Purse Seine Tuna Fisheries Improvement Project in the Eastern Atlantic Ocean

Action Plan

Report to the FIP Participants

Final

4 October 2017

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Cover photo: purse seine vessels from companies having expressed their interests to be FIP participants – left: Via Mistral (Saupiquet) from Ouest France, 2013 and Zuberoa (ATUNSA) from ANABAC, 2017

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Final version submitted after the presentation of the detailed action plan to the future FIP partners (4th December 2017) taking into account minor comments raised by attendees

Abbreviations and acronyms used

ABNJ ..... areas beyond national jurisdiction (GEF funded project with FAO coordination)
ANABAC..... *Asociación Nacional de Armadores de Buques Atuneros Congeladores* (Spanish producer organisation representing Spanish fishing vessel owners/operators – vessels are either flagged in Spain or in non-EU countries)
AZTI ..... Spanish research institute on fisheries and the marine ecosystem
B ..... biomass
B_0 ..... Biomass zero (unfished or virgin biomass)[1]
BET ..... bigeye tuna
C ..... critical (IPG)
CMM ..... Conservation and Management Measures
CoC ..... (MSC) Chain of Custody
CoP ..... Code of (good) Practices
CPC ..... Contracting Party and Cooperating Non-Contracting Party
CR ..... Certification Requirements
e.g..... *exempli gratia* in Latin, which means 'for example'
EEZ..... Exclusive Economic Zone
ETP ..... Endangered, Threatened and Protected
EU ..... European Union
EUR..... Euro
F..... Fishing mortality
FAD..... Fish Aggregating Device
FAO..... Food and Agriculture Organization of the United Nations
FCR ..... (MSC) Fisheries Certification Requirements
FIA ..... FIP internal activities
FIP..... Fishery Improvement Project
F_{MSY} ..... Fishing mortality rate that would give maximum sustainable yield
FPA ..... Fisheries Partnership Agreement
GEF ..... Global Environment Fund (the World Bank serves as GEF trustee)
GT..... Gross Tonnes
GTA..... Ghana Tuna Association
HCR..... Harvest control rules
i.e..... Latin *id est* meaning 'that is'
ICCAT..... International Commission for the Conservation of Atlantic Tunas
Ifremer ..... Institut Français de Recherche pour l'Exploitation de la Mer
ILO ..... International Labour Organisation
Inc (or inc.). ..... including
IPG..... Improved Performance Goal
IRD..... *Institut de Recherche pour le Développement (France)*
ISSF ..... International Seafood Sustainability Foundation
IUU ..... Illegal Unreported and Unregulated (fishing)
m ..... metre(s)
MCS ..... monitoring, control, and surveillance
MIRAH ..... *Ministère des Ressources Animales et Halieutiques* (Côte d'Ivoire)
MoFAD ..... Ministry of Fisheries and Aquaculture Development (Ghana)
MPA..... Marine Protected Area
MSC ..... Marine Stewardship Council
MSE ..... Management Strategy Evaluation

[1] See glossary of technical terms to fisheries biology on NOAA: http://www.st.nmfs.gov/st4/documents/F_Glossary.pdf , latest access: 30 April 2017.

MSY ..... Maximum Sustainable Yield
mt ..... metric tonnes ('tonne' is preferably used in the document)
N/A ..... not available
Na (or na) ..... not applicable
NC ..... non-critical (IPG)
NGO ..... non-governmental organisation
nm ..... nautical mile
NOAA ..... (US) National Oceanic and Atmospheric Administration
OPAGAC ..... *Organización de Productores Asociados de Grandes Atuneros Congeladores*
OPTUC ..... *Organización de Productores de Tunidos Congelados*
Orthongel ..... *Organisation française des producteurs de thon congelé et surgelé*
P ..... (MSC) Principle (P1, P2 and P3)
PI ..... Performance Indicator
PMT ..... Project Management Team
PRI ..... Point of Recruitment Impairment
PSA ..... Productivity Susceptibility Analysis
RBF ..... Risk-Based Framework
RFMO ..... Regional Fisheries Management Organisation
SB ..... Spawning Biomass
SCRS ..... (ICCAT) Standing committee on research and statistics
SFPA ..... Sustainable Fisheries Partnership Agreement
SG ..... Scoring Guidepost
SI ..... Scoring Issue
SKJ ..... skipjack
t ..... tonne(s)
TUE ..... Thai Union Europe
UNCLOS ..... United Nations Convention on the Law of the Sea
UoA ..... Unit of Assessment
UoC ..... Unit of Certification
v ..... version
VMS ..... Vessel Monitoring System
YFT ..... yellowfin tuna

1 BACKGROUND AND PURPOSE OF THIS DOCUMENT

1.1 BACKGROUND

This document has been prepared under the initiative of Thai Union Europe (TUE) by Poseidon Aquatic Resource Management Ltd, a UK based fisheries consultancy firm. It provides the detailed action plan for a prospective Fisheries Improvement Project (FIP) for most of European Union (EU) and third country-flagged purse seine vessels fishing for tuna in the Eastern Atlantic Ocean with the purpose of landing their catches in main fishing ports in West Africa. It is based on, and an update of, the scoping document of the FIP drafted in June 2017 (see Defaux and Huntington, 2017). The proposed detailed activities are adapted from the detailed action plan for the 'Sustainable Indian Ocean Tuna Initiative' (SIOTI) FIP too (see Huntington, 2017).

Description of the fishery (Unit of Assessment):

Fleet and storage on board: the fishing fleet to be covered by this FIP currently consists of industrial purse seine fishing vessels operating in the Eastern Atlantic Ocean and varying in length from around 50 m to 100 m. These vessels store their catch in brine storage: vessels that have brine wells that store fish at around -20°C and are thus only suitable for canning[2].

Fishing gear (details to be confirmed by the FIP stakeholders during the drafting of the detailed FIP action plan)**:** the purse seine used by the fleet vary according to the size of the vessel, but are generally 250 – 280 metres (m) deep and 1,500 – 1,800 m in length. The nylon mesh size is around 50 mm. The net lengths are divided into separate panels, which can be replaced when the nets are damaged. The first sets of the day usually commence at around 3 or 4 am and is usually completed at around 10 am. Each set lasts around 1 hour for unsuccessful sets and 2 to 2.5 hours on large, successful hauls. Depending on opportunities, there may be up to 3 sets in a day, but a single set is more normal. Trip lengths may last from 30 to 40 days. Vessels fish all the year round, with 2-3 weeks every two years for servicing and refitting.

A purse seiner encircles the school with a deep curtain of netting, then the bottom of the net is pursed (closed) underneath the fish school by hauling a wire running from the vessel through rings along the bottom of the net and then back to the vessel, preventing the fish from 'sounding', or swimming down to escape the net. Searching for the fish schools and assessing their size and direction of movement is an important part of the fishing operation. Sophisticated electronics, such as echo sounders, sonar, and track plotters, may be used to search for and track schools, assessing their size and movement and keeping in touch with the school while it is surrounded with the seine net. Crows nests may be built on the masts for further visual support. A very heavy boom, which carries the power block, is fitted at the mast. On the deck are three drum purse seine winches and a power block, with other specific winches to handle the heavy boom and net. Vessels are usually equipped with a skiff.

Fishing for tuna schools may occur by setting the purse seine around free schools or schools aggregating near drifting natural or purpose-built devices (Fish Aggregating Devices or FADs). These techniques are usually opportunistic, that is vessels catch tuna from both free and associated schools during fishing trips, but the majority of vessels use FADs to some extent. However, this practice varies from vessel to vessel. Purse seine vessels are now limited to use 500 active FADs with or without instrumental buoys at any one time but may store more on board (ICCAT Conservation and Management Measure, CMM[3]).

[2] The majority (if not all) of the purse seiners active in the Atlantic Ocean use brine storage. Dry storage: vessels freezing the fish down upon catch and then placing them in dry storage at -40°C and thus can go for further value addition. This storage is very likely to be less used in the Atlantic Ocean than in the Indian Ocean. The implications of these two alternate catch storage approaches will need to be investigated over the FIP course.

[3] Paragraph 16 of Recommendation 2016-01 by ICCAT on a Multi-Annual Conservation and Management Program for Tropical Tunas. The Recommendation will become active from mid-2017. The current

FADs have evolved over the last six to seven years to reduce the potential for turtle and shark entanglement through the use of 'sausage nets' rather than hung net panels. ISSF and other organisations including the producer organisations ANABAC, Orthongel and OPAGAC are now advocating the greater use of non-entangling materials, rather than nets.

Fish is stowed in wells. The number of wells and their capacity will vary according to vessel size. Fish are generally frozen in a brine mix once in the wells and offloaded to carriers or directly into marketing or processing facilities when in port. **Note that some vessels store tuna distinguishing those fished in a similar fishing trip on free schools and on FAD associated schools to respond to (or anticipate) a market demand for 'FAD – free' tuna.**

Fishing areas: the area of the fishery is seasonal –The vessels tend to steam to prospective FADs at night (at around 16 knots) and fish only during the day. The various purse seine fleets fish both in the high seas, as well as the EEZs (exclusive economic zones) of coastal states. Access to EEZ are either through private agreements or through public agreements with the coastal States, such as the EU sustainable fisheries partnership agreements for EU vessels. Catches in different zones may vary significantly between years for any specific month given the migration patterns of tuna, but typically around half of their catches are made in high seas areas (based on Consultant's consultations of ANABAC, OPAGAC and Orthongel within the evaluations of sustainable fisheries partnership agreements between the EU and coastal States within the last 4 years[4]).

1.2 PURPOSE OF THE FIP AND REACHING MSC FISHERIES CERTIFICATION

A key development over the past two decades has been the emergence of market-driven mechanisms to put pressure on fisheries to improve their environmental sustainability. The main such mechanism is the third-party certification of fisheries against a pre-established standard. In terms of uptake, by far the most successful of these is the ***Marine Stewardship Council*** (MSC) standard for responsible fisheries.

1.2.1 The MSC Standard for Responsible Fisheries

Under the MSC programme, fisheries are certified and entitled to display the blue ecolabel if they meet the MSC Standard: the principles and criteria for sustainable fishing. The Standard comprises three core principles:

1. Sustainable target fish stocks (Principle 1)
2. Impact minimisation of fishing on ecosystems (Principle 2)
3. Effective fisheries management (Principle 3) (based on MSC FCR v 2.0[5]).

The actions that fisheries take to demonstrate they meet these three principles vary considerably and take into account the unique circumstances of each fishery. Certification to the MSC Standard is a multi-step process conducted by independent certification bodies. The process usually begins with a ***pre-assessment*** to determine whether a fishery is ready for full assessment against the Standard and provides guidance about the issues that may need improvement to meet the MSC performance requirements.

recommendation 15-01 in force since 4 June 2016 limit the number of instrumental buoys active at any one time to 500 (paragraph 16 of Rec. 15-01; see http://www.iccat.int/en/RecsRegs.asp - latest access: 3 October 2017).

[4] See for instance, the 2013 regional overview of tropical tuna fishing in the Eastern Atlantic (EU funds): https://ec.europa.eu/fisheries/sites/fisheries/files/docs/body/report-tuna-fisheries-in-the-east-atlantic_fr.pdf , latest access: 3 October 2017. See especially page 60 section 5.2.2.3 2nd paragraph.

[5] Page 5.

Briefly, the assessment process involves scoring 28 Performance Indicators - PIs (under FCR version 2.0) using narrative guides to the characteristics that will achieve scores (called scoring guideposts, SGs for short). **To obtain the MSC certification, the fishery needs to achieve a score of 60 or more for each PI. If a fishery achieves a score of less than 60 on any PI, certification will not be awarded**. **Additionally, the fishery must have an aggregate score of 80 or higher for each of MSC's three principles in order to be certified.**

In some cases, and for only five status-related (i.e. outcome-related) PIs, when sufficient quantitative data are not available to score a given PI using the usual set of SGs, the MSC Risk-Based Framework (RBF) might be used. This is a set of assessment methods that enable certifiers to assess the risks a fishery poses to the sustainability (or status) of target, retained and bycatch species, as well as habitats and ecosystems. Detailed procedures for the applicability and use of the Risk-Based Framework are in the MSC certification requirements.

1.2.2 Social and ethical issues in fisheries – an MSC self-declaration on forced labour in the future

Prior launching an MSC assessment, the MSC Fisheries Certification Requirements version 2 requires that the assessment scope be confirmed. Among other conditions, the certification body must ensure that the fishery to be certified does not include an entity that has been successfully prosecuted for violations against forced labour laws based on national and international rules. The MSC evaluates forced labour in compliance with the International Labour Organisation (ILO)'s definition of forced labour. The MSC Programme is aiming to provide further assurance that MSC certified fisheries and applicant fisheries are free of serious labour abuses. The MSC anticipates introducing any agreed new risk-based requirements in three phases as follows:

1. The initial phase is expected to require a self-declaration by MSC certified fisheries that they are free from unacceptable labour practices and are able to supply evidence to support this claim. The MSC Board has asked for this requirement to be implemented by the end of 2018, following detailed consultation.
2. The MSC will also consult on a set of auditable social requirements or declaration that will be implemented in the Chain of Custody[6] standard in 2018. This may include recognition of solutions offered by other standard setting organisations.
3. The final phase will be to consult on a set of auditable social requirements for labour practices in fisheries, including options to recognise solutions offered by other standard setting organisations, which will be implemented in 2020 when planned updates to the MSC Fisheries Standard are released (the development of the risk based approach can be followed online).

In the meantime, the tuna fishing sector aims to improve social ethics in the tuna supply chain by applying Codes of Conduct and Social responsibility policies. It is the intention that this FIP will follow progress of these initiatives closely and, most particularly, engage with the MSC process at the earliest opportunity. Discussions with MSC (Hannah Norbury, pers. comm., 11 August 2016) indicate that **opportunities will exist for fisheries and FIPs to pilot test any extension of the MSC Principles and Criteria to social and ethical issues** and this possibility should have to be included in both initial and recurrent action planning processes.

1.2.3 Fisheries Improvement Projects

If the pre-assessment demonstrates that a fishery is unlikely to achieve the required standard across the three MSC principles, it will need to consider how the necessary improvements will be made to the identified weaknesses. If the improvements to the fisheries management procedures and

[6] MSC procedure (and related audits) to avoid mixing MSC certified products with non-certified ones in the supply chain.

information base could be made over a relatively short time-frame, that is five years or less, that would give greater confidence that the fishery is ready for full assessment. One approach to making these improvements is through a formal ***Fisheries Improvement Project*** (FIP).

A FIP is a well-established process to improve fisheries sustainability over a set time. FIPs are usually:

1. Based on a MSC pre-assessment;
2. Have an agreed Action Plan with measurable indicators and an associated budget;
3. Involve a FIP 'Partnership' with a secretariat, a coordinator and technical facilitators;
4. Have a final goal of MSC certification.

FIPs can give better market access as a FIP demonstrates commitment to reach the market-driven MSC standard. They can provide a framework to move a fishery towards sustainability by an agreed time by:

- Creating partnerships between fishers, buyers, researchers, and government;
- Strengthening fisheries management by addressing key gaps identified by a pre-assessment;
- Identifying clear targets and activities.

A FIP normally follows a pre-assessment which informs the design and initial benchmarking, and once under implementation, undergoes regular evaluation to track progress to the FIP's ultimate goal, be this MSC certification or an alternative agreed end point (see figure below). To end, this Atlantic Ocean Tuna Purse Seine FIP has adopted the WWF guidelines for the Fishery Improvement Project and the definition of credible FIP by the MSC (see section 3.1 for further details).

1.3 DESIGN PROCESS

The development of a FIP is very much a stakeholder-driven process. As suggested by the figure below (next page), the starting point is the MSC pre-assessment report, which will have identified which Performance Indicators (PIs) have scored less than 80 being the unconditional pass level for MSC. Therefore, all those PIs that scored <60 (fail) or 60 – 79 (conditional pass) need to be assessed to determine the key weaknesses, how they can be addressed and by who.

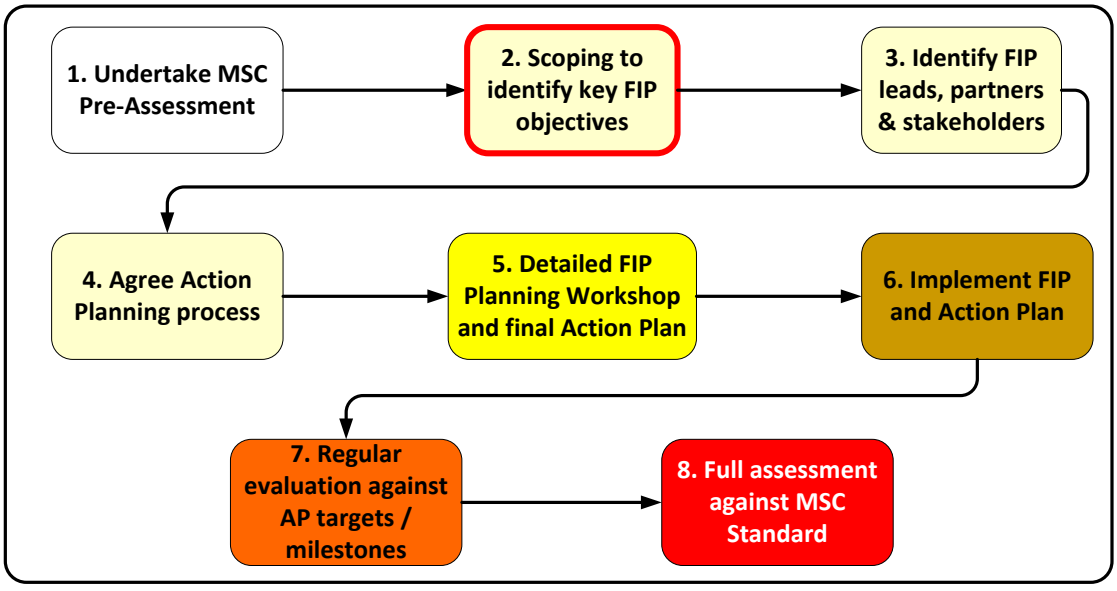


Figure 1: FIP Planning Process

1.4 OVERALL SCOPE

The overall scope of this FIP is synthesised in the table below.

Table 1: overall scope of the FIP[7]

Target species	Skipjack tuna (*Katsuwonus pelamis*) Yellowfin tuna (*Thunnus albacares*) Bigeye tuna (*Thunnus obesus*)
Fishing area	FAO fishing areas 34 and 47[8] including the high seas and tuna fishing zones of Coastal States' waters within these areas
Management system	ICCAT - International Commission for the Conservation of Atlantic Tunas (RFMO) – the areas above are under the mandate of the ICCAT, the regional tuna fisheries management organisation – RFMO- in the Atlantic Ocean:
Stocks	Eastern Atlantic skipjack tuna Atlantic yellowfin tuna; and Atlantic bigeye tuna
Fishing method	Purse seiners with two fishing strategies: 1. ***Free-schools***: vessels seek large schools of tuna, which are then fished by a single vessel, usually during daylight; and 2. ***Associated sets***: vessels that utilise the natural aggregation of tuna around floating objects, such as natural logs (and other large debris), large marine animals such as whale sharks, and around purpose-built drifting FADs[9].
Unit of assessment (UoA)	• UoA A.1 Purse Seine Fishery (Skipjack Tuna) • UoA A.2 Purse Seine Fishery (Yellowfin Tuna) • UoA A.3 Purse Seine Fishery (Bigeye Tuna) (as agreed by the main FIP participants on 17 May 2017)
Expected unit(s) of certification (UoCs)	Skipjack, yellowfin and bigeye tuna fished in the Eastern Atlantic Ocean by purse seiners of the FIP fishing industry partners

FIP participants[7]	*Main partners:*
	• FIP Coordinator: to be confirmed;
	• FIP facilitator: Thai Union Europe (including its local processing company in Ghana - PFC);
	• FIP country partners: the government of Ghana and the Government of Côte d'Ivoire;
	• FIP industry partners:
	  ○ Producer organisations (POs) such as the Ghana Tuna Association, ANABAC-OPTUC and Orthongel; and
	  ○ Purse seine fishing vessel companies being members of the organisations above and other purse seine fishing vessel companies (vessels flagged in EU and non-EU countries)
	External partners: OPAGAC, Ghanaian-flagged pole and line vessel companies with vessels operating from and based in Ghana, WWF, ISSF // *Other potential external partners:* Côte d'Ivoire surface longliner company, processors and traders in Ghana and Ivory Coast such as TriMarine; flag States of the vessels participating to the FIP and other landing States // *Other key stakeholders*: ICCAT, the MSC

[7] See detailed version in Table 9.

[8] http://www.fao.org/fishery/area/search/en , latest access: 4 October 2017.

[9] For this FIP, it is proposed that the different forms of associated sets are treated as the same.

Target species and stocks: this FIP will consider the following three pelagic tuna species as the targeted species:

1. Skipjack tuna (*Katsuwonus pelamis*) – eastern stock
2. Yellowfin tuna (*Thunnus albacares*)
3. Bigeye tuna (*Thunnus obesus*)

Yellowfin and bigeye are considered to belong to single Atlantic stocks, whereas skipjack is split into an Eastern stock and a Western stock (ICCAT[10]).

Status of the targeted stocks at the date of drafting the scoping document (April 2017):

Species	Overfished	Overfishing occurring	Stock status	Last/next assessment
Bigeye tuna	**Overfished**	**Overfishing**	**Overfished and overfishing**	2015 /2020*
Yellowfin tuna	**Slightly overfished ('about 5 % below MSY')** **(2011 assessment: overfished)**	**No overfishing** **(2011 previous assessment: no overfishing**	**Slightly overfished/no overfishing**	2011 and 2016 Next stock assessment: 2021** (ICCAT SCRS, 2016[11])
Skipjack – eastern stock	**'Not likely'****	**'Not likely'****	**Likely to be neither overfished nor under overfishing****	2014/2019*

Legend: colour coding for the stock status– green, stock neither overfished (overexploited) nor under overfishing (fishing activities run with the risk of the stock becoming overexploited); orange, stock being overfished without overfishing (or with some uncertainties in the stock status) occurring, red: overfished and facing overfishing; NB: *, provisional date subject to ICCAT's decision; **: colour coded light green as a precautionary approach. Source: consultant own elaboration based on ICCAT data in October-2016[12]

Fishing methods: this FIP will include the use of purse seines by large (above 50 m) specialist purse seine vessels. Sets by these vessels can be made in two different ways, on:

1. ***Free-schools***: vessels seek large schools of tuna which are then fished by a single vessel, usually during daylight.
2. ***Associated sets***: vessels that utilise the natural aggregation of tuna around floating objects, such as natural logs (and other large debris), large marine animals such as whale sharks, and around purpose-built drifting FADs[13].

[10]ICCAT stock assessments: http://www.iccat.int/en/assess.htm , latest access: 3 October 2017

[11] Page 16 of ICCAT PLE SCRS report, presentation 11 Nov. 2016: http://www.iccat.int/com2016/ , latest access: 3 October 2017.

[12] ICCAT, 2016 – Report of the ICCAT Standing Committee on Research and Statistics in October 2016: http://www.iccat.int/Documents/Meetings/Docs/2016_SCRS_ENG.pdf for yellowfin, see page 15 in YFT3 3rd paragraph and the table in page 16 (see also page 72 of ICCAT, 2017); for skipjack, see table in page 54; for bigeye, see table in page 37.

[13] For this FIP, it is proposed that the different forms of associated sets are treated as the same.

Fishing area: the FAO fishing areas 34 and 47 are within the Atlantic Ocean area under the jurisdiction of the regional tuna fisheries management organisation International (RFMO) in the Atlantic Ocean: the International Commission for the Conservation of Atlantic Tunas (ICCAT). Note that the ICCAT area includes all waters of the Atlantic Ocean 'except the territorial sea and other waters, if any, in which a state is entitled under international law to exercise jurisdiction over fisheries' (articles 1 and 9 of the ICCAT Convention[14]; see the representation of the area in the Figure 2 below).

Unit of certification (UoC): MSC certified yellowfin, skipjack and bigeye tuna caught by the purse seine vessels of the FIP fishing industry partners.

The minimum requirement for a vessel to enter the FIP is to be listed on the International Seafood Sustainability Foundation (ISSF)'s proactive vessel register[15]. A rough estimate of the initial number of vessels involved in the UoCs – around 40 - is included in Appendix D.

The exact number and nature of the fleet (flags) will be updated and clarified as the FIP partnership evolves, and will be assessed in detail during the FIP action planning. It is recognised that the fishing fleet might change over time if the FIP partnership is enlarged or decreased too.

Unit of assessments (UoA):

Consulted MSC staff and FIP participants in May 2017 suggested that the distinction between the FAD-dependent purse-seine fishing strategy and the free-school one be not made in the tropical tuna FIPs.

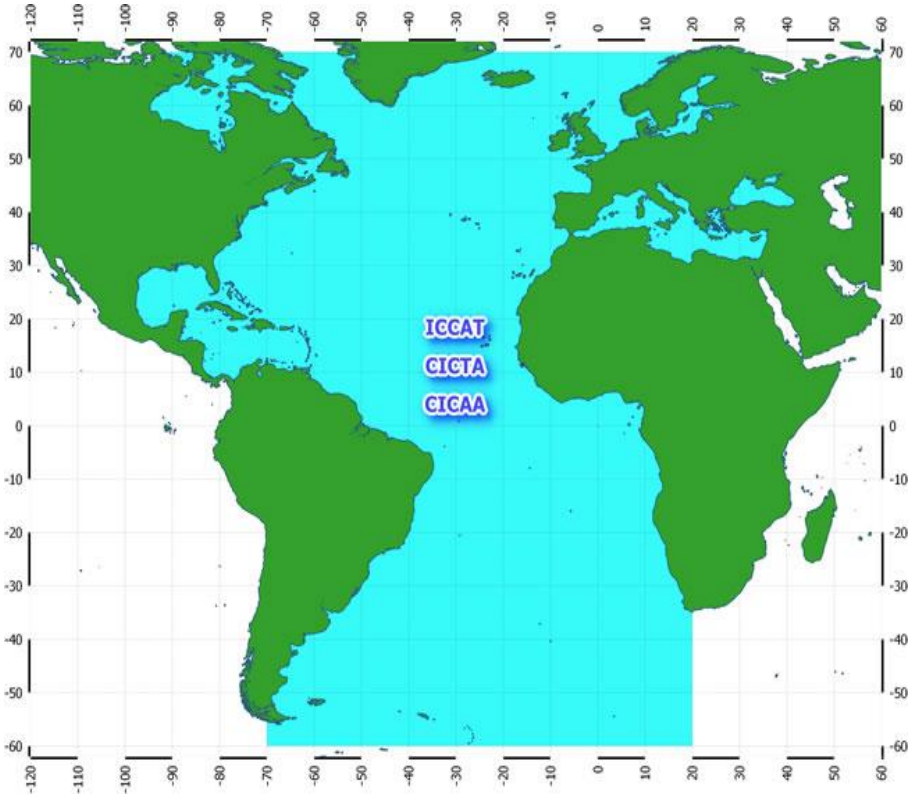
Based on the above, the proposed **units of assessment** (UoAs) would be:

- UoA 1 Purse Seine Fishery (Skipjack Tuna – Eastern Atlantic stock);
- UoA 2 Purse Seine Fishery (Yellowfin Tuna);
- UoA 3 Purse Seine Fishery (Bigeye Tuna);

[14] http://www.iccat.int/Documents/Commission/BasicTexts.pdf , latest access: 3 October 2017.

[15] For a presentation of ISSF, see section 2.1.3. 'The ISSF Proactive Vessel Register (PVR) enables tuna vessel owners to identify themselves as active participants in meaningful sustainability efforts, such as implementing specific best practices.' ISSF website: http://iss-foundation.org/knowledge-tools/databases/proactive-vessel-register/ , access: 3 October 2017.

Figure 2: Management area of the ICCAT



Source: ICCAT website[16]

[16] http://www.iccat.int/en/convarea.htm, latest access: 3 October 2017.

2 ANALYSIS OF BASELINE INFORMATION

This initiative is largely the result of a series of pre-assessments (see table below) for certification of these yellowfin, bigeye, and skipjack tuna-directed purse seine fisheries against the Marine Stewardship Council (MSC) standard for responsible fisheries. In particular, this FIP scoping document is based upon two MSC pre-assessments recently conducted for purse seine vessels flagged in EU and non-EU countries being members of the Spanish producer organisations ANABAC and OPAGAC (see Chapter **2** for more details) and the International Seafood Sustainability Foundation -ISSF's scoring of tropical tuna stocks against the Principles 1 and 3 (see Table 2). It also recognises that further harmonisation with other MSC certification initiatives[17] for large pelagic species (that is tuna and associated species) in the Atlantic Ocean would be essential (see section 2.3.2 – see the findings of the MSC pre-assessment carried out by Orthongel in 2015). This subsequent harmonisation process will be conducted in association with WWF and other FIP stakeholders and partners (cf. section 1.4).

Table 2: List of analysed MSC pre-assessment and full assessment initiatives

Fishery	Author (Date)	Initiative	Status
ANABAC Atlantic Ocean purse seine fisheries (YFT, BET, SKJ)	MRAG (March 2017)	MSC pre-assessment (against the MSC Fisheries Certification Requirements - FCR version 2.0)	Pre-assessment completed in March 2017
OPAGAC global purse seine fisheries (YFT, BET, SKJ) including the Atlantic Ocean	OPAGAC / WWF (2016)[18]	Fishery Improvement Project Work Plan (FCR v2.0)	Version September 2016. Global FIP running since October 2016 *Considering comments from the author of the FIP progress monitoring in August 2017*
	WWF/OPAGAC 2016	FIP Scoping document	Version January 2016
	WWF / OPAGAC (2015)	MSC pre-assessment (FCR v2.0)	Update of MRAG (2014). Pre-assessment completed in 2015. FIP designed in 2016 and launched
	MRAG (2014)	MSC pre-assessment (FCR v1.3)	Pre-assessment completed in 2014
ISSF evaluation of global tuna stocks relative to MSC criteria (latest update[19]) by oceans	Medley and Powers (2016)	Scoring across P1 & P3 (FCR v2.0)	Version 4 (December 2016) – scoring regularly updated to monitor the scoring evolution of the tuna stocks hence the fourth version
	Jodi Bostrom et al. (2017)	Scoring across P2 (FCR v2.0)	Version 1 (January 2017) – preparatory document to score tuna stocks against Principle 2

[17] For instance, the MSC pre-assessment carried out by the French producer organisation Orthongel in 2015.

[18] Cited in this scoping document as OPAGAC (2016).

[19] http://iss-foundation.org/?s=MSC+criteria, latest access: 3 October 2017

2.1 PRE-ASSESSMENT RESULTS

To develop the scoping document, the following pre-assessments results are analysed in this Chapter (see next pages):

- The 2017 pre-assessment of ANABAC purse seine tuna fishing fleet;
- The 2015 OPAGAC purse seine fishing fleet pre-assessment based on the 2016 FIP work plan document (Atlantic Ocean); and
- The latest ISSF evaluation of tuna fish stocks against the MSC Principles 1 and 3 from Powers and Medley (2016).

Within those three initiatives, the UoAs are purse seiners active in the Atlantic targeting tuna in free-schools or in schools associated with FADs (see details in the sections 2.1.1, 2.1.2, and 2.1.3 below).

2.1.1 Atlantic ANABAC purse seine fishery - pre-assessment (March 2017)

A desk-based[20] pre-assessment of the 'ANABAC' Eastern Atlantic purse seine fishery was undertaken recently by the Fisheries Consultancy MRAG (on behalf of ANABAC). The results were published in March 2017 (see MRAG, 2017). The ANABAC fishing fleet consists of Spanish (EU) fishing vessels and non-EU vessels flagged such as Belize and Cape Verde[21]. The fleet targets skipjack, yellowfin and bigeye tuna fishing with FADs or on free swimming schools (units of assessments being identical to the units of certification in this exercise and do not distinguish the UoA between fishing in association with FADs and fishing on free schools). The MSC FCR version 2.0 of October 2014 was used.

In the current state, the fishery would be likely to fail against the MSC standard due, especially, to the low scoring for bigeye tuna against Principle 1 (P1). Also, a fishery must have an aggregate score of 80 or higher for each of MSC's principles to be certified, which is not the case (see Table 3 below). With little information available on the flag States Belize and Cape Verde from the desk review, there is an important level of uncertainty in the pre-assessment with regards to these flag States with a risk of poor performance indicators scoring against P3, that could also result in a fail. Therefore, the authors recommended gathering the relevant evidence for further action (i.e. for a full assessment).

Table 3: 2017 ANABAC purse seine UoA scoring

UoA		Principle	PIs less than 60	Overall outcome
Purse seine (free-school & FAD-associated) fishing strategies	A.1 Skipjack tuna (Eastern stock)	1 Stock	0 / 5*	Conditional pass
		2 Ecosystem	0 / 15	Conditional pass
		3 Management	0 / 7**	Conditional pass
	A.2 Yellowfin tuna	1 Stock	0 / 6	Conditional pass
		2 Ecosystem	0 / 15	Conditional pass
		3 Management	0 / 7**	Conditional pass
	A.3 Bigeye tuna	1 Stock	3 / 6	Fail
		2 Ecosystem	0 / 15	Conditional pass
		3 Management	0 / 7**	Conditional pass

Source: based on MRAG, 2017 (see especially pages 19 – 21 for the detailed scoring table) NB: *: the performance indicator 1.1.2 'stock rebuilding' is not scored because the stock is not currently considered depleted. **: scoring of Belize and Cap Verde flag States for compliance and enforcement (PI 3.2.3) was carried out by MRAG's knowledge of fisheries surveillance by these two countries. The authors recommended that it required to be confirmed from document evidence or consultation.

Fail <60	Pass with condition (60 – 79)	Pass (≥80)

[20] No consultation or data collection undertaken during the exercise.

[21] Vessels with other flags shall be confirmed by ANABAC in the FIP preparation-implementation.

2.1.2 Global OPAGAC purse seine fisheries MSC pre-assessment – focus on the Atlantic Ocean (based on the SEPTEMBER 2016 FIP Work plan) – minor scoring update expected for PIs 1.2.1 and 1.2.2

OPAGAC is a Spanish producer organisation (recognised as such by the EU) representing Spanish purse seine vessel owners/operators targeting tropical tuna (skipjack, yellowfin tuna and bigeye). 'OPAGAC' vessels are either flagged in Spain or in non-EU countries).

In association with WWF, OPAGAC carried out an MSC pre-assessment of their fishing fleet operating in the Atlantic, Indian and Pacific Oceans in 2014 applying the MSC standard version 1.3. The unit of assessments[22] in the three oceans did not distinguish whether the fleet target free schools or FAD-associated schools. The process ended up in launching a FIP in October 2016 (a scoping document has also been drafted).

The FIP work plan (OPAGAC, 2016) presents an updated and reviewed MSC pre-assessment applying the MSC FCR version 2.0 for Principle 2 and updating the scoring of Principle 1 considering the latest ICCAT stock assessment of skipjack and bigeye tuna species in the Atlantic Ocean, respectively in 2014 and 2015 (see Gascoigne, 2015 and WWF, 2016a for details). The overall scorings of the reviewed pre-assessment in the Eastern Atlantic are summarised in Table 4 below.

The three Units of assessments (skipjack, yellowfin tuna and bigeye tuna) failed with against Principle 1.

*An **update** of the PI scoring was carried out by the FIP monitoring team in August 2017. The PIs 1.2.1 and 1.2.2 were scored between 60 and 79 for YFT (Gascoigne, comm., Sept. 2017). The harmonisation table considered this new scoring (see Table 7).*

Table 4: 2016 OPAGAC purse seine UoA scoring in the Eastern Atlantic Ocean

UoA		Principle	PIs less than 60	Overall outcome
Purse seine (free-school & FAD-associated) fishing strategies	A.1 Skipjack tuna (Eastern stock)	1 Stock	2/5*	Fail
		2 Ecosystem	0 / 15	Conditional pass
		3 Management	0 / 7	Conditional pass
	A.2 Yellowfin tuna	1 Stock	3/ 6	Fail
		2 Ecosystem	0 / 15	Conditional pass
		3 Management	0 / 7	Conditional pass
	A.3 Bigeye tuna	1 Stock	3 / 6	Fail
		2 Ecosystem	0 / 15	Conditional pass
		3 Management	0 / 7	Conditional pass

Source: based on OPAGAC, 2016

NB: **important,** the colour coding used in the table 6 of OPAGAC, 2016 in the online version found on the FIP tracking website 'Fishery Progress'[23] is to be read correctly for the colour coding legend is confusing the MSC scoring system with IPG being listed as 'low priority' and 'medium priority' (to compare with table 2 of the scoping document elaborated in January 2016 in WWF, 2016a)

*: the performance indicator 1.1.2 'stock rebuilding' is not scored.

Fail <60	Pass with condition (60 – 79)	Pass (≥80)

[22] The term 'Unit of Certification' is applied in OPAGAC, 2016.

[23] http://fisheryprogress.org/system/files/documents_workplan/OPAGAC%20FIP%20work%20plan%20FINAL%20%281%29.pdf , latest access: 20 April 2017.

2.1.3 ISSF evaluation of tuna fish stocks against the MSC criteria (December 2016 and January 2017)

The International Seafood Sustainability Foundation (ISSF), an NGO, requires companies (fishing vessel owners, processors, traders and/or marketers) working with the Foundation to advocate for improved fishery management, fund scientific advancements through research and expert analysis, and take direct action to encourage the adoption of responsible fishing practices in the tuna fishing sector. Thai Union is a founding member of ISSF. Producer organisations or associations such as GTA, ANABAC, OPAGAC and Orthongel collaborate with ISSF to promote better fishing practices.

ISSF has been evaluating on a regular basis the scoring of tuna fish stocks against the MSC standard towards Principles 1 and 3 and complemented this regular scoring exercise by an evaluation of the scoring of the same stocks towards the MSC Principle 2 (considered for the latter Principle as a preliminary work by ISSF). The MSC FCR version 2.0 was used to carry the scoring of the three Principles (see Table 5 for the summary findings).

The latest ISSF scoring of tuna stocks in the Atlantic Ocean (Powers and Medley, 2016) is as follows: Conditional pass, was due to:

a) the lack of well-defined harvest control rules (HCR) in place – PI 1.2.2. 'Harvest control rules and tool' scoring just 60 - **however progress towards applying HCR is demonstrated by ICCAT** (Principle 3 – 'pass') and

b) for bigeye, to the status of the stock – PI 'Stock status' scoring just 60 considering that the biomass of the stock (the stock population) is 'likely to be above the level where recruitment would be impaired' (condition to meet the 60 scoring in FCR v 2.0) according to the 2015 stock assessments (see section 1.1.1 of Powers and Medley, 2016).

ISSF is preparing to pre-assess tuna fisheries against Principle 2 in the different oceans in 2017 (see Bostrom et al., 2017[24])

Table 5: 2016 ISSF purse seine UoA scoring in the Eastern Atlantic Ocean

UoA		Principle	PIs less than 60	Overall outcome
Purse seine (free-school & FAD-associated) fishing strategies	A.1 Skipjack tuna (Eastern stock)	1 Stock	0/5*	Conditional pass
		2 Ecosystem	N/A	ISSF scoring expected to be available by the end of 2017**
		3 Management	0 / 7	Pass
	A.2 Yellowfin tuna	1 Stock	0/ 6	Conditional pass
		2 Ecosystem	N/A	Ibid**
		3 Management	0 / 7	Pass
	A.3 Bigeye tuna	1 Stock	0/ 6	Conditional Pass
		2 Ecosystem	N/A	Ibid**
		3 Management	0 / 7	Pass

Source: based on Powers and Medley, 2016 for Principles 1 and 3 (see especially page 4 for the detailed scoring)
NB: *: the performance indicator 1.1.2 'stock rebuilding' is not scored (not stock rebuilding required for skipjack); **: see Bostrom et al., 2017.

Fail <60	Pass with condition (60 – 79)	Pass (≥80)

[24] http://iss-foundation.org/?s=Principle+3+MRAG , latest access: 21 April 2017.

2.2 COMPARATIVE ANALYSIS

When these three different sets of baseline scores are compared, there is a broad agreement with regards to the scoring: **the critical issue being the stock status of bigeye tuna and the absence of harvest control rules (Principle 1)**. The key differences between the three scorings are analysed below based on the Table 6 hereafter.

Table 6: Comparison of scoring between the OPAGAC, ANABAC and ISSF baseline scores

UoA		Principle	PIs less than 60		
			OPAGAC	ANABAC	ISSF
Purse seine (free-school & FAD-associated) fishing strategies	A.1 Skipjack tuna	1 Stock	2 / 5	0 / 5	0 / 5
		2 Ecosystem	0 / 15	0 / 15	N/A
		3 Management	0 / 7	0 / 7	0 / 7
	A.2 Yellowfin tuna	1 Stock	3 / 6	0 / 6	0 / 6
		2 Ecosystem	0 / 15	0 / 15	N/A
		3 Management	0 / 7	0 / 7	0 / 7
	A.3 Bigeye tuna	1 Stock	3 / 6	3 / 6	0 / 6
		2 Ecosystem	0 / 15	0 / 15	N/A
		3 Management	0 / 7	0 / 7	0 / 7

NB: see sources and notes in the previous sections 2.1.1, 2.1.2 and 2.1.3 for details

Fail <60	Pass with condition (60 – 79)	Pass (≥80)

Why is the ISSF evaluation more optimistic?

The authors of the **ISSF evaluation** scored globally more optimistically showing some improvements of the targeted stocks towards achieving certification against the MSC Principle 1, although globally failing, and Principle 3 being slightly above 80 on overall – although with caveats[25] - by considering governance improvements ('Pass' with 84.2; see details in Appendix B).

Why has the OPAGAC pre-assessment more PIs failing under Principle 1 for SKJ and YFT compared to the ANABAC pre-assessment?

Compared to ISSF and **ANABAC**, **OPAGAC** scored below 60 the harvest strategy design (PI 1.2.1 – scoring issue a) and two scoring issues PI 1.2.2 harvest control rules for the yellowfin tuna and bigeye tuna, which are PI 1.2.2 (a) HCR design and application and PI 1.2.2 (b) HCR evaluation while the former ones scored between 60 and 79 (conditional pass) for those species for PI 1.2.1 and 1.2.2 (see OPAGAC, 2016 – pages 8 and 21-23 and WWF, 2016a Tables 6 and 9). The approach is likely to be due the authors of the OPAGAC MSC pre-assessment initiatives applying a stronger precautionary approach, however the purse seine fishery fails against the three MSC principals according to the authors of the ANABAC pre-assessment too.

The differences of the three scoring exercises are analysed in section 2.3.1 to harmonise the findings and define the critical and non-critical IPGs. **A precautionary approach has been applied in the harmonisation process** (see details in Appendix B), *however, the harmonisation table from the scoping document is updated considering the possible new OPAGAC scoring for 1.2.1 and 1.2.2 for YFT and as a precautionary approach PI 1.2.4 for SKJ by ISSF (see Table 7, text box section 2.1.2 and Appendix B).*

[25] The exact scoring of P3 is dependent on the covered Unit of certification as many P3 issues are based on individual State performance (see page 7, last paragraph of Powers and Medley, 2016)

2.3 CONSIDERATIONS FOR THE FISHERIES IMPROVEMENT PROJECT

2.3.1 Improved Performance Goal (IPG) Development

The FIP will use the various pre-assessment scoring information to identify where the fisheries will need to demonstrate improved performance to meet the MSC Standard for Responsible Fisheries. These deficiencies are used to formulate a set of 'Improved Performance Goals' (IPGs). There are two classes of IPGs as follows:

- **Critical IPGs**: For those PIs that scored less than 60 in the pre-assessment (i.e., a fail)
- **Non-critical IPGs**: For those PIs that scored between 60 and 79 in the pre-assessment (i.e., a possible conditional pass)

Based on the pre-assessments or other initiatives analysed in the previous sections of this Chapter 2, the Table 7 page 15 summarises the scoring for the different gear / species combinations and identifies whether the PI needs to be developed into either a critical or non-critical IPG. Where the score is above 80 for all gear / species combinations, no IPG is required and that PI is not included in the FIP.

The purpose of the FIP is to improve the performance of individual PIs (and their constituent Scoring Issues (SI)) over time to the point at which they will consistently score 80 or above. It is important to remember that a pass can only be achieved at the Principle level, as it is the weighted average across the Principle that is required. Therefore, a fishery can fail even if none of the individual PIs scored <60. Then the more IPG's the FIP addresses, the more certainty that an 80-aggregate score for that Principle will be met.

Table 7 below presents the overall conclusion of the harmonisation of the analysed pre-assessments to define the critical and non-critical IPGs accordingly (for details on the harmonisation mechanism, see Appendix B).

Table 7: Identification of Improved Performance Goals from the pre-assessments (updated from the scoping document)

Performance Indicator (PI)	UoA			IPG allocation		Comment
	Eastern SKJ	YFT	BET	Critical	Non-critical	
1.1.1 Stock status	≥80	60-79	60-79		NC	Note the BET scoring for ISSF being 60 rather than 60-79
1.1.2 Stock rebuilding		≥80	<60	C		Eastern skipjack not scored, stock not considered depleted
1.2.1 Harvest strategy	<60	60-79	<60	C		OPAGAC scoring / updated scoring by Poseidon - August 2017
1.2.2 HCRs	<60	60-79	<60	C		OPAGAC scoring / updated scoring by Poseidon - August 2017
1.2.3 Information	60-79	≥80	≥80		NC	ANABAC scoring (after comparing with the two other scoring)
1.2.4 Assessment of stock status	60-79	≥80	≥80		NC	ISSF scoring
2.1.1 Primary species outcome	60-79	60-79	60-79		NC	Precautionary approach: see preliminary PSA scoring of ISSF
2.1.2 Primary species management	60-79	60-79	60-79		NC	Precautionary approach: see preliminary PSA scoring of ISSF
2.1.3 Primary species Information	≥80	≥80	≥80			ANABAC scoring (after comparing with the two other scoring)
2.2.1 Secondary species outcome	60-79	60-79	60-79		NC	OPAGAC scoring
2.2.2 Secondary species management	60-79	60-79	60-79		NC	OPAGAC scoring
2.2.3 Secondary species information	60-79	60-79	60-79		NC	OPAGAC scoring
2.3.1 ETP species outcome	60-79	60-79	60-79		NC	OPAGAC scoring
2.3.2 ETP species management	60-79	60-79	60-79		NC	OPAGAC scoring
2.3.3 ETP species information	60-79	60-79	60-79		NC	OPAGAC scoring
2.4.1 Habitat outcome	≥80	≥80	≥80			ANABAC scoring
2.4.2 Habitat management	≥80	≥80	≥80			ANABAC scoring
2.4.3 Habitat information	≥80	≥80	≥80			ANABAC scoring
2.5.1 Ecosystem outcome	60-79	60-79	60-79		NC	OPAGAC scoring
2.5.2 Ecosystem management	60-79	60-79	60-79		NC	OPAGAC scoring
2.5.3 Ecosystem information	60-79	60-79	60-79		NC	OPAGAC scoring
3.1.1 Legal & customary framework	60-79	60-79	60-79		NC	Harmonisation of OPAGAC and ISSF scoring
3.1.2 Consultation, roles & responsibilities	60-79	60-79	60-79		NC	Harmonisation of OPAGAC and ISSF scoring
3.1.3 Long-term objectives	60-79	60-79	60-79		NC	OPAGAC scoring
3.2.1 Fishery-specific objective	60-79	60-79	60-79		NC	NC IPG 3.1.3 dealt in combination with NC IPG 3.2.1.
3.2.2 Decision-making processes	60-79	60-79	60-79		NC	OPAGAC: 3.2.2 a. 'responsiveness for decision-making' = 60
3.2.3 Compliance & enforcement	60-79	60-79	60-79		NC	ANABAC scoring (after comparing with the two other scoring)
3.2.4 Management performance	≥80	≥80	≥80			ANABAC scoring (after comparing with the two other scoring)
			Total	3	20	

Legend: C – critical (IPG), NC – non-critical (IGP), white cell, scoring not applicable; source: Poseidon based on the three analysed MSC pre-assessment initiatives except stated differently (see cell 'comment' and Appendix B for further details); NB: update for PIs 1.2.1 and 1.2.2 for YFT (upgraded to 60-79) and 1.2.4 eastern SKJ (downgraded to 60-79)

2.3.2 Harmonisation with other relevant fisheries assessments and FIPs

It is important to recognise that other works have already been conducted on assessing potential fisheries to reach MSC certification of similar tuna fisheries in the Atlantic Ocean (that is fisheries targeting the same fishing stocks). Other related initiatives known by Poseidon[26] are summarised in the Table 8 below. Please note (again) that this scoping report is based on the analysed pre-assessments and related initiatives presented in section 2 and has not been fully harmonised with the initiatives listed in the Table 8 below. **To conclude, currently, there is an absence of MSC certified fishery targeting YFT, BET and SKJ tuna in the Atlantic Ocean.**

Table 8: Potential harmonisation with other MSC pre-assessment and related initiatives

Fishery	Author / Date	Initiative	Status	Harmonisation potential and potential issues noticed by the initiative
French purse seine tropical tuna fishery (Yellowfin, Skipjack, and Bigeye) in the Indian and Atlantic Oceans – Orthongel fleet[27]	Southall and Medley (2015)	MSC pre-assessment	Current situation of Orthongel members (2017): involved in FIPs to get their vessels MSC certified	At the date of the pre-assessment (2015), Southall and Medley concluded that only fisheries fishing on free schools in the Indian Ocean could be certified (page 24 of Southall and Medley, 2015).
US North Atlantic swordfish hook and line fishery with target species being swordfish (*Xiphias gladius*) and retained species including albacore tuna (*Thunnus alalunga*), yellowfin tuna (*Thunnus albacares*)	Certified by MRAG Americas	MSC certification	Certified since March 2013 with component(s) in assessment	Until 2017, yellowfin tuna (and albacore tuna) have been assessed against the MSC Principles as retained species to certify this fishery. The two species are being assessed to be included as target (Principle 1) species. The decision for the scope extension is to be known by March 2018 (MSC website, situation in October 2017)
St Helena[28] pole & line and rod & line yellowfin, bigeye, albacore, and skipjack tuna **Fleet of 12 small vessels (< 12 m) fishing in waters around St Helena (2009-2010 situation)** **Applicant:** St. Helena Development Agency	Carleton et al. (2010)	MSC assessment in 2009-2010	Certification not granted and the fishery exited the certification process	Issue(s) noticed: fishery not certified in 2010 due to a number of PIs scoring below the unconditional level (< 80) especially against Principle 1 due to ICCAT ineffective management of the targeted stocks in compliance with the MSC fisheries certification requirement Potential harmonisation(s): the assessment was carried out 7 years ago. The findings of the initiative are worth checking to comprehend the (slow) progress made by ICCAT to enable all the fisheries targeting the same

[26] Poseidon is not aware of other relevant MSC pre-assessments, which does not mean that other ones that are not listed in the table do not exist. Indeed, the MSC pre-assessment process remains confidential between the applicant and the assessors.

[27] Received by the Consultant on 4 May 2017.

[28] British overseas territory.

Fishery	Author / Date	Initiative	Status	Harmonisation potential and potential issues noticed by the initiative
				species to reach the MSC certification
Southeast US North Atlantic bigeye tuna and yellowfin tuna fishery using hooks and lines **Applicant:** Day Boat Seafood LLC (US company)	MRAG (2010)	MSC assessment	Application process withdrawn (i.e. certification process announced publicly then not carried out)	Reason of application withdrawal not available on the MSC website

Source: MSC website, 19 April 2017 (re-checked on 3 Oct. 2017) – track a fishery (see Appendix C for further details)

Two relevant fisheries are MSC certified in the Atlantic now[29]:

- *The US North Atlantic swordfish* with retained species including yellowfin tuna. The US North Atlantic swordfish fishery (UoC) is aiming to extend the scope of the fishery to yellowfin tuna and albacore tuna in 2017 by an expedited scope extension assessment planned to run from April 2017 to March 2018 (MSC website, situation in October 2017). The fishery primarily targets swordfish and tuna, with the latter represented about 20% of the catch in this fishery between 2005 and 2011 (page 34 of MRAG, 2013). Also, it has incorporated the previously certified Southeast US swordfish fishery;
- *The North Atlantic albacore artisanal fishery*: the targeted species is not ones of those within the scope of this document. The initiative is therefore not analysed in this section.

An MSC pre-assessment of the French tropical tuna purse seine fisheries (that is vessels members of the producer organisation Orthongel) was carried out in 2015. The results concluded that the French purse seine fishing vessels could not attain certification in the Atlantic Ocean by failing against Principles 1 and 2, with only the FAD-associated UoA failing against P2. Only the Orthongel vessels fishing on free schools in the Indian Ocean could pass the MSC certification (see page 24 of Southall and Medley, 2015).

A pole & line and rod & line St Helena fishery did not attain the MSC certification in 2010 and has dropped out of the MSC certification application process since then. Several performance indicators fell below 80 but above 60 because of weak condition and management of tuna stocks as a whole; the management of these stocks are under the responsibility of ICCAT. Below is the list of issues noticed during the certification:

- Principle 1:
  - The status of the stocks: bigeye, yellowfin and albacore tuna falling below the target status;
  - The quasi-absence of reference points and the lack of harvest control rules to manage the stocks; and

[29] According to the MSC website (19 April 2017).

  - The weak credibility of the harvest strategy for skipjack: based on poor data quality according to the authors and with no established TAC;

- Principles 2 and 3:
  - Indicators that passed scored at the level of 'good practice' but not higher;
  - The effectiveness of the decision-making process of the fishery, which is in majority under the mandate of ICCAT (Principle 3); and
  - Other indicators that passed under conditions are mostly related to the recording and management of non-targeted species (billfish, discarded species, and vulnerable species), which are specific to the fishery and less relevant to the purpose of the scoping document (for further details see Carleton et al., 2010).

Note that the assessment was carried out with a previous version of the MSC fisheries certification requirements: the MSC Fisheries Assessment Methodology v.2 of July 2009. The risk based framework approach was used for the assessment for the following performance indicators for 2.1.1 – bycatch within biologically based limits and 2.2.1 – discard within biologically based limits.

An action plan was drafted without a timescale (see pp. 59-61 and pp. 152-155 of Carleton et al., 2010) but the fishery has since exited the certification process.

Finally, a **Southeast US North Atlantic bigeye tuna and yellowfin tuna fishery using hooks and lines** applied for MSC fisheries certification in 2010. However, the certification process was halted at the site visit announcement.

3 NEXT STEPS

3.1 OVERVIEW

WWF advocate three stages for FIP processes.

The **Step 1** required that '[the] *FIP [had)* ***a Scoping Document*** *and an MSC pre-assessment completed by an independent, third-party auditor who has experience applying MSC Fishery Assessment Standard'* (WWF, 2016b).

The current **Step 2** is the detailed **Action Plan Developmen**t: a Plan (5 years maximum) developed to improve the fishery to a level conforming to MSC standard, targeting any deficiencies identified during the Scoping in Step 1.

The next step is **Step 3: Implementation**. FIPs must make progress according to the indicators and timeframes agreed in the Action Plan, and should employ an independent system for tracking and reporting progress against Action Plan indicators ensuring milestones (such as policy changes, improvements in fishing practices, reduced habitat impacts or stock improvements), are met. FIP fisheries must also commit to ensure transparent operations.

3.2 ACTION PLAN DEVELOPMENT

The scoping document identified the critical and non-critical Improved Performance Goals that had to be achieved to reach a level where the MSC certification is likely to be successful (see Chapters 2 and 3 for details). Note that *the future scoring of ISSF against Principle 2 (planned to be available before the end of 2017[30]) may enable a stronger harmonisation of the most recent initiatives within the action plan of the FIP*.

The detailed Action Plan in Chapter 4 reviews and fine tunes the IPGs, and provide a practical action plan to achieve the FIP milestones outlined in the IPGs. Key elements of the Plan include:

1. **Listing of fishing company partners that will participate to the FIP** based on the minimum selection requirements (ISSF PVR listed first but not exclusively) to identify the potential future Units of Certification.

2. **Eligibility of fishery products to enter further Chains of Custody:** a brief analysis of the eligibility of certified fishery products to enter further MSC Chains of Custody will be part of the next stage. Entries could indeed be carriers at transhipping locations (for instance in Senegal) and fish storage at landing locations (for instance in Ivory Coast and Ghana) - all landing locations will be considered.

3. **Detailed development and agreement of IPGs, actions and time-bound milestones**: the IPGs provided in this scoping document are provided as a simple framework and need to undergo considerable development by the FIP partnership. This will include:
    - Review of the IPGs to ensure that they capture all the weaknesses as determined by ALL the relevant pre-assessments.
    - Development of actions that are practical and achievable by the FIP partners and other key stakeholders. It is important to consult with key stakeholders outside the FIP partnership, especially ICCAT having an important role in meeting the action plan

[30] http://iss-foundation.org/download-monitor-demo/download-info/a-preliminary-evaluation-of-the-environmental-impact-of-fishing-for-global-tuna-fisheries-relative-to-marine-stewardship-council-criteria/ , latest access: 3 October 2017. See the accompanying PSA scoring link at the end of the web page.

milestones and private stakeholders[31] having already implemented activities to responding to IPGs listed in the previous pages (IPG tables above).
- Specification and agreement of the various outputs and milestones resulting from the activities, including their timing. It is important to ensure that co-dependencies across different IPGs are fully recognised and their design and timing amended accordingly.

4. **Allocation of responsibilities**: responsibilities will need to be allocated at two levels:
   - Activity-level: each activity will need to have a designated lead partner, together with an identification of other partner responsibilities as well as any external (e.g. outside the FIP partnership) cooperation and inputs.
   - FIP level: there needs to be a clear organisation structure and lines of command within the FIP partnership. The action plan will need to agree the need for – and responsibilities of – the different roles that will be played by FIP partners and their resources.

5. **Review processes**: it is planned that this FIP will take place over a five-year period. It will be necessary to both include progress *monitoring tools* e.g. recurrent reporting and the possible use of the MSC FIP Benchmarking and Tracking Tool (BMT) as well as an independent evaluation of FIP progress, possibly by an accredited Conformity Assessment Body (CAB).

   The PMT and the FIP participants could investigate the possibility to have a monitoring mechanism distinguishing progress by fleets enabling the ones advancing more rapidly to prepare their specific MSC certification.

6. **Budget development**: a considerable number of actions are proposed which will require both staff time and expenses. In addition, there will be costs associated with the management of the FIP, as well as the intermittent evaluation processes. These costs need to be quantified and set into a formal budget once the action plan has been formulated.

7. **Funding**: finally, but still crucial, is the identification and confirmation of funding for the budget. This needs to be agreed and put in place before the FIP can be launched. The following Chapter **Error! Reference source not found.** deals with the budget estimate.

   The PMT and the FIP participants are invited to develop collaboration mechanisms to save costs with related FIPs in the region (e.g. OPAGAC FIP). Cost-efficiency could occur by sharing experience, information and, when possible, joining forces in carrying out some common actions, for instance but not exclusively on those related to IPGs to meet the MSC Principles 1 and 3.

[31] For instance, OPAGAC with results of implemented projects to pass P2.

4 IMPROVED PERFORMANCE GOALS

4.1 OVERALL SCOPE OF THIS FISHERIES IMPROVEMENT PROJECT

Based on the harmonisation of known pre-assessments and related initiatives in Chapter 2 above, the overall scope of the FIP is defined in further details[32] below:

Table 9: FIP Scoping Summary

<table>
<tr><td colspan="2">Fishery name:
Tropical tuna purse seine fishery in the Eastern Atlantic targeting yellowfin, skipjack, and bigeye tuna</td><td>Start date:
1 January 2018 (target: December 2017)</td></tr>
<tr><td>Fishery location:
Eastern Atlantic Ocean: FAO areas 34 and 47[33] including the high seas and fishing zones of the Coastal States bordering these areas</td><td>Fishing method:
Purse seine (free schools & other catches associated with FADs)</td><td>Anticipated end date:
30th December 2022</td></tr>
<tr><td colspan="2">FIP Coordinator
To be determined
FIP Facilitator
Thai Union Europe (FIP Facilitators)
FIP industry partners:
• ANABAC-OPTUC (association/producer organisation)
• Orthongel (producer organisation)
• GTA – Ghana Tuna Association
Fishing vessel companies being members of the organisations above and other fishing vessel companies (vessels flagged in EU and non-EU countries) – names of the companies to be provided by the FIP participants
Processors: PFC, Cosmo, SCODI, Airone
Others to be determined
FIP country partners:
• Government of Ghana represented by the Ministry of Fisheries and Aquaculture Development (MoFAD)
• Government of Ivory Coast represented by the Ministère des ressources animales et halieutiques (MIRAH)</td><td>Improvements recommended by:
Poseidon Aquatic Resource Management Ltd
External Participants
OPAGAC (producer organisation)
Fishing: Ghanaian-flagged pole and line vessel companies with vessels operating from and based in Ghana
Traders: Tri Marine (to be confirmed)
WWF and International Seafood Sustainability Foundation (ISSF)
Other Potential external partners
Côte d’Ivoire flagged longliners operating from and based in Côte d’Ivoire
Governments of the flag States of the vessels participating to the FIP
Other coastal states where vessels participating to the FIP land
Other related FIP participants
Other key stakeholders
ICCAT
Retailers MSC</td></tr>
</table>

[32] See Table 1.

[33] FAO subareas: http://www.fao.org/fishery/area/Area34/en and http://www.fao.org/fishery/area/Area47/en, latest access: 3 October 2017.

Overview of the Action Plan:

Critical Improved Performance Goals

Principle 1: sustainable fish stocks

1. **Stock rebuilding (1.1.2):** there is evidence of stock rebuilding within a specified timeframe, especially for the bigeye tuna stock;
2. **Harvest strategy (1.2.1):** there is a robust and precautionary harvest strategy in place especially for bigeye tuna (*non-critical IPG for yellowfin tuna*); and
3. **HCRs (1.2.2)**: There are well defined and effective harvest control rules (HCRs) in place especially for bigeye tuna (*non-critical IPG for yellowfin tuna*).

Non-critical Improved Performance Goals[34]

Principle 1: sustainable fish stocks

4. **Target stocks - stock status (1.1.1)**: the stock is at a level which maintains high productivity and has a low probability of recruitment overfishing, especially for yellowfin tuna and bigeye tuna;
5. **Information & monitoring (1.2.3):** relevant information is collected to support the harvest strategy; and
6. **Assessment of stock status (1.2.4):** adequate assessment of the stock status for eastern skipjack.

Principle 2: environmental impact minimisation

IPGs under P2 focusing on reducing impacts of FAD-associated fishing mostly but not exclusively (cf. Table 7).

7. **Primary species - outcome (2.1.1):** the UoA aims to maintain primary species above the point where recruitment would be impaired (PRI) and does not hinder recovery of primary species if they are below the PRI;
8. **Primary species – management (2.1.2):** there is a strategy in place that is designed to maintain or to not hinder rebuilding of primary species; and the UoA regularly reviews and implement measures, as appropriate, to minimise the mortality of unwanted catch;
9. **Secondary species - outcome (2.2.1):** the UoA aims to maintain secondary species above a biological based limit and does not hinder recovery of secondary species if they are below a biological based limit - issue especially for FAD-associated fishing;
10. **Secondary species – management (2.2.2):** there is a strategy in place for managing a secondary species that is designed to maintain or to not hinder rebuilding of secondary species; and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch- issue especially for FAD-associated fishing;
11. **Secondary species - information (2.2.3)**: information on the nature and amount of secondary species taken is adequate to determine the risk posed by the UoA and the effectiveness of the strategy to manage secondary species - issue especially for FAD-associating fishing;
12. **ETP species – outcome (2.3.1):** the UoA meets national and international requirements for protection of ETP species - issue especially for FAD-associated fishing
13. **ETP species – management (2.3.2):** the UoA has in place precautionary management strategies designed - issue especially for FAD-associated fishing;
14. **ETP species - information (2.3.3)**: relevant information is collected to support the management of UoA impacts on ETP species - issue especially for FAD-associating fishing;
15. **Ecosystem - outcome (2.5.1)**: the UoA does not cause serious or irreversible harm to the key elements of ecosystem structure and function - issue especially for FAD-associated fishing;
16. **Ecosystem - management (2.5.2):** – issue especially for FAD-associated fishing; and
17. **Ecosystem - information (2.5.3)**: there is adequate knowledge of the impacts of the UoA on the ecosystem – issue especially for FAD-associating fishing - issue especially for FAD-associated fishing.

Principle 3: effective management

18. **Legal & customary framework (3.1.1)**: The management system exists within an appropriate and effective legal and/or customary framework;
19. **Consultation and responsibilities (PI 3.1.2):** a) the management system has effective consultation process that are open to interested and affected parties and b) the role and responsibilities of organisations and individuals involved in the management process are clear and understood by all relevant parties;

    NC IPG dealt with PI 3.2.1 below - Long-term objectives (PI 3.1.3): the management policy has clear long-term objectives to guide decision-making being consistent with the MSC standard and incorporate the precautionary approach **– non-critical IPG dealt within the non-critical IPG 3.2.1.** (see below);
20. **Fishery-specific objectives (PI 3.2.1):** the fishery-specific management system has clear specific objectives to achieve the outcomes expressed MSC's Principles 1 and 2;
21. **Decision-making process (PI 3.2.2):** the fishery-specific management system includes effective decision-making processes that result in measures and strategies to achieve the objectives and has an appropriate approach to actual disputes in the fishery; and
22. **Compliance and enforcement (3.2.3)**: Monitoring, control and surveillance mechanisms ensure the management measures in the fishery and enforced and complied with.

Source: consultant's own elaboration; FIP organisation based partly on the Memorandum of Understanding shared between a selection of FIP partners in its preliminary versions on 23 May 2017 then 9 June 2017.

4.2 CRITICAL IMPROVED PERFORMANCE GOALS

The following section examines the critical IPGs (i.e., those that scored <60 in the pre-assessment) and establishes the key Scoring Issues (SIs) to be addressed by the FIP. These are laid out in a simple tabular format that broadly follows the MSC-recommended approach to FIP planning (MSC, 2013) and further developed by Huntington (2016). The table is made of the following components:

- **IPG (Improved Performance Goal) title**: a summary of the Improved Performance Goal that reflects a pass (e.g., achieved SG 80 or higher) for the overall Performance Indicator;
- **UoC (Unit of Certification)**: In this FIP, we have three UoCs, which are EU and non-EU purse seiners - of FIP fishing industry partners - targeting eastern skipjack tuna (one UoC), yellowfin tuna (second UoC) and bigeye tuna (third UoC) fishing on free schools or on schools associated to fish aggregating devices (FADs) being natural or artificial logs;
- **Target species**: the target species whose stock, ecosystem impacts or management need to be addressed in reaching the goal, which are in the case of this future FIP yellowfin tuna, bigeye tuna and eastern skipjack tuna;
- **Scoring Issue**: each Performance Indicator is made up of one or more Scoring Issues that might or might not need to be addressed in the Action Plan, depending on their contribution to the overall PI score. In some cases, even if the overall PI scores less than 60, an individual SI might score ≥80 and thus not need addressing in the Action Plan;
- **Actions**: the actions required to raise the score to 80 or more. These will be combined to form the overall Action Plan during detailed FIP design and planning. These are usually

[34] Although termed as 'non-critical', important goals to meet by the FIP participants to pass the MSC certification too.

based upon the SG 80 for the SI concerned, but in some cases where there is no SG 80, it will be based upon SG 60 or SG 100 (indicated in parentheses in the table);

- **Timescale / Milestones**: the timescale for achieving the different actions. These are normally stated at milestones (e.g., clearly defined outputs or results) that need to be achieved by a certain time point e.g., end of Year 3 (from FIP start);
- **Action lead**: denotes the organisation that will take responsibility for the action (or actions) at SI level.

  The body implementing this, if different, is noted in non-bold text. Please note that the Project Management Team (PMT) will normally be initiating actions and tasking the Action Lead.
- **Action partners**: denotes the other organisation(s) that will be directly involved in implementing an action (or actions) at SI level; and
- **Other stakeholders**: denotes other stakeholders with an interest and potential involvement in implementing an action (or actions) at SI level.

Principle 1: Sustainable Target Stocks

4.2.1 Target stock rebuilding (PI 1.1.2)

Critical IPG 1	**There is evidence of stock rebuilding within a specified timeframe: by the end of Year 3, there shall be clear evidence that the BET stock is at a level which maintained high productivity and has a low probability of recruitment overfishing (i.e., it is likely that the stock is above the limit reference point of 20% B_0); or there is evidence of stock rebuilding within a specified timeframe**				
Target species	**YFT:**	**BET:** ✓	**Eastern SKJ:**		
Scoring Issue	**Actions**	**Timescale / Milestones**[35]	**Action lead /** implementation	**Action partners**	**Other stakeholders**
(a) Rebuilding timeframes	A practicable rebuilding timeframe is specified without exceeding one generation time	• **End Y1**: Robust, comprehensive BET rebuilding strategy developed. • **End Y2**: ICCAT has adopted the above rebuilding strategy. • **End Y3**: Stock rebuilding strategy implemented.	**Key coastal States (Côte d'Ivoire, Ghana):** Ghana Fishing Authorities (MoFAD) and MIRAH ICCAT (with independent scientific assistance)	WWF FIP industry partners FIP Country partners	FIP external country partners
(b) Rebuilding evaluation	There is evidence that the rebuilding strategies are rebuilding stocks, or it is likely based on simulation modelling, exploitation rates or previous performance that they will be able to rebuild the stock within the specified timeframe (SG80).	• **End Y3**: Fishing mortality F is $<F_{MSY}$. • **End Y5**: Stock assessment or other incontrovertible evidence shows that stocks can rebuild the stock within the specified timeframe.	**Key coastal States (Côte d'Ivoire, Ghana):** Ghana Fishing Authorities (MoFAD) and MIRAH ICCAT	FIP industry partners FIP Country partners	FIP external country partners

Year	Activities	Resources	Approx. cost (EUR)
Year 1	**1a: Conduct re-building scenarios.** Independent scientific assistance to support the ICCAT Standing Committee on Research and Statistics (SCRS) in developing BET re-building scenarios	Tuna stock assessment specialist (1 week in Madrid & 2 weeks home office)	
Year 2	None		
Year 3	**1b: Re-evaluation of rebuilding plan.** Re-evaluation of the re-building plan at end of Yr. 3. Short-term technical assistance to the ICCAT SCRS.	Tuna stock assessment specialist (1 week in Madrid & 1 week home office)	
Year 4	None		
Year 5	None		
TOTAL			

4.2.2 Harvest strategy (PI 1.2.1)

Critical IPG 2	There is a robust and precautionary harvest strategy in place. By Year 5 harvest control strategies for all three target species are in place and evidence suggests that they are achieving their objectives *(non-critical IPG for Eastern SKJ)*					
Target species	**YFT:** ✓	**BET:** ✓	**Eastern SKJ:** ✓			
Scoring Issue[36]	**Actions**	**Timescale / Milestones**		**Action lead /** implementation	**Action partners**	**Other stakeholders**
(a) Harvest strategy design	Design of an explicit harvest control (HC) strategy for YFT, BET and SKJ	**Indicative timing based on the draft version of the 5-year ICCAT road map by the EU - US (to be updated according to the ICCAT version**[35]**):** • **End Y1**: Management Strategy Options (MSEs) for controlling SKJ, YFT and BET tuna harvest developed (see note in footnote[36]). • **End Y2**: HC options considered and discussed inter-sessionally and formally though ICCAT meeting processes. ICCAT record reflect discussions and progress. • **End Y3**: draft harvest strategies for all three species discussed and agreed within ICCAT and formally adopted.		**Key coastal States (Côte d'Ivoire, Ghana):** Ghana Fishing Authorities (MoFAD) and MIRAH ICCAT	FIP industry partners FIP Country partners ISSF	FIP external partners

[35] An ICCAT meeting was held in Madrid on 29-30 June 2017 to review the road-map to develop HCR and MSEs – to be developed in detail by the ICCAT SCRS in 2017 - for priority stocks including tropical tuna based on the ICCAT resolution 16-21 (see ICCAT website: http://www.iccat.int/en/meetingscurrent.htm). A proposed version of a draft road map by the EU-US is available online (version 24 Nov. 2016 - https://www.iccat.int/com2016/DocENG/PLE_137B_ENG.pdf) and the meeting report can be found at https://www.iccat.int/Documents/Meetings/Docs/2017_SWGSM_REP_ENG.pdf, see especially section 5.4 - latest access to both links: 4.10.2017. The SCRS Meeting on 4 - 8 Sept. 2017 will discuss the development of multispecies MSEs for BET, YFT and SKJ (access to the meeting documents is however restricted – situation: 3 Oct. 2017).

[36] SI (e) Shark finning and (f) Review of alternative measures: not applicable for target species // Note: timing could be staggered across different species as suggested by WWF (2016).

(b) Harvest strategy evaluation	Formal evaluation procedure for harvest strategies put in place.	• **End Y2**: Formal harvest control options include evaluation framework and timetable. • **End Y5**: Harvest control strategies evaluated to assess evidence that they are achieving their objectives.	Ibid.	Same as above	
(c) Harvest strategy monitoring	See 1.2.1 b	• **End Y4**: Formal harvest control options include a monitoring framework and timetable. • **End Y5**: Harvest control strategies monitoring framework to assess objectives are being achieved.	Ibid.	Ibid.	
(d) Harvest strategy review	See 1.2.1 b	• Post FIP			

Year	**Activities *(note: activities subject to regular updates based on the ICCAT plan and progress to develop HCR[35]*)**	**Resources**	**Approx. cost (EUR)**
Year 1	**2a: Engage with EU/Ghana scientists and delegations**. Ensure as far as possible that the SCRS provides advice to the Commission as required by Rec. 15-07 (on the Development of Harvest Control Rules and of Management Strategy Evaluation (MSE)).	Project Management Team	
	2b: Schedule regular meetings with relevant government stakeholders. Hold meetings with delegation members 3-4 times per year with the following purpose: • Continuing to emphasise the importance of the harvest strategy process and BET stock rebuilding to the FIP industry partners and other fisheries in the Atlantic Ocean • Proposing practical ways that the governments could support the process; e.g. via liaison to support capacity-building with coastal states, or other activities Reporting regularly to the delegations so that the they are kept informed of current ideas and proposals at ICCAT and within coastal states where the industry partners have links.	Project Management Team 4 meetings per year over 3 years (2, 3 & 4)	
	2c: ICCAT Briefing Document on Harvest Strategies (2017). Prior to ICCAT plenary 2018 produce a formal briefing document regarding the status of the harvest strategy / stock rebuilding for each stock, the objective of ICCAT, the position of key players and likely upcoming proposals, and the outcome preferred by the FIP, to brief the EU/governments and other stakeholders.	Project Management Team Coastal States	

Year	Activities	Resources	Approx. cost (EUR)
Year 1 (cont'd)	**2d: Position paper for a harvest control strategy and HCRs**. Prepare a position paper to submit to plenary in support of making significant progress in developing a harvest strategy and control rules for all three species, including rebuilding for the BET. Work with the EU/governments delegations to obtain their support for the paper, as well as that of other member states as far as possible.	Tuna stock assessment specialist (15 days, inc. 4 days at ICCAT SCRS Meeting)	
	2e: Promote best practice for harvest strategy and stock rebuilding. Promote through the governments a process of consultation to inform ICCAT members about best practice for harvest strategy and stock rebuilding, to build consensus towards support of proposals of management measures prior to ICCAT Sessions.	Project Management Team	
	2f: Strengthen partnership with ABNJ, a World Bank funded programme with FAO coordination. Possible collaboration on capacity building (regarding harvest strategy and control rules). Deepen Thai Union's participation in the ABNJ project by bringing in additional partners.	Project Management Team	
	2g: Proposal to ICCAT of a work plan and timetable for the implementation of Rec. 15-07 for each stock. Evidence of project initiation may include, for example, the proposal to ICCAT of a work plan and timetable for the implementation of 15-07 for each stock (timetable to be consistent with FIP milestones).	Project Management Team	
	2h: Progress harvest strategy development. Intersessional discussions to progress the harvest strategies between like-minded ICCAT members and organisations, and formally at the relevant ICCAT meetings.	Project Management Team	
Year 2	**2i: Progress in harvest strategies reviewed.** Progress in developing harvest strategies is reviewed by an independent specialist, and recommendations made to address any issues / delays identified.	Tuna stock assessment specialist (5 days, home-based)	
Year 3	**2j: Progress in harvest strategies reviewed.** Progress in developing harvest strategies is reviewed by an independent specialist, and recommendations made to address any issues / delays identified.	Tuna stock assessment specialist (5 days, home-based)	
Year 4	**2k: Progress in harvest strategies reviewed and progress evaluated.** Progress in developing and implementing harvest strategies is reviewed by an independent specialist, and recommendations made to address any issues / delays identified. Will include an evaluation of harvest strategy effectiveness.	Tuna stock assessment specialist (5 days, home-based)	
Year 5	None		
TOTAL			

4.2.3 Harvest control rules (PI 1.2.2)

Critical IPG 3	There are well defined and effective harvest control rules (HCRs) in place. By Year 5 harvest control rules for all three target species fisheries are in place and evidence suggests that they are effective in reducing exploitation levels where necessary *(non-critical IPG for Eastern SKJ)*					
Target species	**YFT:** ✓	**BET:** ✓	**Eastern SKJ:** ✓			
Scoring Issue	**Actions**	**Timescale / Milestones**		**Action lead /** implementation	**Action partners**	**Other stakeholders**
(a) HCRs design and application	Design and implementation of well-defined and explicit harvest control rules for YFT, BET and SKJ according to the harvest control strategies developed in IPG 2 to ensure that the exploitation rates are reduced as limit reference points are approached and that the stock fluctuates around a target level consistent with (or above) MSY.	**Timing based on the draft version of the 5-year ICCAT road map by the EU - US (to be updated according to the ICCAT version[35]):** • **End Y1**: Options for harvest control rules (HCRs) and tools for managing SKJ, YFT and BET tuna harvest developed[37]. • **End Y2**: HCR options considered and discussed inter-sessionally and formally though ICCAT meeting processes. ICCAT record reflect discussions and progress. • **End Y3 (target: end of 2020)**: HCRs for all three species discussed and agreed within ICCAT and formally adopted as part of the harvest strategy implementation approach (see IPG 2).		**PMT** ICCAT	MoFAD and MIRAH FIP industry partners FIP Country partners ISSF	
(b) HCRs robustness to uncertainty	HCRs are determined to be robust to main uncertainties.	• **End Y2**: The main uncertainties for different HCR options are identified. • **End Y3**: the main uncertainties are considered and discussed inter-sessionally and formally though ICCAT meeting processes. ICCAT record reflect discussions and progress.		**PMT** ICCAT	MoFAD and MIRAH FIP industry partners FIP Country partners ISSF	

[37] Note: timing could be staggered across different species as suggested by WWF (2016)

(c) HCR evaluation	HCR tools are determined to be effective in achieving the exploitation levels under the HCRs.	• **End Y5**: Formal evidence is provided to demonstrate the HCR tools are appropriate and effective in reducing exploitation levels where necessary.	**PMT** ICCAT	MoFAD and MIRAH FIP industry partners and FIP Country partners	ISSF

Year	Activities *(note: activities subject to regular updates based on the ICCAT plan and progress to develop HCR[35])*	Resources	Approx. cost (EUR)
Year 1	**3a: Building regional consensus on the need for robust HCRs**. Intersessional discussions on HCRs and tools between like-minded ICCAT members and organizations and formally at meetings at each ICCAT meeting.	Project Management Team	
	3b: Ensure a holistic implementation HCR development. Monitor work plan development for the implementation of Res. 15-07 (or other proposal for a harvest strategy) (see IPG 2) to ensure the development, evaluation, and agreement of a HCR for the three species, alongside the development of the tools required for implementation.	Project Management Team	
	3c: Provide an independent paper on the scope and needs of HCRs. Conduct a study to identify candidate HCRs and tools for all three species that meet the objective of IPG 3 for submission to the ICCAT SCRS. Will include an evaluation of current (candidate) HCRs and tools for their effectiveness, and the main uncertainties identified and considered.	Tuna stock assessment specialist (15 days, home-based)	
Year 2	**3d: On-going engagement with coastal states and ICCAT over HCR development**. Discussions held regarding the assessment of HCRs and tools for all stocks, including how to address the assessment's findings have occurred through inter-sessional discussions and formally through the ICCAT meeting process. To include Intersessional discussions on HCRs and tools between like-minded ICCAT members and organizations and formally at meetings at each ICCAT meeting.	Project Management Team	
Year 3	**3e: Independent evaluation of HCR robustness and effectiveness**. Conduct further study to evaluate progress made in developing HCRs, focussing on their potential effectiveness in reducing exploitation levels when required, and their ability to account for uncertainties that might affect their implementation.	Tuna stock assessment specialist (5 days, home-based)	
Year 4	**3f: On-going engagement with coastal states and ICCAT over HCR development**. Discussions held regarding the installation and potential implementation of HCRs and tools for all stocks. To include Intersessional discussions on HCRs and tools between like-minded ICCAT members and organizations and formally at meetings at each ICCAT meeting.	Project Management Team	
Year 5	**None**		
TOTAL			

4.3 NON-CRITICAL IMPROVED PERFORMANCE GOALS

Principle 1: Sustainable Target Stocks

4.3.1 Stock status (PI 1.1.1)

Non-critical IPG 4 24738	The yellowfin tuna and bigeye tuna stocks are at a level which maintains high productivity and has a low probability of recruitment overfishing.					
Target species	YFT: ✓	BET: ✓	E. SKJ:			
Scoring Issue	**Actions**	**Timescale / Milestones**	**Action lead /** implementation	**Action partners**	**Other stakeholders**	
(a) Stock status relative to recruitment impairment	As below (issue related to SI b)	• As below (issue related to SI b below)	**PMT** ICCAT	MoFAD and MIRAH	ISSF WWF	
(b) Stock status in relation to achievement of Maximum Sustainable Yield (MSY)	Monitor the enactment of routine YFT and BET stock assessments by ICCAT and, if deferred or delayed, advocate that they continue as per the current schedule	• **No milestones.** Annual review of YFT and BET stock assessment and status in line with the recovery plan (see critical IPG 1 too)	**PMT** ICCAT	MoFAD and MIRAH	ISSF	

Year	Activities	Resources	Approx. cost (EUR)
Year 1	None		-
Year 2	None		-
Year 3	None		-
Year 4	None		-
Year 5	None		-

4.3.2 Information and monitoring (PI 1.2.3)

Non-critical IPG 5 24738	Relevant information is collected to support the harvest strategy (PI 1.2.3)					
Target species	YFT:	BET:	E. SKJ: ✓			
Scoring Issue	**Actions**	**Timescale / Milestones**		**Action lead /** implementation	**Action partners**	**Other stakeholders**
(a) Range of information	Sufficient relevant information related to stock structure, stock productivity, fleet composition and other data are available to support the harvest strategy	Timing to define in consultation with ICCAT – indicative timing below: - **Y1** continuing actions with the fleets to implement better data reporting system which will allow for a more efficient transfer of catch data to the designated base; - **End Y3 (earlier if possible):** sufficient information on stock structure (e.g. better understanding of sub-stocks) - **End Y3 (earlier if possible):** Sufficient information on stock productivity -		**WWF** **PMT** ICCAT and FIP fishing partners	MoFAD and MIRAH FIP external partners (especially fisheries research institutes such as IRD and AZTI)	ISSF
(b) Monitoring	SI meeting 80	• None		-	-	-
(c) Comprehensiveness of information	SI meeting 80	• None		-	-	-

Year	Activities	Resources	Approx. cost (EUR)
Year 1	**5a: Engage with ICCAT SCRS and stock WGs to evaluate key data gaps**. Short-term technical assistance in Yr. 1 with ICCAT SCRS to review and assess data quality of SKJ removals in the EAO. Will develop methodology (for ICCAT) to improve estimates and reduce uncertainties.	Tuna stock assessment specialist (5 days at home office)	
Year 2	None		
Year 3	None		
Year 4	**5b: Review of updated information systems on fisheries removals**. Review of the actions taken to date, progress in work plan implementation, and an evaluation of remaining gaps in data collection and analysis.	Tuna stock assessment specialist (5 days at home office)	
Year 5	None		
TOTAL			

4.3.3 Assessment of stock status (PI 1.2.4)

Non-critical IPG 6 24738	Adequate assessment of the stock status for eastern skipjack (PI 1.2.3)					
Target species	**YFT:**		**BET:**		**E. SKJ:** ✓	
Scoring Issue	**Actions**	**Timescale / Milestones**		**Action lead /** implementation	**Action partners**	**Other stakeholders**
(a) Appropriateness of assessment to stock under consideration	None					
(b) Assessment approach	Development of additional mechanisms to assess stock status, such as size-based indicators, to assist in the development of applicable, quantitative HCRs	• More robust, quantitative approach by next stock assessment in 2019. Will require lobbying with the ICCAT WG on Stock Assessment Methods (WGSAM) and the SKF Species Group.		**PMT** ICCAT	WWF	ISSF
(c) Uncertainty in the assessment	None					
(d) Evaluation of assessment	None [beyond the FIP (scoring guidepost to meet: 100) - development of improved statistical models with exploration of alternative hypotheses and approaches (ISSF, 2016 p. 56)]					
(e) Peer review of assessment	None					

Year	Activities	Resources	Approx. cost (EUR)
Year 1	**6a: Engagement with ICCAT SKJ Species and WGSAM on developing more robust, quantitative approaches to stock assessment** (see Report of the 2014 ICCAT East and West Atlantic Skipjack Stock Assessment Meeting (Dakar, Senegal - June 23 to July 1, 2014)	Project Management Team	
Year 2	6b: Follow up next SKJ stock assessment report and recommendations to ensure stock assessments support the development of applicable, quantitative HCRs	Project Management Team	
Year 3			
Year 4			
Year 5			
TOTAL			

Principle 2: Environmental Impact

4.3.4 Primary species – outcome status (PI 2.1.1)

Non-critical IPG 7 24738	**The UoA aims to maintain primary species above the point where recruitment would be impaired (PRI) and does not hinder recovery of primary species if they are below the PRI** **By Year 2 management measures are in place for main primary species scored as high risk and by year 3 for other main primary species scored as medium risk to ensure that main primary species (see below) are highly likely to be above the PRI by year 5.** ***(precautionary approach for this PI based on the ISSF funded preliminary PSA scoring[38]; RBF recommended within 'ANABAC' - MRAG, 2017l)***
Target species	**YFT:** ✓ **BET:** ✓ **E. SKJ:** ✓

Scoring Issue	Actions	Timescale / Milestones	Action lead / implementation	Action partners	Other stakeholders
(a) Main primary species stock status	Ensure that main primary species are highly likely to be above the PRI *Preliminary milestone to the actions: FIP partners to agree the species considered as high and medium risks based on the ISSF work at the detailed FIP planning (or early in the implementation stage of the FIP)*	Main primary species scored as high risk under the PSA scoring: [timing will be fine-tuned at the detailed action planning considering the ICCAT progress on understanding and improving management of these species and by defining which high risk and medium risk species require to be dealt in priority] • **End Y1 for the key high-risk species (end Y2 for the others)**: development of specific management plans[39] for the *high-risk* species, including addressing data deficiencies and a strategy to ensure that these fisheries don't	**PMT** RFMOs (Management Plans) **FIP Industry partners**	WWF MoFAD and MIRAH ICCAT	

[38] See the ISSF PSA scoring table (Excel): http://iss-foundation.org/downloads/14210/ (source: http://iss-foundation.org/download-monitor-demo/download-info/a-preliminary-evaluation-of-the-environmental-impact-of-fishing-for-global-tuna-fisheries-relative-to-marine-stewardship-council-criteria/), latest access: 20 September 2017. Approach in the ISSF preliminary evaluation to define primary species: 'General rule of thumb was if a species "looks like" a potential target species then it should be primary, even if it does not currently have reference points.' (page 6 of Bostrom et al., 2017 – additional information is present in the document on the PSA scoring method, pages 12 and 13 section 'PSA' especially: 'the PSA is made up of productivity and susceptibility attributes that are used to infer the level of risk a UoA places on a species. Each attribute is scored a 1 for low risk, a 2 for medium risk, or a 3 for high risk').

[39] Management plans are likely to be the suitable solution: they may be very simple, with basic objectives, a simple harvest strategy and HCRs, probably based on an Environmental Risk Assessment.

	Main primary species scored as *high risk* under the ISSF PSA scoring (<60): *Acanthocybium solandri* (wahoo); *Euthynnus alletteratus* (little tunny); *Istiophorus platypterus* (Atlantic/Indo-Pacific sailfish); *Isurus oxyrinchus* (shortfin mako); *Makaira nigricans* (blue marlin); *Sarda sarda* (Atlantic bonito); *Scomberomorus maculatus* (Atlantic Spanish mackerel); *Thunnus atlanticus* (blackfin tuna) Main primary species scored as *medium risk* under the ISSF PSA scoring (60-79 or ranked as medium risk species): *Auxis thazard* (frigate tuna) – however MSC scored: 80; *Euthynnus affinis* (kawakawa); *Squalus acanthias* (picked/spiny dogfish); *Xiphias gladius* (swordfish)	hinder the recovery of this species, if required; and • **End Y2 (end Y3; same approach as above)**: adoption of specific management measures to address the bycatch of the high-risk species by all fisheries in the UoA. Main primary species scored as *medium risk* under the PSA scoring: • **End Y2 for the key medium risk species (end Y3 for the others):** development of a generic management plan for these species, including addressing data deficiencies and a strategy to ensure that these fisheries do not hinder the recovery of these species, if required; • **End Y3 (end Y4; same approach as above):** Adoption of specific management measures to address the bycatch of main primary species by all fisheries in the UoA.			
(b) Minor primary species stock status	Out of scope of the FIP	None			

Year	Activities	Resources	Approx. cost (EUR)
Year 1	**7a: Non-target species management plans.** The status of these primary species is not well known in the Eastern Atlantic Ocean. Expertise will be provided to conduct environmental risk analyses (ERAs) might provide information for measures to reduce their susceptibility for tuna fishing, together with recommendations for improving their management within the UoA.	FAD / bycatch specialist (10 days, home-based)	
	7b: Vessel-based Code of Practice (CoP) for reduction in non-target catches in the UoC. The main thrust for the FIP will be on vessel-based approaches, such as reduced dependencies on FADs, better crew awareness of non-tuna bycatch issues, development and improvement to methods for reduce non-tuna bycatch levels, etc. A desk-based Code of Practice (CoP) will be produced for review and adoption by all catching vessels in the FIP.	FAD / bycatch specialist (10 days, home-based)	
Year 2	None		
Year 3	None		
Year 4	**7c: Review effectiveness of management plans & CoP**. A short consultancy to review the effectiveness of (i) the non-target species management plans (6a) and (ii) the CoP for reduction in non-target catches (6b).	Fisheries biologist (5 days home-based)	
Year 5	None		
TOTAL			

4.3.5 Primary species – management strategy (PI 2.1.2)

Non-critical IPG 8 24738	There is a strategy in place that is designed to maintain or to not hinder rebuilding of primary species; and the UoA regularly reviews and implement measures, as appropriate, to minimise the mortality of unwanted catch				
Target species	YFT: ✓	BET: ✓	E. SKJ: ✓		
Scoring Issue	**Actions**	**Timescale / Milestones**	**Action lead /** implementation	**Action partners**	**Other stakeholders**
(a) Management strategy	See IPG 7 (2.1.1)	• See non-critical IPG 2.1.1			
(b) Management strategy evaluation	Assess and test the effectiveness of the management measures in NC IPG 2.1.1	• **End Y4**: Review of management measures and outcome indicators.	**PMT** Coastal States (MoFAD and MIRAH) FIP Industry partners	WWF ICCAT	ISSF
(c) Management strategy implementation	Put in place a system that demonstrates that management measures in IPG 5 are being implemented successfully.	• **End Y4**: Review of management measures and their implementation processes to assess implementation successes and barriers. Put in place alternative measures as required.	**PMT** Coastal States (MoFAD and MIRAH) FIP Industry partners	WWF ICCAT	ISSF
(d) Shark finning	See NC IPG 2.2.2	• See non-critical IPG 2.2.2			
(e) Review of alternative measures to minimise mortality of unwanted catch	Ensure that alternative measures to minimise unwanted catch are put in place, especially for associated fishing.	• **End Y1**: Development of a fleet-level generic bycatch reduction strategy to minimise bycatch levels, especially for associated sets. • **End Y2**: Implement fleet level generic bycatch strategy.	**PMT** FIP Industry partners	WWF MoFAD and MIRAH ICCAT	ISSF

Year	Activities	Resources	Approx. cost (EUR)
Year 1	**See IPG 7** (costs covered through IPG7)	FAD / bycatch specialist (10 days, home-based)	
Year 2	None		
Year 3	None		
Year 4	**See IPG 7** (costs covered through IPG7)	Fisheries biologist (5 days home-based)	
Year 5	None		
TOTAL			

4.3.6 Secondary species – outcome status (PI 2.2.1)

Non-critical IPG 9 24738	**The UoA aims to maintain secondary species above a biological based limit and does not hinder recovery of secondary species if they are below a biological based limit. By Year 2 management measures are in place for main secondary species by Year 3 that ensure that main secondary species (see below) are highly likely to be above biologically-based limits by year 5.**							
Target species	**YFT:**	✓	**BET:**	✓	**E. SKJ:**	✓		

Scoring Issue	Actions	Timescale / Milestones	Action lead / implementation	Action partners	Other stakeholders
(a) Main secondary species stock status	Ensure that main secondary species (see below) are highly likely to be above biologically-based limits. Main secondary species[38] (60-79 – ISSF preliminary PSA scoring in Jan. 2017): *Centroscymnus coelolepis* (Portuguese dogfish), *Rhizoprionodon terraenovae* (Atlantic sharp-nose shark) and *Scyliorhinus canicular* (small-spotted catshark) See IPG 2.3.1 for ETP species (e.g. silky shark)	• **End Y1**: Review of CPC implementation of shark-related recommendations at the ICCAT Annual Meeting in November 2017 (see Rec. 16-13). Based on this, development of a generic management plan for main secondary shark species as necessary, including addressing data deficiencies and a strategy to ensure that these fisheries don't hinder the recovery of these species, if required. • **End Y3**: Adoption of specific management measures to address the bycatch of main secondary species by all fisheries in the UoA.	**PMT** RFMOs (Management Plans) **FIP Industry partners**	WWF MoFAD and MIRAH ICCAT	
(b) Minor secondary species stock status	Out of scope of the FIP	• None			

Year	Activities	Resources	Approx. cost (EUR)
Year 1	**9a: Review of the CPC implementation of shark-related recommendations at the ICCAT Annual Meeting in November 2017**. Review of the levels of CPC compliance with shark conservation and management measures [Rec. 04-10, 07-06, 09-07, 10-06, 10-07, 10-08, 11-08, 11-15, 12-05, 14-06 and 15-06 that will be conducted by the ICCAT Conservation and Management Measures Compliance Committee (COC) in November 2017.	FAD / bycatch specialist (5 days, home-based)	
	9b: Development of a vessel-based Code of Practice (CoP) for reduction in non-target catches in the UoC. Based on the needs of 8b above, the FIP will develop a generic management plan for main secondary shark species. The main thrust for the FIP will be on vessel-based approaches, such as reduced dependencies on FADs, better crew awareness of non-tuna bycatch issues, development and improvement to methods for reduce non-tuna bycatch levels, etc. A desk-based Code of Practice (CoP) will be produced for review and adoption (in Year 3) by all catching vessels in the FIP.	FAD / bycatch specialist (10 days, home-based)	
Year 2	None		
Year 3	**9c: Adoption of a Vessel-based Code of Practice (CoP) for reduction in non-target catches in the UoC**. See 9b above.		
Year 4	None		
Year 5	None		
TOTAL			

4.3.7 Secondary species – management strategy (PI 2.2.2)

Non-critical IPG 10 24738	**There is a strategy in place for managing secondary species that is designed to maintain or to not hinder rebuilding of secondary species; and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch. By Year 4 management measures for main secondary species are in -place and reviewed for their effectiveness.**							
Target species	**YFT:** ✓	**BET:** ✓	**E. SKJ:** ✓					
Scoring Issue	**Actions**	**Timescale / Milestones**			**Action lead /** implementation	**Action partners**	**Other stakeholders**	
(a) Management strategy	See NC IPG for PI 2.2.1	• See NC IPG for PI 2.2.1						
(b) Management strategy evaluation	Assess and test the effectiveness of the management measures in NC IPG for PI 2.2.1	• **End Y4**: Review of management measures and outcome indicators.			**PMT** Coastal States (MoFAD and MIRAH)	WWF ICCAT	ISSF	
(c) Management strategy implementation	Put in place a system that demonstrates that management measures in NC IPG for PI 2.2.1 are being implemented successfully.	• **End Y4**: Review of management measures and their implementation processes to assess implementation successes and barriers. Put in place alternative measures as required.			**PMT** Coastal States (MoFAD and MIRAH)	WWF ICCAT	ISSF	
(d) Shark finning	Ensure that shark finning does not take place in the UoA	• **End Y1**: Conduct risk assessment to assess likelihood of non-shark finning within the UoA in compliance with the ICCAT CMM recommendation 04-10. Assess effectiveness of NPOAs for shark within the UoA. • **End Y2**: Put in place additional management measures, if required, to ensure that shark finning does not take place.			**PMT** Coastal States (MoFAD and MIRAH)	WWF ICCAT		

(e) Review of alternative measures to minimise mortality of unwanted catch	Ensure that alternative measures to minimise unwanted catch are put in place, especially for associated fishing.	• **End Y1**: Development of a fleet-level generic bycatch reduction strategy to minimise bycatch levels, especially for associated sets. • **End Y2**: Implement fleet level generic bycatch strategy.	**PMT** FIP Industry partners	WWF MoFAD and MIRAH ICCAT	ISSF

Year	Activities	Resources	Approx. cost (EUR)
Year 1	**10a: Shark finning risk assessment and management strategy.** Conduct a desk-based risk analysis that shark finning is taking place within the UoA in compliance with the ICCAT CMM recommendation 04-10. Assess effectiveness of NPOAs for shark within the UoA. Based on this, prepare a management strategy for preventing shark finning, if required.	Fisheries biologist (5 days home-based)	
Year 2	None		
Year 3	None		
Year 4	**10b: Review effectiveness of management strategy & CoP**. A short consultancy to review the effectiveness of (i) the CoPs for 8b (non-ETP sharks) and (ii) the management plan for preventing shark finning (10a).	Fisheries biologist (5 days home-based)	
Year 5	None		
TOTAL			

4.3.8 Secondary species - information (PI 2.2.3)

Non-critical IPG 11 24738	**Information on the nature and amount of secondary species taken is adequate to determine the risk posed by the UoA and the effective-ness of the strategy to manage secondary species. By the end of Year 3 (target year to define by consulting ICCAT), annual bycatch reporting is being fully utilised for secondary species stock assessment and management purposes and any information gaps are identified and addressed.**
Target species	**YFT:** ✓ **BET:** ✓ **E. SKJ:** ✓

Scoring Issue	Actions	Timescale / Milestones	Action lead / implementation	Action partners	Other stakeholders
(a) Information adequacy for assessment of impact on main secondary species	Full analysis of non-target catch levels and their impact on secondary (e.g. unmanaged) species catches	• **End Y1**: Bycatch database fully operational, including timely vessel / observer reporting, data input and quality control. • **Annual (Yr. 3 – 5):** Annual bycatch reporting, with fishing mortality information being fully utilised for secondary species stock assessment and management purposes. In addition, sufficient information to allow Environmental Risk Assessments (ERAs) to be carried out for main secondary species.	**FIP Industry partners**	WWF MoFAD and MIRAH ICCAT	IRD – AZTI Ghanaian and Ivorian research institutes?
(b) Information adequacy for assessment of impact on minor secondary species	As above	• As above	**FIP Industry partners**	WWF MoFAD and MIRAH ICCAT	IRD – AZTI Ghanaian and Ivorian research institutes?
(c) Information adequacy for management strategy	Conduct gaps analysis of bycatch reporting system to ensure it is adequate for management purposes.	• **End Y3**: Gaps analysis completed and recommendations made for upgrading data collection, if necessary.	**FIP Industry partners**	WWF MoFAD and MIRAH ICCAT	IRD – AZTI Ghanaian and Ivorian research institutes?

Year	Activities	Resources	Approx. cost (EUR)
Year 1	**11a: Support for data gathering programmes: observer training, observer / EMS support.** Provision of short-term technical assistance to conduct an initial 2-day workshop with MoFAD / MIRAH to review bycatch observer program and current bycatch data compilation processes. This workshop will agree what support can be provided by both the FIP and the vessel operators to improve long-term bycatch reporting and analysis. Will focus on both observers and development of Electronic Monitoring Systems (EMS), and provide a workshop report with conclusions and recommendations for update to the Action Plan. 5 days in country (Ghana or Code d'Ivoire).	FAD / Bycatch Specialist (5 days in country)	
	11b: Start process of developing observation system for all trips (observer or electronic). Based on the workshop results, develop observer training / EMS use, supporting existing observer coverage to improve bycatch (primary and secondary) species recording. It is presumed that existing bycatch databases will be utilised. The main focus will be on vessel-based systems and processes, working with fishing companies (to develop systems) and vessel operators (to implement these systems). This will be implemented through a series of seminars and workshops, in either Ghana or Code d'Ivoire. 5 days in country / 5 days home-based.	FAD / Bycatch Specialist (10 days, of which 5 days in country)	
	11c: Observer data consolidation and quality control. Assistance to MoFAD / MIRAH / ICCAT to upgrade bycatch data compilation, quality control and analysis (home-based).	FAD / Bycatch Specialist (5 days home-based)	
Year 2	**11d: Bycatch review and final recommendations**. Home-based review of the system to recommend final changes and fine-tuning to ensure the system is fully operational and sustainable.	FAD / Bycatch Specialist (5 days home-based)	
Year 3	**11e: Annual bycatch monitoring and analysis**.	Project Management Team	
Year 4	**11e: Annual bycatch monitoring and analysis**.	Project Management Team	
Year 5	**11e: Annual bycatch monitoring and analysis**.	Project Management Team	
TOTAL			

4.3.9 ETP species – outcome status (PI 2.3.1)[40]

Non-critical IPG 12 24738	The UoA meets national and international requirements for protection of ETP species. The UoA is highly likely to not hinder recovery of ETP species and to not create detrimental indirect effects *Note: RBF recommended by ANABAC pre-assessment (MRAG, 2017)*				
Target species	**YFT:** ✓	**BET:** ✓	**E. SKJ:** ✓		
Scoring Issue	**Actions**	**Timescale / Milestones**	**Action lead /** implementation	**Action partners**	**Other stakeholders**
(a) Effects of the UoA on population/stocks within national or international limits, where applicable	See actions within lines b and c below	• -			
(b) Direct effects	*High risk* ETP species (ISSF PSA scoring, Jan. 2017 – not mentioned in the OPAGAC work plan): • *Sphyrna lewin* (scalloped hammerhead); • *Alopias pelagicus* (pelagic thresher shark); and • *Alopias superciliosus* (bigeye thresher shark); • *Alopias vulpinus* (common thresher/thintail thresher shark);	Whale shark: milestone – to work on actions 2.3.3 'species information' before launching the actions under SI b and c below • **End Y2**: Development of a specific management plan for whale shark, including addressing data deficiencies and a strategy to ensure that these fisheries don't hinder the recovery of this species, if required. • **End Y3**: Adoption of specific management measures to address the bycatch of whale shark by all fisheries in the UoA.	**FIP Industry partners**	WWF MoFAD and MIRAH ICCAT	

[40] Harmonised on the OPAGAC action plan (OPAGAC, 2016 – section 4.5 and Workplan 5) considering the ISSF preliminary PSC scoring in Jan. 2017. Absence of cetaceans listed as high-medium risk species within the ICCAT area by the ISSF PSA scoring in Jan. 2017.

	• *Carcharhinus longimanus* (oceanic whitetip shark); • *Isurus paucus* (longfin mako); • *Lamna nasus* (porbeagle); • *Sphyrna mokarran* (great hammerhead shark) • *Sphyrna zygaena* (smooth hammerhead) *Medium risk* ETP species (60-79; ISSF PSA scoring in Jan. 2017): • *Rhincodon typus* (whale shark – mentioned in OPAGAC, 2016); • *Istiompax indica* (black marlin); • *Kajikia albida* (Atlantic white marlin) • *Sphyrna tiburo (*bonnethead shark)	<u>Other ETP species:</u> • **End Y1**: To determine whether other ETP species listed as high-medium risk within the Jan. 2017 ISSF PSA scoring (see list in line b above) are highly likely to be hindered by the UoA through direct effects – for relevant species, same approach to silky shark below.			
c) Indirect effects	Potential FAD entanglement issue on Key ETP species (<60): • Silky shark[41] (ISSF PSA scoring in Jan. 2017 and OPAGAC, 2017)	<u>Silky shark (see note on SI b above)</u>: • **End Y1**: Development of a specific management plan for silky shark, including addressing data deficiencies and a strategy to ensure that these fisheries don't hinder the recovery of this species, if required.	**FIP Industry partners**	WWF MoFAD and MIRAH ICCAT	

[41] Near threatened species – IUCN: http://www.iucnredlist.org/details/39370/0 , latest access: 3 October 2017.

		• **End Y2**: Adoption of specific management measures to address the bycatch of silky shark by all fisheries in the UoA. <u>Other ETP species:</u> • **End Y1**: To determine whether other ETP species listed as high-medium risk within the Jan. 2017 ISSF PSA scoring (see list in line b above) are highly likely to be hindered by the UoA through indirect effects – for relevant species, same approach to silky shark above			

Year	Activities	Resources	Approx. cost (EUR)
Year 1	**12a: Development of a silky shark management plan**: Silky sharks were ranked as the species with the highest degree of vulnerability in the 2010 ecological risk assessment for Atlantic sharks. A short paper would be produced, reviewing the status of silky sharks in the Eastern Atlantic Ocean, and will assess the effectiveness of ICCAT Rec 11-08 on the Conservation of Silky Sharks Caught in Association with ICCAT Fisheries, NPOAs and the EC Action Plan for the Conservation and Management of Sharks in the client fleet and proposing an ocean-wide strategy to reduce silky shark fishing mortality, including by the UoC fleet.	FAD / bycatch specialist (5 days, home-based)	
	12b: Other ETP species management plans. The status of a number of other shark and billfish ETP species is not well known in the Atlantic Ocean. Expertise will be provided to conduct environmental risk analyses (ERAs) might provide information for measures to reduce their susceptibility for tuna fishing (both directly and indirectly), together with recommendations for improving their management within the UoA.	FAD / bycatch specialist (10 days, home-based)	
Year 2	**12c: Development of a whale shark management plan**: Whale sharks can act as a 'natural log of animal origin' (ANLOG, see 2016 SCRS report) and may be vulnerable to injury or mortality in ANLOG sets. A short paper would be produced, reviewing the status of whale sharks in the Eastern Atlantic Ocean, and will assess the effectiveness of NPOA and EC Action Plan for the Conservation and Management of Sharks in the client fleet and proposing an ocean-wide strategy to reduce whale shark fishing mortality, including by the UoC fleet.	FAD / bycatch specialist (5 days, home-based)	
	12d: Vessel-based 'Code of Practice (CoP) for the reduction in (i) silky shark and (ii) whale shark injury and mortality in the UoC. The main thrust for the FIP will be on vessel-based approaches, such as reduced dependencies on FADs, improved FAD use (e.g. reduction of entanglement risk), better crew awareness / identification skills of shark bycatch issues in general and of silky and whale sharks, development and improvement to methods for keeping shark bycatch alive before release, etc. A desk-based Code of Practice (CoP) will be produced for review and adoption by all catching vessels in the FIP.	FAD / bycatch specialist (10 days, home-based)	
Year 3	None		
Year 4	**12e: Review effectiveness of management plans & CoP**. A short consultancy to review the effectiveness of (i) the non-target species management plans (6a) and (ii) the CoP for reduction in non-target catches (6b).	FAD / bycatch specialist (5 days home-based)	
Year 5	None		
TOTAL	None		

4.3.10 ETP species – management strategy (PI 2.3.2)[40]

Non-critical IPG 13 24738	The UoA has in place precautionary management strategies designed: a) highly likely to meet national and international requirements -; and b) to ensure the UoA does not hinder recovery of ETP species. Also, the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of ETP species.					
Target species	YFT: ✓	BET: ✓	E. SKJ: ✓			
Scoring Issue	**Actions**	**Timescale / Milestones**	**Action lead /** implementation	**Action partners**	**Other stakeholders**	
(a) Management strategy in place (national and international requirements)	ETP species management mostly for whale shark interacting with tuna schools including juveniles (natural FAD) and for species risking FAD-entanglement (mostly silky shark) – actions and outputs within this IPG to adapt to findings of actions with the non-critical IPG 2.3.1 and 2.3.3 See actions in lines c, d, and e below	• See lines c, d, and e below				
(b) Management strategy in place (alternative)	ETP species management mostly for whale interacting with tuna schools including juveniles (natural FAD) and for species risking FAD-entanglement (mostly silky shark) – actions and outputs within this IPG to adapt to findings of actions with the	• See lines c, d, and e				

	non-critical IPG 2.3.1 and 2.3.3 See actions in lines c, d, and e below				
(c) Management strategy evaluation	Code of good practice evaluation (note that some FIP partners already implement codes of practices to use (or minimise the use of) non-entangling FADs such as ANABAC, OPAGAC and Orthongel[42])	• **End Y2:** see IPG 12d	**PMT (monitoring)** AZTI, IRD? Ghanaian and/or Ivorian research institute(s)?	WWF ISSF	
(d) Management strategy implementation	Code of Practice (see c above)	• **End Y2:** see IPG 12d	**PMT (monitoring)** FIP partners	WWF ISSF	
(e) Review of alternative measures to minimise mortality of ETP species	Evaluation of code of practice	• **End Y2:** see IPG 12e	**PMT (monitoring)** AZTI, IRD? Ghanaian and/or Ivorian research institute(s)?	FIP partners	

[42] http://opagac.org/en/sustainability/code-of-good-practices/ and http://orthongel.fr/index.php?content=gbp&page=home - latest access: 8 May 2017.

Year	Activities	Resources	Approx. cost (EUR)
Year 1	None (see IPG 12)		
Year 2	Ibid. (same as year 1 above)		
Year 3	Ibid.		
Year 4	Ibid.		
Year 5	Ibid.		
TOTAL			

4.3.11 ETP species – information (PI 2.3.3)[40]

Non-critical IPG 14 24738	Relevant information is collected to support the management of UoA impacts on ETP species, including: a) information for the development of the management strategy; b) information to assess the effectiveness of the management strategy; and c) information to determine the outcome status of ETP species - If RBF is used to score PI 2.3.1 for the UoA: some quantitative information is adequate to assess productivity and susceptibility attributes for ETP species.				
Target species	**YFT:** ✓	**BET:** ✓	**E. SKJ:** ✓		

Scoring Issue	Actions	Timescale / Milestones	Action lead / implementation	Action partners	Other stakeholders
(a) Information adequacy for assessment of impacts	Note for this non-critical IPG: actions mostly required for silky shark and whale shark (see NC IPG for PI 2.3.1)	• **End Y1**: ○ Support for data gathering through observation (training, observer support, remote observation) – for instance OPAGAC and Orthongel programmes; ○ Observer data consolidation and quality control; ○ Support to other research activities to evaluate and mitigate impacts on ETP species (tagging, bycatch identification, etc.) ○ Review of new actions • **End Y2:** Implementation of new actions (see IPG 2.3.1. especially)	**PMT progress monitoring** AZTI, IRD? Ghanaian and Ivorian research institutes? In collaboration with FIP partners	FIP partners	
(b) Information adequacy for management strategy	See SI a above	• See SI a above			

Year	Activities	Resources	Approx. cost (EUR)
Year 1	**14a: Study on the impact of purse seine gear on ETP species and likely consequence for Atlantic Ocean populations**. Desk-based study of observer data to assess the likely mortality of ETP species after their release from fishing gear, and an analysis of the likely impact on Atlantic Ocean populations. Prepared as a contribution to the ICCAT WP SCRS (Sub-Committee on Ecosystems, or other). Should include an identification of data gaps, especially in the quantification and characterisation of ETP interactions with the client fleet.	FAD / Bycatch Specialist (7 days home-based)	
	14b: Improved vessel-level reporting of ETP interactions. Preparation of a Code of Conduct for the better reporting of ETP interactions. To be included in observer system development under Activity 11a & 11b.	Project Management Team	
Year 2	None		
Year 3	None		
Year 4	**14c: Review of ETP information-based management**. Independent review of ETP-related information availability and adequacy for development of an appropriate management strategy.	FAD / Bycatch Specialist (5 days home-based)	
Year 5	None		
TOTAL			

4.3.12 Ecosystem – outcome status (PI 2.5.1)

Non-critical IPG 15 24738	The UoA is highly unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm					
Target species	YFT: ✓	BET: ✓	E. SKJ: ✓			
Scoring Issue	**Actions**	**Timescale / Milestones**	**Action lead / implementation**	**Action partners**	**Other stakeholders**
(a) Ecosystem status	Risk assessment of the use of FADs and their possible impact on target species stock structure and the key elements underlying ecosystem structure and function.	• **End Y3**: Credible and peer reviewed risk assessment published. • **End Y4**: Management measures to address any identified risks, if any, are agreed and undergoing implementation. • To be coordinated with IPG 7.	**PMT** ICCAT	FIP Industry partners MoFAD and MIRAH	FIP External partners

Year	Activities	Resources	Approx. cost (EUR)
Year 1	**15a: Review of FAD design, deployment, and tracking**. Independent study to review global lessons in 'eco-friendly' FAD design with the aim of recommending a 'Code of Practice' for FAD design (a 'FAD CoP'), deployment and tracking. Will include methods of reducing the negative environmental impacts of FADs (e.g. bycatch and target size compositions), improved instrumented tracking of FADs and approaches to ensure their safe retrieval and end of life disposal. *(note that ICCAT recommend that all FADs be biodegradable by the end of 2018 'if possible' – ICCAT Rec. 16-01 article 24 item ii)*	FAD / Bycatch Specialist (10 days home-based)	
	15b: Development of a FAD registration, monitoring and reporting system. Start work with relevant stakeholders (other purse seine companies; FAD working groups) to start a process towards more transparency around FADs based on the evaluation from 14a. and the adoption of the FAD CoP.	Project Management Team	
Year 2	None		
Year 3	None		
Year 4	**15c: Review of FAD use and monitoring**. Independent evaluation of FAD usage, likely impacts and FAD-related Abandoned, Lost and Discarded Fishing Gear (ALDFG) outcomes (esp. on VMEs), with recommendations for improving the FAD CoP's effectiveness.	FAD / Bycatch Specialist (10 days home-based)	
Year 5	None		
TOTAL			

4.3.13 Ecosystem – management strategy (PI 2.5.2)

Non-critical IPG 16 24738	There are measures in place to ensure the UoA does not pose a risk of serious or irreversible harm to ecosystem structure and function. By Year 5, there is objective evidence that the ecosystem-based management strategy is working.				
Target species	YFT: ✓	BET: ✓	E. SKJ: ✓		

Scoring Issue	Actions	Timescale / Milestones	Action lead / implementation	Action partners	Other stakeholders
(a) Management strategy in place	Development of an ecosystem-based strategic approach to tuna fisheries management in the Atlantic Ocean. Includes an information gaps analysis to be addressed in NC IPG for 2.5.3.	Note that ICCAT is currently working on developing an ecosystem-based fisheries management ('tuna RFMOs' [such as ICCAT] 'are half way to implementing the ecological component of EBFM' (ICCAT SCRS report, Nov. 2016[43]), the timeframe below is indicative: • **End Y1**: ICCAT develops an ecosystem-based strategy; • **End Y3**: ICCAT puts into place management measures, as necessary, to implement an ecosystem approach to fisheries management.	**PMT** ICCAT	MoFAD and MIRAH	
(b) Management strategy evaluation	Ecosystem-based strategic approach to tuna fisheries management is independently evaluated.	• **End Y5**: An independent evaluation provides objective evidence that the ecosystem-based management strategy is working.	**PMT** ICCAT	MoFAD and MIRAH	ISSF
(c) Management strategy implementation	Ecosystem-based strategic approach to tuna fisheries management in the Atlantic Ocean is being successfully implemented.	• **End Y4**: An internal evaluation provides objective evidence that the ecosystem-based management strategy is being implemented successfully.	**PMT** ICCAT	MoFAD and MIRAH	

[43] ICCAT (2016) PLE SCRS report. 18 pages. Presentation to the plenary session on November 2016. Date of the document: 13 November 2016. See page 7. Internet: http://www.iccat.int/com2016/ and http://www.iccat.int/com2016/presentations/PLE_SCRS_Report.pdfb , latest access: 11 June 2017.

Year	Activities	Resources	Approx. cost (EUR)
Year 1	**16a: Working Paper on EAFM to ICCAT's SCRS Sub-Committee on Ecosystems.** Preparation of an Intersessional Working Paper on the core elements of EAFM needs and requirements resulting from the ecosystem impacts of purse seine fishing for tuna in the Atlantic Ocean.	EAFM Specialist (10 days home-based)	
Year 2	None		
Year 3	None		
Year 4	**16b: Independent evaluation of ICCAT's EAFM approach**. Scientific evaluation to determine the level of objective evidence that an ecosystem-based management strategy is being implemented successfully.	EAFM Specialist (5 days home-based)	
Year 5	None		
TOTAL			

4.3.14 Ecosystem – information/monitoring (PI 2.5.3)

Non-critical IPG 17 24738	There is adequate knowledge of the impacts of the UoA on the ecosystem. Additional data and information gathering initiatives, if necessary, formally agreed and in place by the end of Year 3.					
Target species	**YFT:** ✓	**BET:** ✓	**E. SKJ:** ✓			
Scoring Issue	**Actions**	**Timescale / Milestones**	**Action lead /** implementation	**Action partners**	**Other stakeholders**	
(a) Information quality	Not applicable	• None				
(b) Investigation of UoA impacts	Information gaps analysis in NC IPG for PI 2.5.2 on the main impacts the UoA on key ecosystem elements evaluated and addressed, where necessary.	• **End Y3**: Additional data and information gathering initiatives, if necessary, formally agreed and in place.	**PMT** ICCAT	MoFAD and MIRAH		
(c) Understanding of component functions	Not applicable	• None				
(d) Information relevance	Not applicable	• None				

Year	Activities	Resources	Approx. cost (EUR)
Year 1	None		
Year 2	**17a: EAFM Information Gaps Analysis**. Building upon the outputs of Activity 16a (Working Paper on EAFM to ICCAT's SCRS Sub-Committee on Ecosystems), a short study will identify the key information gaps in enabling an ecosystems approach to tuna fisheries management in the Atlantic Ocean. This will be presented as an Intersessional Working Paper on the core elements of EAFM to the ICCAT SCRS Sub-Committee on Ecosystems.	EAFM Specialist (10 days, home-based).	
Year 3	None		
Year 4	None		
Year 5	None		
TOTAL			

Principle 3: Effective Management

4.3.15 Legal and customary framework (PI 3.1.1)

Non-critical IPG 18 24738	**The management system exists within an appropriate and effective legal and/or customary framework. Any major gaps in national legislation of ICCAT CPCs to deliver management outcomes consistent with MSC Principles 1 & 2 are being addressed by the end of Year 4.**					
Target species	**YFT:** ✓	**BET:** ✓	**E. SKJ:** ✓			
Scoring Issue	**Actions**	**Timescale / Milestones**		**Action lead /** implementation	**Action partners**	**Other stakeholders**
(a) Compatibility of laws or standards with effective management	Review to determine the extent and effectiveness of national legislation of FIP member flag and coastal/landing States in delivering management outcomes consistent with MSC P1 & 2.	• **End Y2**: An independent review identifies major legislative gaps in national efforts to comply with ICCAT CMMs. • **End Y4**: Evidence presented that any major legislative gaps (or weaknesses) are being effectivity addressed.		**PMT** FIP Coastal/landing States	FIP Country Partners	FIP External Partners
(b) Resolution of disputes	EU and other stakeholders such as Ghana and non-EU flagged countries to: a) draft a paper to ICCAT on dispute resolution best practices (with experience learned from other RFMOs); b) continue inter-sessional discussions on implementing a strategy for improving ICCAT management framework	• **End Y1:** For a - advocacy to prepare the ICCAT plenary session For b – ongoing		**PMT** FIP Coastal/landing States	FIP Country Partners	FIP External Partners
(c) Respect for rights	Not applicable	• None				

Year	Activities	Resources	Approx. cost (EUR)
Year 1-2	**18a: Strategy for addressing needs of better tuna fisheries management, including dispute resolutions, in the Eastern Atlantic Ocean** Development of position papers outlining strengths and weaknesses of: a) The current tuna management regime at national level (including checking whether the ecosystem and precautionary management approaches are included – see IPG 3.2.1); and b) The dispute resolution mechanism in the Eastern Atlantic Ocean at ICCAT level. *The weaknesses are known by ICCAT – see ICCAT 2016 performance review -: ICCAT having a work plan to respond to the weakness* (PMT to monitor ICCAT progress in responding to the weakness to adapt the activity b (within PMT costs)) The Papers will provide a strategic framework to address the identified remaining weaknesses on both a) and b). The papers would then be presented at a special meeting of EU, Côte d'Ivoire, Ghana, and /or other agreed stakeholders for development and at ICCAT meetings (intersessional then at plenary). Milestones: an independent review identifies major legislative gaps in national efforts to comply with ICCAT CMMs at the end of year 2 at the latest	Legal specialist: 10 days home-based, and 5 days in-country Workshop hosting either in Côte d'Ivoire (Abidjan) or Ghana (Tema/Accra)	
Year 3-4	**18b: Follow-up and facilitation of the Strategy**. The FIP Management Team will engage with national stakeholders, and ICCAT, to encourage and facilitate the implementation of the Strategy. Note: activity and costs to be combined with Activity 2b	Four workshops included in budget	
TOTAL			

4.3.16 Consultation and responsibilities (PI 3.1.2)

Non-critical IPG 19 24738	The management system has effective consultation processes that are open to interested and affected parties. The roles and responsibilities of organisations and individuals who are involved in the management process are clear and understood by all relevant parties				
Target species	**YFT:** ✓	**BET:** ✓	**E. SKJ:** ✓		

Scoring Issue	Actions	Timescale / Milestones	Action lead / implementation	Action partners	Other stakeholders
(a) Roles and responsibilities	Roles and responsibilities to be clearly understood especially in terms of data submission and control applications by carrying out, among other actions, intersessional meetings, and capacity-building (similar approach as NC IPG for PI 3.1.1)	• **End Y1**: roles and responsibilities at least, partly understood – with documented evidence - by flagged countries and the landing countries with stakes within the FIP • **End Y2**: roles and responsibilities fully understood by flag and landing States	**PMT** Relevant flag and landing States	FIP Country Partners	FIP External Partners
(b) Consultation processes	Not applicable to the FIP	• -			

Year	Activities	Resources	Approx. cost (EUR)
Year 1	**19a: Analysing weaknesses in main flag States and landing States:** • Interviewing ICCAT, flag and landing States to identify whether and where such analyses are already carried out; • Carrying out the analysis in key flag and landing States where such analyses are not completed by other organisations and presenting findings of analyses carried out by other organisations.	Fisheries management specialist (10 days including 5 days travel in a key State)	
Year 1- year 2	**19 b: Advocating improvements based on the analyses 16a (ensuring coherence and complementarity with related initiatives)** A sessional meeting with the key flag States and landing States (combined costs with activity 18a)	-	
Years 3 - 5	None		
TOTAL			

4.3.17 Long-term objectives (PI 3.1.3) and Fishery-specific objectives (PI 3.2.1) [40]

NC IPGs against PI 3.1.3 and 3.2.1 dealt together

Non-critical IPG 20 24738	**The fishery-specific management system has clear, specific objectives designed to achieve the outcomes expressed by MSC's Principles 1 and 2: short and long-term objectives, which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are explicit within the fishery-specific management system.**
Target species	**YFT:** ✓ **BET:** ✓ **E. SKJ:** ✓

Scoring Issue	Actions	Timescale / Milestones	Action lead / implementation	Action partners	Other stakeholders
(a) Objectives	ICCAT long term and fishery specific objectives to be explicitly consistent with the precautionary and ecosystem management approaches	• **End Y1**:.EU, Ghanaian, and other stakeholders to develop a strategy to improve the ICCAT management framework – to revise the work plan for next years of the FIP by end Y1 for subsequent action	**PMT** PMT and FIP participants	FIP Country Partners	FIP External Partners

Year	Activities	Resources	Approx. cost (EUR)
Year 1 -2	**20a: Advocacy at ICCAT inter-sessional meetings and plenary sessions** *Weaknesses known by ICCAT – see ICCAT 2016 performance review: amendment of ICCAT Basic texts expected soon for instance* • PMT to inform the FIP participants of ICCAT progress in responding to the weakness (at PMT costs*); then • Position paper if no ICCAT progress (*combining costs with the activity 19b if carried out) *: no budget allocated at this early stage then **To revise the work plan for next years of the FIP by end Y1 for subsequent action (see milestone)**	PMT	-
Year 3	None		
Year 4	None		
Year 5	None		
TOTAL			**-**

4.3.18 Decision-making process (PI 3.2.2)

Non-critical IPG 21 24738	The fishery-specific management system includes effective decision-making processes that result in measures and strategies to achieve the objectives and has an appropriate approach to actual disputes in the fishery. Decision-making processes respond to serious and other important issues.					
Target species	**YFT:** ✓	**BET:** ✓	**E. SKJ:** ✓			
Scoring Issue	**Actions**	**Timescale / Milestones**		**Action lead / implementation**	**Action partners**	**Other stakeholders**
(a) Decision-making processes	-	• -				
(b) Responsive-ness of decision-making processes	Lesser priority action Improve responsiveness in decision-making (through transversal actions to pass Principle 3 within non-critical IPG for PI 3.1.1)	• **End Y1:** progress report		FIP Facilitators	FIP Country Partners	FIP External Partners
(c) Use of precautionary approach	-	• -				
(d) Accountability and transparency of management system and decision-making process	-	• -				
(e) Approach to disputes	-	• -				

Year	Activities	Resources	Approx. cost (EUR)

Year 1-2	**21a: Advocacy to improve decision-making at ICCAT (if necessary)**
	• PMT to inform FIP participants about progress by ICCAT (at PMT costs) on the following items:
	  ○ Extent and quality of discussions before draft recommendations are put to vote
	  ○ Situation of the revision of the opt-out procedure in Res. 12-11 to be in line with modern opt-out procedures;
	  ○ Assess whether new opt-out procedures and decision making ae applied from the moment of their adoption;
	  ○ Review ICCAT working practices in transparency enhancement in decision-making
	  ○ ICCAT review of its rules of procedures especially within ICCAT Rec. 03-20 and Res. 94-06 (ICCAT 2016 performance review – panel recommendation section 5.1 p. 59); then
	• If absence of clear evidence of progress, position paper to draft and present at ICCAT inter-sessional meetings
	
	To revise the work plan for next years of the FIP by end Y1 for subsequent action (see milestone)
		PMT	-

Year 3	-		
Year 4	-		
Year 5	-		
TOTAL			**-**

4.3.19 Compliance and enforcement (PI 3.2.3)

Non-critical IPG 22 24738	Monitoring, control, and surveillance mechanisms ensure the management measures in the fishery and enforced and complied with. By the end of Year 4, ICCAT has begun to address issues of non-compliance with ICCAT management measures through the use of deterrent sanctions. Initial efforts shall focus on members providing timely and accurate catch data to the ICCAT.				
Target species	**YFT:** ✓	**BET:** ✓	**E. SKJ:** ✓		
Scoring Issue	**Actions**	**Timescale / Milestones**	**Action lead /** implementation	**Action partners**	**Other stakeholders**
(a) MCS implementation	Not applicable	• None	-	-	-
(b) Sanctions	ICCAT considers proposals to strengthen sanctions as effective deterrent, most particularly when members repeatedly fall short in complying with ICCAT management measures ICCAT has recommended a process to (i) develop deterrent sanctions and (ii) provide more in depth and critical reporting of non-compliance. ICCAT adopts sanctions for non-compliance and makes public an in-depth summary of all non-compliance. Flag States ensure that the sanctions are implemented through a robust national legal framework (actions to carry out in parallel with improving dispute-resolutions)	• **End Y1**: Formal proposals for a strengthened compliance regime presented and strategy agreed in the ICCAT managed tuna fisheries; **If not set yet,** EU and other FIP stakeholders to develop and advocate a strategy for improving the ICCAT management framework with regards to sanctions (including improving the national enforcement systems of the flag States to ensure that the ICCAT sanctions are implemented); • **End Y2**: Deterrent sanctions developed and non-compliance reporting systems enhanced; • **End Y3**: Deterrent sanctions in place; • **End Y4**: Public reposing of non-compliance levels and sanctions imposed as a result, if any.	**PMT** With WWF support ICCAT	FIP Country Partners	FIP External Partners
(c) Compliance	See IPG (b) above	• See IPG (b) above			

(d) Systematic non-compliance	See IPG (b) above	• See IPG (b) above			

Year	Activities	Resources	Approx. cost (EUR)
Year 1-2	**22a: Approaches to increase fisheries-related compliance in the (Eastern) Atlantic Ocean** Development of a positional paper that analyses history and trends of tuna fishing compliance in the Eastern Atlantic Ocean. The scope of this work would cover both FIP coastal and flag States, as well as other key ICCAT CPCs. The Paper would then be presented at a special meeting of EU, Côte d'Ivoire, Ghana, and /or other stakeholders for development (see activity 18a). The finalised approach should: a) set out the current weaknesses in the compliance regime (inc. MCS, and the ensuing administrative / legal processes), and b) suggest how sanctions and other measures might be used to strengthen compliance levels as well as deterring future IUU behaviour.	Fisheries management specialist (15 days home-based)	
Year 3	**22b: Follow-up and facilitation of an (Eastern) Atlantic Ocean fisheries compliance Strategy**. The Project Management Team will engage with stakeholders to encourage and facilitate the implementation of a fisheries compliance strategy.	Project Management Team	
Year 4	None		
Year 5	None		
TOTAL			

5 TIMELINE

5.1 CURRENT TIMELINE (UPDATE)

It is understood that the current timeline is as follows. It continues to conform to the agreed timeline set in the scoping document.

Milestone	May 17	Jun 17	July 17	Aug. 17	Sep 17	Oct 17	Nov 17	Dec 17
Review and comment draft AP	★	★						
MoU with WWF signed		★						
FIP participants meeting in Ghana		★						
Budget for detailed AP agreed			★					
Detailed action Plan development						★		
FIP Partnership agreed						★		
Public signing of the FIP Partnership							★	
Webpage and public relations							★	
FIP commenced								★ Latest

Appendix A: List of references

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Appendix B: Harmonisation of the three MSC pre-assessment (or related) initiatives

Below are presented the differences of the three scoring exercises, whose sources are Powers and Medley, 2016 cited as ISSF below; MRAG, 2017 cited as ANABAC; OPAGAC, 2016 and WWF, 2016a cited as OPAGAC below, to harmonise the findings and define the critical and non-critical IPGs accordingly. The overall conclusion of the harmonisation is summarised under section 2.3.2 of the scoping document; especially in Table 8.

Principle 1

PI 1.1.1: stock status

The bigeye stock status (PI 1.1.1 – non-critical IPG) just met the scoring guidepost 60[44] according to ISSF while ANABAC and OPAGAC proposed a scoring 'likely to be between 60 and 79'. While the 2015 assessment[45] concluded globally that the stock was overfished (that is the 2014 Biomass being below the sustainable – or MSY – biomass) and facing overfishing. While the 'statistical' analysis based on the FCR v2.0 scoring mechanism looks correct, a precautionary approach is preferable considering that the overall findings of the 2015 assessment by the ICCAT Standing Committee on Research and Statistics (that the stock is overfished and facing overfishing activities). Poseidon proposes to follow, at least, the scoring of ISSF for the bigeye tuna stock status PI 1.1.1. However, the nuance is minor to set a non-critical IPG for 1.1.1 BET.

For **YFT and SKJ (PI 1.1.1 – non-critical IPG)**, the three scorings reach the same conclusions: pass for YFT and conditional pass for SKP (non-critical IPG).

PI 1.1.2 - Stock rebuilding (for YFT and BET only – not applicable for Eastern SKJ)

Critical IPG 1.1.2 for BET: OPAGAC made both YFT and BET stock rebuilding fail (< 60). ISSF and ANABAC shared the same scoring for YFT: pass (≥80). This more 'optimistic' scoring is certainly due to the latest ICCAT findings (2016).

On the other hand, while ISSF scored as conditional pass for BET, ANABAC scored this targeted species below 60 considering that SCRS, the ICCAT Standing Committee on Research and Statistics, assumed that the stock rebuilding would take more than 10 years and therefore between two to three times the species generation time (< 5 years). ISSF based on the same data from SCRS concluded that the rebuilding timeframe (of 2028) is within the 20 years or 2 times the approximation generation time for skipjack (4-5 years) and that the likelihood expressed by SCRS of 49 % chances of the stock to get beyond the B MSY ((B>BMSY) by 2028 is likely to be higher due to the conservation and management measures taken since 2015. As a precautionary approach, the position of ANABAC is conserved in the following scoping document: critical IPG for skipjack. The IPG may be updated to a non-critical one in 2018 should positive findings demonstrate that it can be raised to this level.

[44] considering that the biomass of the stock (the stock population) is 'likely to be above the level where recruitment would be impaired' (condition to meet the 60 scoring in FCR v 2.0)

[45] http://www.iccat.int/en/assess.htm - bigeye summary stock status http://www.iccat.int/Documents/SCRS/ExecSum/BET_ENG.pdf from the 2016 ICCAT biennal report 2014-2015 volume 2 section 8.2 page 36, latest access: 3 October 2017.

PI 1.2.1 – harvest strategy ***UPDATE from the scoping document***

BET and SKJ: critical IPG for 1.2.1 (NC IPG for YFT): OPAGAC scored below 60 PI 1.2.1 for yellowfin tuna, bigeye tuna and eastern skipjack. ANABAC scored bigeye tuna below 60 and the two other species between 60-79 while ISSF scored bigeye tuna and eastern skipjack 60 only and yellowfin tuna as 'pass'. This less optimistic scoring from OPAGAC might be due to a pre-assessment exercise held at the beginning of January 2016 where less evidence of progress of the RFMO (ICCAT) toward preparing the implementation of HCR rules in the future were available (see OPAGAC, 2016 – pages 8 and 21-23 and WWF, 2016a Tables 6 and 9). As a precautionary approach, the scoring harmonisation applied is 'below 60' for the three species - *see harmonised scoring for YFT in the paragraph below)*. Indeed, although early steps have been developed including a roadmap for the ICCAT SCRS to work on limit reference points, etc., management measures for skipjack and yellowfin tuna, when measures on these species are applied, have a side effect on bigeye management (that is failing to keep the sock healthy).

Harmonised scoring for YFT updated *based on the latest progress of the OPAGAC FIP by its monitoring unit in August 2017 (document not available to the public yet): scored upgraded to 60-79. 'Based on projections, one can argue that the strategy is "expected to meet" stock objectives (BMSY) and is likely to work, meeting SG60; but it is not directly responsive to the state of the stock (catch limit is fixed and unallocated) so SG80 is not met.' (Gascoigne, comm., August 2017).*

PI 1.2.2 - harvest control rules and tools ***UPDATE from the scoping document***

The ICCAT recommendation 15-07 provides a framework for developing HCRs for tropical tunas. The work is ongoing from 2016 but has not yet progressed enough to pass the performance indicator 1.2.2 (≥80).

BET and SKJ: critical IPG for 1.2.2 (NC IPG for YFT): for the eastern skipjack and yellowfin tuna stocks (non-critical IPG 1.2.2), the ANABAC pre-assessment considers that the scoring is likely to be between 60 and 79 (ISSF scored just 60 for the three species and OPAGAC scored below 60 for the three species). The FCR v 2.0 states that PI 1.2.2 should score 60 if HCRs are in place or **available.** These are presumed available by the ANABAC pre-assessors for skipjack and yellowfin tuna based on tools to manage bigeye tuna (TAC, capacity limits and fishing closures) and may appear to be indirectly effective in exploiting the yellowfin and skipjack stocks (YFT is slightly overfished with no overfishing and the eastern SKJ is likely to be neither overfished nor under overfishing). However, as a precautionary approach, the scoring harmonisation applied is 'below 60' for the three species (same approach as 1.2.1 - *see harmonised scoring for YFT in the paragraph below*.

Harmonised scoring for YFT updated *based on the latest progress of the OPAGAC FIP by its monitoring unit in August 2017 (document not available to the public yet): scored upgraded to 60-79. 'There is a well-defined HCR (catch limit 110,000 t) which is expected to maintain the stock at a suitable level but may not continue to work if the stock declines towards the PRI. Tools to implement the HCR (quotas) are "available" (since they have been applied for bigeye) but are not currently in place. SG60 is met but SG80 is not met.' (Gascoigne, comm., August 2017).*

PI 1.2.3 – information / monitoring

Eastern SKJ: non-critical IPG for 1.2.3: ANABAC, OPAGAC and ISSF scored identically with a conditional pass (60-79) for Eastern SKJ while YFT and BET passed. According to ANABAC (and ISSF), SKJ failed due to poor data and information[46] and the stock structure is not well understood (scoring issue a 'range of information'). For YFT and BET, there is adequate information available, with recent significant improvements, and data are sufficient to undertake and complete full stock assessments using several approaches (ANABAC and ISSF findings).

PI 1.2.4 - assessment of stock status ***UPDATE from the scoping document***

Eastern SKJ: non-critical IPG for 1.2.4: the assessment for skipjack could not estimate with quantitative terms the stock situation in relation with the reference points (scoring issue b). According to ISSF (1.2.4 scoring: 75; see pp. 49-59), the assessment models have not been robust enough too (scoring issue d) (harmonisation on ISSF scoring and a recent scoring of a tuna fishery in the Eastern Atlantic by Poseidon).

Principle 2 (reminder: scoring available from OPAGAC and ANABAC pre-assessments only, not from ISSF)

ANABAC and OPAGAC globally scored the Principle 2 Performance Indicators at the same level (reminder: ISSF is preparing to score Principle 2 for tropical tunas before the end of 2017).

Most of the scoring from the OPAGAC pre-assessment (see Table 7 and section 4.5 of OPAGAC, 2016) has been followed being less optimistic in terms of environmental effects of the purse-seiners in the Eastern Atlantic and bearing mind that the OPAGAC fleet:

a) has launched its FIP (collaboration will be expected) and

b) will be part of the Unit of certification within the FIP covered by this scoping document.

Also, an update of the OPAGAC Principle 2 scoring has been achieved distinguishing FAD associated purse seine fishing and free school fishing (see page 4 of Gascoigne, 2015). The distinction has been taken into account to harmonise the scoring of Principle 2 within this scoping document.

For instance, PI 2.3.1 -ETP species outcome, non-critical IPG for the FAD-dependent UoA: the PI scored as conditional pass for OPAGAC based on direct effects on various species and FAD entanglement issues. Direct effects on ETP species can be considered low (see ANABAC), however FAD entanglement risks are to be considered carefully within the future FIP although improvements to use non-entangling FADs is in progress in the Atlantic purse seiners. The scoring is harmonised as conditional pass with a distinction between the FAD-UoC and the non-FAD UoC (pass).

[46] For instance, some States flagging purse seine vessels active in the Eastern Atlantic fail to provide data (http://www.iccat.int/com2016/index.htm - see issues raised under the document 'Compliance summary tables' COC-308 to COC-308B for examples during the ICCAT special meeting in November 2016 in Portugal).

However, with regards to the primary species, as a precautionary approach and taking into account the preliminary work of ISSF scoring of the ICCAT tropical stocks against Principle 2 (**ISSF PSA scoring – version 26 January 2017**[47]), **the PIs 2.1.1 Primary species outcome and 2.1.2 Primary species management have been scored conditional pass (60-79) therefore non-critical IPGs**.

With regards to the PI 2.4 'Habitats', purse seine gear are considered to have no or low impact on the habitat. Indeed, purse seines operate in the upper part of the water column (that is without interacting with a substrate). However, FADs and their nets can modify micro-habitats. These issues are treated under the PIs 2.5 'ecosystem' to harmonise the action plan with the Eastern Atlantic OPAGAC FIP especially (see ANABAC pp. 49-53 for additional details and the OPAGAC FIP on https://fisheryprogress.org/node/1521/improvement#).

Principle 3

3.1.1 - Legal & customary framework, non-critical IPG: the PI scored as conditional pass by ISSF and OPAGAC and pass for ANABAC. Both ISSF and OPAGAC scorers stated that many disputes are in 'abeyance' rather than resolved inhibiting the application of conservation measures. The scoring is harmonised as conditional pass.

3.1.2 – clear responsibilities and roles, non-critical IPG: the PI scored as conditional pass by ISSF and OPAGAC and pass for ANABAC. For ISSF and OPAGAC, roles within ICCAT and CPCs are not necessarily well understood by entities between nations, leading to failures in the application of controls and data submission. 'This would have to be evaluated for each fishery' (Powers and Medley, 2016). The scoring is therefore harmonised as conditional pass.

3.1.3 – Long term objectives (to guide decision making), non-critical IPG: the PI is scored as pass (80 or above) by both ISSF and ANABAC. OPAGAC raised that the ICCAT long term objectives are not explicitly consistent with the precautionary and ecosystem based approach to management. This issue is considered within 3.2.1 by ANABAC and ISSF. The PI is harmonised on the OPAGAC scoring (60-79).

3.2.1 – Fishery specific objectives, non-critical IPG: ISSF scored the PI as pass while ANABAC and OPAGAC (page 12 of WWF, 2016a) scored it as conditional pass (between 60 and 79). ICCAT fishery objectives have weakness in terms of explicit consideration of risks (precautionary approach) and ecosystem based management recognised by the three scoring organisations. The PI is harmonised on the ANABAC scoring (60-79).

3.2.2 – Decision making processes, non-critical IPG: ANABAC and ISSF scored this PI 80 or above while OPAGAC stressed the decision-making responsiveness weakness at ICCAT (3.2.2.a scoring 60 – conditional pass). ICCAT allows parties to opt-out decisions. However, decision making processes (mostly by consensus) results in measures and strategies to achieve objectives. Decision making results is mostly addressed in Principle 1 according to ISSF (ISSF, 2016) and in the OPAGAC work plan year 1 this matter has been considered a low priority (see Tables 9 and section 4.1 Workplan 1 C of OPAGAC, 2016). As a precautionary approach, 3.2.2. is harmonised as 'conditional pass'.

3.2.3 - Compliance and enforcement and 3.2.4 – Management evaluation: same scoring for ISSF, ANABAC and OPAGAC.

[47] http://iss-foundation.org/download-monitor-demo/download-info/a-preliminary-evaluation-of-the-environmental-impact-of-fishing-for-global-tuna-fisheries-relative-to-marine-stewardship-council-criteria/ and http://iss-foundation.org/downloads/14210/ , latest access: 3 October 2017.

Appendix C: MSC tracked tuna and associated tuna fisheries in the Atlantic with the same targeted species as the ones targeted by the Units of Assessments within the scoping document

Table 10: MSC tracked tuna and associated tuna fisheries in the Atlantic with the same targeted species as the analysed Unit of Assessments

Fishery	Species (targeted species)	Gear type	FAO region	MSC status	Tonnage
US North Atlantic swordfish	Swordfish (*Xiphias gladius*) – retained species: tuna (albacore) (*Thunnus alalunga*), Tuna (yellowfin) (*Thunnus albacares*), -tuna written as 'target species' on the MSC website however the scope of the certificate does not include these species – see main text for additional details	Hooks and Lines - Longlines, Hooks and Lines: Pelagic longline	Western Central Atlantic	Certified with component(s) in assessment	2 356
North Atlantic albacore artisanal fishery	Tuna (albacore) (*Thunnus alalunga*)	Hooks and Lines - Handlines and pole-lines (mechanized), Hooks and Lines - Trolling lines	Northeast Atlantic	Certified	4 300
St Helena pole & line and rod & line yellowfin, bigeye, albacore and skipjack tuna	Tuna (skipjack) (*Katsuwonus pelamis*), Tuna (albacore) (*Thunnus alalunga*), Tuna (yellowfin) (*Thunnus albacares*), Tuna (bigeye) (*Thunnus obesus*)	Hooks and Lines - Handlines and pole-lines (hand-operated)	Southeast Atlantic	MSC assessment carried out in 2009-2010[48], exited the MSC certification process since then	-
Southeast US North Atlantic bigeye tuna and yellowfin tuna	Tuna (yellowfin) (*Thunnus albacares*), Tuna (bigeye) (*Thunnus obesus*)	Hooks and Lines - Longlines	Western Central Atlantic	Withdrawn	-

Source: extracted and adapted from the MSC website[49]

[48] https://fisheries.msc.org/en/fisheries/st-helena-pole-line-and-rod-line-yellowfin-bigeye-albacore-and-skipjack-tuna/@@assessments, access: 3 October 2017.

[49] https://fisheries.msc.org/en/fisheries/ , searched with keywords 'tuna' then species view. Latest access: 3 October 2017.

Appendix D: rough estimate of the number of vessels to be involved in the expected Unit(s) of Certification

The expected points of entry of the certified products into the Chains of Custody[50] are expected to be fish storage and processing factories based mainly but not exclusively in Ivory Coast and/or Ghana[50].

Taking into account the provisional scope of the fishing fleet to be part of the UoC, the fishing fleet is estimated to number around forty vessels fishing for, or on behalf of, the FIP participants. EU and non-EU purse seine vessels active in Ghana and expected to be part of the UoC[51] are taken as a provisional reference. Indeed, the number active in other coastal States and on the high seas is likely to be similar but may not include all purse seiners flagged in Ghana: 35 purse seine vessels were licensed to fish in Ghana in 2015 (based on NFDS et al., 2016 see page 38 section 5.2.2.1 Table 5.3 and the Ghana annual report to ICCAT in October 2016[52]).

[50] Expected points of entry of the certified products into the supply chains (MSC chains of Custody) on land. **Other landing and transhipping locations are likely to be covered too such as Cape Verde and Senegal**.

[51] At this preliminary stage of the FIP, the purse seiners flagged in Senegal are not considered within the UoC (5 purse seiners in 2015, Senegal 2016 annual report to ICCAT in ICCAT (2016), p 322 – see footnote **Error! Bookmark not defined.**).

[52] ICCAT (2016). 2016 COM – Annual Reports of CPCs and NPCs. Doc. No. COC-301 / 2016. 25 October 2016. 494 pages. See the Ghana annual report ANN-017/2016 in page 169 Part 1 section 1 first line of the paragraph. Note that there is no purse seine vessel flagged in Ivory Coast recorded in the online ICCAT database (http://www.iccat.int/en/vesselsrecord.asp , extraction 27 May 2017), see also the 2016 Ivory Coast annual report to ICCAT section 1.2: : one longliner flagged in Ivory Coast active in 2015 (2016 COM – Annual Reports received late Doc. No. COC-301-Addendum 2/ 2016 November 11, 2016 (1:13 PM) – internet: http://www.iccat.int/com2016/index.htm , latest access: 27 May 2017). In 2017, two Ivorian longliners are active (MIRAH – Fisheries Directorate, pers. comm., July 2017)