RFMOs, including impacts to similar fisheries within national waters

Published reports for GEF-5 DS project (4660)

- FAO. 2020. Worldwide review of bottom fisheries in the high seas in 2016.

- Fletcher, W.J. 2020. A review of the application of the FAO ecosystem approach to fisheries (EAF) management within the areas beyond national jurisdiction (ABNJ). Rome, FAO. https://doi.org/10.4060/cb1509en.
- Harrison, J., Lobach, T., Morgera, E., Diz, D., Kuemlangan, B., Manoa, P. and Hamley, G. 2019. Step-wise guide for the implementation of international legal and policy instruments related to deep-sea fisheries and biodiversity conservation in the areas beyond national jurisdiction.
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SDGs: The United Nations sustainable development goals (SDGs) are reported to the UN via member states and not through RFMO mechanisms. The work of the RFMO contributes towards the achievement of the SDGs. The DSF Project (10623) will particularly support:

- SDG 14.4 by undertaking new assessments of the status of data-limited stocks and promoting management actions to ensure sustainable productive fisheries under Outcome 2.2.
- SDG 14.2 through sustainable fisheries management to avoid significant adverse impacts on stocks and ecosystems under Outcome 2.3.
- SDG 14.5 by specifically managing designating delineated areas containing vulnerable marine ecosystems and/or other ETP species to mitigate against impacts from fisheries and to coordinating with other sectors to achieve wider protection under Outcomes 2.1, 2.2, 2.3 and 3.1

c. Proposed alternative scenario with a brief description of expected outcomes and components of the project and the project?s Theory of Change
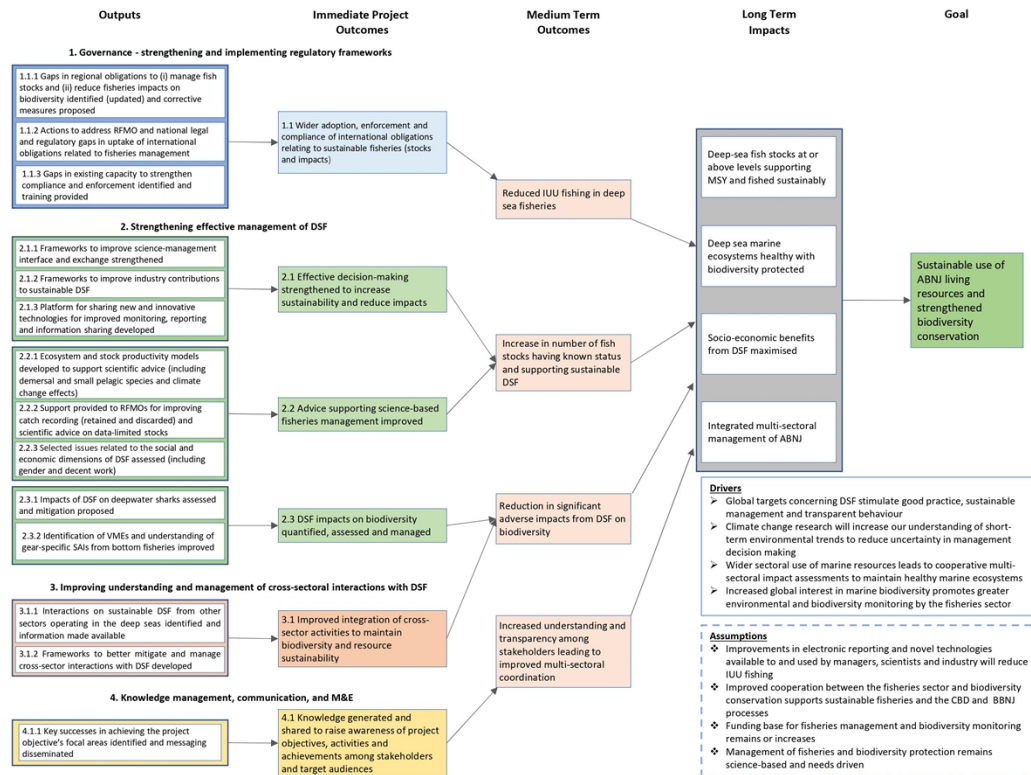
Figure 1. DSF Project (10623) Theory of Change (TOC)

The new GEF-7 program contributes to the ?sustainable use of ABNJ resources and strengthen biodiversity conservation in the face of a changing environment?. This builds upon the outcomes of the earlier GEF-5 program that finished in 2020. The program receives information from its four child projects and assimialtes this into comuniucatin and knowledge management strategies to achieve sustainably managed global ocean resources in the ABNJ. The DSF Project (10623)?s is one of the four child projects and works almost exclusively with commercially harvested demersal fish and shellfish species. The Theory of Change (ToC) is shown in Figure 1. This responds to and reflects the program?s ToC.

The DSF Project (10623) objective is ?To ensure that DSF in the ABNJ are managed under an ecosystem approach that maintains demersal fish stocks at levels capable of maximizing their sustainable yields and minimizing impacts on biodiversity, with a focus on data-limited stocks, deepwater sharks and vulnerable marine ecosystems.?. The focal areas were chosen to reflect areas where the DSF Project (10623) could make the largest contribution. The management of the commercial fisheries on the main high-yielding deep sea stocks is well covered by the RFMOs and their member states and it is very unlikely that the DSF Project (10623) could contribute to this.

The main drivers of the DSF Project (10623) enusre that there is a solid foundation to promote the achievement of project outcomes. These are:

- Global targets concerning DSF stimulate good practice, sustainable management and transparent behaviour
- Climate change research will increase our understanding of short-term environmental trends to reduce uncertainty in management decision making
- Wider sectoral use of marine resources leads to cooperative multi-sectoral impact assessments to maintain healthy marine ecosystems
- Increased global interest in marine biodiversity promotes greater environmental and biodiversity monitoring by the fisheries sector

The main assumptions of the DSF Project (10623) that must be fullfield to achieve project outcomes are:

- Improvements in electronic reporting and novel technologies available to and used by managers, scientists and industry will reduce IUU fishing
- Improved cooperation between the fisheries sector and biodiversity conservation supports sustainable fisheries and the CBD and BBNJ processes
- Funding base for fisheries management and biodiversity monitoring remains or increases
- Management of fisheries and biodiversity protection remains science-based and needs driven

There are numerous subtle and important drivers and assumptions and these vary according to the fishing nations. Many of these may be outside of the control of the fishing sector, and certainly outside of the control by the porject.

The project?s longer-term outcomes:

- Deep-sea fish stocks at or above levels supporting MSY and fished sustainably
- Deep sea marine ecosystems healthy with biodiversity protected
- Socio-economic benefits from DSF maximised
- Integrated multi-sectoral management of ABNJ

may be achieved in a few cases within the duration of the project, but will need a longer time period to be fully achievable. The last three also extend beyond traditional fisheries management and hence are partly or fully outside of the control of the RFMOs who manage the fishery. With the continued and even increased involvement of the CBD in the marine environment, and the supporting or possibly pivital role palyed by the BBNJ negotiations, it is possible that we will start to see a new multi-sectoral style of fisheries management, but again this will be beyond the time frame of this project.

The medium-term outcomes:

- Reduced IUU fishing in deep sea fisheries
- Increase in number of fish stocks having known status and supporting sustainable DSF
- Reduction in significant adverse impacts from DSF on biodiversity

are again general but should be achievable soon after project completion assuming that the assumptions can be met. Perhaps the most critical is a continued commitment by Contracting Parties (through RFMOs) to ensure that fished stocks are maintained around or returned to MSY level by ensuring that effort and catch restrictions match realistic rebuilding programs. Further, a more complete system of monitoring impacts, especially on deepwater sharks and VMEs, in all regions is regularly conducted, and that appropriate measures are in place and evaluated to ensure that real protection is provided. Detailed descriptions of the project?s components and immediate outcomes are given below, and of the project?s outputs and activities in Annex H.

Component 1 Governance ? strengthening and implementing regulatory frameworks

Component 1 has one outcome which seeks to strengthen DSF governance by dsRFMOs in the ABNJ through the wider adoption, enforcement and compliance of international obligations by fishing nations to achieve sustainable fisheries aimed at maintaining stocks and reducing impacts. The component will examine the interpretation and uptake of applicable international instruments and guidelines (UNCLOS, UNFSA, FAO CoCRF, etc) relevant to managing fish stocks and reducing impacts on dependent and associated species. The focus will be on those aspects that relate to data-limited stocks where assessments are below the level at which the MSY criteria can be applied and impacts on deepwater sharks and VMEs.

Outcome 1.1 ? Wider adoption, enforcement and compliance of international obligations relating to sustainable fisheries (stocks and impacts)

The outcome will be monitored through two indicators. Firstly, the number of new measures and laws adopted by RFMOs and States that improve the management of management of data-limited stocks and/or reduce impacts on bycatch species especially deepwater sharks and VMEs. Secondly, improvements in monitoring, control and surveillance (MCS) through better compliance information gathering contributing to more sustainable DSF on data-limited stocks and reduced impacts.

Some aspects of Component 1 will have overlapping responsibilities with other resource users, most notably the ISA for mining, the CBD for biodiversity conservation, and spatial management of DSF in general for the BBNJ negotiations. These cross-sectoral aspects will be more fully dealt with under Component 3.

Output 1.1.1 will identify and address gaps in regional obligations to (i) manage fish stocks and (ii) reduce fisheries impacts on biodiversity identified (updated) and propose corrective measures. This follows on from work undertaken in the GEF-5 Deep-seas project (4660) and will comprise mainly of participatory work with RFMOs and other stakeholders to undertake scoping studies on how well relevant international instruments have been applied to fisheries management in situations where data is limited and obligations have only been highlighted in the last 10 years or so. This complements the RFMO work on the management of the main commercial stocks that are data rich and been subject to assessment and management for more than two decades. Corrective measures will be discussed in the second and third years of the project and included in the scoping study report. Uptake will be monitored over the full span of the project.

Output 1.1.2 will address measures to fill in gaps in national regulations necessary for the uptake on international (UN level) and regional (RFMO level) obligations. This also follows from work undertaken in the GEF-5 Deep-seas project (4660) that used a ?deep flip? questionnaire[2] and stepwise guides[3][2] that allow for States to undertake a self-assessment of their performance. This will involve the development of, in cooperation with RFMOs and selected member States, the self-assessment questionnaire along with a supporting e-learning package that will be developed by FAO under its e-learning program. The project will provide support to States in completion of the self-assessment and in analysing the results. The longer-term objective of this output is to provide RFMOs and their members with a lasting package which promotes self-assessment and improvement of performance.

Output 1.1.3 will support GEF-eligible states to fill gaps identified in existing capacity under output 1.1.2 to strengthen monitoring, compliance and enforcement through targeted support including training and equipment provisioning as necessary. Mechanisms for more automated and remote MCS tools to support on-board observers and port sampling officials will be promoted as a means for both more efficient and consistent data collection and to help mitigate problems resulting from the covid pandemic and other situations where observers are not on vessels (these will be identified through output 2.1.3 on new and innovative technologies). This will lead to improved compliance to prevent IUU fishing and more accurate scientific advice. A baseline for this was developed during the GEF-5 DS Project (4660)[4][3]. This output supports. Planning for this output will start in year 2 and support activities will occur in years 3 and 4.

Component 2 ? Strengthening effective management of DSF

Component 2 operates at the science-management interface and at the scientific level. It aims to support Component 1 by ensure that the best possible scientific advice is provided to managers to act as a basis for their decisions. This component is also forward looking and aims to tackle some of the more challenge aspects in the provision of advice. There are three outcomes under this component.

Outcome 2.1 ? Effective decision-making strengthened to increase sustainability and reduce impacts

This outcome aims to strengthen communication between managers, scientists and the industry, with the objective of increasing cooperation to provide improved scientific advice and strengthen support effective decision-making to increase fishery sustainability and reduce impacts. This supports UNGA Res. 75/89, para 17 that ?Urges States to increase their reliance on scientific advice in developing, adopting and implementing conservation and management measures, and to increase their efforts, including through international cooperation, to promote science for conservation and management measures that apply, in accordance with international law, the precautionary approach and ecosystem approaches to fisheries management, ??. This outcome also includes the establishment of a ?new technologies? forum which is again designed to communicate information among interested stakeholders, which in this case is the technology developers and the RFMOs and industry that would like to use the technology. Such a forum could be up-scaled if it is found successful.

This progress of this outcome will be monitored through the development of the precautionary approach and ecosystem approach to fisheries (EAF) frameworks by RFMOs during the project period, and on the formalising of opportunities for the fishing industry to contribute advice. The new technologies forum will be monitored based on the uptake by the project as piolet examples and by the RFMOs and industry to address and solve particular requirements.

Output 2.1.1 is to develop frameworks to improve science-management interface and strengthen information exchange. This will be achieved through a better understanding of the management-science and science-management interfaces, so that requests by managers for scientific advice are fully formulated and that the best available scientific advice can be developed and communicated appropriately to managers. This will commence with a review of the existing mechanisms of communication between the RFMO management and scientific committees, including the new mechanisms that have been developed to address both a common understanding of issues and improvements in efficiency. This output is open to including the compliance committees, though the main overlap here is in the duties assigned to on-board observers who support the work of the compliance committee and/or the scientific committee. This will occur in the first year of the project.

The second activity under this output is the application of the precautionary approach and the ecosystem approach to fisheries that has typically been addressed by scientific committees, but are really issues that require joint attention by both RFMO bodies. The review of the uptake of the EAF component was undertaken in the GEF-5 DS project (4660), whereas a similar analysis will be undertaken at the start of this GEF-7 project. The work is mainly participatory with RFMOs and appropriate stakeholders and designed to support the development of frameworks that promote the uptake of the precautionary approach and EAF.

Output 2.1.2 looks at the interface between the RFMOs and the fishing industry to increase joint cooperation and stewardship of the resource. This is a challenging output that aims to support and complement existing management mechanisms by allowing industry to share their inputs on the development of management measures and provision of scientific advice. In many respects, this is already happening within national delegations who invariably include industry representatives. Here we will explore if there are benefits for this happening at the RFMO level. This activity will happen throughout the five years of the project.

Output 2.1.3 will develop a platform, initially housed at FAO, for sharing new and innovative technologies for improved monitoring, reporting and information sharing. This will be assisted by the development of web-based information sharing platforms. The concept is to link the developers and projects who have and are trialling innovative technologies with the RFMOs, States, and industry who have problems that can be solved through the application of technology. The use of technology will strengthen the decision-making and science-advisory processes within the fisheries sector necessary for enhancement for supporting effective control measures, compliance monitoring and scientific information gathering. The focus will be on the use of cameras to support on-board data gathering by observers and vessel masters, and on reducing the amount of fishing gears that are lost or abandoned at sea. The main activity in this output is the development of a sharing platform; the uptake of new technologies will be supported under other outputs.

Outcome 2.2 ? Advice supporting science-based fisheries management improved

This outcome supports RFMOs in the assessment and management of data-limited fish stocks and other activities that support the wider application of the EAF though applying ecosystem productivity models and assessing the social and economic values of DSF. This will highlight the social and economic losses resulting from over-exploited fisheries and help identify options to return systems that maximise ecological and socio-economic benefits.

This outcome will be monitored largely by uptake by RFMOs in their management and scientific committees. This will be demonstrated by improved advice and/or control measures incorporating results from these outputs.

GEF-7 Core Indicators 8 (on over-exploited stocks) will also be assessed under this outcome whereby improvements during the project periods will be evident. This will mainly be through improved assessments identifying the status of the data-limited deep sea fish stocks, particularly for alfonsino and armourhead. The recovery to levels that can provide MSY catches is unlikely to occur during the project period (if indeed the stocks are found to be below optimal levels) as this can take decades and is dependent upon prevailing environmental conditions.

Output 2.2.1 involves the use of ecosystem productivity models in the provision of scientific advice. These models are not new, but have been increasingly been used to support scientific stock-assessment advice in line with increasing appreciation that environmental drivers play a significant role in stock productivity. Changes in environmental conditions, which result from natural long-term variations or to man-made climate change, and the resulting changes in primary, secondary and tertiary production, all help to provide better assessments and allow for improved management. Further, ecosystem monitoring required to develop the models also acts as early indicators of change, either from pollution or climate change, or some other form of impact. The main activity in this output is the holding of a symposium to bring together work currently undertaken on these models in a structured framework that goes from pure science to the adoption of management measures. The symposium is planed for the 2nd or 3rd year of the project. The preparation for the symposium and the project?s follow-up work afterwards is an integral part of this output. Uptake of ecosystem-level predictions is challenging in RFMOs because it moves from single-species to multi-species advise. However, there is also a need to incorporate ecosystem considerations into single-species advice under an EAF and this will be its most immediate use.

Output 2.2.2 concerns the fishing on data-limited stocks and is a significant challenge to fisheries management, to the industry, and to transparency. A survey of the 76 high seas deep-sea stocks undertaken during the GEF-5 DS project (4660) showed that their stock status (biomass) was satisfactory (fisheries sustainable) for 29 stocks and unsatisfactory (fisheries unsustainable or closed) for 24 stocks, with the status of 23 stocks being unknown. ICES (2018) developed in 2016 a stock classification based on the type of information available for assessment which ranges from Category 1 (full analytical assessments with forecasts), through Category 4 (landings and effort data only), down to Category 6 (bycatch fisheries with negligible landings). Most DSF stocks fall into Categories 4?6. The lack of information on reliable trends in stock biomass makes the application of adaptive management very difficult, but there is a need to develop mechanisms for precautionary management in the absence of full scientific assessments. This is needed to quantify progress on SDG target 14.4 on sustainable fisheries. In order to give this output some global coherence, it will focus on the assessments of alfonsino and armourhead (=boarfish). These are typical seamount species whose catches are relatively

low and whose biology makes them difficult to assess. They are represented in all regions except the Mediterranean. Orange roughy is not a focus species for the project, mainly because it is an iconic seamount and deep slope species that is well worked on by RFMOs. Where appropriate, there will be a cross-fertilisation of ideas to improve assessments overall.

A two-pronged approach will be taken to improve data-limited stocks assessments, both being coordinated by ICES. The first activity undertaken by the project will be a review of the data collection requirements and a comparison with information actually collected. This will be supported by the ?new technologies? output, as appropriate, to support on-board observers in their data collection tasks. The second activity will review the assessment models through participatory workshops across regions in an attempt to improve assessment models and better define the data collection requirements. A final activity is direct support to SIOFA in the Indian Ocean though the FAO EAF-Nansen program[5][4] involving joint work with commercial vessels to assess alfonsino through acoustic methods and comparisons with surveys undertaken by commercial vessels. The work is planned for 2023 but is subject to the availability of the R/V Dr. Fridtjof Nansen vessel.

Output 2.2.3 follows on from studies on the application of EAF undertaken during the GEF-5 DS Project (4660) that identified gaps in the application of the economic and human pillars of EAF by RFMOs. Whereas this is outside of their direct remit, economic and socio-economic discussions form an important part of the RFMO Contracting Party meeting preparations. It is generally accepted that the inclusion of these pillars would improve the development and uptake of control measures and increase transparency. This will be promoted by determining the social and economic value of DSF and how this can be incorporated into EAF (though it is appreciated that RFMOs may not be the appropriate forum for these discussions). There are five activities in this output. The first is to examine the DSF value chains to better understand the importance of DSF in food and employment security and to look at issues related to control points, decent work and gender equity. The second, third and fourth activities will work with RFMOs to develop gender equality and decent work awareness, culminating in the development of frameworks to support RFMOs and contracting parties in their application of these issues. The final activity to be undertaken in the final two years of the project will determine how and if the social and economic pillars of EAF should be incorporated into the RFMO framework. This is challenging, as it is known that the main drives of DSF are social and economic, yet the RFMOs are set-up to assess stock status. The question related to EAF and fisheries management deals with improvements in the management process if the social and economic drivers were discussed openly and transparently within the RFMO fora.

The non-staff regional travel budget associated with this output (60 trips) is for use to support young professionals at the beginning of their careers, with preference given to promoting young women working in the fields of fisheries management, science or MSC.

Outcome 2.3 ? DSF impacts on biodiversity quantified, assessed and managed

This outcome supports RFMOs to further assess and quantify impacts on biodiversity that may arise during the course of normal deep sea fishing operations with gears that contact the seafloor. This is a difficult and complex topic as the gears are fished differently, in different areas, and for different target

species. Bottom trawls, around the 2000s, were targeted as highly destructive gears and this belief is still widespread. However, bottom trawls require relatively smooth terrain in which to tow over, which is common in shallower waters and on deeper slopes, but hard to find on deep ridges and seamounts. As such, they only impact a small area. Longlines, gillnets and pots, on the other hand, can be fished over a wider range of habitats including rocky grounds where VMEs occur, and so may impact much wider areas. Further, it is often hard to identify the significance of the impacts, as they can be hard to observe and monitor. This outcome will focus on impacts on deepwater sharks and VMEs, which are likely the main ones beyond the targeted fish stocks that are assessed through the traditional stock assessments. Impacts on seabirds can occur in bottom-set longline fisheries, but these are best studies in conjunction wit the tuna mid-water longline fisheries and so are not dealt with in this DSF Project (10623).

Impacts on deepwater sharks will be addressed by monitoring the number of RFMOs who have effective measures to reducing incidental deepwater shark mortality, and this includes assessing the effectiveness of existing measures and quantifying the actual impact on deepwater shark populations. The later is necessary but challenging, as deepwater sharks are notoriously difficult to identify and little is known about their population status. Impacts on VMEs, at the outcome level, will look at the overall spatial monitoring of DSF using VMS and gear monitoring systems. This is necessary to assess the percentage of areas fished by each gear type and then assess the risk to VMEs. An increased knowledge of the spatial extent of DSF by gear type is beneficial for studying changes in the fishery due to environmental and climate change, on stock assessments, and on developing temporal and spatial fisheries restrictions to protect target stock spawning and nursery areas, and reduce seasonal impacts.

GEF-7 Core Indicators 2 (on biodiversity) and 5 (on improved practices) will also be assessed under this outcome whereby improvements during the project periods will be clearly evident.

Output 2.3.1 will study impacts on deepwater sharks. These have already been conducted in 5 of 7 dsRFMOs using a variety of methods according to their individual regional needs. Deepwater shark catches by bottom fisheries are known to occur in the Mediterranean and believed to be minimal in the North Pacific, but neither region has conducted impact assessments. The main constraint in the analyses in all regions has been a paucity of data on catches by commercial vessels exacerbated by difficulties in species identification. Basic information on the spatial distribution of deepwater shark species and of bottom fishing activities, and gear-related catchabilities are also generally lacking. There are four activities that will support this output. The first activity will review data collection processes conducted by RFMOs on DSF vessels, combined with support for improved data collection using, as appropriate, new technologies as identified under output 2.1.3, training and workshops. The second activity will concern the assessment of risk and impacts on deepwater sharks that will likely require the development of new or improvement of existing analytical methods. The third activity is a study on the effectiveness of existing mitigation options, likely supported by computer modelling. However, it is not clear that effective mitigation options are currently in place or have even been developed for deepwater sharks. Such a mitigation measure requires dealing with low level impacts over a potentially wide area on a long-lived species. Unlike VMEs, it is likely not possible to delineate and close an area, but an improved knowledge of the biology may allow for effective seasonal closures. Gear modifications would seem the most effective option, and these will be investigated further under this output. The final

activity is a symposium planned for the third year which will bring together the collective knowledge and highlight the issues to a wider stakeholder audience.

Output 2.3.2 concerns the protection of VMEs, which is well developed in most regions with many known or likely VME areas closed to bottom fishing. However, there are still great difficulties in mapping VME distributions and in assessing actual impacts on VMEs (i.e., if impacts are significant adverse impacts) by the different bottom fishing gears. In addition, seamount trawl fisheries are assumed to be high destructive but fish only on the flatter parts of a seamount or on narrow trawl lanes, whereas seamount longline and gillnet fisheries have a greater potential to be deployed over a much wider range of bottom slopes and rugosity where VMEs typically occur. Such interactions need to be quantified in order to provide better targeted protection. Fisheries interactions with deepwater sharks and with VMEs are also relevant to marine spatial planning exercise and of interest to other emerging sectors using the marine space (see Component 3).

There are four activities under this output. Firstly, is improved mapping using technologies available on-board commercial fishing vessels, including supporting the use of underwater cameras deployed on the fishing gear. This is particularly important in exploratory fisheries in areas that have not been previously fished. Secondly, is a second review of the implementation of the FAO DSF Guidelines which was first conducted in 2010 in Busan only two years after they were adopted. These guidelines have been widely applied with uptake being tailored to the specific needs of each region. Thirdly, and perhaps the most challenging, is the monitoring of VMEs for ecosystem status. Whereas this is unlikely to be within the mandate of the RFMOs, it may be within the mandates of the national fisheries research and monitoring centres, and would be desirable when looking at status change due to recovery following reduced impacts or climate change. However, there are considerable challenges to overcome, partly scientific and partly financial as such surveys would be expensive. Such things will be considered following the BBNJ negotiations. The final activity is the improved mapping of DSF by position and gear type. There are some technical difficulties here and much work has been undertaken by RFMOs in linking VMS position information to observer or logbook records on gear deployment (and perhaps this will only be fully solved through electronic monitoring systems). The other challenge, and perhaps more significant, relates to commercial and other forms of confidentiality, and work will be undertake to openly discuss these issues. Newly identified technologies under Output 2.1.3 will be used to support the identification and protection of VMEs.

Component 3 - Improving understanding and management of cross-sectoral interactions with DSF

Fisheries in the ABNJ operates in the 400 ? 2 000 m depth range, sometime shallower and deeper, and apart from avoiding marine cables has not interacted much with other sectors. However, activities over the last 20 years regarding biodiversity conservation and the establishment of marine protected areas (MPAs, though not really in the ABNJ) has brought these two sectors closer together (treating biodiversity as a sector). Further, the advent of deep sea mining may start to overlap with some of the deeper fisheries, and this will lead to the need for sectoral collaboration. To complicate this, deep sea mining on the extended continental shelf area is likely to be regarded as a national or coastal state

issue, whereas the fisheries in the ABNJ are regional issues. This component will look at these interactions from the viewpoint of how they will affect DSF.

<u>Outcome 3.1 ? Improved integration of cross-sector activities to maintain biodiversity and resource sustainability</u>

This outcome aims to develop linkages between the fisheries sector and other resource users of the ABNJ marine space and in particular with the mining and biodiversity sectors. The mining sector in the ABNJ is under the ISA established as an autonomous body through UNCLOS and the 1994 Agreement[6][5]. Biodiversity is embedded within UNCLOS and in the mandates of the RFMOs and ISA, to the extent that the fisheries and mining sectors should avoid impacting on biodiversity whenever possible. But through the BBNJ negotiations biodiversity is starting to be regarded as a resource that needs direct protection. At present, there is some potential spatial overlap between the planned shallower deep sea mining activities and deeper DSF.

This outcome will be monitored by the number of RFMOs where mechanisms have been developed in collaboration with relevant sectoral agencies to mitigate and manage cross-sectoral impacts to DSF. This is likely to manifest itself initially in improved cross-sectoral cooperative impact assessments, the development of assessment tools, and finally frameworks for cooperation among different sectors.

Output 3.1.1 concerns the identification of possible interactions with other sectors and the development of tools to assess the significance of such interactions. These may be due to the establishment of biodiversity protection areas or mining concessions that exclude fisheries form an area, or it may be due to analysing the effects of sediment plums from deep sea mining operations dispersing into the water column and carrying fine particulate matter and potentially toxic metals. There is a need for fisheries organisations to develop the tools and mathematical models to be able to assess the significance of such impacts on DSF in order to be able to support the ISA and CBD in their impact assessments. The impacts could be of an ecological, social or economic nature. Activities will include a scoping study on nature, spatial extent, possible impact of activity, and science needed to assess interaction followed by virtual workshops and reports in an on-going process to identify possible interacts and to develop the science needed for impact assessments.

Output 3.1.2 deals with frameworks or cooperative agreements with different competent authorities managing the use of the marine space. This builds upon the conclusions of output 3.1.1 dealing with interactions, and will likely be limited to the ISA (for deepsea mining) and CBD (for biodiversity), and potentially national authorities. Clearly such frameworks are, or will be, discussed during the BBNJ negotiations and this output is not intended to prejudge or influence any decisions arising during these negotiations. It?s intent is to start to establish likely management and scientific mechanisms by which relevant sectors can communicate and undertake joint and transparent impact assessments. This will allow for an evolution of potential cooperative mechanisms that can begin prior to any outcomes of the BBNJ negotiations entering into force (and it is unlikely any outcomes can enter into force before the end of the DSF Project (10623) period planned for 2027).

The DSF Project (10623) regards such cooperation as a 2-way (or multi-way) process whereby all users benefit from improved spatial coordination of the ABNJ space. Each sector can contribute to the

success of the other sectors, whilst realising that there will be a process of compromise. With respect to fisheries, this means dividing the fishing space into fished areas, unfished areas, and protected areas (something that has been undertaken in most regions for DSF). The other users will be required to do the same for their resource usage, and again partly done for mining and biodiversity. The project?s activities will involve the establishment of an expert advisory group comprising of members of the resource sectors, with the suggestion that NAFO and NEAFC play a lead role for the RFMOs owing to their prior experience in cross-sectoral work, and hopefully representatives from the CBD and ISA. The plan is to hold virtual meetings to advance the process once a year for the duration of the DSF Project (10623) and for the project to act on any recommendations that the group make.

As a final caveat, it is sensible to remember that the economic users of the marine space in the ABNJ are also those that have the resources to map and protect biodiversity. This can clearly be demonstrated by the work undertaken by the RFMOs and their members to map and protect VMEs. To a large extent, the RFMOs and their members contributed a significant amount of information to the CBD EBSA description process.

Component 4 ? Knowledge management, communication and M&E

Component 4 is divided into the knowledge management and communication at the DSF Project (10623) and program level, and separately the monitoring and evaluation (M&E) of the DSF Project (10623) in achieving its objectives as stated in the project document. We are here concerned only with the knowledge management and communication.

<u>Outcome 4.1 ? Knowledge generated and shared to raise awareness of project objectives, activities and achievements among stakeholders and target audiences</u>

This outcome addresses knowledge management, communication, monitoring and evaluation, within the project and on how the DSF Project (10623) interacts with the program and other projects within the program. We are here concerned only with the knowledge management and communication. There are no baselines attached to this component, except that reviewers of the GEF-5 Common Oceans ? program? noted that there was little coordination and collaboration among the projects. This is a true but perhaps slightly unfair comment in that this was never built into the GEF-5 program and projects. This has been rectified in the GEF-7 program and projects, in that the programmatic element is much stronger and has a GCP (10626) to support common and higher level coordination.

The outcome level indicators at the project level identifies the number of RFMO websites that have improved their communication strategies to reach a wider stakeholder audience. Whereas this may seem to be a minor outcome - it is not. RFMOs, and indeed the RFMO websites, were set up to serve the RFMO members with little emphasis being given to outside non-fisheries audiences. This started to change about ten years ago, and RFMO websites contained progressively more information on activities that are relevant to a wider range of stakeholders. This will be reviewed and promoted in the DSF Project (10623). However, the project recognises the constraints faced by RFMO Secretariats in developing their websites for wider stakeholder engagement and the resources available to them. They will never match the level of the large national government facilities or NGOs who depend upon website communication for support.

Output 4.1.1 will particularly support the RFMOs to further their communication outreach to inform both the BBNJ negotiations and wider stakeholders on the management of sustainable fisheries currently undertaken in the ABNJ. There is an increasingly growing negative press about the state of the fisheries and the fisheries impacts on biodiversity in the ABNJ and EEZ areas. This is exacerbated by the widespread dissemination of mis-information regarding the lack of regulatory legal instruments currently operating in the ABNJ. As stated earlier, there exists internationally adopted conventions that cover fisheries, mining, shipping, labour conditions, and more. It is the strong believe of this project that these existing mechanisms exist, are effective, and need supporting and advertising.

There are two main activities under this output. Firstly, the review of the RFMO websites with regard to wider messaging to other stakeholders. This will be achieved by a report by an independent expert review of the RFMO website content to achieve the wider messaging. The report will then be subject to participatory review by the RFMOs and a plan made for recommendations to RFMOs regarding inclusion of wider messaging in their websites. Secondly, this output will concern messaging on the project?s work at the project and program level, including support to the GCP (10626) for higher level messaging. This is considered an important DSF Project (10623) activity and will fully integrate the project into the program. These later aspects will be monitored at the program (GCP) level.

d. Alignment with GEF focal area and/or Impact Program strategies

The Project is consistent with IW Objective 2: Improve management in the Areas Beyond National Jurisdiction (ABNJ) through activities leading to: (i) improved DSF governance, including through the strengthening and implementation of regulatory frameworks, (ii) strengthening the effective management of DSF through improved decision making processes, improved advice supporting science-based fisheries management and improved management of DSF impacts on biodiversity, (iii) improved understanding and management of cross-sectoral impacts on DSF, and (iv) communicating the DSF Project (10623) objectives, activities and achievements.

IW objective 2 specifically supports investments that:

- •Strengthen support to RFMO activities including national and regional policy setting to end IUU and overfishing and inform sustainably management of marine capture fisheries,
- •Policy work towards reaching agreements to reduce harmful fishing subsidies,
- •Collaboration among relevant international, regional and domestic bodies on area-based management in national waters and ABNJ,
- •Reduce overexploitation of fish stocks and IUU, through implementation of international agreements, and
- •Reduce overexploitation of fish stocks, with a particular focus on IUU.

Strengthen support to RFMO activities including national and regional policy setting to end IUU and overfishing and inform sustainably management of marine capture fisheries. The Project will strengthen DSF governance by dsRFMOs in the ABNJ through the wider adoption, enforcement and compliance of international obligations and policies aimed at combating IUU fishing and ending overfishing. Gaps in existing regional and national capacity to strengthen monitoring, compliance and

enforcement will be identified and remedied through targeted support including training and equipment provisioning.

Policy work towards reaching agreements to reduce harmful fishing subsidies. The Project will not specifically address policy work related to reaching agreements to reduce harmful fishing subsidies. The Project will, however, mitigate the negative effects of harmful fisheries subsidies by promoting fisheries management practices that will lead to the introduction of sustainable catch and/or effort limits. These limits will maintain catches at sustainable levels, regardless of whether fishing fleets are subsidized or not.

Collaboration among relevant international, regional and domestic bodies on area-based management in national waters and ABNJs. The Project will improve stakeholder coordination and engagement in multi-sectoral processes addressing governance and management of ABNJ. The component will identify potential interactions between the fisheries sector and other sectors in the high seas and make this information available to allow for the development of future dialogue on multi-sectoral management. The component will also assist RFMOs in developing tools for sectoral and spatial impact assessments, both on and by fisheries.

Reduce overexploitation of fish stocks and IUU, through implementation of international agreements. The Project will strengthen DSF governance in the ABNJ through the wider adoption, enforcement and compliance of international agreements obligations and policies aimed at combating IUU fishing and ending overfishing. The Project will assess the uptake of applicable international regulations and guidelines relevant to managing fish stocks and combating IUU fishing. The Project will work with key stakeholders such as dsRFMOs and the private sector to ensure broad based support for the implementation of international agreements.

Reduce overexploitation of fish stocks, with a particular focus on IUU. The Project will reduce the overexploitation of fish stocks on two levels. The Project will improve fisheries management by developing sustainable catch and effort limits through the identification reference points for data-limited stocks and by increasing the number of stocks assessed. This will ensure that catch levels are set at sustainable levels that will prevent overexploitation of fish stocks, especially those that had not been effectively managed due to data limitations. The second level will involve the improved adoption, enforcement and compliance of international obligations and policies aimed at combating IUU fishing and ending overfishing.

The GEF-7 private sector engagement (PSE) strategy principally aims to mobilize the private sector as an agent for market transformation. This is achieved through enhanced coordination and knowledge management in partnership with the GEF Agencies and countries. A critical element for the DSF Project in promoting sustainable DSF is embedded within the PSE strategy on multi-stakeholder platforms to drive systematic transformation beyond the transactional level. This can be considered a form of public-private partnership and is embedded in Output 2.1.2 on ?Frameworks to improve industry contributions to sustainable DSF?. This is intended to explore possibilities of engaging the commercial fisheries private sector in supporting the assessment and management of fish stocks and impacts on biodiversity by RFMOs. It is not envisaged that this will take the form of co-management but it is envisage this will increase efficiencies and uptake that will reduce produce more effective and efficient control measures and reduce IUU fishing. It is hoped that this will allow for an evolution of

existing ?arrangements? between, for example, the RFMOs SIOFA and SPRFMO with the industry groups SIODFA and HSFG, respectively. The GEF-7 PSE strategy will potentially, to a lesser extent, also be supported by upscaling of innovative technologies (Output 2.1.3) and public-private partnerships along the value chain (Output 2.2.3).

GEF?s Response to Covid-19. GEF are supporting a coordinated response to support transformational change to restore a balance between natural systems and human systems, as this has been identified as one of the root causes of the covid-19 pandemic (https://www.thegef.org/council-meeting-documents/gefs-response-covid-19). Whereas it is hard to make a connection between the covid-19 pandemic and the state of the marine ecosystems in the ABNJ, there is a wider and more important message being made by GEF that healthy natural ecosystems are more resilient to perturbations, whether they be of man-made or natural origins. The DSF Project, under output 2.2.1 on productivity models (including demersal and pelagic species) examines the overall energy pathways and predator-prey relationships in an attempt to move beyond single-species fisheries management towards a multi-species approach looking at Ecosystem production potential (EPP) and the setting of area-based total catch limits (TCL). The modelling undertaken to develop this will also serve to ensure that there is a balanced healthy ecosystem. This work is supported by outputs 2.3.1 and 2.32. that examine impacts on deepwater sharks and benthic vulnerable marine ecosystems. Collectively, through these and other outputs, the DSF Project will monitor ecosystems so that they can better respond to perturbations, for example, due to climate change.

GEF?s covid-19 plan also addresses the more immediate effects on project delivery and on how the project can support post-covid recovery in deepsea fisheries. These are described in several places in this project document but most notably under Part II ? 5 on ?Risks? and summarised in Tables 7 and 8.

The Project is also consistent with BD Objective 1: Mainstream biodiversity across sectors as well as landscapes and seascapes, through activities leading in the improved identification of VMEs, quantification of DSF impact on VMEs and mapping of VME distributions.

e. Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

GEF funding will ensure coordination and collaboration among the many stakeholders involved in DSF. This will build on synergies built under the GEF5 Project, which in particular provided a vehicle for the deep sea RFMO Secretariats to more effectively work together and support each other?s activities. The Project will continue to support the deep sea RFMOs, which are the legal instrument of governance of DSF in the ABNJ, to ensure consolidation and continuation of processes initiated under the earlier project. This will ensure consistent progress towards the Project?s objectives.

Without the Project and GEF financing, actions would still be taken to achieve sustainable DSF and biodiversity conservation, but at a slower pace and in a more piecemeal manner, with more limited prospects of uptake and impact. There would be additional risks to biodiversity conservation as a result of the slower, fragmented approach. Given its capacity for mobilizing substantial financial resources and technical knowledge, GEF is uniquely placed to orchestrate the concerted and integrated project

that is. Moreover, the Project?s objectives and expected results are in complete alignment with GEF focal areas.

The Project will improve the sustainability of DSF and biodiversity conservation through the delivery of the Project?s four components that address the challenges noted above:

Component 1 will strengthen DSF governance by dsRFMOs in the ABNJ through the wider adoption, enforcement and compliance of international obligations relating to sustainable fisheries management aimed at maintaining stocks and reducing impacts. The component will examine the interpretation and uptake of applicable international regulations and guidelines relevant to managing fish stocks and reduce impacts. The incorporation of international and regional regulations into national legislation will be assessed through a self-assessment process to be developed by the project. Gaps in existing capacity to strengthen monitoring, compliance and enforcement will be identified and remedied through targeted support including training and equipment provisioning as necessary using the step-wise legal guide[7][6].

Mechanisms for more automated and remote MCS tools to support on-board observers and port sampling officials will be promoted as a means for both more efficient and consistent data collection and to help mitigate problems resulting from the covid pandemic and other situations where observers are not on vessels (these will be developed through output 2.1.3.). This will lead to improved compliance to prevent IUU fishing and more accurate scientific advice.

Component 2 will improve the dsRFMOs? capacity to manage fisheries sustainably in ABNJ. The component will work with scientists and managers representing member states of RFMOs to improve scientific advice through the uptake of new and innovative technologies and more informed decision-making by strengthening the science-management interface and cooperation with industry. The component will improve also fisheries management under EAF by identifying reference points for data-limited stocks and increasing the number of stocks assessed. This includes developing socio-economic indicators and examining the consequences of climate change leading to adaptive management. The component will also examine risk assessment methodologies to mitigate impacts on non-target species and VMEs. This will help RFMOs develop appropriate measures for sustainable fisheries.

Component 3 will improve stakeholder coordination and engagement in multi-sectoral processes addressing governance and management of ABNJ. The component will identify potential interactions between the fisheries sector and other sectors in the high seas and make this information available to allow for the development of future dialogue on multi-sectoral management. The component will also assist RFMOs in developing tools for sectoral impact assessments, both on and by fisheries. These entry points by the fisheries sector will promote multi-sectoral planning and feed into other projects under the Program, notably the Sargasso Sea (10620) and Cross-sectoral (10697) projects.

Component 4 will improve knowledge and Knowledge Management and lesson learning for more informed decision-making among stakeholders to support sustainable utilization of ABNJ. This component will generate, share and raise awareness of the DSF Project (10623)?s objectives and achievements. At the project level, this will comprise of more technical information directed mainly towards the primary stakeholders which are the RFMOs and the industry. This will be followed by

more general information to raise awareness of fisheries and fisheries management in the ABNJ in general, to inform the wider stakeholder audiences, including the general public and those with biodiversity/conservation interests. The Project will also work closely with the GCP (10626) on the wider cross-project messaging.

Co-financing from the Project?s partners will furthermore ensure that the benefits obtained at the regional level through RFMO-specific activities will be transformed to global ABNJ benefits through the sharing of experiences and lessons learned. This is particularly relevant across the dsRFMOs, where some of the more established RFMOs can share experiences with more recently established ones.

f. Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

Overall the Project will reduce threats to global waters by addressing deep sea fisheries sustainability and biodiversity conservation, helping restore and sustain marine ecosystems as well as reducing the vulnerability to climate change and climate related risks, and increasing ecosystem resilience.

The associated Global Environmental Benefits will mainly be derived from measurable improvements in biodiversity conservation through:

> •the identification of new VMES in the ABNJ: the Project will specifically look at different methodologies to identify VMEs using modelling, research surveys and commercial fishing vessels, with the purpose of identifying and establishing new VMEs. The R/V Nansen will also be used to survey selected areas in the Indian Ocean to help techniques for the identification of VMEs,
> •improved monitoring of VME status and impacts: the project will develop a plan to monitor and assess the significant adverse impact from DSF on VMEs and to monitor ecosystem health of VMEs, and
> •improved management practices in areas outside the bottom fishing footprint and outside VME areas (ABNJ areas where ?exploratory? fisheries take place): the project will assess the identification of VMEs in exploratory fisheries occurring outside of the existing bottom fishing areas and the development of management approaches to protect them from significant adverse impact.

DSF impacts on biodiversity will be further quantified for deepwater sharks, including information on their spatial distribution and susceptibility to different fishing gears. The Project will specifically assess the effectiveness of mitigation options adopted by deep sea RFMOs used to reduce impacts on deepwater sharks and recommend appropriate conservation and management measures.

Improved fisheries sustainability outcomes will also be achieved through 50 000 metric tons of DSF moved to more sustainable levels. Furthermore, DSF stocks with an unknown biomass will move to a known biomass (50%), stocks with unknown exploitation levels will move to known exploitation levels (50%), and stocks with no stock measures will have stock measures in place (50%). This will be achieved through a range of activities in the Project, including through:

●improving the science-management interface and application of the precautionary approach (PA) and Ecosystem Approach to Fisheries (EAF) at regional and national levels,

●improving the operational relationship between the commercial fishing industry and the dsRFMOs with the objective of improving the long-term sustainability of fisheries and reducing impacts,

●the use of productivity models to help understand various effects (fishing pressure, climate change, socio-economic) on ecosystem and stock productivity for short and mid-term yield predictions,

●a review of the current data collection programs used to monitor data-limited stocks and the development of fit -for-purpose data collection programs, and

●the development and application of assessment methodologies for data-limited stocks.

The Project will further contribute to the delivery of global environmental benefits through:

●Improving multi-sector collaboration: the project will examine the impacts other sectors may have on deep sea fisheries including measures related to stock sustainability and the protection of biodiversity and will consider frameworks to mitigate cross-sectoral impacts, and

●Improving knowledge management and communication for more informed decision-making among stakeholders to support sustainable utilization of ABNJ.

g. Innovativeness, sustainability, potential for scaling up and capacity development

The International Waters DSF Project (10623) works principally with the sustainable management of bottom fisheries in the ABNJ. The fisheries aspects follow on from an earlier GEF Project, the GEF-5 IW and BD Deep Seas Project (4660), whereas the biodiversity aspects are dealt with through reducing possible fisheries impacts. The Deep Seas Project terminal evaluation highlighted the VME work as being sustainable and suitable for upscaling, but the sustainability of other aspects which were regarded as ?one-off and not expected to continue? was judged to be moderately unlikely without further investment. The terminal evaluation recommended that any follow-up project could greatly benefit from having a partner similar to International Seafood Sustainability Foundation (ISSF) or having ISSF expanding its activity to deep-sea fisheries. This was explored during the preparation phase of the DSF Project (10623) but was quickly identified as not being model that could be applied to DSF. As stated elsewhere in this project document, many of the ?one-off? activities in the Deep Seas Project formed useful baselines for both the RFMOs and this DSF Project (10623).

Innovativeness: There are several aspects of the DSF Project (10623) that can be regarded as innovative.

The Project will develop a platform to share new and innovative technologies (output 2.1.3) to improve monitoring, reporting and information sharing. The focus of this will be on technologies that improve data acquisition for MCS and scientific purposes. Mechanisms for more automated and remote MCS tools to support on-board observers and port sampling officials will be promoted as a means for both more efficient and consistent data collection and to help mitigate problems resulting from the covid pandemic and other situations where observers are not on vessels. This will lead to improved

compliance to prevent IUU fishing (output 1.1.3) and more accurate scientific advice (outputs 2.1.1-2.3.2). The project will promote and support the trialling and uptake of new technologies under other outputs that will help to achieve innovation, sustainability and the project?s objectives.

The project will also work with two ?interface? frameworks that have been identified as important to assisting the RFMO management committees in reaching their decisions to manage fisheries. The first is the RFMO science-management interface where the project will explore existing methods of communication among the two committees and to compare how this is achieved among the RFMOs (output 2.1.1). It is expected that innovative methods of communication will assist this interface and in the understanding of the messaging across contracting parties. The second is between the RFMOs and the fishing industry which is the major stakeholder affected by RFMO management decisions (output 2.1.2). Industry is often an important stakeholder in assisting their own contracting parties, but the project would like to explore if there are options for this at the RFMO level.

The DSF Project (10623) will further work with promoting a better understanding of the spatially-based management measures used by RFMOs, especially in relation to bottom fisheries where spatial measures control where fishing activities occur and how biodiversity is protected (output 2.3.2). The project would like to assist RFMOs in improved mapping of their fisheries, which along with the spatial-measures, would provide for greater of cross-sectoral interactions and an input into the BBNJ negotiation process and into marine spatial planning in the ABNJ in general (output 3.1.2).

To further the cross-sectoral work, the project will support the partners in identifying impacts on fisheries from other sectors (output 3.1.1). This is an extension to work undertaken in GEF-5 on impacts to biodiversity by fisheries, which will be further expanded in this current project. Cross-sectoral impacts on fisheries can arise from direct impacts, such as suspended sediments in the water column caused by other sub-marine human activities, or indirectly through activities such as restricting areas available to fishing by MPAs for example. This can displace fishing activities and increase pressures away from the closure. This has already been observed around VMEs where fishing often increases just outside the closure boundaries (though in reality, perhaps more of a problem with coastal MPAs). Whereas fisheries bodies can predict the effects of displacement, they lack the tools needed to assess other forms of impacts. This work will identify and promoting the use of new tools to look at impacts on fisheries (and hence new methods to look at impacts on biodiversity more generally).

Sustainability: The DSF Project (10623) will be guided by many of the outputs the GEF-5 Deep Seas project (4660) that were evaluated as ?one-off? activities but which in fact form the bases for future development.

The Deep Sea project had a strong legal component that produced several documents relating to the legal frameworks governing the ABNJ (output 1.1.1), to legal gaps in national legislation (1.1.2), and to MCS systems that need supporting (output 1.1.3). Component 1 undertakes this which (a) prepares the bases for the DSF Project (10623)?s other components, and (b) provides input for the long-term development of the legal regimes of the RFMOs and contracting parties. The advantage the project has over the interests of individual RFMOs or contracting parties, is that the project can impartially place this within a global context to align with UN Instruments such as UNCLOS, UN FSA and FAO Port State Measures Agreement which will aid greater sustainability.

The DSF Project (10623) will also undertake its activities fully with its main partners, the dsRFMOs who adopt the management regulations and provide most of the in-kind project activities. Thus sustainability is ensured in areas like the use of new and innovative technologies (output 2.1.3), data-limited stock assessments (output 2.2.2), and protection of deepwater sharks (output 2.3.1) and VMEs (output 2.3.2).

Sustainability is further enhanced through the DSF Project (10623) being implemented by FAO, which is the UN technical agency for fisheries. Many of the project?s outputs will feed into the FAO?s own internal mechanisms for promoting sustainable fisheries and reducing impacts. Especially, it will feed into FAOs biannual publication ?The State of the World Fisheries and Aquaculture?, which requires additional information of fisheries in the ABNJ. In line with this, the project will help, in a small way, to producing information to monitor the SDG and Aichi global targets, especially on the date of the stocks and on spatial-management tools for protecting biodiversity under multi-sectoral governance.

Potential for scaling up: The design of the DSF Project (10623) centres around scaling up the in-kind partner activities at the national and regional levels to the global level through discussing and communicating via workshops and project and FAO publications. This will be especially supported through strong collaboration with industry to trail and assess new technologies need to improve data collection to reduce IUU fishing (output 1.1.3), improve data-limited stock assessments (output 2.2.2), and reduce impacts on deepwater sharks (output 2.3.1) and VMEs (output 2.3.2). The project?s design includes the in-kind contributions and support financing to achieve this.

The DSF Project (10623) will also place RFMOs in a better position to support the BBNJ process through side-events, information exchange, and sharing of fisheries information on spatial use (output 3.1.2). This is not only particularly important in contributions to the ?sustainable use? aspects of the BBNJ negotiations, but also to the assessment and monitoring of ?marine biological diversity?. A considerable amount of fisheries work, especially in more recent years, has been on monitoring impacts to biodiversity and in undertaking biodiversity surveys. This was appreciated during the EBSA description process organised by CBD where most of the ABNJ submissions originated from fisheries or fisheries-related activities. This is a more general form of up-scaling and one that will benefit the status of the oceans for generations to come.

With respect to scaling up, particular attention is given to communication strategy (output 4.1.1) and the GCP (10626). As is often noted, ocean management is multi-sectoral with fisheries being one of the sectors. There is a need to communicate the work of the fisheries sector with other sectors and vice versa. Communication by the RFMOs is through their websites and by representation at other meetings. The purpose of the RFMO websites was originally to communicate to their contracting parties, though this has been progressively expanding over the past ten or so years with great outreach to wider audiences. The DSF Project (10623) will review the RFMO websites with a focus on greater outreach and wider messaging, using expertise available through the communicators experts working with the GCP (10626). This will again enhance scaling up in the multi-sectoral context.

Capacity development: This current DSF Project (10623) has investments into capacity building, but also notes that this has been included extensively in projects over the past 20 years often without a lot of sustainable success. There are many examples of compliance infringements from lack of report submissions, and scientific stock assessments and impact assessments being attempted and dropped

owing to a lack of data. Usually there have been data collection protocols in the measures or as requests from scientific council, but the data has just not been collected or has not been made available. The DSF Project (10623) will therefore examine why compliance monitoring or data collection has been problematic, and then decide on the appropriate form of capacity building to solve the constraint.

The capacity building currently in the project includes the review of the uptake of international measures by RFMOs (output 1.1.1) and of regional measures by national authorities (output 1.1.2). This will identify gaps and then corrective measures can be proposed and their uptake supported by the appropriate intervention. The identification of gaps at the national level will be supported by a self-assessment questionnaire that follows on from work undertaken under the GEF-5 DS Project (4660), supplemented by e-learning tools which will be developed by FAO with funding from the project. The capacity building and training for corrective measures will be coordinated though output 1.1.3 and will include:

- Port inspection training (output 1.1.2),
- Observer training for data recording (compliance and scientific) (output 2.2.2),
- Deepwater shark catch monitoring and bycatch reduction (output 2.3.1),
- VMS and mapping of DSF by gear type (output 2.3.2), and
- Other topics identified by self-assessment (output 1.1.2).

The above may include training needs for the use of new and innovative technologies designed to meet compliance and scientific needs (output 2.1.3). Technical training on data-limited stock assessment methods will be conducted through ICES (output 2.2.2) and will cover capacity building to better understand the assessment data needs and in the training of scientists to discuss and apply new assessment methodologies.

In addition to the more directed capacity development, the project will work on the general applications of the ecosystem approach to fisheries (EAF) and the precautionary approach (PA) (output 2.1.1). This will provide a focus to activities to improve the science-management interface. EAF work in the GEF-5 DS project (4660) identified strengths and weakness in the way it is currently applied by RFMOs, with a general finding that it is confined to the work of the scientific committees. There was little application of the social and economic components to the work of the RFMOs, though it is known to be important within national delegations with extensive pre-meeting consultations with industry and processors. Work on the precautionary approach was not undertaken in GEF-5. The DSF Project (10623) will build capacity towards a more inclusive application of both the EAF and PA.

There is also capacity building in preparation for greater interactions from other resources users of the ABNJ space through impacts to DSF (output 3.1.1) and frameworks to mitigate and manage cross-sectoral impacts (output 2.3.2).

System-wide capacity development (CD): The DSF Project (10623) has been designed to cover all aspects of the management of deep sea fisheries, but with a focus on those aspects that RFMOs find most challenging. These include managing data-limited stocks, identifying impacts on deepwater sharks, quantifying significant adverse impacts to VMEs, and mapping deep sea fisheries. This will be covered from the legislative perspective, data collection challenges, provision of scientific advice, formulation and adoption of measures, and how these enter the multi-sectoral arena including

biodiversity conservation. The reason for choosing the above as a project focus is that RFMOs expend most of their effort on the management of the main and productive target fisheries, where it is unlikely that the project will have significant impacts.

Training offered under several outputs will be directed towards individuals belonging to RFMO contracting parties, with a strong preference to supporting individuals from GEF-eligible countries. Past experience has shown that this is often where the weakest sustainability link in capacity development occurs, with training being given to individuals who are either incorrectly selected or who frequently change jobs. This is a difficult issue to address, but the hope is to develop new and innovative tools that are to some extent independent of the operator.

The project will also work with its regional partners to build up a global picture to ensure that lessons learnt at the regional levels can be made available at the global level. Sustainability is ensured by working with the RFMOs and fishing industry, and the project delivering the appropriate tools and training by the end of the project (with strong legal and RFMO frameworks in place). It is hoped that this approach will result in system-wide capacity development.

Summary of changes in alignment with the project design with the original PIF

There are very few changes since the submission of the PIF, and nothing that changes the overall objectives of the project. The changes are detailed below.

Map

Project Document	PIF	Change
Figure 2. Map of deep sea RFMOs (GFCM, NAFO, NEAFC, NPFC, SEAFO, SIOFA, SPRFMO).	Figure 1. Map including deep sea RFMOs (GFCM, NAFO, NEAFC, NPFC, SEAFO, SIOFA, SPRFMO), RFBs (CECAF, WECAFC) and CCAMLR.	This just represents a change to reflect the map only includes the partner deep sea RFMOs, as stated in the PIF under ?Indicative sources of Co-financing?.

GEF Core Indicator Number 2

Project Document	PIF	Change

42 million hectares (Indicator 2.1 = 12 million ha; indicator 2.2 = 30 million ha).	12 million hectares (Indicator 2.1 = 11 million ha; indicator 2.2 = 1 million ha).	The areas have changed because of a calculation error at the PIF stage. The values in this project document now comprises of 12 million ha of marine protected areas (VMEs) newly created (i.e. 10 percent new VME areas created during the project period) and 30 million ha of marine protected areas (VMEs) under improved management (i.e. 25 percent of the VME area currently closed to bottom fishing). The total area currently closed by RFMOs to protect VMEs is 120 million ha. The PIF stated that 50 percent of the current VME area will have improved and transparent compliance monitoring and 10 percent of the current VME area will have been monitored for biodiversity and climate change resilience and information disseminated. Owing to the calculation error mentioned above, this has been revised to 20 percent and 5 percent, respectively. Such changes should be reflected in an increased METT score for the relevant regions (see below).
The regional METT scores ranged from 51-71 for the VME closed areas.	No METT scores included.	The METT scores were added because it is believed they will assist in the improvement of the management of the VME sites. They also highlight important regional differences. Some of the categories used to calculate the METT index do not fit well into the process used to adopt VME closures, and so the scores given above can not be compared with METT scores from other MPAs. A detailed METT calculation table is included in Annex F to assist the project in calculations for the mid-term and final targets on the objective level indicators (that are based on the GEF core indicators).

GEF Core Indicator Number 7

Project Document	PIF	Change
?1? representing global (i.e. the ABNJ)	Not included	This was added to include the contributions that the DSF Project will make to the IW learn programme under GEF-7 CI 7.4. It was added to Part I ? Section F and to Annex F.

Theory of Change

Project Document	PIF	Change
There is no reference to the Tuna Project (10622) in the Theory of Change	The ToC includes the text ?(+tuna) in six outputs.	The addition of ?+tuna? in the PIF indicated likely areas of collaboration between the DSF Project (10623) and the Tuna Project (10622). This was removed from the ToC as it was felt that the ToC should reflect the outputs and outcomes of the DSF. Annex O shows outputs from the DSF (10623) and Tuna (10622) projects that will benefit from stronger technical coordination to address similar challenges faced by the management of these two dissimilar fisheries. Collaboration between the DSF Project (10623) and the Tuna project (10622) will be promoted under the GCP (10626) with the details being decided when the activities are undertaken at the beginning of the projects.

Partners and co-financing

Project Document:	PIF:	Change

| Subtotal USD 48,860,002; Project Management Cost (PMC) USD 2,442,998; Total project costs USD 51,303,000. | Subtotal USD 59,400,000; Project Management Cost (PMC) (at 5%) USD 0; Total Project Cost USD 59,400,000. | The Project Document shows a decrease of $9,097,000 in co-funding. Written confirmation has been received for USD 51,303,000 (NEAFC, NAFO, GCFM, NPFC, SEAFO, SIOFA, FAO, ICFA, ICES, SIODFA and NOAA). Additional commitments are expected by February 2022. The contribution from ICES is a significant addition and this will mainly be used to support activities organized by ICES for output 2.2.2 on data collection and assessment of data-poor stocks. |

Outputs under Outcome 1.1

Project Document:	PIF:	Change:
Output 1.1.2 ? Actions to address RFMO and national legal and regulatory gaps in uptake of international obligations related to fisheries management	1.1.2 - Measures to address national legal and regulatory gaps in international obligations related to fisheries management piloted in selected countries.	The word ?Measures? replaced with ?Actions? to avoid confusion with RFMO adopted measures.

Outputs under Outcome 2.1

Project Document:	PIF:	Change:
Output 2.1.2 ? Frameworks to improve industry contributions to sustainable DSF.	Not present.	The inclusion of an output directly related to industry was decided during discussions at the project?s Inception Workshop[8]. It was felt that this output would provide a useful contribution towards increased industry stakeholder engagement at RFMO meetings. The fishing industry is clearly the stakeholder that is affected most by RFMO management decisions, yet they play a very small role in developing and reviewing measures (though they can be influential within national delegations). Further, industry are in the best position to support compliance and scientific monitoring programs. The aim of this output is to improve cooperative between the RFMOs and the industry in support of long-term sustainable fisheries.

Output 2.1.3 ? Platform for sharing new and innovative technologies for improved monitoring, reporting and information sharing developed.	Output 2.1.2 ? Uptake of new and innovative approaches and technologies for improved monitoring, reporting and information sharing piloted and introduced.	This output remains unchanged, but the wording was modified to better reflect the output?s activities. The output was renumbered.
Output removed.	Output 2.1.3 ? Management systems promoting and rewarding compliant behaviour along fisheries supply chain.	This output was removed owing, in part, to the project being rather distant from the management process and the difficulty in working along the supply chain in DSF. The concept will be absorbed into the new output 2.1.2.

Outputs under Outcome 2.2

Project Document:	PIF:	Change:
Output 2.2.2 ? Support provided to RFMOs for improving catch recording (retained and discarded) and scientific advice on data-limited stocks	Output 2.2.2 ? Improved advice supporting science-based fisheries management	The addition of extra wording reflects the role of data collection in the assessment of data-limited stocks. It also recognizes that improved data collection will apply to retained harvested stocks and discarded catch. The emphasis will still be on improvements to assessing data-limited stocks including better data collection and improved assessments. ICES will partner this activity.

| Output 2.2.3 ? Selected issues related to the social and economic dimensions of DSF assessed (including gender and decent work). | Output 2.2.3 ? Socio-economic considerations of DSF assessed and information disseminated. | Change: This output was originally intended to focus primarily on value chains and the inclusion of the social and economic dimensions into EAF by RFMOs. The baseline consultancy on value chains showed that much of the ABNJ deep sea bottom fish catches quickly become mixed in with the much larger EEZ fish catches, and so working along the value/supply chain becomes more of an EEZ focus (and better suited to EEZ projects). This element is still retained in this output for the later years of the project. However, following the GAP analysis and discussions within FAO, it was felt that focussing on the promotion of gender equity and decent work and associated frameworks, would be more productive. Travel funds have been set aside to promote the inclusion of young professionals into project activities, especially and pro-actively young women. |

Outputs under Outcome 3.1 (and Component 3)

Project Document	PIF	Change
Component 3: Improving understanding and management of cross-sectoral interactions with DSF. Output 3.1.1 ? Interactions on sustainable DSF from other sectors operating in the deep seas identified and information made available. Output 3.1.2 ? Frameworks to better mitigate and manage cross-sector interactions with DSF developed.	Component 3: Improving understanding and management of cross-sectoral impacts on DSF Output 3.1.1 ? Interactions between fisheries and other sectors operating in the deep seas identified and information made available. Output 3.1.2 ? Mechanisms to better mitigate and manage cross-sector impacts on DSF developed.	There are small wording changes that reflect a change in emphasis, especially relevant to the component 3 tile and output 3.1.2, to reflect the two-way nature of the relationship between fisheries and the other marine sectors, where ?impacts? was changed to ?interactions?. ?Impacts? are generally regarded as negative but they can also be positive, and it is felt that ?interactions? provides a more balanced term for creating cooperative frameworks, especially regarding contributions that fisheries can make to the UN SDGs and CBD post-2020 biodiversity framework. The change does not affect the planned activities.

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[1] https://www.neafc.org/system/files/2019%20Final.pdf.
[2] 2019. Seven ?Reports on national legal framework pertaining to deep sea fisheries and biodiversity conservation in ABNJ?. Internal DS Project documents, FAO, Rome.
[3] Harrison, J., Lobach, T., Morgera, E., Diz, D., Kuemlangan, B., Manoa, P. and Hamley, G. 2019. Step-wise guide for the implementation of international legal and policy instruments related to deep-sea fisheries and biodiversity conservation in the areas beyond national jurisdiction. Rome, FAO.
[4] Lenel, S. 2020. Monitoring, control, and surveillance of deep-sea fisheries in areas beyond national jurisdiction. Rome, FAO. https://doi.org/10.4060/ca7320en.
[5] https://www.fao.org/in-action/eaf-nansen/en
[6] https://www.un.org/Depts/los/convention_agreements/convention_overview_part_xi.htm
[7] Harrison, J., Lobach, T., Morgera, E., Diz, D., Kuemlangan, B., Manoa, P. and Hamley, G. 2019.

Step-wise guide for the implementation of international legal and policy instruments related to deep-sea fisheries and biodiversity conservation in the areas beyond national jurisdiction. Rome, FAO.
[8] http://www.fao.org/documents/card/en/c/cb2909en (see page 4)

1b. Project Map and Coordinates

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

The DSF Project (10623) is global in scope and operates in the marine waters of the ABNJ. The ABNJ and national EEZ?s were defined around 1979 when UNCLOS was nearing the end of its negotiating phase. The management of fisheries in the ABNJ is primarily the responsibility of the flag states whose vessels fish in the ABNJ. This is normally coordinated through RFMOs that act as a forum for discussion and decision making. RFMOs adopt fisheries measures that are binding on their member states; non-members are not permitted to fish in regions managed by RFMOs. RFMOs fall into three main categories: Tuna-RFMOs managing tuna and tuna-like species, specialist-RFMOs managing single of closely-related species, and deep sea RFMOs managing small pelagic and demersal species. The DSF Project (10623) only works with the deep sea RFMOs, all of whom are project partners.

Though the DSF Project (10623) covers all ABNJ marine waters, its work is primarily focused in those regions where dsRFMOs exist (Figure 1 and Table 1). As can be seen from the map, the areas covered by NAFO and NEAFC extend in to the EEZs of the north Atlantic. However, the RFMOs have no authority to manage fisheries within the EEZs, unless specifically requested to do so by coastal states. It is also seen that the area covered by GFCM in the Mediterranean and Black Sea also extends to the coast, and here GFCM have management authority up to the limit of the territorial waters.

It is seen that there are no RFMOs in the eastern central Pacific and central Atlantic, but there are no significant small pelagic or demersal fisheries here either. One possible exception is a small seamount fishery that targets alfonsino on the Corner Rise, to the south-east of NAFO?s regulatory area. However, with the closure of NAFO?s alfonsino fishery, it is now unlikely that any bottom fisheries occur here. Of perhaps more significance is the southwest Atlantic that has some large ABNJ fisheries very close to the Argentinean EEZ that fishes on straddling stocks of southern cod, Argentinean hake and shortfin squid. The DSF Project (10623) is only planning to work in areas covered by RFMOs. Should the project (or FAO) receive an invite to work in these areas, then this will have to be considered at a Project Steering Committee meeting or at the Mid-Term Review. The reason being is that the DSF Project (10623) would not expect to make any impacts in these areas.

Coordinates and shapefiles are available for all these regions on the RFMO websites and in the FAO VME DataBase.
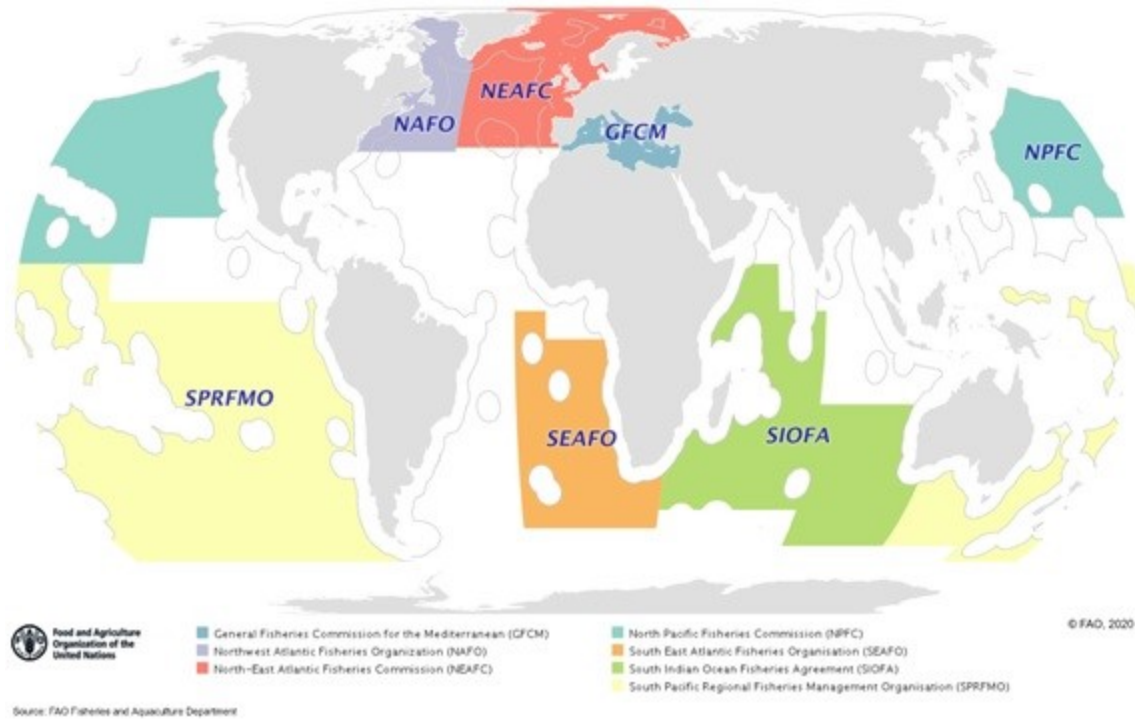
Figure 1. Map of deep sea Regional Fisheries Management Organisations (RFMOs) with the competence to manage small pelagic and deep sea fisheries.

(Note: This map and the accompanying text are provided for information purposes and have no legal status.)

Table 1: Regional Fisheries Management organisations (RFMOs) with competence over bottom fisheries in the high seas.

Region	Body	Acronym	Type	Established (concluded)	Convention (amendments 1)	Area of competence	Regulatory area
Northeast Atlantic Ocean	North East Atlantic Fisheries Commission	NEAFC	RFMO	1959 (1979) 1980	1959 1982 (2004, 2006)	Marine waters - northeast Atlantic	High seas - northeast Atlantic
Northwest Atlantic Ocean	Northwest Atlantic Fisheries Organization	NAFO	RFMO	1979	1979 (1980, 1987, 1996, 2007)	Marine waters - northwest Atlantic	High seas - northwest Atlantic
?	International Commission for the Northwest Atlantic Fisheries	ICNAF	RFB/ RFMO	1949 (1979)	1949	Marine waters outside of territorial waters -- northwest Atlantic	

Southeast Atlantic Ocean	South East Atlantic Fisheries Organisation	SEAFO	RFMO	2003	2001	High seas - southeast Atlantic
Mediterranean and Black Seas	General Fisheries Commission for the Mediterranean	GFCM	RFMO (FAO Art. XIV)	1949	1949 (1963, 1976, 1997, 2014)	Marine waters of the Mediterranean Sea and Black Sea
North Pacific Ocean	North Pacific Fisheries Commission	NPFC2	RFMO	2015	2012	High seas - North Pacific
South Pacific Ocean	South Pacific Regional Fisheries Management Organisation	SPRFMO 2	RFMO	2012	2009	High seas - South Pacific
Indian Ocean	Southern Indian Ocean Fisheries Agreement	SIOFA	RFMA	2012	2006	High seas - Southern Indian Ocean

1 Amendments adopted by the organization, but not necessarily in force.
2 NPFC (2006?2015) and SPRFMO (2006?2012) existed in an interim phase prior to Conventions entering into force and met regularly in an advisory capacity to member States.

1c. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

The DSF Project (10623) conforms and contributes to the overall goal and principles of the GEF-7 ABNJ Program as described in the Program Framework Document (PFD) and the structure and approach of the Project are closely aligned and coordinated to facilitate its management as part of a coherent multi-sector programmatic initiative with benefits at national, regional and global levels. The DSF Project (10623) responds to and reflects the program?s Theory of Change (see Table 1).

Table 1: Alignment of DSF Project (10623) Outcomes with GEF-7 Common Oceans Program Components.

ABNJ program component	DSF conformity and contribution to ABNJ (program outcomes in bold)
Component 1. Strengthening frameworks, processes and incentives for more effective fisheries governance and management in ABNJ	Project Outcome 1.1 will work with RFMOs and member states to harmonise international legal and voluntary frameworks. The focus will be on incorporation of the PA and EAF to achieve sustainable fisheries and healthy ecosystems though reducing impacts. This maps directly to the program **Outcome 1.1 ?Policy and legal frameworks, incorporating obligations and good practices to support sustainable use of ABNJ resources harmonised, integrated and implemented?.**

ABNJ program component	DSF conformity and contribution to ABNJ (program outcomes in bold)
Component 2. Improving capacity to manage fisheries sustainably in ABNJ	Project Outcome 2.1 will work with scientists and managers representing member states of RFMOs to improve scientific advice through uptake of new and innovative technologies and more informed decision-making by strengthening the science-management interface and cooperation with industry. This maps directly to program **Outcome 2.2 ?Quality and availability of technical/scientific information to support evidence-based decision-making on fisheries governance, investment and management in ABNJ strengthened?**. Project Outcome 2.2 will improve fisheries management under EAF by identifying reference points for data-limited stocks and increasing the number of stocks assessed. This includes developing socio-economic indicators and examining the consequences of climate change leading to adaptive management. Project Outcome 2.3 examines risk assessment methodologies to mitigate impacts on non-target species and VMEs. This will help RFMOs develop appropriate measures for sustainable fisheries. These two outcomes map to program **Outcome 2.1 ?Institutional and individual knowledge, skills and tools to apply EAFM in ABNJ strengthened?**.
Component 3. Improving stakeholder coordination and engagement in multi-sectoral processes addressing governance and management of ABNJ	Project Outcome 3.1 will identify potential interactions between the fisheries sector and other sectors in the high seas and make this information available to allow for the development of future dialogue on multi-sectoral management. This maps to program **Outcome 3.1 ?Sector mandates, roles and responsibilities related to ABNJ clarified and promoted (awareness raised) and sector-specific impacts and ecological connections better understood?**. Project Outcome 3.1 will also assist RFMOs in developing tools for sectoral impact assessments, both on and by fisheries. This contributes to program **Outcome 3.2 ?Cross-sectoral technical knowledge sharing and coordination improved?**. These entry points by the fisheries sector will promote multi-sectoral planning and feed into other projects under the Program, notably the Sargasso Sea (10620) and Cross-sectoral (10697) projects.

ABNJ program component	DSF conformity and contribution to ABNJ (program outcomes in bold)
Component 4.

Improving knowledge and Knowledge Management and lesson learning for more informed decision-making among stakeholders to support sustainable utilization of ABNJ | Project Outcome 4.1 will generate, share and raise awareness of the DSF Project (10623) objectives and achievements. At the project level, this will comprise of more technical information directed mainly towards the primary stakeholders which are the RFMOs and the industry. This will be followed by more general information to raise awareness of fisheries and fisheries management in the ABNJ in general, to inform the wider stakeholder audiences, including the general public and those with biodiversity/conservation interests. The DSF Project (10623) will also work closely with the GCP (10626) on the wider cross-project messaging. This directly supports program **Outcome 4.1. ?Quality and availability of information on ABNJ (challenges and solutions) for decision-makers, civil society and private sector investors improved?** and program **Outcome 4.2 ?Information exchange mechanisms and new knowledge management systems developed or strengthened to support awareness-raising and more transparent coherent decision-making?**. |

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Civil Society Organizations Yes

Indigenous Peoples and Local Communities

Private Sector Entities Yes

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

The Stakeholder Engagement Plan (SEP) of the GEF-7 DSF Project (10623) is consistent with the GEF Guidelines on the Implementation of the Policy on Stakeholder Engagement and the FAO Operational Guidelines for Stakeholder Engagement, to catalyse and organize the stakeholder engagement and ensure that it is consistent with the purposes and requirements of GEF and FAO policies. Forming and maintaining dialogues will allow the Project to maintain strong partnerships and harness the knowledge and expertise of stakeholders throughout the Project lifecycle.

Stakeholder engagement with the Common Oceans programme and the other child projects

The Common Oceans Programme (10548), through the programme coordinator, the GCP Project (10626), and their associated steering committee meetings, will coordinate and inform the four child projects on progress and opportunities for stakeholder collaboration. The knowledge management component of the GCP will provide the information hub to feed into the programme, the child projects, and to other programmes, projects, and the wider community. This will allow the child projects, each with their own sub-set of stakeholders, to coordinate activities and allow for upscaling. The DSF Project (10263) and Tuna II Project (10622) will be particularly active in working with their respective RFMOs on areas of common interest. The work of the DSF Project (10623) with the Program and the

Sargasso Sea (10620) and Cross-sectoral (10697) Projects will focus on the cross-sectoral aspects (Component 3) and knowledge management and communication (Component 4).

Stakeholder Identification in DSF Project (10623)

According to the FAO Operational Guidelines for Stakeholder Engagement, ?stakeholders? refers to project-affected individuals, communities, institutions, organizations or groups that have a direct or indirect interest in the intervention. Stakeholder engagement is fundamental to achieve results and should be pursued throughout the Project to support quality and sustainability.

The development and participation of relevant stakeholders with interests in the future sustainability of deep sea fisheries and the conservation of biodiversity in the ABNJ was central to the GEF-5 DS Project (4660). The partnerships were a major factor contributing to that Project?s achievements.

The stakeholders for the DSF Project (10623) were identified and classified based on the experiences and knowledge from the GEF-5 DS Project (4660), and in accordance with developments since the first phase. This was strongly supplemented by the wide and varied involvement of the many stakeholders present at the two program-level Theory of Change meetings held in December 2018 and April 2019. It is also pertinent to note that the GEF-7 DSF Project (10623) is within the GEF International Waters focal area, whereas the GEF-5 DS project (4660) was in both the International Waters and Biodiversity focal areas. This affects the current partner and stakeholder involvement. The stakeholders have been identified in accordance with the above and classified according to their association with the project (Table 3).

Civil society, in the form of the eNGOs, were present at the ToC meetings but did not express their wish to becomes partners to the DSF Project (10623). This represents a change from the GEF-5 DS project (4660) which had several partners that represented more directly the biodiversity conservation interests. This is partly due to this GEF-7 DSF Project (10623) having a reduced biodiversity focus area, though biodiversity conservation is strongly represented in the project through monitoring and reducing impacts on associated and dependent species during the course of deep-sea fishing.

Table 3. Stakeholder classification.

Stakeholders to be affected, directly or indirectly, by the outcomes of the Project implementation	Stakeholders that participate in the Project implementation	Stakeholders being able to influence and decide on the Project implementation or use project outcome for decision making	Stakeholder?s role/involvement in deep sea fisheries*
FAO	FAO	FAO	UN technical agency providing guidance and tools for improved management of marine fisheries (and impacts to biodiversity).

Other marine sector UN Agencies: ISA, CBD, IMO, etc	CBD (single consultation)	CBD, ISA	Global target setting and monitoring. Sector aligned. Interact with fisheries when sector?s overlap spatially.
dsRFMOs	dsRFMOs	dsRFMOs	Manage and set binding regulating in the ABNJ to mange fisheries. Increasingly cooperating with other sectors.
RFMO members and Contracting Parties (usually via the RFMO Secretariats)	RFMO members and Contracting Parties (usually via the RFMO Secretariats)	RFMO members and Contracting Parties	Each RFMO has its own set of members. The members are responsible for adopting decisions to manage fisheries.
DSF Industry and industry groups	DSF Industry and industry groups	DSF Industry and industry groups	Undertake commercial fishing operations. Observers to RFMOs or form part of national delegation.
Academic institutions (marine, universities, Government science institutes)	Occasional specialist individuals consulted.	Opportunities to join and share work with the project. A project focus will be on linking technology developers and users together.	Typically undertake research to help understand ocean processes. Their information provides background to some aspects of the project.
Civil society (eNGOs ? biodiversity conservation)	Many at the program level ToC meetings in 2019/2020, but none approached the ABNJ project for further involvement.	Civil society (eNGOs)	The eNGOs are playing an increasingly important role in highlighting issues relating to biodiversity conservation.
Civil society (markets and consumers)		Civil society (markets and consumers) ? through consumer choice	Markets and consumers form a small somewhat niche group for DSF who, for economic reasons, must catch high value species to cover costs. The main interest here is for consumers to be fully informed if their fish are sustainably harvested.
Other stakeholders		Non-project partners are welcome to make recommendations at any time to the DSF Project (10623) and its PSC.	This covers all those groups not mentioned above who may have interactions with ABNJ fisheries. The DSF Project (10623) is always ready to receive input from any group or individual. The uptake of this will be addressed on a case-by-case basis.

* No formal connection to the RFMO decision processes. Decisions are taken by RFMO member countries by managers who represent their contracting party (National states and EU). RFMOs ?normally? only make decisions (or adopt management measures) for fisheries- related issues in the ABNJ (excluding certain sedentary species on continental shelves). RFMOs ?normally? manage biodiversity by reducing harmful impacts to biodiversity from fisheries. RFMOs are independent of

each other. All other stakeholders are independent of RFMOs and have no formal mechanism to be part of the RFMO decision process, though some groups (e.g. certain industry groups and eNGOs) may be observers to RFMO meetings or certain individuals can be part of national delegations.

The primary stakeholders in the DSF Project (10623) are the project partners who will work closely with the project and provide in-kind contributions. There are several other stakeholder groups that may be interested in the outcomes of the DSF Project (10623) and the project will make communications material available to these groups to inform them of the projects work and outcomes (Table 4). The various stakeholders that have been present at the various project formulation meetings have expressed their expectations and concerns from the project?s activities. There was no formal analysis and so the entries in the table represent summaries from the various discussions (Table 5).

Table 4. Stakeholder engagement program

Stakeholder group	Engagement method	Materials to be used	Location	Responsible organisation, person	Date
UN FAO	Inform FAO Fisheries department of projects activities.	Reports and publications. Meetings and webinars. Uptake and review of FAO instruments and guidelines relevant to DSF. PSC.	FAO, Rome	Project?s LTO. Project?s Chief Technical advisor (TA) GCP Project Coordinator.	Annually at PSC meeting and 3 monthly with LTO.
RFMOs	Direct contact with RFMO to discuss and execute partnership arrangements.	Webex/Zoom meetings Regional project meetings. Project presentations to RFMO Committees.	Seven RFMO Secretariats around world.	Project?s CTA RFMO Executive Secretaries	Annually at PSC meetings. Partner reporting every 12 months Otherwise, as required.
States (RFMO Contracting Parties), Governments	Inform RFMO members on project progress and, as required, discuss future requirements.	RFMO Meetings. Direct contact or by relevant RFMO Secretariat (activity dependent). Reports and publications.	Global	Project?s CTA RFMO Contracting Party members.	Annually (occasionally if involved in specific activity).

Research Institutes (and independent advisory bodies) - ICES	ICES to work directly with RFMOs and CPs on developing and reviewing data requirements and stock assessment methodologies.	Contract with ICES. Direct communication and meetings with RFMOs. Reports and publications.	Copenhagen, Denmark	Project?s CTA ICES Secretariat (Head of Science Support)	Annually at PSC meeting. As required to execute contract.
DSF Industry and industry groups	Support for increased engagement in RFMO meetings. Trials undertaken on commercial fishing vessels.	Meetings. Equipment and training for trials on vessels. Reports and publications.	Global (ICFA) and Indian Ocean (Sealord and SIODFA).	Project?s CTA Industry contacts	Annually at PSC meeting. As required for trials.
Other marine sectors (ISA, IMO, CBD, BBNJ Negotiations)	Inform on protection of biodiversity through reduced impacts and possible interactions between sectors. The project would welcome more formal involvement of these groups in the project.	Reports and publications. Maps of DSF. Transparent reporting of interactions. Meetings (inc. side events at BBNJ negotiations). Wider project messaging. Communications from GCP (10626) at program level.	Global	Project?s CTA Relevant sector contacts	Annually (and invited as observers to PSC meetings as required)
Civil society (eNGOs, MSC and other food certification bodies, retail markets)	Inform on projects activities and achievements. Receive feedback as provided.	Meetings where eNGOs are present. Project publications and reports. GCP (10626) Communications.	Global	Project?s CTA	Annually

Table 5. Key stakeholder expectations and concerns analysis

Stakeholder group	Key expectation	Key concerns	Recommendations
FAO	Support as a UN Technical Agency to RFMOs and States to promote sustainable DSF under an EAF.	Staff allocated to project management, coordination and monitoring may be insufficient.	-

RFMOs	Knowledge sharing among regions. Improving data collection and consistency of data collection among CPs. Improving bycatch and discard reporting. Promotion of the work of the RFMOs in the management of the ABNJ (inc. in the BBNJ Negotiations).	The DSF Project (10623) will make excessive demands on the RFMO Secretariats. The RFMO Secretariats are a point of contact, but are not involved in scientific advice or decision making.	Coordinate activities wherever possible to increase efficiency of communication with RFMOs. To focus on information exchange among regions. For the project to support multi-sectoral collaboration.
States (RFMO Contracting Parties), Governments	Not usually represented at the formulation meetings. When present have offered guidance and support for project activities.	When present, some states have expressed concerns that RFMO partnership to the project will involve excessive contributions in terms of time and money.	The project assures States and partners that there are no commitments beyond those stated in the partnership agreement/co-financing letter. The project further emphasizes that additional contributions in cash or in-kind activities that support project activities are welcome, but this is at the discretion of the RFMO/State.
Research Institutes (and independent advisory bodies) - ICES	The activities on data collection and assessment of data-limited stocks are relevant to the work of ICES. Other project activities are also relevant to ICES.	None mentioned.	-
DSF Industry and DSF Industry groups	Promotion of industry objectives for long term sustainable fisheries. Wish, as the main stakeholder, to develop better cooperation with RFMOs. To change the recent perception that all stocks are over-fished and all fishing companies are bad!	That the project cannot support some States in addressing their compliance and reporting difficulties.	From industry: Need to develop mechanisms to recognize good compliant behaviour by certain fishing companies/States. Need, in some way, to develop rights-based management systems to ensure incentives for sustainable fisheries.
Other marine sectors (ISA, IMO, CBD)	Not present at formulation meetings.	Not present at formulation meetings.	The project informs other sectors of progress and invites feedback, particularly in the cross-sectoral Component 3.

Civil society (eNGOs, MSC and other food certification bodies, retail markets)	Not present at formulation meetings.	Not present at formulation meetings.	The project informs, through wider communications, the improvements that the project and its partners are making to sustainable fisheries and biodiversity conservation.

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

Stakeholder Engagement ? Methods and Channels

Stakeholder engagement consultations will be comprehensive with disclosure on information to promote awareness and understanding of Project strategies, policies and operations. During the disclosures, the Project is required to:

?   Identify stakeholders that are or could be affected by the Project as well as other interested parties (including vulnerable groups);

?   ensure that such stakeholders are appropriately engaged on issues that could potentially affect them, through a process of information disclosure and meaningful consultation; and

?   maintain a constructive relationship with stakeholders on an on-going basis through meaningful engagement during Project implementation.

The stakeholder consultations will be on-going processes taking place during the Project life-cycle, and during this process the stakeholders will be informed about consequences of the Project implementation and ensure the opportunity for feedback.

To engage with stakeholders, the Project will engage or communicate with the identified stakeholders using the following methods and channels (Table 6).

Table 6. Methods of communication to stakeholders

Stakeholder Group	Means of Engagement	Rules for Communication
Donor and GEF Agencies (stakeholders involved in the Project implementation)	- Direct meetings and exchanges - Project-related meetings and events - Progress reporting	In accordance with Project activities and progress relevant to the stakeholder group. The consultations will take place regularly, starting from the Project inception onwards.

Regional/Intergovernmental Organizations (stakeholders who participate in the Project implementation)	- Direct meetings and exchanges - Official letters - Project-related meetings and events - Progress reporting	In accordance with administrative procedures and requirements, and in relation to Project activities and progress relevant to the stakeholder group. The consultations will take place regularly, starting from the Project inception onwards.
National Governments and Agencies (stakeholders able to influence and decide on the Project implementation or use Project outcome for decision making)	- Direct meetings and exchanges - Official letters - Project-related meetings and events - Progress reporting	In accordance with administrative procedures and requirements, and in relation to Project activities and progress relevant to the stakeholder group. The consultations will take place regularly, starting from the Project inception onwards.
Civil Society Organizations (CSOs) (stakeholders who participate in the Project implementation)	- Direct meetings and exchanges - Project-related meetings and events - Progress reporting	In accordance with Project activities and progress relevant to the stakeholder group. The consultations will take place regularly, starting from the Project inception onwards.
Research institutions/Academia (stakeholders who participate in the Project implementation, and stakeholders to be affected, directly or indirectly, by the outcomes of the project)	- Direct meetings and exchanges - Project knowledge products and lessons learned	In accordance with Project activities and progress relevant to the stakeholder group. The consultations will take place regularly, starting from the Project inception onwards.
Private sector entities (stakeholders who participate in the Project implementation)	- Direct meetings and exchanges - Project-related meetings and events - Progress reporting	In accordance with Project activities and progress relevant to the stakeholder group. The consultations will take place regularly, starting from the Project inception onwards.
Civil Society (stakeholders to be affected, directly or indirectly, by the outcomes of the Project implementation, including vulnerable groups)	- Project website - Project communication activities (outreach and awareness-raising materials and events) - Consultation meetings (there are currently no identified vulnerable groups)	In accordance with Project activities and progress relevant to the identified stakeholder group. The consultations will take place regularly, starting from the Project inception onwards.

Making information publicly available

By making information available to the public, the Project will allow stakeholders to get to know and understand the risks and impacts associated with the Project, as well as opportunities provided by the Project.

On an ongoing basis, the Project will have a routine disclosure and consultation on the Project?s performance including grievances and other new emerging issues. The disclosures will made to all

stakeholders through Project briefs or annual reporting. While providing this disclosure, the Project will also provide:

> ? An update on the Project achievements and how its contributing to achieve sustainable deep sea fisheries and biodiversity conservation in the ABNJ.

> ? An overview of the stakeholder engagement process and how affected parties can participate and provide feedback.

Select what role civil society will play in the project:

Consulted only; Yes

Member of Advisory Body; Contractor;

Co-financier;

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

Executor or co-executor;

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

A gender analysis was carried out during project preparation. It found that there are perceptions of the place, role and value of women in society influencing their participation in the capture fisheries sector, including the deep-sea fisheries sector. There is often an expectation that women remain in, or close to, the home for family responsibilities, their absence for long periods of time is not always accepted. As a consequence, in the deep-sea fisheries sub-sectors, like capture fisheries more generally, women tend to be rather represented in the land-based processing industry than as crew onboard fishing vessels. While there is overall little detailed information available, a preliminary survey of the role of women in deep-sea fishing in the ABNJ, conducted during the GEF-5 DSF project, confirmed that it is a male-dominated industry because of its industrial nature remoteness at sea.

●Gender disaggregated employment figures are not available for national fisheries administrations, but women tend to also be under-represented in RFMOs and fisheries science and as observers and other positions related to MCS. As the project will work closely with RFMOs as partners and on fisheries management, including with regard to capacity development for observers and other key positions, it will have opportunities to promote gender equality in these areas. Accordingly, the Gender Action Plan (GAP) for the project was elaborated based on the gender analysis and taking into consideration the overall scope of the project. The GAP aligns with the GEF Gender Equality Guidelines, and FAO?s

Policy on Gender Equality. The objective of the GAP is to support the inclusion of gender equity considerations throughout the project and seeks to:

•- Foster a critical examination of gender roles, norms, attitudes and behaviours that perpetuate gender inequalities, especially in management, science and compliance activities,

•- Actively promote the participation of women in all aspects of project implementation,

• -Recognize and strengthen positive norms and practices that support equality and an enabling environment for women in fisheries among the project partners and their members.

The project will proactively engage with its partners, dsRFMO Commissions, working groups and scientific committees, Contracting Parties and other partners to move away from practices that are reinforcing gender bias and constraining norms, to some that not only acknowledge and consider women?s and men?s specific needs, but proactively redress unconscious bias and discrimination and promote women?s participation and visibility. This will raise awareness about women in fisheries among all project partners, and instill practices that advance their recognition and opportunities in the sector. Accordingly, key considerations and activities include:

- Promote the participation of women in all project activities and meetings etc in all capacities, e.g., as informants, workshop participants, as well as team members or study leader (consultants).

- Encourage partners and organisations targeted by project activities to nominate women among their participants.

- Promote women and men early in their careers to facilitate workshops and provide adequate support for them to do so confidently.

- Ensure that the contents of project outputs (trainings, workshops, studies) are inclusive in their language and design, as appropriate (see UNDP 2020 for practical examples)

- Provide flexible timings (e.g. repeated sessions) and disseminate recordings to fit the different work schedules of the targeted audience/participants.

- Ensure the safety of women and men going onboard vessels for survey work and data collection (if needed) through pair work

The indicators provided in the GAP matrix have been included in the Project?s Results Framework (Annex A1). The full gender analysis and GAP are included in Annex P.

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

Yes

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

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

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

Yes
4. Private sector engagement

Elaborate on the private sector's engagement in the project, if any.

The development and participation of relevant stakeholders with interests in the future sustainability of deep sea fisheries and the conservation of biodiversity in the ABNJ was central to the GEF-5 DS Project (4660). The partnerships, and in particular the engagement with the private sector, were a major factor contributing to that Project?s achievements. Much of the private sector?s engagement in the GEF-5 DS Project (4660) involved contributions of vessel time, representing substantial co-finance (in excess of USD 39 million).

The private sector will continue to play an important role in the Project?s second phase, building on its significant contribution to the first phase of the Project. Private sector participation was strong in the preparation process of the DSF Project (10623).

The private sector was consulted regularly during the development of DSF Project (10623). The private sector also participated in the DSF Project (10623) Inception and Validation Workshops. Following feedback received during the Inception Workshop an additional output focusing on frameworks to improve private sector contributions to sustainable DSF was added to component 2 of the DSF Project (10623). This output will specifically include activities seeking to strengthen cooperation between the private sector and dsRFMOs. The DSF Project (10623) will also support the private sector trialing of new and innovative technologies that contribute to sustainable deep sea fisheries and the conservation of biodiversity in the ABNJ.

The private sector will be kept abreast and invited to contribute to the Global Coordination Project?s (10626) component 3, which focuses on opportunities for innovative private sector engagement in the ABNJ. The objective of this component is to enable the private sector to engage and invest in collective action to address ?global? or ?ABNJ wide? sustainability issues. This component will test models/approaches/incentives including innovative financing and risk mitigation measures for better private sector engagement and investment in addressing ABNJ-wide issues.

 The fishing industry, through two partner organizations, International Coalition of Fisheries Associations (ICFA) and Southern Indian Ocean Deepsea Fishers Association (SIOFDA), and through the Sealord Group, will collaborate with the DSF Project (10623) to obtain improved fisheries and related ecosystem information through providing access to fishing vessel time, as appropriate, to test new methods and tools. They will also contribute with results from trialling of new fishing practices and management measures.

ICFA is a coalition of the national fish and seafood industry trade associations from the world?s major fishing nations that represents countries harvesting more than 85 percent of the globe?s fish. The group was formed in 1988 to provide decision-makers a unified voice on global fish and seafood issues. ICFA members advocate policies for the long-term sustainable use of living marine resources for the benefit of global food security and prosperity and have been actively engaged in issues relating to deep-sea

fisheries. ICFA members are committed to science-based and fully participatory fishery conservation and management processes.

SIODFA was formed in 2006 by the four companies that were active in the deep-sea high-seas fisheries of the Southern Indian Ocean at the time, and is registered under the Incorporated Societies Act of the Cook Islands. The objectives of the Association included the promotion of responsible management of the deepwater fishery resources of the Southern Indian Ocean to ensure sustained harvests for the benefit of humankind while conserving biodiversity, especially deepwater benthos in the area of the fishery and associated and dependent species. SIODFA members have been collecting data and information on deep-sea species and ecosystem components for over 5 years.

The private sector will provide a significant amount of co-financing as shown in Section C above under the sources of co-financing, where confirmed co-financing is US$ 25 million.

5. Risks to Achieving Project Objectives

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

Risk management is a structured, methodical approach to identifying and managing risks for the achievement of project objectives. The risk management plan will allow stakeholders to manage risks by specifying and monitoring mitigation actions throughout implementation. Part A of this section focuses on external risks to the project, and Part B on the identified environmental and social risks from the project.

Section A: Risks to the project

Risks to the Project?s successful implementation can be found at the national, regional and global levels. They are related to the complexity of the issues addressed, their associated political consequences, as well as the potentially uneven commitments and performance of stakeholders. The main risks identified, along with an estimated rating of their likelihood and corresponding mitigation measures, are presented in Table 1.

Table 1: Risks to the project.

Description of risk	Impact	Probability of occurrence	Mitigation actions	Responsible party

The great number and diversity of stakeholders in deep-sea fisheries and biodiversity conservation constrains efficient coordination and implementation of the Project?s activities	M	L	The involvement of stakeholders is built in throughout the project (mainly through PSC, FAO Project Task Force, Project Website, M&E system and IW-Learn, regular workshops and roundtables) providing the opportunity for interactions and discussions between different partners.	PSC, FAO Project Task Force
Changes in decision makers, or other events beyond the control of the Project, lead to changes in policies and/or support for the objectives and activities. Political risks may include lack of support at national level, or unexpected conflict between regional partners.	M	L	The Project priorities are in line with what all stakeholders have agreed in international forums and are therefore anchored in existing policies. Support at national and regional level will be secured through careful selection of initial partner States, linking with regional bodies, and the building of support through regional and international dialogue and sectoral policy and development processes. It is envisaged that support will be strengthened/widened during preparation and all along implementation. The project will work to an agreed-upon timeline.	PSC, FAO Project Task Force
There is insufficient capacity to support the Project?s proposed transformational changes, particularly with regard to institutional and administrative support	M	L	The scope of the Project has been agreed with the relevant stakeholders and, by focusing on a selected number of issues in a limited number of locations, it should be possible to achieve results without putting undue pressure on the existing institutions. Nevertheless, some customized capacity building/training will be available from the Project, as required in the case of developing countries.	PSC, FAO Project Task Force
Because of the actual lack of scientific knowledge on the particularly complex and fragile ecosystems of the deep seas, progress concerning the development of more biodiversity-friendly effective tools and practices is less successful than expected	M	L	The project includes activities aimed at substantially enhancing the practical/reliable knowledge available through: (i) compilation and sharing of existing information from different communities, (ii) targeted information gathering to cover key gaps and (iii) direct engagement of the fishing industry in the data collection processes. These steps should substantially reduce the lack of the necessary scientific knowledge and the development of tools and practices should therefore be significant. In addition, the project will identify the nature and types of knowledge necessary in follow-up phases for the further development of specific tools and practices, as deemed appropriate.	PSC, FAO Project Task Force

Adverse climate changes compromise the Program?s achievements, particularly concerning the ecosystems and biodiversity.	L	L	The significance and impact of climatic changes depends on the physicochemical and bioecological transformational processes involved, not all of which are well understood in the deep seas. However, significant changes are not expected to take place for decades. In the meantime, precautionary management to increase resilience and knowledge building will be required as supported through this project. The Program?s Monitoring and Evaluation (M&E) system will include indicators allowing for a close monitoring of the possible climate change impacts over time. Moreover, climate resilient management practices for particularly vulnerable ecosystems will be developed and promoted.	PSC, FAO Project Task Force
Risk of Covid-19 Impacts to Project design and implementation include reduced or no travel, no personal meetings, delays of workshops and risks and impacts on human resources	M	L	Develop a budgeted, contingency plan to cover the first two years of the project in case COVID19 does not permit the implementation of initial activities as proposed; - conduct COVID19-related risk assessments and opportunities to inform approach to project implementation to the potential effects of COVID-19; - adopt COVID-19 mitigation measures (e.g., for managing travel, workshops etc.) in line with government and partner policies and procedures; - revert to virtual mechanisms (Zoom, Skype, email-type platforms); - shift education courses to online courses supported by increased engagement of learners and encouragement of enrolment through using advance learning technologies; - personnel boarding and inspection replaced by EMS; - adoption of online survey tools; and - field activities where necessary and/or are more efficient shifted to the project?s outer years	PSC, FAO Project Task Force

Climate change risk analysis

It is well known that the oceans are affected by short (days), medium (annual) and long-term (decadal) environmental cycles. It is also well known that the one-way changes induced by climate change have been observed in the deep oceans, as shown by work undertaken in the GEF-5 DS Project (4660)[1]. In addition, ICES undertook a study on distributional shifts of fish stocks in the north Atlantic and found that many drivers could result in distributional change, and that only some of the observed changes could be explained by climate change[2].

Fish stocks have a long history of variability, and the fishing industry can often adapt to this. Such adaptation by the industry can stabilise markets, but dramatic variability such as stock collapse tends to cause significant disruption in markets which is almost irreversible. One of the most awkward consequences of distributional change occurs when stocks move from the ABNJ to an EEZ, or vice versa. This results in significant quota allocation problems which are difficult to resolve, and an example of this occurred with the North-east Atlantic mackerel that moved from ABNJ waters to be largely within EEZ waters. This distribution shift may well have been due to climate change. Therefore, climate change can

cause changes to the DSFs, and similar changes can result from several other causes, but the mitigation response must lie within a flexible and adaptive management framework that can be implemented by managers responsible for ABNJ and EEZ fisheries.

There could be actions taken by flag states on their fishing fleets to directly mitigate factors that contribute to climate change, but this is outside the remit and expertise available to this DSF Project (10623) implemented by FAO. And again, most fisheries occur in EEZs and national projects would be better suited to address this.

The DSF Project (10623), bearing the above in mind, has two approaches to reducing climate change risk to DSF. Firstly, under output 2.1.1 on frameworks to support the science-management interface, the project will support solutions for the improved uptake of scientific advice and a more efficient adaptive-management response. This will greatly help to ensure that fisheries are managed for long-term sustainable yields rather than short-term options that may lead to stock collapse. Secondly, and supporting output 2.1.1, is the inclusion of climate change effects into output 2.2.1 on ecosystem and stock productivity modelling that will help to understand reasons for low stock biomasses and allow for simulations of the best recovery options. Some of this will involve trying to return stocks to levels that can produce MSY (Bmsy), rather than keeping stocks above a limit reference point (Blim).

Socio-economic risks

During the continued development of the project document, the design team concluded that most activities supported by the Project to FAO?s relevant socio-economic risk category was ?low? defined by minimal or no adverse socio-economic impacts including with respect to gender, and that no further assessment was thus required. The team found that most project activities could be classified into the following categories: (i) workshops and training activities (e.g., capacity building, consultations and information dissemination, development of best practices; (ii) studies; and (iii) policy (e.g., review of laws and binding instruments etc.).While this rating still holds following a more in-depth assessment of gender issues in the project as part of the preparation of the GAP, the GAP has been designed to minimize this risk even further.

Covid-19 risk analysis

The Covid-19 pandemic has resulted in disruptions to the commercial DSF, and to compliance monitoring and enforcement, management and scientific advice of DSF. In most cases, all have continued, albeit at slightly reduced levels. The fishery, and the response by the industry to covid-19, are sustainable in the short term, and should quickly return to ?normal? once the effects of the pandemic have weakened sufficiently. The main initial constraints being movement restrictions applied to vessel masters and crew who could not enter many ports and so could not access markets. Further the markets were often closed and the supply chain disrupted. Catches and markets have been depressed during the covid period, and so it is unlikely that the stocks have suffered any short-term over-fishing and/or stock decline since the beginning of 2020. What is perhaps more critical in the long term are the effects covid has had on the collection of catch and effort data, the provision of scientific, and the adoption of management measures. Disruptions to time series cause problems in assessments, though since many of the deep sea stocks are data poor, this may have less of an effect until fuller assessments are applied (see RSN survey of RFMOs; https://www.fao.org/3/cb5269en/cb5269en.pdf). However, those that rely on DSF are usually sufficiently buffered from short-term disruptions, unlike small-scale fisheries where livelihoods can be lost.

There have been a number of lessons learnt from the covid pandemic and the project can address some of them to help with recovery (and perhaps improved systems):

? The stocks, fishery and DSF industry are unlikely to have suffered any significant impacts.

? The RFMOs have been affected by reduced and virtual meetings, and with significant drops in the amount of compliance and scientific data collected. Scientific committees continued to provide key stock advice (which had greater uncertainty), but often had to delay new forms of advice. Management committees tended to roll-over adopted measures and found it difficult to adopt new measures owing to limited negotiating options. Virtual meetings are seen as ways to support in-face meetings, not replace them.

? The restrictions placed on movements of people meant that compliance and scientific observers working at-sea or in ports could not undertake their duties. Whereas this is treated as an inconvenience for scientific observes, vessels unable to carry compliance observers are at risk of being classified as IUU fishing. This is a serious offence that may result in expensive consequences. Some RFMOs adapted their measures to allow for other forms of monitoring. NPFC were the only RFMO to adopt formal best-practices guidelines (Annex F in COM06 2021 Report, NPFC)

? The RFMOs, on a plus side, have done remarkably well at holding and managing virtual meetings, and these will certainly be more frequent in post-covid times. It also allows for greater participation with increased attendance and reduced participation costs in terms of time and money.

? For the DSF Project (10623), it is appreciated that the acquisition of data for compliance and scientific purposes, often collected by observers, has always been challenging. There are many reasons for this, but it is clear that observers would benefit from being supported by new technologies. The use of camera systems, possibly in conjunction with electronic monitoring, would assist observers and help more generally with improved monitoring and data gathering.

A fuller account of the environmental and social risks, including a covid risk analysis and mitigation plan is given in Annex I1.

Project opportunities to assist in the sustainable recovery of DSF following the covid pandemic

The above text, under the covid-19 risk analysis, explains that there are few obvious medium-term effects of the pandemic on DSF since it started in 2020, either to the industry or to the management of the fishery. And since DSF on demersal species are relatively small volume going to select markets, there are few effects on livelihoods, unlike the larger volume pelagic fisheries or the small scale inshore fisheries that support the livelihoods of many vulnerable groups.

A survey of the most recent year?s RFMO Commission meeting reports highlighted the issues raised in the risk analysis, but the overall conclusion was that the RFMOs have managed to conduct their duties with only limited disruptions. Much of this was due to the introduction of virtual meeting formats with many of the managerial and scientific members being able to work from home. At sea observers and port inspections were significantly affected, yet NPFC was the only RFMO to adopted covid inspection guidelines and SIOFA relaxed their at-sea observer requirements so fisheries could continue with out being regarded as IUU. However, there was no mention in the commission reports of any other mitigation measures that would assist compliance or scientific work. In general, the RFMO Secretariats recorded a

higher level of concern regarding the effects of covid that apart from a reading of the various RFMO meeting reports.

The Regional Fishery Body Secretariats? Network (RSN) under FAO surveyed RFMO Secretariats during April 2020 and November 2020 for the impacts of covid on the fisheries and received a fuller account of the problems encountered (https://www.fao.org/3/cb5269en/cb5269en.pdf). The Secretariats are likely to observe these covid impacts as they usually monitor compliance and receive scientific data directly. The report provides a list of the problems and identifies where FAO could provide support; those relevant to the DSF Project are given in Table 8.

One area where the DSF Project is aiming to provide significant advances is in data collection, and this can be supported by the use of new and innovative technologies and appropriate targeted training. Though not directly aimed at mitigating some of the covid difficulties, since data collection for sustainable fisheries management and reducing impacts has been a long-standing problem, it will certainly help to alleviate some of the issues with lack of observer coverage during the covid pandemic period.

The DSF Project will support the following long-term COVID 19 response measures in the long-term

?   the longer-term effect is a contribution to greater effectiveness and cost-efficiency in reducing and eliminating IUU fishing, thus reducing economic losses and improving the performance of legal operators, considering also the external impacts of pandemics and other effects;

?   strengthening compliance measures supported by increased capacity and use of technology will lead to more sustainable fisheries and increase benefits to communities contributing to socio-economic resilience to pandemics; and

?   increase understanding of fisheries supply chains will contribute to increased environmental quality and increased resilience to external stressors such as pandemics.

Table 8. COVID 19 related project opportunities.

RSN Secretariats survey https://www.fao.org/3/cb5269en/cb5269en.pdf		DSF Project support
RFMO-identified covid problems	FAO support initiatives	Project outputs
Meetings ? virtual and teleworking. Cost savings and increased participation compared to in-person meetings.	Provide and coordinate assistance to RFMO Secretariats to share best practices. Provide ?global? calendar of RFMO meetings to allow for improved coordination. Inter-organizational communications under UN Decade of the Ocean Science	Output 3.1.2 ? Frameworks for cross-sectoral coordination Output 4.1.1 - Support under the Global Coordination Project

| Compliance and scientific observer coverage (noted increased use of electronic monitoring) Compliance policy guidelines	remote MCS Innovative data collection methods Sharing good practice	Output 1.1.3 ? Gaps in MSC identified and training provided Output 2.1.3 - Platform for new and innovative technologies Output 2.2.2 ? Data collection for data-limited stocks using new technologies Output 2.3.1 - Data collection for deepwater sharks using new technologies Output 2.3.2 - Data collection for VMEs using new technologies
Employment difficulties especially with observers and port inspectors. Intern programs suffered	Staff training and support	Using above outputs to lessen the reliance on observers, though it is not seen that new and innovative technologies will replace observers but make their work more efficient.
Supply chain and market difficulties	Encourage e-commerce and supply chain and market	Output 2.2.3 ? Social and economic dimensions of DSF
Health policies and procedures ? to reduce risk of transmission	Sharing good practice	Output 4.1.1 ? Support under the Global Coordination Project

[1] FAO. 2019. *Deep-ocean climate change impacts on habitat, fish and fisheries*, by Lisa Levin, Maria Baker, and Anthony Thompson (eds). FAO Fisheries and Aquaculture Technical Paper No. 638. Rome, FAO. 186 pp.

[2] ICES. 2017. Report of the Working Group on Fish Distribution Shifts (WKFISHDISH), 22?25 November 2016, ICES HQ, Copenhagen, Denmark. *ICES CM 2016/ACOM*: 55. 197 pp.

6. Institutional Arrangement and Coordination

Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

●**Figure 1**: Institutional arrangements for DSF Project (10623)
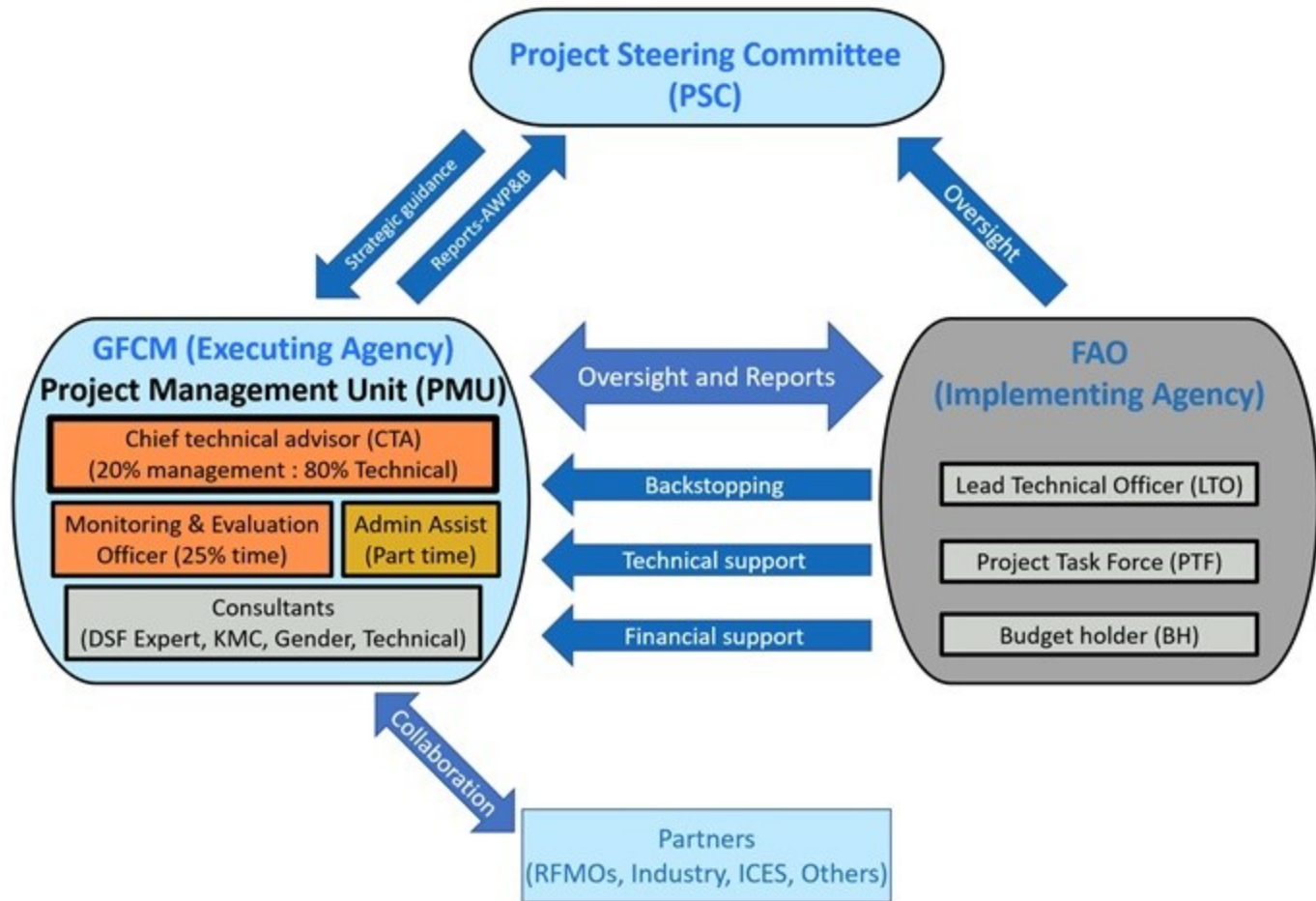
FAO-GEF Common Oceans program is comprised of five child projects of which the DSF Project (10623) is one. The DSF Project (10623), together with the three other technical and sectoral projects, will be supported by the Global Coordination Project (GCP (10626)). The GCP (10626) will ensure effective coordination, communication, partnerships, lesson learning and knowledge management among the other four child projects and support innovative financing initiatives for sustainable use of ABNJ resources across the Program.

FAO is the GEF Implementing Agency (IA) for the DSF Project (10623). The General Fisheries Commission for the Mediterranean (GFCM) is the project?s Execution Agency (EA) and have the overall executing and technical responsibility for the DSF Project (10623), with FAO providing oversight as the IA as described below. The Project organization structure is presented in Figure 3.

FAO will, as the IA for the DSF Project (10623), provide project cycle management and support services as established in the GEF Policy. As the GEF IA, FAO holds overall accountability and responsibility to the GEF for delivery of the results. In the IA role, FAO will utilize the GEF fees to deploy three different actors within the organization to support the project (see **Annex K** for details):

•The Budget Holder (BH), which is usually the most decentralized FAO office, will provide oversight of day to day project execution;

- The Lead Technical Officer (LTO), drawn from across FAO will provide oversight/support to the projects technical work in coordination with government representatives participating in the Project Steering Committee; and
- The Funding Liaison Officer (FLO) within FAO will monitor and support the project cycle to ensure that the project is being carried out and reporting done in accordance with agreed standards and requirements.

FAO will provide oversight of project implementation and technical guidance, as required, to ensure that the project is being carried out in accordance with agreed standards and requirements. Specifically, FAO?s responsibilities, as GEF IA, will include:

- disburse funds from GEF to the EA (in accordance with the rules and procedures of FAO);
- oversee project implementation in accordance with the project document, work plans, budgets, agreements with co-financiers and other rules and procedures of FAO;
- provide technical guidance to ensure that appropriate technical quality is applied to all activities concerned;
- oversee the preparation of required reports for submission to the GEF Secretariat
- monitor and review project expenditure reports necessary
- undertake the mid-term review
- provide administrative support for the Program Steering Committee.
- The full outline of FAO?s roles and responsibilities in the project is provided in detail in Annexes K and L (FAO?s role in internal organization and FAO and Government Obligations, respectively).
- The GFCM will be the project?s Executing Agency and will ensure project management for the day-to-day management of the Project. As the EA of the Project, GFCM will be accountable to FAO, the IA, for the timely implementation of the project results, operational oversight of implementation activities, timely reporting, and for effective use of GEF resources for the intended purposes and in line with the IA and GEF policy requirements. Specifically, GFCM?s responsibilities, as GEF EA, will include:

- Establish and support the Project Management Unit (PMU);
- Act as Secretariat for the Project Steering Committee (PSC);
- Ensure that the project is executed according to the agreed work plan and budget;
- Review and submit required reporting obligations to the IA, including half-yearly expenditure reports and annual Project Implementation Report (PIR);
- Ensure all procurement is done in compliance with Agency standards;
- Recruit consultants;
- Issue Letters of Agreement
- Communicate with and disseminate information to the Partners and other stakeholders.

The members of the project management units for the DSF Project (10623) and Tuna II project (10622), will be hosted by the Global Coordination Project. This will ensure timely and consistent execution of these two projects under the Common Ocean Program, allowing for easy transfer of lessons learned and cross-fertilization.

Project Steering Committee

A Project Steering Committee (PSC) will oversee project management. It will comprise representatives of the IA and EA and from each of the partners. The Project Manager will act as the PSC secretary. The GEF Secretariat will be invited to participate as observers. The PSC will be the ultimate decision-making body with regard to strategies and other issues affecting the achievement of the project?s objectives. The PSC will normally meet once a year, although additional meetings, either in person or through multimedia (such as by video or skype conferences), can be called as necessary. The PSC will develop and approve its TORs at its first meeting.

The members of the PSC will be responsible for:

- oversight and review of technical activities carried out under the Project;
- overview and report on the progress towards the project?s objectives and their contribution to the overall programmatic objectives;
- assessment of the progress in the implementation of the Project in accordance with timelines and goals stated in the Results Framework, including review of the project Theory of Change assumptions;
- taking consensus-based strategic decisions and recommendations when guidance is required by the Project Coordinator;
- a review of the narrative that links the impacts of the activities, outputs and outcomes of the Project in particular in relation to their contribution to the programmatic objective;
- ensuring timely availability and effectiveness of co-financing support and engagement with project partners;
- assessing effectiveness of the knowledge management and communication efforts at the programmatic level;
- reviewing sustainability of key project outcomes, including up-scaling and replication;
- approval of the project?s Annual Work Plan and Budget (AWP/B);
- Enhance synergy between the project and other ongoing initiatives related to the GEF International Waters Focal Area;
- Ensure full coordination of the project with the entire Common Ocean Program; and
- reviewing and providing comments on the annual Project Implementation Review (PIR), and independent external evaluations and audits, as well as advise on any other issues that would be brought to its attention by the PMU.

Project Management

A Project Management Unit (PMU) will be established by the GFCM. Following the guidance of the Project Steering Committee, the main functions of the PMU, will be to ensure overall efficient management, coordination, implementation and monitoring of the Project through the effective implementation of the annual work plan and budget (AWP/B). The PMU will be composed of a full-time Chief Technical Advisor (80% technical : 20% management) who will work over the life of the 5 year project. In addition, the PMU will include a communication expert (part-time), and an M&E expert (part-time), and operational support (part-time). The PMU will be closely supported by the project?s Lead Technical Officer (LTO) with contributions from specialists from the EA.

GFCM will ensure project management with the assistance of the project?s chief technical advisor who will have both project management and technical responsibilities (see Annex N for ToRs). Following the guidance of the PSC, the main functions of project management will be to ensure overall efficient management, coordination, implementation and monitoring of the Project through the effective implementation of the annual work plan and budget (AWP/B). The PMU will also be supported by the Program Coordination Unit (PCU), as appropriate. An M&E expert will be cost shared with other projects under the program and support project monitoring.

The chief technical advisor (CTA), through his/her parttime project management functions, will be responsible for the day-to-day implementation, management, administration and technical supervision of the Project in accordance with the Annual Work Plan and Budget approved by the PSC. He/She will be responsible for the following among other tasks:

- ensure timely delivery of outputs, including preparation of annual workplans, budgets and TORs for consultants;
- monitor the quality of products generated in the implementation of the Project, including products and activities carried out by project consultants;
- monitor financial resources and accounting to ensure accuracy and reliability of financial reports;
- Monitor and support the implementation of the GAP;
- implement and manage the project monitoring and communications plans;
- organize annual PSC meetings;
- submit the six-monthly Project Progress Reports (PPRs) with the AWP/B to the IA
- support the organization of the mid-term review and final evaluation in close coordination with the FAO Budget Holder and the FAO Independent Office of Evaluation (OED); and
- inform the PSC and Project Budget Holder of any delays and difficulties as they arise during the implementation to ensure timely corrective measure and support.
- ensure ongoing analysis of project outputs and outcomes, communicate with the Program to construct a narrative and contribute to programmatic progress and objectives;

Project Task Force

A Project Task Force (PTF) will be established to provide technical support and guidance to the Project. In addition to technical members, the PTF will include the Project Budget Holder (BH), the Project Lead Technical Officer (LTO) and Project Funding Liaison Officer (FLO).

Inception Workshop

An Inception Workshop will take place as close as possible to the beginning of the Project with participation of the IA and EA, as well as key partners, to establish the PSC. During the first six months or the project (the inception phase), there will be further elaboration of the project-level Knowledge Management and Communications strategy, and arrangements for a cohesive project Monitoring and Evaluation plan.

6.b Coordination with other relevant GEF-financed projects and other initiatives.

International Frameworks

The Project is part of the Common Oceans ABNJ Program, together with three other technical child projects and under the overall coordination and support of a Global Coordination Project (GCP (10626)), implemented and executed by FAO. The projects, all working with different elements of ABNJ management, will each contribute to address the issues affecting ABNJ management identified in the programmatic Theory of Change.

The results, lessons learned, experiences and best practices of the individual child projects will be translated by the GCP Program Coordination Unit team into a cohesive narrative that describes the joint progress of the child projects towards the programmatic goals.

For this approach to be effective, the Common Oceans child projects agree to uphold principles that will guide their collaboration on coordination, knowledge management and communications (KM&C), as well as monitoring and evaluation (M&E). These principles are:

1. The Project will participate in coordination meetings, at a frequency and times to be determined in consultation with the GCP Program Coordination Unit (PCU), to discuss topics of relevance to the implementation of the GCP (10626). In addition, the Project will participate in the meetings of the programmatic Global Steering Committee to discuss strategic and implementation issues related to the Program.

2. The Project will participate in efforts coordinated by the PCU to identify and implement opportunities for conducting shared activities when there is full complementarity between already planned activities between two or more child projects. This could allow for a more efficient and effective use of resources, including sharing relevant capacity building material and exercises.

3. The Project will share all reports, knowledge management and communication products produced during implementation, and will participate in the development of programmatic synthesis products by the GCP (10626) that are based on those inputs.

4. The GCP KM&C team will provide guidance to the child projects according to a programmatic KM&C strategy to be developed at the beginning of the implementation phase in consultation with all child projects. This KM&C strategy will provide recommendations on common issues such as Program branding, visibility, common boilerplates, etc.

5. The GCP M&E team will assist and guide the child projects, if requested, to provide information according to a programmatic M&E strategy, agreed by all child projects, including program level indicators, to allow a proper monitoring of the programmatic progress and an adaptive management of the Program.

6. The Project will maintain its independence as to the conduct of the technical activities described in this project document.

UNCLOS. The DSF Project (10623) second phase is consistent with the relevant global framework. The UN General Assembly (UNGA) plays a central role in addressing issues relating to the conservation and sustainable use of biodiversity in marine areas beyond national jurisdiction as manifest in 1972 UNGA resolution 72/73 on oceans and the law of the sea and its preambular paragraphs on the United Nations Convention on the Law of the Sea (UNCLOS) complemented by subsequent legal instruments (e.g., the Agreement on Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks in 1982 and the Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing in Port State Measures in 2009).

BBNJ. While UNCLOS set forth the rights and obligations of states regarding the use of the oceans, their resources, and the protection of the marine and coastal environment, it did not refer specifically to marine biodiversity. Following more than a decade of discussions convened under the UNGA, in 2017 the UNGA decided to convene an Intergovernmental Conference (IGC) to elaborate the text of an International Legally Binding Instrument (ILBI) under UNCLOS on the conservation and sustainable use of Biological Diversity of Areas beyond National Jurisdiction (BBNJ). The four elements covered by the ILBI package, identified in an earlier ad hoc UN working group in 2011, are: (i) marine genetic resources, including questions on the sharing of benefits; (ii) measures such as area-based management tools, including marine protected areas; (iii) environmental impact assessment; and (iv) capacity building and the transfer of marine technology.

The IGC was mandated to meet for four sessions; the first three sessions were held in September 2018, March 2019, and August 2019, respectively. During the last session (IGC-3), delegates delved for the first time, into textual negotiations based on a ?zero draft? containing treaty text developed by the IGC President. The fourth session had been scheduled for March 2020, but was postponed due to the COVID-19 pandemic. To keep the momentum towards reaching agreement on a draft text a virtual intersessional work program was launched in September 2020. The UNGA decision 75/570, noting with concern the continued situation concerning the coronavirus disease (COVID-19), postponed IGC-4 until the earliest possible available date in 2022 and likely will be tasked with a further revision of the draft text on the conservation and sustainable use of marine biological diversity of ABNJ.

This process and on-going negotiations are likely to have significant implications for dsRFMOs and the management of deep sea fisheries. During the BBNJ negotiations, it has been argued that fishing activities could represent a threat to biodiversity. Although many of these activities are regulated under the UNCLOS and UNFSA provisions, the new agreement should address and understand the contribution of fisheries to the cumulative anthropogenic impacts on marine biodiversity. This will require the achievement of effective and sustainable cross-sectoral cooperation towards a better governance of natural resources in the ABNJ.

Under the first program, the GEF-5 Deep Sea Project provided essential information to BBNJ negotiators and contributed to beginning to build bridges between fisheries and environment communities that are essential in the BBNJ negotiations[1].

Collaboration between the BBNJ process and the GEF-7 Program and projects will continue occurring primarily through: (i) development and promotion of adoption of best-practices for sustainable management and biodiversity conservation of ABNJ resources, and (ii) contributions to and coordination with the BBNJ process as it continues to evolve and develop in the future.

SDGs. Building on the success of the earlier Millennium Development Goals (MDGs), the United Nations? Sustainable Development Goals (SDGs) aimed to go further to end all forms of poverty. The new Goals are unique in that they call for action by all countries to promote prosperity while protecting the planet. They recognize that ending poverty must go hand-in-hand with strategies that build economic growth and addresses a range of social needs including education, health, social protection, and job opportunities, while tackling climate change and environmental protection. Of the 17 SDGs, Goal 14 is most relevant to the GEF-7 Project (see Table 1).

Table 1: UNSDGs and Targets to Which the Project Contributes

SDG Goal	Targets	Project-supported Contributions
Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development.	SDG 14.4. By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics	Contribute to this target through its support of activities for the strengthened management of deep sea fisheries and its contribution to ending illegal, unreported and unregulated fishing.
	SDG 14.5 By 2020, conserve at least 10 percent of coastal and marine areas, consistent with national and international law and based on the best available scientific information.	Contribute to this target through its support of activities to identify new VMEs and improve their scientific and compliance monitoring.

	SDG 14.c. Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of ?The Future We Want?.	The DSF Project (10623) is fully consistent with the relevant global frameworks. The UN General Assembly (UNGA) plays a central role in addressing issues relating to the conservation and sustainable use of biodiversity in marine areas beyond national jurisdiction as manifest in UNGA resolution 72/73 (2017) on oceans and the law of the sea and its preambular paragraphs on the United Nations Convention on the Law of the Sea (UNCLOS) complemented by subsequent legal instruments (e.g. the Agreement on Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks in 1982 and the Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing in Port State Measures in 2009). Addressing these issues is consistent with UNCLOS and also links to SDG and BBNJ goals (see below).

The year 2020 was to represent a critical opportunity for the global community to support events and processes leading to a sustainable future for the global ocean; a goal to which the proposed GEF-7 Common Oceans ABNJ Program and Project would directly contribute. These included in particular the 2020 United Nations Ocean Conference (directly targeting the scaling up of efforts to achieve the aforementioned SDG 14) and the 15th meeting of CBD?s COP (expected to adopt a new post-2020 global biodiversity framework that would likely include key priorities and objectives for the marine and coastal biodiversity). Unfortunately, the Conference which was to highlight much needed science-based innovative solutions aimed at starting a new chapter of global ocean action and accelerate progress towards the achievement of SDG 14 by 2030 was postponed, now to 2022 due to Covid-19. The UN Convention on Biological Diversity (CBD) said in a statement that COP 15, the biggest biodiversity summit in a decade, has now been moved to October 2021 due to delays related to the coronavirus pandemic[2].

However, as 2020 marked the deadline for the Aichi Biodiversity Targets and SDG, a new global framework for biodiversity (GFB) was needed to carry the global community into the future with a view to achieving the 2050 Vision for Biodiversity. CBD?s Secretariat is presently in the process of implementing a comprehensive and participatory process for the preparation of the post-2020 global biodiversity framework. In anticipation, the CBD Secretariat has made available a draft of the GBF. The GBF has four long-term goals for 2050. Of these, the project will most directly contribute to Goal A and the following relevant action-oriented targets for 2030 (Table 2).

Table 2: CBD Global Biodiversity Framework (GBF) Goals, Milestones and Targets to Which the Project Contributes.

GBF Goal	Targets	Illustrative project-supported contributions
Goal A. The integrity of all ecosystems is enhanced, with an increase of at least 15 per cent in the area, connectivity and integrity of natural ecosystems, supporting healthy and resilient populations of all species, the rate of extinctions has been reduced at least tenfold, and the risk of species extinctions across all taxonomic and functional groups, is halved, and genetic diversity of wild and domesticated species is safeguarded, with at least 90 per cent of genetic diversity within all species maintained	2. Ensure that at least 20 per cent of degraded freshwater, marine and terrestrial ecosystems are under restoration, ensuring connectivity among them and focusing on priority ecosystems	- identify new VMEs; - improve compliance and scientific monitoring of VMEs; - improve impact assessments of exploratory fisheries (outside fishing footprints and VMEs).
	4. Ensure active management actions to enable the recovery and conservation of species and the genetic diversity of wild and domesticated species, including through ex situ conservation, and effectively manage human-wildlife interactions to avoid or reduce human-wildlife conflict	- increase scientific and technical capacity of dsRFMOs to sustainably manage deep sea fisheries, - promote the adoption of EAFM objectives and implementation plans by dsRFMOs.
	5. Ensure that the harvesting, trade and use of wild species is sustainable, legal, and safe for human health.	- improve dsRFMOs capacity to manage deep sea fisheries, including for data deficient fisheries; - increase MCS capacity in dsRFMOs.
	8. Minimize the impact of climate change on biodiversity, contribute to mitigation and adaptation through ecosystem-based approaches, contributing at least 10 GtCO2e per year to global mitigation efforts, and ensure that all mitigation and adaptation efforts avoid negative impacts on biodiversity.	- increase focus on the likely impacts of CC on deep sea fisheries to enable planning for potential management responses by dsRFMOs and member states, leading to increased global, regional and national commitment to develop and implement climate adaptive EAFM plans for deep sea fisheries.

Countries are expected to reach an agreement over targets to protect the natural world, including proposals to conserve 30% of the world?s oceans and land by 2030, introduce controls on invasive species and reduce plastics pollution.

Regional Frameworks

UNCLOS provides the legal basis for the management of deep sea fisheries by regional dsRFMOs. In addition to these regional bodies, the Project?s first phase was supported by a large and diversified group of stakeholders encompassing most of the sector?s main stakeholders. These included institutions from the private sector, NGOs, national governments and regional organizations. The GEF-7 Project will build on the strong network of partnerships, experience and lessons-learned derived from the first phase, leading to more effective and transformative activities

GEF Cape Town Workshop. Among some of the main recommendations stemming from GEF Cape Town Workshop in 2017[3] that the Project will support are the following: (i) the ecosystem approach is an essential condition for the continued long term science-based collaboration in regional ocean governance and that continuing and strengthening collaboration is needed, while also including social and economic elements; (ii) capacity development, including institutional strengthening, is needed for implementing the Ecosystem Approach; (iii) interactions among relevant stakeholders towards better regional ocean governance should make use of best existing practices and respect existing mandates; (iv) there is a need for open access scientific knowledge as a foundation for policy on all levels; (v) a mechanism to translate science into policy is needed; and (vi) the need to recognize the importance of interregional collaboration for sharing lessons learned / experience and to create synergy among regional initiatives and/or activities.

LMEs. The ABNJ are also characterized by a number of complex ecosystems that include pelagic waters, seamounts, submarine ridges and the seafloor itself and also abut or encompass sections of most of the world?s Large Marine Ecosystems (LMEs) that extend beyond national jurisdictions. The Project will collaborate in and contribute to the TDA/SAP process where issues arise with regard to sustainable management of DSF stocks in particular where stocks pass between ABNJ and adjacent waters covered by an LME. Information will be shared with respective regional management authorities through the project website and the IW:LEARN network (see below).

IW:LEARN: IW:LEARN is the Global Environment Facility's (GEF) International Waters Learning Exchange and Resource Network. The IW:LEARN Project was established to strengthen transboundary water management around the globe by collecting and sharing best practices, lessons learned, and innovative solutions to common problems across the GEF International Waters portfolio. It promotes learning among project managers, country official, implementing agencies, and other partners. In the aforementioned Cape Town Workshop, GEF noted it was willing to assist in building the information-sharing platform through its IW:LEARN network. Clearly the proposed GEF-7 Program and Project could contribute to this and continue its successful collaboration with IW:LEARN in the GEF-7. Specifically a minimum of one percent of the GEF grant in support of this Project will be used to support the production of a website in conformity with IWLEARN guidance, at least two experience notes, participation in IW Conferences held during the project implementation period as well as tropical and regional events hosted by IW:LEARN.

GEF financed Projects and Initiatives

Recent global and regional GEF-supported projects are provided in Table 3.

Table 3: Recent GEF-supported projects relevant to the DSF Project (10623)

Project title/Country	Description	Lead Agency	GEF Focal Areas	GEF Funding (million USD)	Relevant DSF Components	Coordination approach
Global/Regional						

| Coastal Fisheries Initiative (CFI) - Program | The Coastal Fisheries Initiative (CFI) is a global effort to preserve marine resources and ensure that coastal fisheries can continue to play their crucial role in society, contributing to food security, as well as economic and social development. Funded by the Global Environment Facility (GEF), the initiative rallies UN agencies and international conservation organizations behind the common goal of promoting the sustainable use and management of coastal fisheries, championing innovative approaches to improve governance and strengthening the seafood value chain. CFI capitalizes on growing political will for reform in fisheries governance and management. It contributes to the UN's 2030 Agenda for Sustainable Development, and in particular Sustainable Development Goal 14 on conservation and sustainable use of the ocean, seas and marine resources. | FAO, UNDP, UNDP, WB, WWF | IW, BD | 33.7 | 2,4 | - IW:LEARN exchange mechanism; knowledge products and events;

-Project website;

- Project communication activities (outreach and awareness-raising materials and events)

- Coordination between the DSF Project (10623) and the CFI Program will benefit both projects through the sharing of their results and lessons learned, particularly in relation to fisheries management. Results from the DSF Project (10623) will be shared with the CFI Program, particularly for the outputs focusing on the science-management interface and on industry contributions to sustainable DSF. |

Blue Nature Alliance to Expand and Improve Conservation of 1.25 billion hectares of Ocean Ecosystems	The project's objective is to catalyse the effective conservation of at least 1.25 billion hectares of ocean (approximately 3.5 percent of the global ocean), in order to safeguard global ocean biodiversity, build resilience to climate change, promote human wellbeing, and enhance ecosystem connectivity and function.	CI	IW	22.6	3,4	- IW:LEARN exchange mechanism; knowledge products and events; -Project website; - Project communication activities (outreach and awareness-raising materials and events) - Coordination between the DSF Project (10623) and the Blue Nature Alliance project will benefit both projects through the sharing of their results and lessons learned, particularly in through a better understanding of the biodiversity impacts from DSF activities. Results from the DSF Project (10623) will be shared with the Blue Nature Alliance project, particularly for the outputs focusing on the impact of DSF on deepwater sharks and on VMEs.

Fisheries and Ecosystem Based Management for the Black Sea (FishEBM BS)	The project, to be executed by the GFCM, will support Georgia, Turkey, and Ukraine in the Black Sea in developing Blue Economy pathways through an ecosystem-based management approach. During project preparation the main issues will be identified requiring technical support, upscale regional fisheries networks, as well as promote and disseminate sustainable management practices with a specific focus on small-scale fisheries and value chains.	FAO	IW	5.0	1,2,3,4	- IW:LEARN exchange mechanism; knowledge products and events; -Project website; - Project communication activities (outreach and awareness-raising materials and events) - Coordination between the DSF Project (10623) and the FishEBM BS project will benefit both projects through the sharing of their results and lessons learned, particularly in through a better understanding of the application of the EAF. Results from the DSF Project (10623) will be shared with the FishEBM BS project, particularly for the outputs focusing on the science-management interface, industry contributions to sustainable DSF, ecosystem and stock productivity models, improved catch recording, scientific advice on data-limited stocks, the impact of DSF on deepwater sharks and on VMEs and impacts of other

Fisheries and Ecosystem Based Management for the Blue Economy of the Mediterranean (FishEBM MED)	The project's objective is similar to the above but focused on Albania, Algeria, Lebanon, Libya, Montenegro, Morocco, Tunisia, and Turkey in the Mediterranean	FAO	BD, IW	7.3	1,2,3	- IW:LEARN exchange mechanism; knowledge products and events; -Project website; - Project communication activities (outreach and awareness-raising materials and events) - Coordination between the DSF Project (10623) and the FishEBM MED project will benefit both projects through the sharing of their results and lessons learned, particularly in through a better understanding of the application of the EAF. Results from the DSF Project (10623) will be shared with the FishEBM MED project, particularly for the outputs focusing on the science-management interface, industry contributions to sustainable DSF, ecosystem and stock productivity models, improved catch recording, scientific advice on data-limited stocks, the impact of DSF on deepwater sharks and on VMEs and impacts of other

| Mainstreaming Climate Change and Ecosystem-based Approached into the Sustainable Management of the Living Marine Resources of the WCPFC | The project's objective is to implement 2019 SAP for the sustainable management of living oceanic resources by the Pacific SIDS to address the primary and emerging threats, particularly CC. Project components are: (i) implementation of an adaptive EBA to regional fisheries management; (ii) innovative technology development and implementation to support adaptive EBA to regional fisheries management; (iii) regional strategy for improved community subsistence and resilience to CC effects on the ecology and fisheries of the region and (iv) KM and sharing. | UNDP | IW | 10.0 | 1,2,3,4 | - IW:LEARN exchange mechanism; knowledge products and events;

-Project website;

- Project communication activities (outreach and awareness-raising materials and events)

- Coordination between the DSF Project (10623) and the WCPFC project will benefit both projects through the sharing of their results and lessons learned, particularly in through a better understanding of the application of the EAF. Results from the DSF Project (10623) will be shared with the WCPFC project, particularly for the outputs focusing on new technologies, ecosystem and stock productivity models (taking into account climate change effects), improved catch recording, scientific advice on data-limited stocks, gender and decent work, the impact of DSF on deepwater sharks and on VMEs. |

| Sustainable Management of the Bay of Bengal Large Marine Ecosystem Programme | The project's objective is to contribute to sustainable management of fisheries, marine living resources and their habitats in the Bay of Bengal region, to reduce environmental stress and improve environmental status for the benefit of coastal states and communities. The project will be implemented 5 Components: (i) Sustainable Management of Fisheries; (ii) Restoration and conservation of critical marine habitats and conservation of biodiversity; (iii) Management of coastal and marine pollution to improve ecosystem health; (iv) Improved livelihoods and enhanced resilience of the BOBLME; and (v) regional mechanism for planning, coordination and monitoring of the BOBLME (includes IUU and EAF). | FAO | IW, CC | 9.5 | 2,3,4 | - IW:LEARN exchange mechanism; knowledge products and events;

-Project website;

- Project communication activities (outreach and awareness-raising materials and events)

- Coordination between the DSF Project (10623) and the BOBLME project will benefit both projects through the sharing of their results and lessons learned, particularly in through a better understanding of the application of the EAF. Results from the DSF Project (10623) will be shared with the BOBLME project, particularly for the outputs focusing on ecosystem and stock productivity models (taking into account climate change effects), improved catch recording, scientific advice on data-limited stocks, gender and decent work, the impact of DSF on deepwater sharks and on VMEs and frameworks to mitigate and |

[1] The Regional Leaders Program provided information to potential negotiators from 34 countries. The project also collaborated with the STRONG HS Project on the specific issue of enhanced MCS tools and policies with a view to improving regional coordination and providing new lessons and approaches for HS governance. The Capacity and the Deep Sea Projects also supported activities to increase public awareness on ABNJ-related issues through dialogues and side events at the UN, a workshop for media, and two cross-sectoral workshops.

[2] It was initially intended that the 15th meeting of the Conference of the Parties (COP 15) to the Convention on Biological Diversity (CBD) would adopt the post-2020 Global Biodiversity Framework. Due to Covid19 this was postponed from October 2020 until 2021. Moreover, parties to the three biodiversity agreements (CBD and Cartagena and Nagoya Protocols) held extraordinary meetings to ensure operations could continue in 2021, and concluded with the adoption of an interim budget for 2021.

[3] GEF, UNDP, IOC/UNESCO, UNEP, and FAO. 2017. Building international partnerships to enhance science-based ecosystems approaches in support of regional ocean governance. Meeting Report. 27-28th November, 2017. Cape Town, SA.

7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assesments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

This DSF Project (10623) operates in the high seas where no one country has jurisdiction. However, under UNCLOS, States are responsible for their vessels (including fishing vessels) and for managing fisheries to ensure fish stocks are maintained at levels producing the maximum sustainable yield and that dependent and associated species are maintained above levels where their reproduction may become seriously threatened. In the ABNJ, this is undertaken cooperatively through independent fisheries management bodies called RFMOs. These comprise of member states who collectively make decisions and then incorporate them into their own national laws. Fishing in the ABNJ where no RFMO is present is the direct responsibility of the State. For deep seas fisheries, the western, eastern and southwestern Atlantic Ocean do not have RFMOs.

RFMOs operate through their member countries and they are not independent of them. They are also governed by their own conventions (agreements or treaties), and as such are responsible only to their member countries. None of them have member strategy documents, similar to the national documents reviewed below. The scientific Committees normally have plans of work or strategic directions in order to provide better advice, Compliance Committees often have periods when ?tools? are being introduced (for example, a 2-year period to equip vessels with VMS), and the Commission takes its direction from the requirements of its RFMO Convention (and UNCLOS, UN FSA, UN PSMA and other binding and voluntary instruments) and from its national positions. GFCM (Art. 17), SEAFO (Art. 21), SIOFA (Art. 13) and SPRFMO (Art. 19) all specifically refer to the special requirements of developing states in their Conventions. NAFO and NEAFC, which do not have this sort of text within their Conventions, assist together with the other RFMOs mentioned, international organisations, like FAO in the GEF-5 DS project (4660), in the transfer of knowledge and training where and when possible.

The national strategies provided under the conventions listed below have been selected for relevance to the DSF Project (10623) operating in the ABNJ. Most of the strategies below apply to developing countries and few developing countries[1] carry out deep-sea fishing in the ABNJ. As an attempt to provide similar priorities by RFMOs, which act as fora for ABNJ fisheries management, a summary of discussion topics held by the Commissions at their annual general meeting is provided and provides and insight into the work currently undertaken by RFMOs.

National Action Plan for Adaptation (NAPA) under LDCF/UNFCCC

A National Adaptation Programme of Action (NAPA) is a type of plan submitted to the United Nations Framework Convention on Climate Change (UNFCCC) by Least Developed Countries, to describe the country's perception of its most "urgent and immediate needs to adapt to climate change". Submitted NAPAs are listed in the ?Submitted NAPAs? database[2]. The webpage lists 51 countries with the most recent submission being in February 2017.

Angola is a contracting party to SEAFO in the south-west Atlantic Ocean. It submitted its report to UNFCCC in December 2011[3]. The report highlights inshore fisheries to Angola, but there are no fisheries in the high seas. Angola Chaired the SEAFO Commission for 2019?2020, but were not present at the Scientific Committee owning to domestic work. There are no climate change adaptations relevant to this DSF Project (10623) that could influence or be supported by the project.

Vanuatu is a contracting party to NPFC in the North Pacific Ocean and SPRFMO in the South Pacific Ocean. It submitted its report to UNFCCC in December 2007[4]. The report highlights the importance of coastal fisheries to Vanuatu, including uncertainty under climate change. The Fisheries Department does not have the sufficient resources to monitor the tuna catch in Vanuatu waters (page 14), and is struggling to manage its coastal fish stocks. It?s only adaptation strategy relevant to this ABNJ DSF Project (10623) is to promote alternative fisheries including deep water fisheries (bullet viii, page 28). Vanuatu offered to host both the NPFC Commission Meeting and Scientific Council meeting in 2020, but these were held virtually instead owing to travel restrictions due to the Covid-19 pandemic. Vanuatu has a small Pacific saury fishery in the North Pacific ABNJ with a catch of 2 160 mt in 2020. The SPRFMO database records high seas catches by Vanuatu of Chilean Jack mackerel and Chub mackerel being caught by mid-water trawls in 2003?2016[5]. In both regions, catches are of pelagic species. There are no climate change adaptations by Vanuatu relevant to deep sea bottom fisheries that could be supported by the DSF Project, though they willingness to take an active role in both NPFC and SPRFMO may provide opportunities for training in fisheries science and management.

National Action Program (NAP) under UNCCD

National action programmes (NAPs) are the key instruments to implement the United Nations Convention to Combat Desertification. This Convention can not be supported and has no relevance to the ABNJ DSF Project (10623).

ASGM NAP (Artisanal and Small-scale Gold Mining) under Mercury

This Convention can not be supported and has no relevance to the ABNJ DSF Project (10623).

Minamata Initial Assessment (MIA) under Minamata Convention

The Minamata Convention Initial Assessments (MIA) is a fund for developing countries to support the sound management of chemicals. This Convention can not be supported and has no relevance to the ABNJ DSF Project (10623).

National Biodiversity Strategies and Action Plan (NBSAP) under UNCBD

The National Biodiversity Strategies and Action Plans were provided by the member?s national reports to the CBD for the conservation and sustainable use of biological diversity. A total of 14 countries have submitted reports under the type-category ?Voluntary report on implementation of the programme of work on marine and coastal biodiversity?[6] in 2008-2009, which have not been updated. There sections are relevant to the DSF Project (10623):

>•2.2: To make available to the Parties information on marine genetic resources in marine areas beyond national jurisdiction, and as appropriate, on coastal and marine genetic resources under national jurisdiction from publicly available information sources.
>•2.4: To enhance the conservation and sustainable use of biological diversity of marine living resources in areas beyond the limits of national jurisdiction
>•3.2: To enhance the conservation and sustainable use of biological diversity in marine areas beyond the limits of national jurisdiction.

A total of 5 of the 14 countries undertake DSF fish in the ABNJ. The reports vary in detail and do not fully reflect current activities. In general, these types of actions have been taken over by the BBNJ negotiations, that will be covered here separately. The following are included in their national reports:

>•Canada supports the BBNJ process, identifies similarities between EBSAs and VMEs, and works closely with NAFO on mapping VMEs, supporting VME closures and bottom fishing measures and implementing the FAO DSF Guidelines.
>•Australia recorded its strong involvement in international organizations, including UNGA, FAO, the BBNJ Negotiations, and RFMOs. It?s focus is on IUU fishing and contributes to the MCS network[7][7]. Supports the UNGA 61/105 and has implemented measures that apply to all fishing vessels. Supports the use of area-based management tools including networks of MPAs, threat-based MPAs, fisheries closures and specially managed areas, to improve conservation and sustainable use outcomes. Information is generally made available to the public through websites.
>•Spain promoted its international works in the framework of the UNGA, supporting RFMOs and promoting international closures to protect VMEs. Spain is actively involved in sensitive habitat mapping around Hatton Bank, and recognizes the importance of MPAs and working with OSPAR and UNGA.
>•Japan?s report concentrated mainly on coastal pollution and coral reefs in Japan?s waters and did not mention ABNJ work.
>•Portugal?s report concerned national waters only.

National Communications (NC) under UNFCCC

Climate change is a very active area of considerable interest. The Oceans in the ABNJ play a significant role in controlling our climate and in mitigating the effects of climate change. There is growing evidence that they are already affected by climate change though they are probably the poorest monitored of any habit, especially the deep oceans. The contribution of DSF to the causative elements of climate change is likely insignificant, though fishing vessels should follow IMO regulations regarding emissions and efficiency. The effects of climate change in the open oceans will affect the distribution of the target fish species and hence the distribution of the fisheries, and also the distribution of associated species and impacts from fisheries on these species. Much of this has been recently summarized in the recent FAO Technical Paper on Deep-ocean climate change impacts on habitat, fish and fisheries[8][8].

This section will concentrate on national communications submitted by the nations currently involved in DSF.

Korea?s 4th NC (2019) focuses entirely on domestic actions but notes the launching of its geostationary satellites, the Chollian and GEO-KOMPSAT-2B, to monitor various physical characteristics, such as red tide, water temperature, marine debris, and marine environment change.

The Spanish report (only in Spanish) seems to focus on domestic issues.

France records that it is a major player in international fora dealing with climate change, and focus its overseas actions on its territories, within the EU, and bilaterally with works in Africa, and countries like Brazil, Indonesia and China. There is little mention of fisheries and none in the ABNJ. The report focuses almost entirely on national issues.

Portugal contributes international but nothing in report outside of national interests, including mainland Madeira and Azores. Contribute to monitoring of oceanic essential climate variables at the surface water column and in the oceans via satellites.

Russia submission are in Russian only with the most recent being in 2017. An English summary from 1996 notes that CC may seriously affect fisheries and notes that Russian contributes to interdisciplinary research on the world?s oceans, the Arctic and Antarctic.

Japan?s report includes observations on a mean annual sea temperature rise of +1.09?C per century and sea level rises averaging 1.1 mm from 1971 to 2010. Apart from promoting a switch to more energy-efficient fishing vessels and concerns regarding the migration of tuna and bonito fish stocks, fisheries in the ABNJ was not specifically mentioned.

The Norway communication links CC to increased CO_2 in marine waters that affects the ability of calciferous organisms to precipitate calcium carbonate. This will be most severe at greater depths and will negatively impact coralline algae, phytoplankton, zooplankton, crustaceans, molluscs and corals. This has knock-on effects affecting the entire marine food chain, though it is very uncertain how the changes will affect species composition, fish stocks and total production in marine ecosystems. The distribution of commercially important fish spe?cies such as cod, haddock, herring and capelin have already changed, and may change more in the future. The report notes that Norway has reduced in emissions of greenhouse gases from the Norwegian fishing fleet since its peak in 2012, from around 1.6 million tonnes CO_2 equivalents to 1.1 million tonnes in 2015. This has been partly achieved by technological developments and improved

fishing methods, equipment and vessels have made possible a restructuring of the fishing-fleet. Norway has a CO2 tax on the use of mineral oils in domestic shipping, though fishing in inshore waters is subject to a low rate.

Norway noted that the declining sea ice cover is making marine and coastal waters in the Arctic more accessible for fisheries, maritime transport, mining activities, cruise ships and oil and gas activities. Negotiations in late 2017 resulted in the draft Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean. Fishing in the central Arctic Ocean, an area that is roughly 2.8 million square kilometres in size, has never been possible, nor is it likely to occur in the near future.

Norway is a major contributor to both international research in climate change and to international funds such as GEF and the Green Climate Fund and to bilateral funds.

Technology Needs Assessment (TNA) under UNFCCC

The TNAs are prepared by developing countries[9][9]. The only country with a report involved in deep sea fishing is China and this report is from 1998 and so too old to be relevant. There exists a synthesis report from 2020[10][10] but this has no information on fish, fisheries or the ocean.

National Capacity Self-Assessment (NCSA) under UNCBD, UNFCCC, UNCCD

The National Capacity Self Assessment (NCSA) is a project that was funded by the Global Environmental Facility (GEF), implemented by the United Nations Development Programme (UNDP), and executed by the Department of Physical Planning and Environment, Ministry of Sustainable Development. The purpose of the NCSA is to identify and analyse country level priorities and needs for capacity development related to the implementation of the United Nations Convention on Biological Diversity (UNCBD), the United Nations Framework Convention on Climate Change (UNFCCC), and the United Nations Convention to Combat Desertification (UNCCD)[11][11].

The final summary report is from 2010 and likely too undated to be of relevance to the DSF Project (10623). In addition, the report reflected mainly terrestrial issues and recorded that ?unsustainable fisheries? was amongst the lowest priority of the 23 issues for the 119 countries responding. Oddly, the highest priorities were biodiversity conservation and vulnerability to climate change, which may reflect a bias towards the organisations who performed the NCSA. Fisheries was mentioned in the context of freshwater and coastal systems and so not relevant to the DSF Project (10623).

National Implementation Plan (NIP) under POPs

This concerns the Stockholm Convention and persistent organic pollutants (POPs). POPs are currently or were in the past used as pesticides, solvents, pharmaceuticals, and industrial chemicals. These have been known to be toxic in fish, for example, PCBs causing spawning failure and or possibly methyl-mercury in tuna. A total of 183 NIPs have been submitted to the Secretariat between 2006 and 2021. Plastics are classified as ?marine litter? and seem not to fall under this POP Convention. It is here assumed that this convention and its NIPs are not of current relevance to the DSF Project (10623).

As an aside, OSPAR is an international organization that monitors POPs in the northeast Atlantic, as stated in the EU NIP submission. This is the only international organization of its type that has a mandate to operate in the ABNJ area.

Poverty Reduction Strategy Paper (PRSP)

Poverty Reduction Strategy Papers (PRSP) are prepared by the member countries through a participatory process involving domestic stakeholders as well as development partners, including the World Bank and International Monetary Fund. DSF is a specialist operation typically confined to developed nations. There are some links to developing countries, for example crewing of vessels, but this can not eb seen as an PRSP.

National Portfolio Formulation Exercise (NPFE) under GEFSEC

GEF National Portfolio Formulation Exercises serve as a priority setting tool for countries and as a guide for GEF Agencies as they assist recipient countries. These have been completed by 38 countries.

Under the GEF-5 template, the Philippines (which does supply crew for DSF vessels) requested support for the development of LMEs and coastal areas. Currently LMEs are within EEZ areas and not generally relevant to the DSF Project (10623) on the fisheries management in the ABNJ. Other countries with submissions are not involved with DSF in the ABNJ.

Biennial Update Report (BUR) under UNFCCC

This is the 4th inclusion of national actions on climate change in this list. The BURs are submitted by developing (non-Annex 1) countries and concern updates of national green house gas inventories. This could be relevant to emissions from fishing vessels in the ABNJ.

China?s report mentions a 2016 value of 5 kg carbon emission per 1 000 ton-sea mile for ocean and coastal freight, but there is no reference to fishing vessels.

The Republic of Korea notes in its 2019 submission ?The shipping sector reduces GHG emissions by improving energy efficiency by introducing fuel-efficient linear technology, high-efficiency propellers, gas engines, and electric propulsion systems and supplying environment friendly ships. For these purposes, the government has supported oceangoing vessels to be replaced with eco-friendly vessels since 2018 and plans to induce the transition of coastal vessels to eco-friendly vessels by interest subsidy and fund support for the modernization of coastal vessels. Since the International Maritime Organization (IMO) plans to regulate the SOx content of ship fuel oil from 3.5 percent to 0.5 percent by 2020 and environmental regulations for NOx also are enhanced, the government responds to the environmental regulations by expanding the use of AMPs and introducing LNG propulsion ships by establishing the Green Port Construction General Plan.?. There is not specific mention of fisheries or fishing vessels.

There are no other Non-Annex 1 countries concerned with DSF.

National Legislation, Governance and provisions for Environmental and Social Risk Management

Not relevant to ABNJ marine areas.

Others

UNCLOS (1982), UNFSA (1995) and the UNGA Resolutions

The two primary conventions governing the use of the Oceans are UNCLOS (1982, in force 1994) and UNFSA (1995, in force 2001). These documents provide the ?laws? by which member-States must abide. With respect to DSF and at the request of the UNGA, FAO and its DSF Guidelines promote the implementation of UNCLOS and the UNFSA.

The UNGA adopts annual UNGA Resolutions supporting UNFSA, and has reviewed the implementation of the recommendations regarding bottom fisheries in the ABNJ in the reports of the Secretary General in 2006 (A/61/154), 2011 (A/66/307), 2016 (A/71/351) and 2020 (A/75/157). The review was held in 2020, but the associated workshop has been postponed until 2022 ?in the light of the impacts of the COVID-19 pandemic? (para 209, UN GA Res 75/89). Important conclusions from the reviews are typically repeated as calls for action in subsequent resolutions. Therefore, only the most recent and relevant UNGA Resolution of 18 December 2020 is reviewed here (A/RES/75/89, 2020)[12][12].

The UNGA also periodically reviews the implementation of the recommendations regarding bottom fisheries in the ABNJ in the reports of the Secretary General in 2006 (A/61/154), 2011 (A/66/307), 2016 (A/71/351) and 2020 (A/75/157)[13][13]. Whereas this is not a national plan, the 2020 report is here reviewed and provides progress on achieving the calls in the UNGA Resolutions relating to bottom fisheries.

UNGA Resolution 75/89 of 18 December 2020

This resolution is organised under several headers each with supporting paragraphs. Those relevant to the DSF Project (10623) are presented as bullet points with reference to the appropriate paragraph:

- Support 2002 World Summit and the SDG 14 to conserve and sustainably use the oceans, and to report on progress using consistent indicators. (3-6, 70)
- consumption of fish sourced from sustainably managed fisheries (7)
- climate change and ocean acidification on ecosystems relevant to fisheries (10)
- precautionary approach and ecosystem approaches (16)
- increase reliance on scientific advice (17)
- improved data collection (21-24)
- Implement the [FAO] shark and other International Plan of Action (26, 75)
- adopt measures necessary to ensure the long-term conservation, management and sustainable use (47)
- Assist developing States in their participation in RFMO/A (48)
- Request FAO to revise its global fisheries statistics database on the basis of where the catch is taken (69)
- Promote Safety of Fishing Vessels (77)
- Combat IUU fishing, promote the FAO Port State Measures Agreement (79, 90, 94)

UNGA A/75/157 Report of the Secretary-General on impacts of bottom fishing and the long-term sustainability of deep-sea fish stocks

Actions taken by States and regional fisheries management organizations and arrangements in response to paragraphs 113, 117 and 119 to 124 of General Assembly resolution 64/72, paragraphs 121, 126, 129, 130 and 132 to 134 of General Assembly resolution 66/68 and paragraphs 156, 171, 175, 177 to 188 and 219 of General Assembly resolution 71/123 on sustainable fisheries, addressing the impacts of bottom fishing on vulnerable marine ecosystems and the long-term sustainability of deep-sea fish stocks.

Those relevant to the DSF Project (10623) are presented as bullet points with reference to the appropriate paragraph:

- Uneven implementation including regions without completed impact assessments in the 10 years since the adoption of resolution 61/105 (3)
- Distribution of deep-sea VMEs in ABNJ essential for implementing effective measures to manage bottom fishing. Data mainly from fishery independent surveys, scientific observer programs and ad hoc scientific research surveys, either coordinated or directly organized by bottom fishing RFMO/As (13)
- Status of 51 targeted deep-sea fish stocks revealed that 16 were relatively good, 10 were negative, and 25 were unknown (34, 35). Catches may be underestimated (36).
- VMEs is most commonly protected by establishing a bottom fishing footprint or by VME fishery closures (37, 54-62, 69). SPRFMO have gear specific spatial measures with bottom trawl, mid-water trawl and bottom line management areas. New and exploratory fisheries outside of these areas required special protocols (70).
- Vessel monitoring shows that the area of seabed fished tends to be much smaller than the fishable area or ?fishing footprint? (39).
- Climate change means many RFMO/As may have to adapt to permanent changes in the managed resources and may need to re-evaluate the appropriateness of spatial and temporal management measures. Pressures on VMEs from ocean acidification, plastic pollution and anthropogenic underwater noise should be monitored (202).
- The coronavirus disease (COVID-19) pandemic has presented States and RFMO/As with a new set of challenges with regard to the management of fisheries and the protection of VMEs, including difficulties in conducting research, adopting and reviewing measures and undertaking monitoring, control and surveillance activities (203).

UN FAO and the Committee of Fisheries

UN FAO is the UN technical agency responsible for marine and freshwater capture fisheries and aquaculture, covering all aspects along the value chain with an emphasis on healthy ecosystems and reducing hunger. FAO is governed by its Committee on Fisheries (COFI) who met this year at their 34th session[14][14].

The COFI directed FAO to engage more actively in international processes, including through the development of technical guidance, to support climate change mitigation and adaptation, marine conservation, and sustainable and inclusive ocean economies (12).

COFI also expressed concern for the continued deterioration of the status of marine fish stocks at global level and to increase links between decision-making on fisheries management and the best available science (15). COFI also called on FAO to have stronger cooperation with RFMOs (77, 82, 83, 88, 89, 90, 91, 111, 122). This should also strengthen the use of effective time and area-based management tools, such as protected areas and other effective area based conservation measures (OECMs) for the conservation and sustainable use of biodiversity, and that this contributes to SDGs and global biodiversity targets (106). COFI commended the regular participation of FAO in the process of deliberation on an instrument on the conservation and sustainable use of biodiversity beyond areas of national jurisdiction (BBNJ) and requested that FAO, within its mandate, to continue providing technical advice and relevant information, including on the objectives and implementation of existing fisheries instruments (86).

COFI also emphasized the importance of safety at sea and working conditions in the fisheries sector and welcomed the close cooperation between FAO and ILO and IMO. Members requested FAO to further strengthen international cooperation on occupational health and safety issues in the fisheries and aquaculture sectors and to promote decent work for fishers and fish workers (92).

UNCBD and Aichi biodiversity target 11

The members of the CBD adopted in 2010 the Strategic Plan for Biodiversity 2011-2020. Target 11 stated ?By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascapes?. CBD aligned their decisions on marine and coastal biodiversity (CBD COP X/29) with the Strategic Plan ?? to safeguard marine and coastal biodiversity and marine ecosystem services, and sustainable livelihoods, and to adapt to climate change, through appropriate application of the precautionary approach and ecosystem approaches, including the use of available tools such as integrated river basin and integrated coastal zone management, marine spatial planning, and impact assessments? (paragraph 15).

The RFMOs have always used a spatial management approach (particularly at the unit of fish stocks) which has been elaborated upon with the adoption of existing bottom fishing areas, VME closures and areas outside of these (UNGA Res. 61/105 and subsequent[15][15]). The VME closures remove the greatest perceived threat to the destruction of benthic biodiversity, namely bottom fishing, and encounter protocols ensure that ?unknown? VMEs are also identified and protected during normal fishing operations.

IUCN (2018)[16][16] monitor progress towards Aichi Target 11 using their own definition of MPAs that differences from the criteria mentioned by CBD (see CBD COP X/29 para 15 above). The term OECM, as used by the CBD in 2010, was defined by the CBD in 2018[17][17]. This would clearly permit fisheries measures that help to protect biodiversity to be included as OECMs as described in CBD COP X/29. The DSF Project (10623) supports the inclusion and recognition of the work of the RFMOs to protect biodiversity from any significant adverse impacts arising from commercial fishing operations. However,

this is still being debated as shown by a recent ICES/IUCN-CEM FEG meeting[18][18]. The final decision may well rest with the CBD member states to decide if fisheries measures meet the intended OECM criteria.

UNCBD and the EBSA descriptions

The members of the CBD adopted in 2008 at COP 9 the scientific criteria for identifying ecologically or biologically significant marine areas. Proposals for EBSA areas were submitted by CBD members at regional meetings and through a review process were approved by the CBD[19][19]. The original intention was for these EBSA areas to be in the open-ocean waters and deep-sea habitats. However, most CBD members have little to no information on this and most of the proposed EBSAs were for coastal or near shores areas. In addition, the range of proposed areas and habitats extended from ocean systems (e.g. the equatorial high-productive zone that extends across the central Pacific Ocean) down to very small areas (e.g. Blue Bay Marine park, a wetland site of 3.5 km2). The original intention was to describe EBSAs and to afford them with a degree of protection. Whereas this is possible for areas within EEZs, it has been problematic for areas in the ABNJ owing to a lack of a governance mechanism for this. The great diversity of EBSAs also means that it is difficult to know what or how to afford them protection. The EBSA program has been subject to discussions by some of the dsRFMOs, and there are areas under fisheries management that are also designated as EBSAs but the processes are not linked. A major constraint in the selection of EBSA areas in the ABNJ is the paucity of information.

The Regional Seas Programmes

The Regional Seas Programme (RSP) was launched in 1974 and is coordinated by UNEP. The Regional Seas Programme aims to address the accelerating degradation of the world?s oceans and coastal areas through the sustainable management and use of the marine and coastal environment, by engaging neighbouring countries in comprehensive and specific actions to protect their shared marine environment. There are 13 Regional Seas programmes established under the auspices of UNEP and five partner organisations. The Mediterranean, depending on how it is classified, is the only RSP that may include the ABNJ. Some of the partner organisations also have mandates that include ABNJ areas, e.g. the northeast Atlantic, Arctic and Southern Oceans.

RFMO Conventions (Agreements, Treaties)

RFMOs are fora comprised of member countries responsible for the establishment of regulations to manage fisheries in the high seas. They are guided by UNCLOS and the UNFSA and are governed by a convention that sets out their duties and obligations. RFMOs are supported by a Secretariat who undertake the day-to-day administrative duties and is the legal entity and point of contact. The details of these vary among the regions though in general, and with the exception of GFCM that is an Article 14 FAO body, they do not generally support development among their members by way of grants or privileges. In general, again with GFCM excepted, the RFMO Secretariats do not execute projects, though it is common for members to fund and execute projects either separately of jointly, and sometimes under the auspices of the RFMO. There is however a spirit of cooperation within RFMOs and a willingness to support each other

to achieve the objectives of the organisation. This spirit of cooperation, as stated in their conventions, also extends to FAO and other inter-governmental organisations.

Member countries submit reports annually to their RFMO according to the adopted obligations. In general, these are accounts of their fishing operations over the previous year. They may highlight deficiencies, but do not normally provide details of national development plans. SEAFO (Article 21), SIOFA (Article 13), SPRFMO (Article 19), and GFCM (Article 8), all recognise the special requirements of developing states. NAFO[20][20] participates in capacity building initiatives for developing countries, particularly through partnering the FAO ABNJ Deep-seas project, and such activities were strongly supported in the NAFO 2018 performance review[21][21]. NEAFC also provided their support and expertise to FAO and the Deep-Sea Project. Both organisations were especially active in promoting north-south exchange.

[1] China, Cook Islands, Republic of Korea, and Russian Federation, are GEF eligible countries that undertake DSF in the ABNJ. Of these, all have signed UNCLOS and UNFSA, only the Republic of Korea and Russian Federation have signed the Port States Measures Agreement.
[2] https://unfccc.int/topics/resilience/workstreams/national-adaptation-programmes-of-action/napas-received
[3] https://unfccc.int/resource/docs/napa/ago01.pdf
[4] https://unfccc.int/resource/docs/napa/vut01.pdf
[5]https://www.sprfmo.int/assets/2020-Annual-Meeting/COMM8-2020/Inf/COMM8-Inf01-Data-Submitted-to-the-Secretariat.pdf
[6] https://www.cbd.int/nbsap/search/
[7]https://imcsnet.org/
[8] http://www.fao.org/3/ca2528en/ca2528en.pdf
[9] https://unfccc.int/ttclear/tna/reports.html
[10] https://unfccc.int/sites/default/files/resource/sbi2020_inf.01.pdf
[11] http://www.thegef.org/sites/default/files/ncsa-documents/759.pdf
[12] https://undocs.org/en/A/RES/75/89
[13] A/75/157 - E - A/75/157 -Desktop (undocs.org)
[14] http://www.fao.org/3/ne472en/ne472en.pdf
[15] http://www.fao.org/in-action/vulnerable-marine-ecosystems/vme-database/en/vme.html
[16] https://www.iucn.org/sites/dev/files/content/documents/applying_mpa_global_standards_final_version_050418.pdf
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[20] https://www.nafo.int/About-us/International-Cooperation
[21] https://www.nafo.int/Portals/0/PDFs/Performance/NAFOPerformanceReviewPanelRpt2018.pdf

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.

The Knowledge Management Approach

The approach to Knowledge Management and communication (KMC) of the DSF Project (10623) is based on the experiences and lessons learned from the first phase of the Project, and the activities will be aligned

with relevant priorities, policies and strategies of FAO, GEF and the partners involved. As a concept, KM is considered the collation, storage, and dissemination of information, best practices, or use of technology relating to promoting sustainable fisheries and biodiversity conservation through reducing impacts, whereas communication activities and materials are used for awareness raising purposes.

During the first phase, there was no structured KM mechanism for the effective harvesting and dissemination of the knowledge produced, and the communication activities were not targeted to reach key stakeholder groups such as the RFMO/As, RSPs and their members, that both benefit and contribute to achieve Project objectives. Furthermore, there were limited interactions between the various projects in the program, which impeded possible synergies and cohesive messaging.

Guided by these lessons learned, the Common Ocean program and its child projects will by guided by a coordinated programmatic approach to ensure coherence, harmonized action and linkages among the program and its child projects. This will be undertaken by the KMC team within the Program Coordination Unit (PCU) following a Common Oceans KMC Strategy (See GCP (10626) Project Document). This will promote a two-way interaction between the program and child projects to enable coordinated and cohesive awareness-raising at the program level, while allowing effective communication and outreach at project level.

The KM and Communication Strategy

The program KMC Strategy will underpin, guide and support the generation, dissemination and application of information and knowledge from the program. It will set out a common analytical framework to organize and analyse information gathered by the different child projects, collect and share best practices, lessons learned, and innovative solutions to ABNJ issues across the program, and ensure that key target audiences are kept informed of the program and individual child Project objectives, activities and achievements.

The KMC Strategy builds on acknowledged best practices widely employed by FAO, such as the Knowledge Sharing Toolkit[1], and be in line with the principles of the FAO Knowledge Strategy (2011) and GEF?s Knowledge Management Strategy and associated guidance[2]. The KMC team will provide guidance on harmonizing messages, branding, visibility etc., and will be responsible for identifying, in consultation with the Program Coordinator, possible stories and narratives that convey programmatic messages synthesized from the activities of the Projects.

Target audiences

The DSF Project (10623) is concerned with the management of deep-sea fisheries and has a specialized set of primary stakeholders and target audiences, which are mainly confined to the RFMOs (and their member states) and the deep-sea fishing industry. This is due to the current global governance regime that restricts fisheries management in the ABNJ to the RFMOs who, through their members, control the activities of the industry. In general, the KMC for this is of a technical nature and it will concern mainly project outputs. This is the primary target audience for the DSF Project (10623).

There is, in addition, a wider secondary group of stakeholders that are playing an increasing, albeit indirect, role in fisheries management and this includes the wider fisheries and conservation communities, academia, donors and media. It is these secondary stakeholders that have been responsible for catalysing many of the changes in ABNJ fisheries management that have been seen over the last ten or so years. In

general, the KMC is still on DSF matters and will be communicated in a semi-technical style but with a more general target audience in mind. It will be directed at those stakeholder groups that have a professional interest in Ocean management. This is at the project/program interface and will require support form the KMC team for effective messaging and will concern mainly project outcomes.

The final level will be a more generalized KMC on wider ocean issues that brings the work of the four child projects together. This will target wider ocean governance issues and include, in addition to the above stakeholders, those people interested in ocean governance and the oceans in general including professionals from a wide range of disciplines, and fish retails, consumers and the general public. For this to be effective, the DSF Project (10623) will work closely with the KMC team to produce the most effective KMC products. This will concern mainly the medium and long-term project and program impacts.

Key deliverables

The DSF Project (10623) KMC are integrated in Component 1 (governance), Component 2 (effective DSF management) and Component 3 (cross-sectoral), and is supported by Component 4 (KMC and M&E). Though these components are often treated independently (and are typically undertaken by people having different backgrounds and responsibilities), the DSF Project (10623) aims to increase understanding across these components through its science-management and industry frameworks (outputs 2.1.1 and 2.1.2). To support these efforts and raise awareness of the Project?s objectives, activities and achievements, various communication products and information materials will be developed and disseminated to stakeholders and target audiences.

It is difficult to identify the budget directly associated with the KMC part of the key deliverables as they are integrated in with the activities required to produce these deliverables. The DSF Project (10623) has identified KMC tasks that will be undertaken by the project?s DSF Expert (6 months over 5 years) and the project-level Communications Expert (16 months over 5 years) under output 4.1.1. In addition, there are more specific product development by the project consultants under other outputs (see Annex N describing the ToRs). The project?s KM Expert and Communications Expert are recruited by the GCP (10626). Details relating to the key deliverables and timelines of the KMC activities are outlined in Table 1. All KMC products will be screened and reviewed for their sensitivity to gender dimensions and equality by the project?s CTA.

Table 1. Project and program knowledge management and communications (KMC) activities assigned to project outputs.

Project knowledge management	Project communications	Program Communications	Results chain
FAO VME Database on measures to prevent SAIs (updating) ? Y1-Y5 FAO EAF Toolbox	Consultancy report, with focus on data-limited stocks and bycatch - Y1 Meeting reports ? Y1, Y3 Publication - Y2	Managing DSF in the ABNJ	Output.1.1.1 - Gaps in regional obligations to (i) manage fish stocks and (ii) reduce fisheries impacts on biodiversity identified (updated) and corrective measures proposed

Project knowledge management	Project communications	Program Communications	Results chain
E-learning package developed on self-assessment ? Y2	Workshop reports ? Y1, Y3 Consultancy report on self-assessment (including details of self-assessment package) ? Y1 Virtual workshops and training material ? Y3 Publication on self-assessment ? Y2-Y4		Output 1.1.2 - Measures to address RFMO and national legal and regulatory gaps in uptake of international obligations related to fisheries management
Use and population of project?s ?New technologies? website and interface (see output 2.1.3) ? Y1-Y5	Meeting reports on needs, analysis and training ? Y2, Y3 Information on new technologies to assist compliance data gathering - Y2-Y4 Training materials on use of new technologies - Y2-Y4 Project publication (Y3)		Output 1.1.3 ? Gaps in existing capacity to strengthen compliance and enforcement identified and training provided
FAO EAF Toolbox	Questionnaires on communication between commission and Science committees - Y1 Meeting reports ? Y1-Y3 Project report of RFMO science-management communication (Y1) Project report aimed at RFMOs and CPs on the application of the PA and EAF by RFMOs ? Y3) RFMO Websites	Improved decision making in fisheries management Comms - The application of the Precautionary approach by RFMOs. Comms - The application of the Ecosystem Approach to Fisheries by RFMOs.	Output 2.1.1 - Frameworks to improve science-management interface and exchange strengthened

Project knowledge management	Project communications	Program Communications	Results chain
	Project workshop reports ? Y1-Y2 RFMO and industry websites ? Y3-Y5 Project reports on industry collaboration with RFMOs Y3	Working together ? RFMO-industry collaboration	Output 2.1.2 ? Frameworks to improve industry contributions to sustainable DSF
	Symposium flyer and report ? Y2 Symposium publication ? Y2-Y3	Moving beyond single species fisheries management - new ways of implementing the ecosystem approach Ecosystem-level ocean management Understanding climate effects on DSF	Output 2.2.1 ? Ecosystem and stock productivity models developed to support scientific advice (including demersal and small pelagic species and climate change effects)
	Project reports ?Uptake of new technologies? newsletter Project documents and workshop reports on alfonsino and armourhead data collection and assessments ? Y2-Y4 Possible documents relating to data collection/assessment training courses offered by ICES (large contract) ? Y2-Y3 Publication	Number of assessed deepsea stocks increased	Output 2.2.2 ? Support provided to RFMOs for improving scientific advice on data-limited stocks

Project knowledge management	Project communications	Program Communications	Results chain
?New technologies? website and interface	Newsletter linking technology innovators to RFMOs and Industry (DSF Expert) ? Y1-Y4 Ad hoc virtual meetings (of the type held for ?On-board observer camera systems? during project development) ? Y1-Y5 Flyers and social media advertising ?new technologies? interface and website Project reports and publications	Linking research, technology, and fisheries ? FAO?s technology sharing platform.	Output 2.1.3 ? Platform for sharing new and innovative technologies for improved monitoring, reporting and information sharing developed
International fisheries instruments (social and economic components) EAF Toolbox	Project reports RFMO and industry websites	Information relating to the importance of DSF in a human context relating to social and economic benefits	Output 2.2.3 ? The social and economic value of DSF assessed and made available for use in EAF processes
FAO Database of measures on conservation and management of sharks (under the FAO International Plan of Action for Conservation and Management of Sharks)	DSF Project (10623) consultancy report ? Y2 ?Uptake of new technologies? newsletter ? Y2-Y4 Project publications ? Y2-Y5	How RFMOs reduce impacts on deepwater sharks	Output 2.3.1 ? Impacts of DSF on deepwater sharks assessed and mitigation proposed
FAO VME Database on measures to prevent SAIs (updating) ? Y1-Y5 FAO VME Database on measures to prevent SAIs (extension to include other spatial fisheries measures) ? Y1-Y5	DSF Project (10623) consultancy reports (Y2-Y4) Workshop report on implementation of FAO DSF Guidelines 4 technical publications (Y2-Y5)	How RFMOs reduce impacts on VMEs How RFMOs reduce impacts by mapping DSF SDG 14.2 and Fishery impacts: Bottom fishing controlled through spatial management with continuous monitoring of catch and impacts.	Output 2.3.2 ? Identification of VMEs and understanding of gear-specific SAIs from bottom fisheries improved

Project knowledge management	Project communications	Program Communications	Results chain
	Workshop reports ? Y2-Y5 DSF Project (10623) consultancy report and baseline report ? Y0-Y3 Project reports ? Y2-Y4 Publication ? Y3-Y4	How RFMOs manage impacts from other sectors.	Output 3.1.1 ? Interactions on sustainable DSF from other sectors operating in the deep seas identified and information made available
	DSF Project (10623) consultancy report Workshop reports Workshops with RFMOs and industry discussing the BBNJ process and how it will affect fisheries	Multi-sectoral management cooperation.	Output 3.1.2 ? Frameworks to better mitigate and manage cross-sector interactions on DSF developed
See above for KM products. These are primarily housed by individual RFMOs and the project will support their needs to expand on these as appropriate.	Supporting program on issues related to decent work and gender equality	Presentations at international conferences on issues related to decent work and gender equality	Output 2.2.3 ? The social and economic value of DSF assessed and made available for use in EAF processes
	RFMO websites communicating information to a more general audience in addition to their core Contracting Party audience. Project supporting communications on key activities to primary target audience (mainly RFMOs and fishing industry) ? see above for details	Project supporting communications on key activities to secondary and more general target audiences advertising both the successes of the project and also the sustainability of DSFs. Details provided above.	Output 4.1.1 ? Key successes in achieving the project objective?s focal areas identified and messaging disseminated

IW Learn

The DSF Project (10623) will spend at least 1% of its budget supporting IW Learn. Much of the IW Learn portfolio is directed at LMEs, which are not in the ABNJ. Nevertheless, there are similarities in the fisheries and ecology within LMEs and ABNJ, and the differences in the management of resources is not so dissimilar. The DSF Project (10623)?s contributions to IW Learn are shown in Table 2 at an estimated total cost of USD 78,500 (1.7%).

Table 2. DSF Project (10623) contributions to IW Learn.

Topic	output	Project resources and budget
IW Learn biennial conference	One person from GFCM (DSF Project (10623) Executing agency) ? 2 conferences	2 trips, USD 10,000 (Output 4.1.2)
IW Learn experience notes	(1) The management of data-poor fish stocks (2) Recording catches of deepwater sharks (3) Reducing impacts on VMEs	DSF Consultant - 2 mths, USD 21,000 (Outputs 2.2.2, 2.3.1, 2.3.2)
IW Learn platforms	The DSF Project (10623) will share technical and meeting reports with the IW Learn platform to share knowledge and promote best practices.	No extra costs (all outputs)
Videos (or similar) communicating to general audiences	Support to GCP (10626) and program	DSF Consultant - 2 mths, USD 21,000 (Any output as needed)
Marine toolkits	Impact assessments undertaken by RFMOs (fished stocks, exploratory fishing areas, sharks, ETP species, VMEs, etc)	Project Technical advisor and DSF Consultant ? 1 mth each, USD 26,500 (Outputs 2.2.2, 2.3.1, 2.3.2)

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[1] http://www.kstoolkit.org/home
[2] See Stocking, M. *et al*. (2018). Managing knowledge for a sustainable global future. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC., GEF Knowledge Management Approach Paper (2015).

9. Monitoring and Evaluation

Describe the budgeted M and E plan

Oversight and Monitoring Responsibilities. Project oversight will be carried out by the Project Steering Committee (PSC) and FAO as the GEF agency (including the FAO GEF Coordination Unit, Technical Units in FAOHQ). Oversight will ensure that: (i) project outputs are produced in accordance with the project results framework and leading to the achievement of project outcomes; (ii) project outcomes are leading to the achievement of the project objective; (iii) risks are continuously identified and monitored and appropriate mitigation strategies are applied; and (iv) agreed project global environmental benefits/adaptation benefits are being delivered, and (v) gender equality in applied throughout project activities . The Executing Agency?s Project Management Unit (PMU) will provide support for the M&E.

The M&E tasks and responsibilities, specifically described in the Monitoring and Evaluation table (Table 1), will be achieved through: (i) day-to-day monitoring of project progress (PMU); (ii) technical

monitoring of indicators (PMU with inputs from partners); (iii) mid-term review and final evaluation (independent consultants and FAO Office of Evaluation); and (iv) oversight, monitoring and supervision missions as implementing agency (FAO).

The M&E Plan will be prepared by the PMU in the first six months of the project and validated with the PSC. The M&E Plan will be based on the M&E table (Table 1) and the M&E Matrix and will include description of the indicators, responsibilities for data collection, validation and aggregation and templates for reporting.

The day-to-day monitoring of the project?s implementation will be the responsibility of the PMU with inputs from project partners and will be driven by the preparation and implementation of an AWP/B followed up through six-monthly PPRs.

Project monitoring information will be regularly shared with the Global Coordination Project and the other projects under the Common Oceans Program through the means established by that Project.

Indicators. In order to monitor the outputs and outcomes of the project, a set of indicators is set out in the Project Results Framework (Annex A1) and the GEF Core indicators (Annex F). Following FAO monitoring procedures and progress reporting formats, data collected will be sufficiently detailed that can track specific outputs and outcomes, and flag project risks early on. Output target indicators will be monitored on a six-monthly basis, and outcome target indicators will be monitored on an annual basis, if possible, or as part of the mid-term review and final evaluations. The Global Coordination Project will support M&E and sharing of learning generated by the Tuna II (10622) and other projects at the Common Oceans Program level. The Common Oceans Program Results Framework will form the basis of the overall monitoring and evaluation of the Program. Key project indicators will feed into the programmatic M&E framework to monitor progress of the Common Oceans Program as a whole.

FAO Supervision Missions. As a GEF Agency, FAO provides overall supervision and technical guidance, and will undertake supervision missions to project sites to provide technical backstopping, and they are also part of assurance activities including field visits to the project sites in a timely manner for monitoring the completion by the Operational Partners in accordance with the work plan, budgets, and progress towards producing the project outputs, particularly in cases where gaps or shortcomings are identified so to agree upon corrective actions and risk mitigation measures.

Reporting. Specific reports that will be prepared during project implementation are:

Project Inception Report. It is recommended that the PMU prepares a draft project inception report in consultation with the LTO, BH and project partners. Elements of this report should be discussed during the Project Inception Workshop and the report subsequently finalized. The report will include a narrative on the institutional roles and responsibilities and coordinating action of project partners, progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. It will also include a detailed first year AWP/B and a draft M&E plan. The draft inception report will be circulated to the PSC for review and comments before its finalization. The report should be cleared by the FAO BH, LTO and the FAO GEF Coordination Unit.

Annual Work Plan and Budget (AWP/B). The results-based AWP/B is developed by the Chief Technical Advisor and project partners, will be linked to the project?s Results Framework indicators (Annex A1) and should include detailed activities to be implemented to achieve the project outputs and

output targets and divided into monthly timeframes and targets and milestone dates for output indicators to be achieved during the year. A detailed project budget for the activities to be implemented during the year should also be included together with all monitoring and supervision activities required during the year. The AWP/B should be approved by the Project Steering Committee. The preparation of the AWP/B and six-monthly PPRs will represent the product of a unified planning process between main project executing partners. Once finalized, the AWP/B and the PPRs will be submitted to the FAO LTO for technical clearance, and to the Project Steering Committee for revision and approval.

Project Progress Reports (PPR). The six-monthly PPRs will be prepared by the PMU based on the systematic monitoring of output and outcome indicators identified in the project?s Results Framework (Annex A1). The purpose of the PPR is to identify constraints, problems or bottlenecks that impede timely implementation and to take appropriate remedial action in a timely manner. They will also report on projects risks and implementation of the risk mitigation plan. The Budget Holder has the responsibility to coordinate the preparation and finalization of the PPR, in consultation with the PMU, LTO and the Funding Liaison Officer (FLO). After LTO, BH and FLO clearance, the FLO will ensure that project progress reports are uploaded in FPMIS in a timely manner.

Annual Project Implementation Review (PIR). The BH (in collaboration with the PCU and the LTO) will prepare an annual PIR covering the period July (the previous year) through June (current year) to be submitted to the FAO GEF Coordination Unit FLO for review and approval within the indicated time frame. The FAO GEF Coordination Unit will submit the PIR to the GEF Secretariat and GEF Evaluation Office as part of the Annual Monitoring Review report of the FAO-GEF portfolio. PIRs will be uploaded on the FPMIS by the FAO GEF Coordination Unit.

Technical Reports. Technical reports will be prepared by national, international consultants and project executing partners under LOAs) as part of project outputs and to document and share project outcomes and lessons learned. The drafts of any technical reports must be submitted to the respective executing partner and LTO for clearance. The LTO will be responsible for ensuring appropriate technical review and clearance of said reports. Technical reports that are to be published will be submitted to FAO for review and clearance in accordance with FAO rules and regulations on publications.

Co-financing Reports. The BH, with support from the PMU will be responsible for collecting the required information and reporting on co-financing as indicated in the Project Document/CEO Endorsement Request. The PMU will compile the information received from the executing partners and transmit it in a timely manner to the LTO and BH. The report, which covers the period 1 July through 30 June, is to be submitted on or before 31 July and will be incorporated into the annual PIR. The format and tables to report on co-financing can be found in the PIR.

GEF Core indicators. Following the GEF policies and procedures, the relevant GEF Core indicators will be submitted at three points: (i) with the project document at CEO endorsement, (ii) at Mid-term and (iii) with the project?s terminal evaluation or final completion report.

Terminal Report. Within two months before the end date of the project, the PMU will submit to the BH and LTO a draft Terminal Report. The main purpose of the Terminal Report is to give guidance at ministerial or senior government level on the policy decisions required for the follow-up of the project, and to provide the donor with information on how the funds were utilized. The Terminal Report is accordingly a concise account of the main products, results, conclusions and recommendations of the project, without

unnecessary background, narrative or technical details. The target readership consists of persons who are not necessarily technical specialists but who need to understand the policy implications of technical findings and needs for insuring sustainability of project results.

Executing partner reporting requirements are the responsibility of each partner and outlined in their individual contractual arrangements with FAO. The preparation of the consolidated reports covering the project as a whole for submission to FAO is a task of the PMU. All reports will be shared with the Common Oceans Global Coordination Project.

Evaluation Provisions. An independent mid-term review will be undertaken at the mid-point of project implementation. The review will determine progress being made towards achievement of objectives, outcomes, and outputs, and will identify corrective actions if necessary. The MTR will be decentralized and under the overall responsibility of the BH, who may call upon OED for guidance and support. The MTR will, inter alia:

- Review the effectiveness, efficiency and timeliness of project implementation;
- Analyse effectiveness of implementation and partnership arrangements;
- Identify issues requiring decisions and remedial actions;
- Identify lessons learned about project design, implementation and management;
- Highlight technical achievements and lessons learned; and
- Propose any mid-course corrections and/or adjustments to the implementation strategy as necessary.

As per the FAO policy on evaluation, the FAO Office of Evaluation (OED) will conduct a final evaluation of the project, to be launched within six months prior to the actual completion date (NTE date). It will aim at identifying project outcomes, their sustainability and actual or potential impacts. It will also have the purpose of indicating future actions needed to assure continuity of the process developed through the project. FAO Office of Evaluation will conduct the evaluation in consultation with project stakeholders and the donor, and share with them the evaluation report, which is a public document.

Table 1. Monitoring and Evaluation Framework.

Type of M&E Activity (and responsible organising party)	Responsible M&E parties	Time-frame	Budget (USD)
Project Inception Workshop (PMU)		Within two months of project implementation start	From PPG*

Development of M&E plan including M&E matrix, description of the indicators, responsibilities for data collection, validation and aggregation and templates for reporting to guide partners during monitoring activities (PMU, M&E Officer)	M&E Officer with inputs from project partners	Within the first six month after inception	
Project Inception Report (PMU - PSC (BH, LTO and GEF unit))	M&E Officer	Within two weeks of inception workshop	
Project Steering Committee (PMU)	PSC	Annually	215,000
Documentation to Project Steering Committee (PMU, M&E Officer))	M&E Officer with inputs from project partners	Annually before the PSC meetings	
Project Progress Reports (PPR) (PMU)	M&E Officer with inputs from project partners	Bi-annually covering Jan-June and July-December	
Project Implementation Review report (PIR) (PMU)	M&E Officer with inputs from all project partners	Annually (July)	
Co-financing Reports (PMU)	M&E Officer with inputs from project partners	Annually	
Mid-term review (PMU)	The BH will be responsible for the decentralized independent MTR	At the mid point	50,000
Terminal evaluation	FAO Office of Evaluation	To be launched within six months prior to the actual completion date (NTE date)	50,000
Terminal Report	M&E Officer	Within two months of project closure	6,650
Total			321,650

* USD 16,000 from PPG not included in total cost.

The Project will ensure transparency in the preparation, conduct, reporting and evaluation of its activities. This includes full disclosure of all non-confidential information, and consultation with major groups and

representatives of local communities. The disclosure of information shall be ensured through posting on websites and dissemination of findings through knowledge products and events. Project reports will be broadly and freely shared, and findings and lessons learned made available.

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)?

The thrust of the Project is to ensure that the DSF industry operating in the ABNJ continues to shift to more sustainable fishing practices including the long-term management of fish stocks and the reduction in impacts on associated and dependent species. The project also acts to promote more stable fisheries free from major disruptions in the sector and thus continue to provide employment opportunities and related socio-economic benefits. This will be promoted by improved stock assessments and returning stocks to biomass levels able to produce maximum sustainable yields. Direct socio-economic benefits and contributions to supporting full and productive employment opportunities at the national levels within the scope of a global project where much of the effort is directed to and promoting of policy formulation and adoption, institutional strengthening and capacity development, developing and testing new technologies and information generation and dissemination will be relative few within the 5 year DSF Project (10623) timeframe.

Deep sea fisheries in the ABNJ do provide a small number of employment opportunities during fishing operations and socio-economic benefits along the value chain, but neither significantly contributes to any form of nutritional benefit or productive employment in rural areas. The value chain quickly becomes consumed by the larger fisheries that operate within EEZs, and these would be best served by national projects and not a global ABNJ project.

The DSF Project (10623) provides an important contribution to supporting the management organisations and the fishing industry to operate sustainably in the ABNJ whilst reducing impacts. This produces direct and global benefits to ensuring the health of the high seas, but there is a potentially more important secondary benefit that is often over-looked. Deep sea and other fisheries in the ABNJ are, in spite of what is often portrayed, managed better now that they have ever been. IUU fishing is likely at its lowest ever point. The result is that most stocks support economically viable fisheries and impacts on other components of the ecosystems are continuously being reduced. The DSF Project (10623) will support this and support improvements in this, to ensure that DSF continue in the ABNJ and continue to be monitored.

Some regions are already seeing reductions in the levels of fishing due to low stocks and poor economic returns. And conservations organisations are in general campaigning for formal bans in fishing and increases in closed areas for MPAs. If this were to be successful, and the results are a formal cessation of many legal deep sea fisheries, then a situation similar to the 1960-1970s would quickly return and there would be massive and uncontrolled catches without any regard for environmental protection. IUU fishing would be the norm and likely would be difficult to ever bring under control. This DSF Project (10623) will serve to improve fisheries management and avoid the possibility of an uncontrolled rise in IUU fishing.

11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
	Low		

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

Introduction: The DSF Project (10623) works principally on demersal deep sea fisheries that occur in the ABNJ. Fisheries in the ABNJ are highly regulated by the vessel?s flag state with this being coordinated by RFMOs in most ocean regions. The RFMOs and/or flag states set legally binding measures and undertake MCS activities to ensure vessels comply with the regulations. Deep sea fisheries require large and powerful vessels capable of operating fishing gears at 200?2 000m depth in areas greater than 200 nmiles from the coast and are at sea for long periods of time and land their catch at ports often far from their home base. Owing to the high costs of these operations, DSF have to target high value species with specialist markets. As such, the vessels and fishing operations are controlled by large companies who specialise in this sort of highly skilled harvesting. Most of the companies undertaking DSF have a long history with long-term investment and an interest to ensure these fisheries are sustainable. New entrants appear from time to time, but without the necessary skills typically find it uneconomic and leave the fishery after a few years. The environmental impact of these new entrants is usually higher than the experienced operators. The above situation defines the environmental and social risks imposed by these DSF. The principal forms of risk from DSF are therefore mostly environmental. There are social risks, but these only extend to rural people when the crew are considered. Many fishing companies employ crew from GEF-eligible countries, and this creates a link to supporting rural economies. Where known, crew are employed under decent working conditions and stay with the vessel for many years[1].

The DSP was unable to secure executing partners, therefore almost all of the activities of the co-funding partners are activities that they would normally have undertaken, though often these have additional activities included that support the project?s objectives. These activities have been assessed to ensure that they are conducted at acceptable risk levels.

The ?Guidelines on GEF?s Policy on Environmental and Social Safeguards? (GEF/C.57/Inf.05 ? 12 Dec 2019) provides the four actions that need to be undertaken during project preparation:

(i) Risk classification of the overall project: The FAO Environmental and Social Management Guidelines[2] were used to assess the project?s risk as applied to all FAO projects. The overall risk score was LOW. Details of the assessment are provided in Annex I1.

(ii) Types and risk classification of the identified risks: No risks were listed in the project?s PIF. The environmental and social screening included in the project?s risk analyses were used to identify the significance of the environmental and social risks attached to activities undertaken by the project or by in-kind partner contribution activities. In no cases were the risks assessed as medium or high. These are summarised in Annex I1.

(iii) Available screening/assessment report(s): Since the Environmental and Social risks imposed by the project on the were assessed as LOW, there is no requirement to undertake screening or assessment reports.

(iv) Available management plan(s): Since the Environmental and Social risks imposed by the project on the were assessed as LOW, there is no requirement to undertake screening or assessment reports.

There are no moderate or high risks identified for the DSF Project (10623).

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[1] Shotton, R. 2008. The Concept of ?State? and Characteristics of Nationality in the Southern Indian Ocean Deepwater Fishery. SIODFA Tech. Rep. 08/01. 8p
[2] http://www.fao.org/3/i4413e/i4413e.pdf

Supporting Documents
Upload available ESS supporting documents.

Title	Module	Submitted
Annex I1 ? Environmental and social risk annexes rev24Jan22	**CEO Endorsement ESS**	
Risk Certificate	**CEO Endorsement ESS**	

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Objective level

Objective: To ensure that DSF in the ABNJ are managed under an ecosystem approach that maintains demersal fish stock at levels capable of maximizing their sustainable yields and minimizing impacts on biodiversity, with a focus on data-limited stocks, deepwater sharks and vulnerable marine ecosystems.
Long term impacts Deep-sea fish stocks at or above levels supporting MSY and fished sustainably Deep sea marine ecosystems healthy with biodiversity protected Socio-economic benefits from DSF maximised Integrated multi-sectoral management of ABNJ
Medium term outcomes Reduced IUU fishing in deep sea fisheries Increase in number of fish stocks having known status and supporting sustainable DSF Reduction in significant adverse impacts from DSF on biodiversity Increased understanding and transparency among stakeholders leading to improved multi-sectoral coordination

1) Objective level indicators (also covering long term impacts and medium term outcomes)

The GEF-7 Core Indicators Nos. 2, 5, 7, 8 and 11 apply well to the DSF Project and are used as the objective level indicators.

Indicators	Project indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
GEF-7 Core Indicator 2 Marine protected areas created or under improved management for conservation and sustainable use[1]	Areas (ha and % of VME area) with measures adopted for protection of new VMEs from bottom fishing impacts.	Current area of VMEs with closures = 120 million ha Current number = 200	6 million ha (i.e. 5% of the VME area)	12 million ha (i.e. 10% of the VME area)	RFMO reports and measures KMCS outreach National submissions to SDG 14.5	New VMEs adopted based on scientific advice and protecting known or likely areas that could be impacted by bottom fisheries.

-	Area (ha) of currently designated VMEs under improved management, for conservation and sustainable use, documented as improvements in monitoring, compliance, SAIs, and ecosystem health by RFMOs and associated transparency.	Current VMEs are closed to one or more bottom fishing gears with no monitoring of SAIs or ?ecosystem health?	Actions to improve monitoring of compliance, SAIs, and ecosystem health documented and adopted by RFMOs for 12 million ha (10% by area) of current VMEs.	30 million ha (i.e. 25% of the current VME area).	RFMO reports and CMMs KMCS outreach Independent evaluations National submissions to SDG 14.2	Responsibility for monitoring VMEs assumed by RFMOs (not currently their mandate) or appropriate body identified. RFMOs invest effort into monitoring the closed areas.
GEF-7 Core Indicator 5 Area of marine habitat under improved practices (excluding protected areas)[2]	Marine area (ha) and number of RFMOs demonstrably showing improved practices to reduce impacts on biodiversity (especially for deepwater sharks and VME habitats)[3], including exploratory fishing protocols, or other forms of impact assessment.	The current practices to reduce impacts on biodiversity are many and varied, but their effectiveness is difficult to assess. Exploratory fishing protocols focus mainly on avoiding impacts on VMEs. There are few measures to avoid impacts on deepwater sharks.	4 RFMOs have taken action towards improved monitoring and transparency of impacts on biodiversity (benthos, deepwater sharks, etc), especially in exploratory fishing protocols.	3 200 million ha marine area and 4 RFMOs	RFMO reports and CMMs. KMCS outreach. Independent evaluations.	RFMOs continue to strive to protect biodiversity whilst maintaining viable DSF.

GEF-7 Core Indicator 7 Number of shared water ecosystems (fresh or marine) under new or improved cooperative management	Engagement in IW Learn to develop products and participation in the	Zero at beginning of project	1 experience note Contribute to IW Learn platform 1 IW Learn biennial conference	3 experience notes Contribute to IW Learn platform 2 IW Learn biennial conference	Documents and reports contribution to cooperative management and IW Learn.	This GEF-7 CI 8 will include working with the GCP to develop products targeting a wider range of stakeholders that those involved with the DSF Project.
GEF-7 Core Indicator 8 Globally over-exploited marine fisheries moved to more sustainable levels	Catch (metric tons, mt) coming from stocks with unknown or depleted status moved to catch coming from stocks with sustainably fished status during project period (biomass and fishing mortality).	Current stock status (see tables in Part 1F and Annex F). 32% of stocks are at low to depleted levels, 38% at moderate to B$_{MSY}$ levels, and 30% at unknown biomass levels. The values for exploitation rates are 17%, 58% and 25%, respectively. The DSF catch in 2016 was estimated at 226 000 mt.	Data collected to allow for estimation of stock biomass and fishing mortality for DSF stocks for 25% of stocks currently with unknown status.	50 000 mt (25% of 2016 catch).	RFMO Reports. FAO and other independent evaluations. National submission to SDG 14.4.	RFMOs prioritise assessing and managing data-limited stocks. Stocks (if over-exploited) start to respond to reduced fishing mortality during project period.
GEF-7 Core Indicator 11: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment	Number of people (women/men) trained or otherwise benefiting by the project with the target being 40% women.	0 people at start, 1 000 people by year 3, and 2 000 people by year 5.	35% of training participants trained by the project are women by year 3. (350 female / 750 male)	40% of training participants trained by the project are women by year 5. (800 female / 1,200 male)	Records of men and women attending training sessions	RFMO contracting parties and project partners prioritise the nomination of women participants.

Component 1: Governance ? strengthening and implementing regulatory frameworks

1) Outcome 1.1: Wider adoption, enforcement and compliance of international obligations relating to sustainable fisheries (stocks and impacts)

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
Outcome 1.1 Wider adoption, enforcement and compliance of international obligations relating to sustainable fisheries (stocks and impacts) with 4 RFMOs and states having adopted new measures that improve the management of data-limited stocks and/or reduce impacts on bycatch species.	Number of RFMOs and states having adopted new measures that improve the management of data-limited stocks and/or reduce impacts on bycatch species (especially deepwater sharks and VMEs).	0 (as counted from project start)	2 RFMOs discussing the results of the project reports and questionnaires from outputs 1.1.1 & 1.1.2 in their Compliance and Commission meetings.	4 RFMOs	Project reports RFMO reports National reports GCP communications	RFMOs and flag states responsive to supporting work of the DSF Project on appropriate legislation on sustainable fisheries and preventing impacts.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
_	Number of RFMOs (or flag states) having improved their monitoring, control and surveillance (MCS) through better compliance information gathering contributing to more sustainable DSF on data-limited stocks and reduced impacts on deepwater sharks and VMEs.	0 (as counted from project start)	3 RFMOs (or flag states) adopting improved methods of monitoring fisheries using new or improved techniques.	3 RFMOs (or flag states)	Project reports RFMO reports National reports GCP communications	RFMOs and flag states responsive to supporting work of the DSF Project on appropriate MCS methodology and technology to improve data collection on sustainable fisheries and preventing impacts.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
Output.1.1.1 Gaps in regional obligations to (i) manage fish stocks and (ii) reduce fisheries impacts on biodiversity identified (updated) and corrective measures proposed ==through at least one workshop and one report==.	Report on the requirements of international instruments relevant to the management of data-limited fish stocks, deepwater sharks and VMEs in the ABNJ. Workshop on the requirements of international instruments for the management of DSF in the ABNJ and how this applies in data-limited situations to commercial landed species and incidental discarded bycatch species (e.g. deepwater sharks and VME indicator species) being discussed and taken up by RFMOs	RFMO performance reviews and independent NGO reviews provide a wide range of opinions regarding the uptake of international instruments by RFMOs. Often this simplifies the requirements of binding and voluntary instruments, and overlooks the actual practicality of applying such requirements in real situations where data is often limited.	Report published	1 virtual workshop held	Consultancy report RFMO reports	RFMOs willing to discuss uptake of international instruments, especially as applied to situations where data is limited, such as data-limited commercial stocks, deepwater sharks and VME species. That there is a legal interpretation where data is limited.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
Output 1.1.2 ==Actions to address RFMO and national legal and regulatory gaps in uptake of international obligations related to fisheries management identified through participation of at least 20 government officials.==	Number of Government officials from Contracting Parties having completed e-learning package. Report available on gender gaps in relevant national legislations identified through the self-assessment	The GEF-5 DS Project developed a step-wise guide and questionnaire to examine flag state performance for seven GEF-eligible countries. Some RFMOs have or want to adopt a similar approach to review flag state performance through self-assessment.	Self-assessment and e-learning package developed and submitted to RFMOs for distribution to their Contracting parties.	20 Government officials (12 men/8 women (40%)). Report available.	Workshops held and workshop reports Self-assessment questionnaire E-learning package National returns of questionnaires	Flag states and RFMOs support self-assessment approach. Identified corrective measures used by RFMOs and states to improve their regulations for sustainable fisheries and biodiversity conservation.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
Output.1.1.3 Gaps in existing capacity to strengthen compliance and enforcement identified and training provided in three regions.	Number of people given training on with a view to improving MCS: - At-sea observer duties - Port inspection duties - VMS maintenance and reporting - Shark bycatch recording - Others as identified	Observers are required on many deep-sea fishing vessels to collect information that monitors compliance. They have a range of duties usually specified in RFMO measures and typically report back to their flag state. Flag states prepare a summary observer report and forward to the RFMO Secretariat after each trip. An annual national summary is usually prepared and forms part of the national report. These are usually reviewed by the compliance committee and actions taken as required.	Identification of training required and training material developed. Plan developed to deliver training courses.	50 people (30 men/20 women (40%)) in 3 regions.	Project reports Training guides Training course reports Improved MSC noted through RFMO committee reports	States willing to support activity. Training courses delivered to appropriate observers. Better training leads to improved MCS. Regional travel permitted to deliver training course.

Component 2: Strengthening effective management of DSF

1)   Outcome 2.1: Effective decision-making strengthened to increase sustainability and reduce impacts

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
Outcome 2.1 Effective decision making strengthened to increase sustainability and reduce impacts ==with three RFMOs having frameworks for more effective implementation of the PA and ecosystem approach to fisheries EAF and three new and innovative technologies used to monitor fisheries incorporated in scientific programs or compliance monitoring.==	Number of RFMOs having frameworks for more effective implementation of the precautionary approach (PA) and ecosystem approach to fisheries (EAF).	The PA and EAF are applied to the management of fisheries to varying degrees in all RFMOs, though only NAFO and has frameworks. The science advisory body for NEAFC, ICES, has a complete PA Framework. Frameworks are needed to improve transparency and strengthen the application of the PA and EAF. The ecological component of EAF is partly implemented in all RFMOs, but only NAFO is accounting for whole-ecosystem effects. The social and economic components are poorly developed in all RFMOs except GFCM.	5 RFMOs have worked on developing frameworks for application of PA and EAF for sustainable fisheries and biodiversity conservation.	3 RFMOs	RFMO inter-committee documents RFMO websites Open-access reports and documentation (transparency) Interviews	RFMOs willing to formalise the PA and EAF by developing accountable and transparent frameworks.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
_	Number of RFMOs having established processes for improved cooperation between RFMOs and the fishing industry on matters relating to the sustainable management of deep-sea fisheries including mechanisms of receiving guidance from the fishing industry.	Fishing industry representatives currently have options to be observers at RFMO meetings where they can, subject to procedures, make opening statements, verbal interventions and submit information papers. They are also often members of delegations but have no independent voice at meetings but may consult with their Head of Delegation.	Discussions by at least 2 RFMOs, especially at the Commission level, formalising opportunities for the fishing industry to contribute advice.	2 RFMOs.	RFMO meeting reports and documents Personal interviews with industry representatives Documented increased contribution of the fishing industry to RFMO activities	The RFMO decision-making process (at Commission level) through Heads of Delegation who represent Contracting Party member states remains, either through consensus or vote. The formal advice process, currently limited to Scientific matters via Scientific Committees, extends to other disciplines (such as industry contributions). Industry advice presented directly, along with other advice, to the Commission (or a Commission-Industry WG). Flag states support increased enhanced industry contributions.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
-	Number of new and innovative technologies used to monitor fisheries (compliance, stock and/or ecosystem targeted) incorporated in scientific programs or compliance monitoring. Web-based platform for sharing technologies sustainable.	Technologies currently used to acquire information on vessel position, gears deployed, catch and effort statistics, and bycatch information for compliance and scientific monitoring.	3 new technologies identified and sea-going trials (or port sampling trails) completed and ready for up-scaling.	3 new technologies. Web-based platform extended beyond life of project.	FAO ?new technologies? webpage RFMO Reports Involvement of designers and innovators Funding of technology	FAO can host website Users willing to populate website

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
Output.2.1.1 Frameworks to improve science-management interface and exchange strengthened in two RFMOs.	Number of RFMOs using an improved and standardised framework for PA and EAF as the basis for their application of PA and EAF.	The application of the PA and EAF is inconsistently applied among the RFMOs, and frameworks exist only in NAFO. The PA to managing fisheries clearly applies to target stocks and the ecosystem in general, whereas EAF has a much wider scope with the social and economic components being marginal to the work of RFMOs. There is a need to better define responsibilities and identify the actions required by RFMOs to applying the PA and EAF.	Two workshops held and draft PA and EAF frameworks developed that identifies the scope and responsibilities for implementation by RFMOs.	2 RFMOs	Workshops completed Project workshop reports (Communication, EAF and PA) RFMO meeting reports Working papers	RFMOs open to working with the DSF Project to develop and implement PA and EAF frameworks. Improved communications between managers and scientists is seen as a prerequisite to the successful implementation of PA and EAF.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
Output 2.1.2 Frameworks to improve industry contributions to sustainable DSF developed in two RFMOs.	Number of RFMOs having developed routines and cooperative partnerships for formal industry contributions (including RFMOs seeking input and views from industry) to the RFMO management, compliance and science process.	Mandatory data reporting from fishing industry to RFMOs is undertaken via Contracting Parties by data submission to the Secretariats and in national reports. The industry organisations HSFG and SIODFA are active observers in SPRFMO and SIOFA. Industry representatives often join delegations. There are no cooperative arrangements or frameworks between RFMOs and the industry.	Participatory survey of industry contributions to RFMOs (including mandatory data reporting via CPs) completed and their use documented.	2 RFMOs	Industry submitted papers to RFMOs Requests from RFMOs to industry (excluding mandatory requirements) Text in RFMO reports Project reports	RFMOs and industry supporting of a two-way collaboration process. Industry able and willing to form ?industry organisations?. Industry contributions to RFMOs via industry organisations seen as complimentary to industry forming parts of the national delegations.
Output.2.1.3 One platform for sharing new and innovative approaches and technologies for improved monitoring, reporting and information sharing developed and operational.	Web-based platform for sharing technologies operational and supported by RFMOs, industry, developers, environmental NGOs and other stakeholders.	Ad hoc mechanisms currently in place to introduce new and innovative technologies into RFMO practices.	15 new tools on platform, with 3 set-up for trialing.	Platform fully operational.	Existence and accessibility of platform	New technologies are being developed, taken-up by RFMO and industries, and are included on the platform. Suitable host for the platform is identified. Funding available to support trialing.

2) Outcome 2.2: Advice supporting science-based fisheries management improved

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
Outcome 2.2: Advice supporting science-based fisheries management improved ==with two RFMOs having adopted TAC management measures and five stocks with improved assessments and reference points adopted==.	Number of RFMOs having adopted TAC management measures that include scientific advice from productivity models relating to the environmental effects on ecosystems and stock productivity.	The mandate of RFMOs started with the management of stocks, which progressed to bycatch and more recently biodiversity impacts. Ecosystem monitoring and advice varies according to region, but typically relates to environmental effects on fish and fisheries. This would help in the understanding of the ecosystem productivity and function. There is currently limited use of the productivity models by fisheries scientists and managers.	2 RFMOs have developed suitable productivity models.	2 RFMOs	RFMO documents: Stock assessment forecasting reports Effects of Climate change reports Ecosystem and stock productivity model publications. Project reports. Workshops.	RFMOs support the development and uptake of productivity models to improve fisheries management. The science of productivity models advances to a stage where it can provide predictions useful in the management of fisheries.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
	Number of alfonsino and armourhead stocks with improved assessments and reference points adopted.	The status of many of the deep sea fish stocks is difficult to assess owing to low catches and complex life histories. Nevertheless, quantitative assessments have been made and a number of stocks can be assessed with ?some level of confidence?. It is currently believed that the status of the deep sea stocks is classified as good (15%), possibly good (9%), possibly poor (19%), and poor (29%). The status of 27% of the stocks is unknown. Currently six and two regions fish alfonsino and armourhead, respectively, with the stock status being unknow for all, with the possible exception of alfonsino in the Indian ocean and Armourhead in the North Pacific.	2 stocks	5 stocks	RFMO reports Project documents and workshops. Independent reviews.	That there is an improvement of catch and effort reporting for stocks with an unknown status. The biology of the species supports assessment (Pacific armourhead, alfonsino and orange roughy are difficult to assess.) The fishery is sufficient to allow for assessment.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
	Number of RFMOs agreeing to implement the gender equality and decent work framework developed with assistance of the project	RFMOs do not generally address issues related to gender equality and decent work in DSF, and yet to some extent these are included in various certification schemes and do affect consumer opinion. A more transparent process among RFMOs and their contracting parties would promote responsible fisheries through the application of decent work and gender equality frameworks and increase consumer confidence in fishery products by ensuring they are harvest according to modern societal norms.	2 RFMOs have declared their commitment to gender mainstreaming and equality in their work.	3 RFMOs	Project reports RFMOs reports RFMO/CP statements of intent or declarations RFMO CP statements and proposals	dsRFMOs and CPs are receptive to the need to encompass gender equality and promote women?s participation in fisheries. dsRFMOs and CPs are willing to change their practices.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
Output.2.2.1 Ecosystem and stock productivity models developed to support scientific advice (including demersal and small pelagic species and climate change effects) in four RFMOs.	Number of RFMOs discussing ecosystem and stock productivity models for producing advice for stock assessments in scientific committees.	Symposia on the environmental regimes and climate change have been held in the past but their incorporation by RFMOs to support fisheries management remains in its infancy.	Symposium held with RFMOs to explore the use of ecosystem and productivity models in the management of deep-sea fish stocks. RFMOs supporting the collection of information useful in developing these models.	4 RFMOs	Symposium report Workshop reports. RFMO reports.	RFMOs support the use of productivity and ecosystem modelling to improve their stock management and advice. The science advances sufficiently for this to be useful.
Output.2.2.2 Support provided to four RFMOs for improving catch recording (retained and discarded) and scientific advice on data-limited stocks.	Number of RFMOs supported to improve fit-for-purpose data collection on data-limited stocks, with a focus on alfonsino and armourhead.	The DSF Project will support data collection programs for armourhead and alfonsinos that form significant DSF in most ABNJ regions, with a focus on alfonsino and armourhead. The RFMO data collection programs will be reviewed at the start of the DSF Project and appropriate support identified and provided.	2 RFMOs supported to establish baseline for fit-for-purpose data collection	4 RFMOs	RFMO reports Project reports. New technologies applied. Independent reviews.	RFMOs (and contracting parties) willing to work with project to improve data collection for use in assessments. Otherwise, same assumptions as given at outcome level.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
-	Number of RFMOs having received support to review, revise and/or establish new assessments that improve knowledge of status of data-limited stocks, with a focus on alfonsino and armourhead.	The assessment methods used for data-limited deep-sea stocks varies from full quantitative analyses to landings only data. Clearly the latter being more data-limited. The DSF Project will provide support, where possible, to improve analytical methods to assess armourhead and alfonsinos. Currently, both species have been subject to some assessments but not have been considered reliable. NPFC and SIOFA in particular are prioritising work to assess these species.	Data-limited stock assessment methods further developed in collaboration with partners.	4 RFMOs	RFMO reports Project reports. New technologies applied. Independent reviews.	These species form significant fisheries only in the North Pacific and Indian Ocean. Results are dependent upon RFMO priorities. These species are difficult to assess, and more data may not actually help.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
Output.2.2.3 Selected issues related to the social and economic dimensions of DSF assessed in six RFMOs (including gender and decent work) and 1 value chain analysis completed.	Number of RFMOs who are aware of the gender action plan (GAP) and who are working with the DSF project to promote gender equality.	Only the GFCM has an explicit commitment to the inclusion of women in its activities in its 2020 Strategy. The other RFMOs likely to not regard this as part of their mandate.	4 RFMOs have successfully conducted awareness raising activities on gender mainstreaming and equality.	6 RFMOs	Project reports RFMO Reports	RFMOs (and their Contracting Parties) regard gender equality as an appropriate issue for inclusion into their work plans.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
-	Number of fisheries/value chains (on a stock, species or fishery basis) on which analysis has been undertaken including gender-equitable employment analysis and decent work considerations.	DSF Guidelines, para 33, recommend ?socio-economic surveys on, *inter alia*, catches, value of landings and employment in the harvesting and processing sectors in DSFs, in order to facilitate analyses such as value-added and multiplier impacts on investment and employment as well as economic impacts of regulatory measures.? (DSF Guidelines para 33). To include decent work and gender equity. There appears to have been no previous work on this for DSF.	Value chain for gender-sensitive analysis identified and method developed, covering all actors supporting the value chain.	1 value chain analysis carried out	Project reports	Cooperation and sharing of information (including sex-disaggregated data) from dsRFMOs, CPs, industry (fishing and processing). RFMOs (and their Contracting Parties) regard decent work as an appropriate issue for inclusion into their work plans.

3) Outcome 2.3: DSF impacts on biodiversity quantified, assessed and managed

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
Outcome 2.3 DSF impacts on biodiversity quantified, assessed and managed ==with effective measures reducing incidental deepwater shark mortality.in four RFMOs.==	Number of RFMOs with effective measures reducing incidental deepwater shark mortality.	There are only a few targeted deepwater shark fisheries in the ABNJ, with most catches being discarded due to retention bans or species having no commercial value. Mitigation includes live release, move-on rules, retention bans, and fishing depth limits. Impacts, for some species, have been assessed in the NW Atlantic, NE Atlantic, South Pacific, Indian Ocean and Southern Ocean. The biggest constraint to reducing impacts is poor catch recording and reporting in commercial fisheries.	4 RFMOs have undertaken comprehensive shark impact assessments and identifying species of concern.	4 RFMOs.	RFMO Measures. Commission and scientific reports Working papers Project workshop reports	Data on catches of deepwater sharks by commercial vessels available and shared. Further development allows risk-based approaches to be useful. RFMOs/CPs willing to undertake impact assessments by gear type on deepwater shark. RFMOs/CPs willing to adopt shark bycatch reduction measures. RFMOs/CPs support evaluation of effectiveness of adopted shark bycatch reduction measures.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
-	Number of RFMOs with full monitoring of vessel positions and gear deployment in DSF (in an anonymised format) and available for use by scientific committees to estimate fishing effort and assess risks to vulnerable species such as VMEs or deepwater sharks.	VMS data on vessel position is collected mainly for MCS, but is increasingly made available to scientific committees in summary form. The use of electronic monitoring of catches is again primarily for MCS. Some of this can be used to estimate fishing effort and risks to vulnerable species, but the main source of data for this comes from logbook information and observer reports that are available to CPs but are usually only submitted to Secretariats in summary form. The extent to which this is done varies among CPs. Improved reporting of gear deployment activities by all fishing nations would lead to improved stock and risk assessments. Confidentiality (and transparency) controls are in place for most of this data.	Requests made by Scientific Committees to Commissions in RFMOs specifying the importance of collecting and releasing vessel position and gear deployment information for use in stock and risk assessments in DSF of 3 RFMOs.	3 RFMOs.	RFMO reports. Project reports. Workshop reports. Technical reports on use of VMS and gear usage information.	There are considerable technical and practical constraints in achieving this output. The technology for monitoring gear activities is available but expensive. The amount of data transmitted is large and needs to be processed. Success also requires committed support from CPs and managers. Confidentiality respected, but transparency given for those who ?need to know? information to undertake analyses. It may be that more efficient use of logbook and observer information is a better solution.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
Output.2.3.1 Impacts of DSF on deepwater sharks assessed and mitigation proposed in four RFMOs.	Number of RFMOs having been provided with methodologies and tools for identification of deepwater sharks	The recording and reporting of deepwater shark catches during commercial fishing operations is generally very limited to almost non-existent. Identification is difficult, even though guides are available, which results in high percentage of erroneous species identification by on-board observers. No pattern recognition technology is used to help in identification.	Constraints to full reporting of catch and bycatch identified in 4 RFMOs	4 RFMOs	CP reports submitted to RFMO Secretariats. Working papers Interviews with observers. DSF Project workshops and reports List of technology used	Sharks are fully reported to the lowest reliable taxonomic level. Observers/CPs willing to work with project. Identification skills can be learnt. Pattern recognition is useful.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
_	Number of RFMOs having received support to undertake shark ERA assessments with improved methodologies or through analysis of deepwater shark catch by commercial vessels	Traditional assessments, ecological risk assessments (ERA), commercial fisheries assessments, and survey-based assessments have been undertaken in 1-2 RFMOs. The methodologies are being developed and advice has been provided. Uptake by managers is largely based on the precautionary approach.	Improved assessment methodologies reviewed and presented to RFMOs.	4 RFMOs.	Workshop reports Consultancy reports RFMO reports. Independent review documents	RFMOs and industry willing to conduct risk assessments. Relevant data made available to DSF Project/RFMOs to conduct analysis. Accurate monitoring of catches of deepwater shark on commercial vessels by observers is possible and undertaken (see above)
Output.2.3.2 Identification of VMEs and understanding of gear-specific SAIs from bottom fisheries improved in four RFMOs.	Guide on Technologies to Identify VMEs by research and commercial fishing vessels.	The presence of VMEs can be predicted or identified using a number of technologies. However, there is no ?Guide? that brings this information together and makes it available to scientists and the fishing industry to promote sustainable fishing and minimise impacts.	Existing case studies reviewed and methodologies made available for development of the Guide.	Guide published and disseminated.	Workshop reports Consultancy reports RFMO reports. Independent review documents FAO Technical publication	No constraints are foreseen in the development of a guide. The technologies would feed into Output 2.1.3.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
-	Review of Implementation of FAO DSF Guidelines	Reviews have been undertaken on the implementation of the DSF Guidelines by the UNGA, RFMOs and independent experts. These focus on the uptake of adopted measures whereas there are also process aspects requiring further guidance, especially in the development of scientific advice.	Panel of experts selected and two workshops held to present reviews of various aspects of the DSF Guidelines and providing solutions for their implementation.	Review peer-reviewed and published.	Workshop reports Draft review text Final publication	No constraints are envisaged in the production of this review.
	Report on identifying methods to monitor VMEs and assess the extent of impacts from a wide variety of threats	With the exception of NAFO who have looked at proportions of VMEs inside and outside of closed areas, there have been no studies on how to monitor the biodiversity and health of VMEs.	Initial methods and responsibilities identified to monitor VMEs and asses the extent of impacts from a wide variety of threats.	Report drafted	Workshop reports Published reports RFMO Reports Reports from other sectors. Methods used.	This is a difficult area of work and may be outside the responsibilities of RFMOs. Hopefully it will develop cooperative partnerships and responsibilities. There may be funding difficults.in doing this work.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
	Number of RFMOs having contributed spatial fishing data to the project?s workshop and publication on mapping of DSF by gear type.	There is very little information on the spatial distribution of DSF by gear type. SPRFMO in the S. Pacific has to a large extent incorporated this into their permitted fishing areas. The bottom fishing footprints in other regions are for all gear types combined. The only global summary, which is incomplete, is in the FAO Worldwide review of DSF (2021).	Types of data that should be contributed identified	4 RFMOs	RFMO reports Project reports Project publication	RFMOs (or CPs) supporting the mapping of bottom fisheries. Confidentiality restrictions not impeding the analysis and the coarse spatial resolution required.

Component 3: Improving understanding and management of cross-sectoral interactions with DSF

1)   Outcome 3.1: Improved integration of cross-sector activities to maintain biodiversity and resource sustainability

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
Outcome 3.1 Improved integration of cross-sector activities to maintain biodiversity and resource sustainability with mechanisms developed in collaboration with relevant sectoral agencies to mitigate and manage cross-sectoral impacts to DSF in two RFMOs.	Number of RFMOs where mechanisms have been developed in collaboration with relevant sectoral agencies to mitigate and manage cross-sectoral impacts to DSF	Sectors, though all having impact assessments, have no formal or even voluntary cross-sectoral coordinating mechanisms to resolve spatial usage and conflict. Other coordinating mechanisms exist.	2 RFMOs have discussed in their relevant scientific committees or working groups cross-sectoral coordinating mechanisms to maximise resource usage and minimise impacts to DSF.	2 RFMOs	RFMO reports Other sector reports Working group reports	Mangers make appropriate requests for scientific advice concerning cross-sectoral issues. RFMOs assume responsibility for and have capacity to analyse impacts to DSF from other sectors. The process develops beyond scientific advice and into mitigation measures. It may be difficult for the DSF project to be effective at ensuring this outcome is successful.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
Output.3.1.1 Interactions with DSF from other sectors operating in the deep seas identified and information made available ==with three current and future opportunities and threats from other ?sectors? to DSF identified and information collected to allow for impact analyses.==	Number of current and future opportunities and threats from other ?sectors? (including changes in fishing technology and biodiversity) to DSF identified and information collected to allow for impact analyses	Current and future opportunities and threats from other sectors to fisheries are not known and/or poorly understood. Biodiversity conservation and no-take fishing areas, if sited in the ABNJ, may cause displacement of fisheries. Mining and biodiversity conservation resulting in reduced viability of the fisheries and increased impacts in new areas. The effect and extent of possible increases in suspended sediments or the mobilization of heavy metals into the oceans is unknown. In addition, market forces and other outside factors may result in changes to fisheries operations, resulting in new and different sustainability challenges. Sectoral coordination and information sharing is required.	Workshop with RFMOs and partners undertaken to identify possible current and future opportunities and threats and to discuss methods to identify if the impacts of such threats are significant.	3 threats	Workshops held Published reports	That there are actually threats to DSF from other sectors. RFMOs and other sector organisations will work together.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
Output 3.1.2 <mark>One framework to better mitigate and manage cross-sector interactions with DSF developed</mark>	Template for cooperating mechanism developed and presented to RFMOs	The OSPAR/NEAFC Collective Arrangement is the only example of more formal cooperation and coordination between two sectoral organisations in the same region to achieve common and agreed objectives with each using their own instruments to achieve this. No similar mechanisms exist between RFMOs and IMO or ISA. The outcome of the BBNJ negotiations will perhaps provide for further coordination. Currently the only spatially overlapping interests is between RFMOs and the ?biodiversity conservation? sector which is not supported by any formal organisation in the ABNJ (except NEAFC/OSPAR).	Workshop with RFMOs to discuss aspects (opportunities, threats, risks, etc.) requiring cooperation with other sectors held and possible cooperating mechanisms discussed.	Template developed and presented	Reports Workshops held	RFMOs and their Contracting Parties are willing to support this output during the period of the BBNJ negotiations. Interactions can provide both positive and negative impacts.

Component 4: Knowledge management, communication and M&E

1) Outcome 4.1 Knowledge generated and shared to raise awareness of project objectives, activities and achievements among stakeholders and target audiences

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions
Outcome 4.1 Knowledge generated and shared to raise awareness of project objectives, activities and achievements in three RFMOs among stakeholders and target audiences	Number of RFMOs that have new or improved communication strategies that are implemented, including improved websites, with a view to achieving wider stakeholder appreciation of their work.	RFMOs have, since around 2010, dramatically improved the information content and layout of their websites. However, they still specifically target the fisheries sector, which is their primary audience and mandate. This lacks impact on other sectors and the wider stakeholder community.	3 RFMO websites reviewed within the context of reaching and being informative to non-fisheries stakeholders[4], whilst still maintaining consistency with RFMO mandates.	3 RFMOs	Project reports RFMO reports and communications RFMO website changes documented	RFMOs willing and able to include wider messaging on their websites and have the resources to achieve this.

Output.4.1.1 Key successes in achieving the project objective?s focal areas identified and messaging disseminated through at least 4 knowledge products and experience notes and 1% allocated to IW:Learn activities.	Number of knowledge products on project key achievements (advances made in the sustainable management and conservation of data-limited stocks, deepwater sharks and VMEs) for civil society and various stakeholders.	No baselines for the current DSF Project.	2 knowledge products	2 knowledge products	Project reports Communications material/knowledge products	This assumes that the DSF project does, in fact, have key achievements of sufficient importance to include here. Appropriate support provided by GCP. Appropriate drafting skills with DSF Project or available.
-	Number of RFMOs having received support to improve their communications with a broader audience		3 RFMOs have identified communications needs and objectives	3 RFMOs		
-	Number of IW:LEARN Experience Notes prepared and shared with the IW:LEARN Network	0	1	2	Experience notes	
-	Number of IW LEARN GEF International Waters Conferences attended	0	1	2	Travel reports	International travel is permitted after covid restrictions are relaxed.
Output.4.1.2 An operational project M&E system implemented with at least 23 reports and other products developed.	Number of M&E plan and project reports in line with FAO and GEF requirements	0	6	14	Inception report, M&E plan, PIRS, PPRs Terminal Report	

	Number of review and evaluation reports prepared and published	0	1	2	Mid-term review report Terminal evaluation report	
	Number of documentation packages to PSC for decision and information	0	2	5	Documentation packages	
	Number of reports on implementation of Gender Action Plan is monitored	0	2	2	Reports	

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[1] The PIF says 25% of existing VMEs = 12m ha. However, this is actually 10% (must have changed % but not value during PIF preparation)

[2] The Concept Note used ?area outside of existing bottom fishing areas? but this is only ?areas subject to exploratory fishing protocols?. This should include areas within the existing bottom fishing area that are subject to a significant change in gear usage or effort, but these have never been designated as exploratory. Suggest we say in ?fished areas? which includes the existing bottom fishing areas and the exploratory fishing areas. Otherwise we would have very little fished area to work with. The is more consistent with project activities on better monitoring of vessel fishing positions and gear usage.

[3] Improved practices means: (1) For sharks ? catch/bycatch quantified, new mitigation measures, compliance with measures, scientific advice that measures are effective; and (2) for VMEs ? Improved methods of identifying VMEs, improved encounter protocols and thresholds (including improved reporting and transparency), and improved understanding of SAIs.

[4] The DSF Project will, under output 2.1.1 activity 4, review the RFMO websites with respect to serving their three constituent committees (management, compliance, science) and the Secretariat. This activity will be undertaken jointly with the KMCS project.

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

The DSF Project received GEF Council comments from France, Switzerland, and the United States of America. Comments related to the Common Oceans programme and the five child projects. Only comments relevant to the DSF Project are addressed here.

No other comments were received from GEF Council or from other bodies with in GEF.

France

The following comment was made by France and is relevant to the DSF Project:

We nevertheless believe that a broader focus on ?management tools per area? (phrasing used by the negotiators owing to a lack of consensus on ?high seas MPA?), conserving biodiversity and not only

fisheries in the coming years, is critical. It is covered in only one of the five child projects (Sargasso Sea - see below) and, to a lesser extent, in the cross-cutting capacity-building project.

We thank France for their comments and wish to expand on their comment relating to tools for area based management.

The management of fisheries has always been ?area based? and typically defined by the area covered by the stock being managed. This is usually quite discrete in deep sea fish stocks that deal with small pelagic species and demersal species, whereas it can be ocean wide for groups like Pacific salmon and tuna. Around 2000, and with the outcomes of the Rio Declaration, the Johannesburg declaration, and the ?Future We Want? outcome document, the UNGA adopted resolutions on the management of bottom fisheries and protection of vulnerable marine ecosystems (VMEs) every year since 2005 (UNGA 59/25), have called for States (usually through RFMOs) to development management systems to control bottom fishing and protect VMEs. This was undertaken through the adoption of extensive bottom fisheries measures by the deep sea RFMOs that divided their regulatory areas into: (1) areas where bottom fishing can occur, (2) areas outside of the bottom fishing areas where special exploratory bottom fishing protocols apply, and (3) areas closed to protect VMEs. This was fully developed in NAFO, NEAFC and CCAMLR by 2010, and is now in place in all RFMOs (except the Mediterranean that follows a different approach).

The GEF Core Indicators used in the DSF Project (No. 2 on MPAs, No. 5 on other areas, and No. 8 on fish stocks) were chosen to align with the three types of spatial management areas currently operating within RFMOs. Further, it should be emphasised that the RFMO spatially managed areas are backed by legally binding measures with compliance being monitored annually by the RFMO Compliance Committees.

We support the statement by France that ?management tools per area? are critical and note that they have been used by RFMOs in the ABNJ since at least 2010 and are fully integrated into the work of the DSF Project.

Switzerland

We thank Switzerland for their comments and feel that all apply, to a greater or lesser extent, to the DSF Project. Taking each in turn:

We request that the program be fully aligned with the BBNJ negotiations and it should also mention them in the context of program.

The programme and DSF Project are supported under the International Waters focal area strategy and not the Biodiversity focal area strategy. As such, the program and projects recognise the BBNJ negotiations and the need for a biodiversity instrument, but this is not the principal focus of the DSF Project.

Having said the above, the DSF Project has many components that are of relevance to the BBNJ negotiations and support the integration of deep sea fisheries in to the sustainable use and biodiversity conservation elements of the BBNJ negotiations. More specifically, the DSF Project has Outcome 2.3 under Component 2 on protecting biodiversity from fisheries impacts which has been allocated

20 percent of project?s budget. Further, under the cross-sectoral Component 3, there is a focus on improved integration of the fisheries sector into the BBNJ process by way of understanding cross-sectoral impacts on fisheries and in preparing the fisheries sector to play a role in the BBNJ outcomes which has been allocated 7 percent of the project?s budget. It is worthy to note that most of the submissions for EBSA descriptions in the ABNJ during the recent CBD EBSA process derived from fisheries related surveys and work. And with the advent of increased interest in VMEs and deepwater sharks, RFMOs will be extending their work into protecting and monitoring biodiversity, allowing them to play an increasing role in the BBNJ outcomes.

Please further specify how 12 million hectares of marine protected areas will be concretely improved in particular in light of the lack of a global regime to define marine protected areas.

As noted by France above, there is no agreed definition of MPA. There has been considerable debate on the inclusion of VMEs as MPAs or OECMs with out any clear conclusions. However, we recognise that VMEs are the only areas in the ABNJ that have legally binding agreements on them that affords real protection from what is perceived to be their greatest threat ? bottom fisheries. So, for this DSF Project, we are including VMEs as MPAs and applying the GEF Core Indicator 2 on MPAs and a modified version of the GEF-7 Protected Area Projects tracking tool. We believe that these are important indicators and tools and will enhance the project?s work to increase protection of these areas (improvements in METT scores from the tracking tool are expected to be helpful in this respect)

The 12 million hectares represents 10 percent of the current VME area closed to bottom fisheries, and it is hoped that a further 10 percent will be added during the course of the project. Considering that these are well defined in most regions, this seems to be a realistic target. We further expect improved management and compliance within the closed VMEs which will further add to their protection.

Please further elaborate how safeguards to avoid any loss of biodiversity will be developed as part of the sustainable management of tuna and deep-sea fisheries component.

The DSF Project explains this under its work in Outcomes 1 and 2.3 on protecting deepwater sharks and VMES.

The legal work under Component 1 has a focus on the assessment of data-limited stocks and reducing fisheries impacts on biodiversity. This is designed to clarify the requirements of the international instruments with regard to these two issues and to set the legal framework for issues under Component 2.

Outcome 2.3 looks more directly at impacts and monitoring impacts. The VME work is well advanced in RFMOs, and includes in addition to the closed areas, extensive work on monitoring catches of VME indicator species outside of the VME closures in an attempt to identify new areas containing VMEs. This is supported by exploratory fishing protocols that are required for permission to fish in new areas. The major challenges are improved reporting of VME indictor catches, and improvements in the identification and delineation of VMEs. Advances are being made in understanding significant adverse impacts and that will allow for better targeting of fisheries measures to protect VMEs. Work on deepwater sharks is at a very early stage of development n the dsRFMOs, but most have some work and measures in place. However, their uptake is inconsistent, and the amount of data actually collected

is in most areas minimal. Whereas there are logistical and biological reasons for this being a difficult task, it is the projects believe that this is important and requires support to be effective.

It is unclear to us how the cross-sectoral collaboration and governance will be improved as part of the program. Please further specify.

The DSF Project is supporting the program under its Outcome 3.1 which looks at cross-sectoral interactions with deep sea fisheries and between the organisations responsible. The first output works on monitoring cross-sectoral impacts on fisheries, which though not currently a threat owing to little spatial overlap among activities, may be so in the future. The challenge here is that fisheries organisations have not developed the tools to assess the types of impacts that may come from other sectors. This contrasts with the effects of monitoring impacts on fish stocks from fisheries where the tools were developed initially in the 1950s and 1960s through work by Beverton, Holt, Cushing and Ricker. Simple questions, like the effects of suspended sediments of fisheries need to be addressed. Such work will also be fundamental in understanding impacts on biodiversity more generally.

The second output under Outcome 3.1 deals with cross-sectoral impact assessments and the wider review of impact assessments beyond the single-sector. Currently, impact assessments have to be undertaken by all sectors, but the decisions are made separately within each sector. For example, impacts from fisheries are made by the fisheries authorities (RFMOs), and impacts from mining are made by the International Seabed Authority (ISA). There is not mechanism to equitably review, for example, fisheries activities affecting mining, or mining activities affecting fisheries. This lies at the heart of the BBNJ negotiations, which will be many years before any new instrument enters into force. In the meantime, we see this output as developing an important and practical solution to more open cross-sectoral impact assessments.

United States of America

The following comment was made by the United States of America and is relevant to the DSF Project:

Which countries will receive funding under this program? Specifically:

> ? Will any project funds go to China, Equatorial Guinea, Iran, North Korea, Sudan, or Syria (public or private sector)?
> ? Will any project funds go to or be administered by the governments of Belarus, Burundi, China, Cuba, Nicaragua, North Korea, Equatorial Guinea, Eritrea, the Gambia, Iran, Mauritania, the Palestinian Authority, Russia, Saudi Arabia, South Sudan, Sudan, Syria, Turkmenistan, Zimbabwe?
> ? If funds will go to the government of Zimbabwe, Nicaragua, Turkmenistan, Belarus, or the Palestinian Authority, how much will go to any of these countries/territories?

We appreciate this question from the United States of America. The DSF Project does not have any funds that will be received by any of the above countries.

Of all the countries above, China and Russia are the only ones having deep sea fisheries, and in many areas these are significant. Russia has a long history in deep sea fisheries and has contributed greatly to

our understanding of marine ecosystems though their scientific studies over the years. Russia have also been very active participants in dsRFMO meetings and are currently members of NAFO, NEAFC, NPFC, and SPRFMO. China is a more recent entrant into deep sea fisheries but their presence is significant and increasing. China are currently members of SIOFA, NPFC and SPRFMO. Though not a partner to this DSF Project, both China and Russia are members of CCAMLR in the Antarctic. Whereas no funds are being directed towards China and Russia, and in the spirit of achieving the best results for sustainable utilization and biodiversity conservation in the ABNJ, the project would welcome the input of their expertise into project meetings, reports and publications. We hope that this will be acceptable to the United States of America.

ANNEX C: Status of Utilization of Project Preparation Grant (PPG). (Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF: **150,000**			
	GETF/LDCF/SCCF Amount ($)		
Project Preparation Activities Implemented	*Budgeted Amount*	*Amount Spent to date (27/10/2021)*	*Amount Committed*
GEF Project Design and financial Specialist	27,000	27,000	0
Monitoring and compliance technologies expert	24,000	24,000	0
Value chain expert	18,000	18,000	0
Bycatch and discard specialist	12,000	12,000	0
Cross sectoral impact assessment specialist	18,000	18,000	0
EAF specialist	18,000	18,000	0
PMC (Contribution to the Common Ocean Coordinator?s costs)	7,000	6,418	582
Operational Partner Capacity Assessments	10,000	0	10,000
Gender GAP Analysis	5,000	5,000	0
COVID 19 Assessment	5,000	5,000	0
PPG virtual inception workshop	1,000	1,000	0
PPG virtual validation workshop	1,000	1,000	0

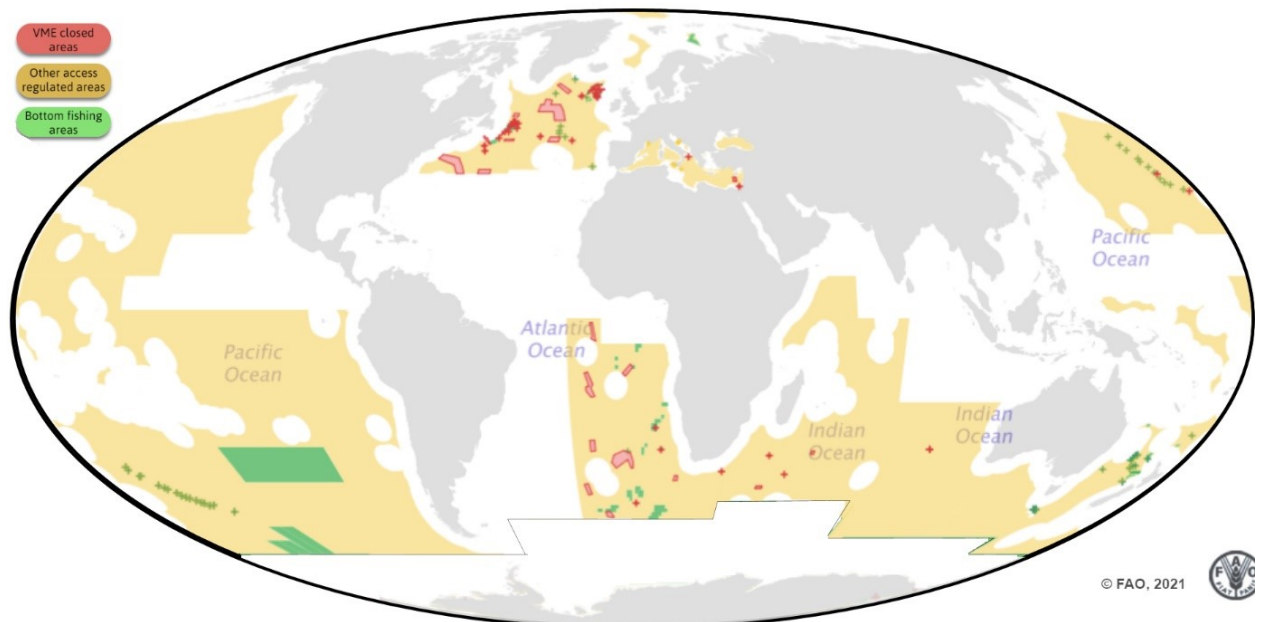|			
RFMO Members consultation	2,000	2,000	0
Private Sector consultation	2,000	2,000	0
Total	150,000	139,418	10,582

ANNEX D: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.

The DSF project will work in the RFMO management regions as presented in Part II.1.b. As explained in the GEF Core Indicator section (Part I.F), the project will focus on three different types of management areas within these regions. These are designated in the FAO VME Database[1] as ?Bottom fishing areas? in green, ?Other access regulated areas? (in orange) which are outside of the bottom fishing areas and can only been fished after extensive exploratory fishing protocols, and VME areas to protect VMEs and are closed to bottom fishing (in red) (Figure E1). There are slight differences in the management of these among regions, and some regions have yet to designate these areas or are choosing a different route. The three types of management areas correspond to GEF Core Indicators 2, 5 and 8.

Coordinates and shapefiles are available for all these regions on the RFMO websites and in the FAO VME DataBase.

Figure E1. RFMO bottom fisheries management areas in the ABNJ.

[1] https://www.fao.org/in-action/vulnerable-marine-ecosystems/vme-database/en/vme.html

ANNEX E: Project Budget Table

Please attach a project budget table.

FAO Cost Categories	Output 1.1.1	Output 1.1.2	Output 1.1.3	Total Component 1	Total outcome 2.1	Total outcome 2.2	Total Outcome 2.3	Total Component 2	Output 3.1.1	Output 3.1.2	Total Component 3	Output 4.1.1	M&E (Output 4.1.2)	Total Component 4	PMC	Total GEF
5011 Salaries professionals																
Chief technical advisor (CTA) (P4)	70,000	70,000	70,000	210,000	150,000	180,000	-	330,000	55,000	55,000	110,000	100,000		100,000	210,000	960,000
Cost-share PMU M&E expert				-	-	-	-	-			-		160,000	160,000		160,000
5011 Sub-total salaries professionals	70,000	70,000	70,000	210,000	150,000	180,000	-	330,000	55,000	55,000	110,000	100,000	160,000	260,000	210,000	1,120,000
5013 Consultants	-			-	-	-	-	-			-			-		-
DSF expert	-	-	-	-	77,000	176,000	253,000	506,000	55,000	-	55,000	44,000		44,000		605,000
Communications expert					-		-	-			-	100,000		100,000		100,000
Legal expert	22,000	33,000		55,000	-	-	-	-			-			-		55,000
Compliance expert			44,000	44,000	-	-	-	-			-			-		44,000
Ecosystem modelling expert				-	-	11,000	-	11,000			-			-		11,000
Industry expert				-	33,000	-	-	33,000			-			-		33,000
Technology expert				-	11,000	-	-	11,000			-			-		11,000
Stock assessment expert				-	-	33,000	-	33,000			-			-		33,000
Value chain expert				-	-	22,000	-	22,000			-			-		22,000
Decent work expert				-	-	22,000	-	22,000			-			-		22,000
Gender expert				-	-	33,000	-	33,000			-			-		33,000
Shark expert				-	-	-	33,000	33,000			-			-		33,000
Fishing impact expert				-	-	-	44,000	44,000	-		-			-		44,000
Editing/layout support for publications	13,100	13,100	13,100	39,300	32,750	13,100	39,300	85,150	6,550		6,550			-		131,000
Sub-total international Consultants	35,100	46,100	57,100	138,300	153,750	310,100	369,300	833,150	61,550	-	61,550	144,000	-	144,000	-	1,177,000
Legal experts		48,000		48,000	-	-	-	-			-			-		48,000
Industry				-	-	-	-	-			-			-		-
Stock assessment				-	-	80,000	-	80,000			-			-		80,000
Sub-total national Consultants	-	48,000	-	48,000	-	80,000	-	80,000	-	-	-	-	-	-	-	128,000
5013 Sub-total consultants	35,100	94,100	57,100	186,300	153,750	390,100	369,300	913,150	61,550	-	61,550	144,000	-	144,000	-	1,305,000
5650 Contracts				-	-	-	-	-			-			-		-
Smaller contracts for studies etc	-			-	25,000	50,000	100,000	175,000			-			-		175,000
Larger contracts for support by, e.g., government labs			-	-	-	150,000	-	150,000			-			-		150,000
Internal contracts for e-learning		35,000	-	35,000	-	-	-	-			-			-		35,000
Midterm review				-	-	-	-	-			-		50,000	50,000		50,000
Final evaluation				-	-	-	-	-			-		50,000	50,000		50,000
5650 Sub-total Contracts	-	35,000	-	35,000	25,000	200,000	100,000	325,000	-	-	-	-	100,000	100,000	-	460,000
5021 Travel				-	-	-	-	-			-			-		-
Missions international travel project staff/consultants	-	-	40,000	40,000	5,000	85,000	40,000	130,000	25,000	-	25,000			-		195,000
Non-staff travel - international (workshops)			40,000	40,000	60,000	112,000	116,000	288,000	60,000	-	60,000			-		388,000
Non-staff travel - regional (workshops etc)	-			-	-	195,957	22,500	218,457			-			-		218,457
5021 Sub-total travel	-	-	80,000	80,000	65,000	392,957	178,500	636,457	85,000	-	85,000	-	-	-	-	801,457
5023 Training				-	-	-	-	-			-			-		-
Larger global and regional workshops			7,500	7,500	-	15,000	22,500	37,500	7,500	-	7,500			-		52,500
Smaller global and regional meetings	-		20,000	20,000	-	30,000	-	30,000			-			-		50,000
Virtual workshop	1,000	1,000	6,000	8,000	3,000	5,000	5,000	13,000	3,000	2,500	5,500			-		26,500
PSC meetings				-	-	-	-	-			-		215,000	215,000		215,000
5023 Sub-total training	1,000	1,000	33,500	35,500	3,000	50,000	27,500	80,500	10,500	2,500	13,000	-	215,000	215,000	-	344,000
6100 Non-expendable procurement				-	-	-	-	-			-			-		-
New technology equipment				-	49	200,000	200,000	400,049			-			-		400,049
6100 Sub-total non-expendable procurement	-	-	-	-	49	200,000	200,000	400,049	-	-	-	-	-	-	-	400,049
6150 Technical support services				-	-	-	-	-			-			-		-
Terminal report costs				-	-	-	-	-			-		6,650	6,650		6,650
6300 Sub-total Technical support services	-	-	-	-	-	-	-	-	-	-	-	-	6,650	6,650	-	6,650
TOTAL	106,100	200,100	240,600	546,800	396,799	1,413,057	875,300	2,685,156	212,050	57,500	269,550	244,000	481,650	725,650	210,000	4,437,156

SUBTOTAL Comp 1	546,800
SUBTOTAL Comp 2	2,685,156
SUBTOTAL Comp 3	269,550
SUBTOTAL Comp 4	725,650
M&E	
Subtotal	4,227,156
Project Management Cost (PMC)	210,000
TOTAL GEF	4,437,156

ANNEX F: (For NGI only) Termsheet

<u>Instructions</u>. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template

provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

n/a

ANNEX G: (For NGI only) Reflows

<u>Instructions</u>. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agencys is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

n/a

ANNEX H: (For NGI only) Agency Capacity to generate reflows

<u>Instructions</u>. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies? capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).

n/a