

MARINE STEWARDSHIP COUNCIL

INDEPENDENT ADJUDICATION

IN THE MATTER OF

AN OBJECTION TO THE FINAL DRAFT REPORT AND DETERMINATION ON THE PROPOSED CERTIFICATION OF THE AGAC FOUR OCEANS INTEGRAL PURSE SEINE TROPICAL TUNA FISHERY (INDIAN OCEAN)

DECISION OF THE INDEPENDENT ADJUDICATOR

1. This is the post-hearing decision in respect of the objection to the certification of the AGAC Four Oceans Integral Purse Seine Tropical Tuna Fishery (Indian Ocean). The Objector is the Coalition for Transparent Tuna Fisheries (CTTF). The Conformity Assessment Body is Lloyd's Register (hereafter the "CAB"). The Fishery Client is AGAC.
2. A number of case management issues have arisen and the parties engaged in a case management hearing by remote means on 27 January 2022. All parties were agreed that there must be an objection hearing and one took place by hybrid means on 01 and 02 March 2022. The parties, their representatives and witnesses attended by a mix of in-person at offices in Madrid and by video/audio link from various locations. As envisaged in the earlier case management decision of 09 February 2022, all parties effectively participated through providing the IA with information/evidence and submissions.

3. The parties provided a substantial number of documents by way of a Dropbox “e” file. There were more documents in each parties’ sections of the “e” bundle than were referred to at the hearing and parties are reminded to take a proportionate approach to the contents of the ‘record’ and only include such documents as are relevant and necessary.
4. At the conclusion of the hearing, it became apparent the parties’ submissions were traversing a number of areas of international maritime conventions. These were not provided to the IA in the agreed bundle of papers. It was directed there should be an agreed set of international conventions which were relevant, and these were provided to me on 04 March 2022, and the parties were provided with the opportunity to file and serve further written submissions on the applicability, if any, of these international legal matters, by 11 March 2022. All parties took up that opportunity and 33 further pages of submissions were provided on 11 March 2022.
5. I also note that Mr Hofford on behalf of the Objector has made a number of written requests to the Fishery Client in respect of data. Towards the end of the first day of the hearing Mr Hofford, sought the following information, by way of email request to AGAC:

“A complete dataset of all AGAC drifting Fish Aggregating Devices (dFADs) in the Indian Ocean, including

- (1) date, time & positions of deployment, ownership of each AGAC dFAD (with name of the AGAC vessel)*
- (2) details of the materials it was constructed of and its dimensions of each AGAC dFAD*
- (3) means of independent verification of dFAD materials & construction details*
- (4) daily position of each dFAD during its lifetime*
- (5) Fate of the dFAD - lost, retrieved, abandoned*
- (6) means by which this data has been independently verified*

6. The IA has not been asked to rule on this issue.
7. At the objection hearing, Mr Alex Hofford represented the Objector and was supported by Ms. Jess Rattle, Head of Investigations, Blue Marine Foundation; Dr. Iris Ziegler, Head

International Cooperation, Sharkproject International; Dr Valentin Schatz, Research Associate, Institute for the Law of the Sea and Maritime Law, Faculty of Law, University of Hamburg. The CAB was represented by Ms Sasha Blackmore, counsel, Mr David Japp assessor on P3, Mr Stewart Norman assessor on P2, Mr Tom Lopes Vieira Senior Fisheries Technical Officer and Mr Rob Blythe-Skymre, team lead assessor. The Fishery Client was represented by Mr Julio Morón, Mr Miguel Herrera and Ms Isadora Moniz. I record my gratitude to them all for their helpful approach to the objection hearing and to AGAC for providing the facilities for the in-person aspect of the hearing.

8. The Fishery was assessed against Fishery Certification Process version 2.1.
9. CTTF's Notice of Objection sets out thirteen scoring objections in respect of the following Performance Indicators
 - a. 2.1.1
 - b. two separate challenges to 2.3.1
 - c. 2.3.3
 - d. 2.4.1
 - e. 2.4.2
 - f. 2.4.3
 - g. 2.5.1
 - h. 2.5.2
 - i. three challenges to 3.2.3
 - j. 3.2.4.
10. I remind myself that:
 - a. PD 2.7.6.1 states that "In no case shall the independent adjudicator substitute his or her own views or findings of fact for those of the CAB."
 - b. The purpose of the Objection Procedure is to provide an orderly, structured, transparent and independent process by which objections to the Final Draft Report and Determination of a CAB can be resolved. PD 2.1.1.1.

- c. It is not the purpose of the Objection Procedure to assess the subject fishery against the MSC Fisheries Standard, but to determine whether the CAB made an error of procedure or scoring.

11. Each of CTTF's grounds of objection require application of the following test set out at PD 2.8.2 c:

The score given by the CAB in relation to 1 or more PIs cannot be justified, and the effect of the score in relation to 1 or more of the PIs in question was material to the determination, because either: i. the CAB made a mistake as to a material fact, or ii. the CAB failed to consider material information put forward in the assessment process by the fishery or a stakeholder, or iii. the CAB failed to consider material information put forward by the peer reviewer(s), or iv. the scoring decision was arbitrary or unreasonable in the sense that no reasonable CAB could have reached such a decision on the evidence available to it.

12. As can be seen from the relevant excerpts from the Fishery Certification Process, it is not the role of the IA to form his/her own view as to what score would be appropriate for an identified performance indicator. The basis upon which a remand to the CAB can be directed in respect of a scoring ground of challenge is as set out above. I cannot direct a remand because I disagree with the CAB's score and would have scored it differently myself.

13. Prior to the Objection Hearing, I asked the parties to provide me with lists of essential reading. Each did so, and I read those papers and references in the days in the run up to the hearing. I have since re-visited many of these references and considered as many of the others as the parties indicated I should look at during the hearing. The fact I have not referenced a paper does not mean it has not been considered. I was asked to look at dozens of papers in an exercise which is already very document intense and this decision would be unwieldy and overly long if I were to set out the background of every document I had read.

14. It is helpful to set out a little background to the Fishery who are the subject of the CAB's assessment. The CAB's detailed 586 page Final Draft Report (hereafter "FDR" or "Report") notes *inter alia* the following:

The assessment for the AGAC four oceans Integral Purse Seine Tropical Tuna Fishery encompasses three species skipjack, yellowfin and bigeye tuna in four areas of operation, namely the Western Central Pacific, Eastern Pacific, Indian and Atlantic oceans. For this specific part of the assessment the jurisdiction is the Indian Ocean and specifically the area under IOTC management. The Units of assessment are UoA 4: yellowfin, UoA 5: bigeye and UoA 6: skipjack.

This report is the Final Draft Report (FDR) which provides details of the MSC assessment process for the AGAC four oceans Integral Purse Seine Tropical Tuna Fishery (Indian Ocean). The process began with publication of the ACDR on the 21st August 2020 and thereafter an offsite visit held with the client and stakeholders between 21st October and 24th November 2020. Given the ongoing COVID-19 pandemic, the site visit took place remotely via conference calls as per the MSC derogation, 27th March 2020. One week, per ocean, was allocated for input and discussion with interested stakeholders.

At this FDR stage the team has taken into account the client and PR comments, stakeholder comments and MSC Technical Oversight. The team has now scored the skipjack tuna (UoA 6) fishery as meeting the criteria for MSC certification with all Principles likely to achieve an overall aggregate score of 80. Seven conditions are raised (Table 5). These include for Principle 1: SKJ stocks, PI 1.2.1 (Harvest strategy) and 1.2.2 (Harvest control rules and tools). For Principle 2: SKJ PI 2.1.2 (Primary species management strategy), PI 2.3.3 (ETP species information), PI 2.4.3 (Habitat information), and PI 2.5.3. (Ecosystem information). A condition was also raised in Principle 3: PI 3.2.2 (Decision making). The team also made two recommendations pertaining to Principle 2, PI 2.3.2 and PI 2.4.2.

UoA 4 Yellowfin scored <60 at PI 1.1.2 (Stock rebuilding), PI 1.2.1 (Harvest strategy) and PI 1.2.2 (Harvest control rules and tools) which means a fail for this UoA.

UoA 5 Bigeye tuna scored <60 at PI 1.2.1 (Harvest strategy) and 1.2.2 (Harvest control rules and tools) which means a fail for this UoA.

The team has considered the suggested changes and comments made to the PCDR and taken into account stakeholder, client, Peer Reviewers and MSC findings and made justified changes to the report. The Assessment Team determines that the skipjack fishery (UoA 6) meets the MSC Requirements, however the yellowfin (UoA 4) and bigeye (UoA 5) fisheries do not meet the MSC requirements.

15. As can be seen, the CAB took the decision to fail 2 out of the 3 units of assessment in the Indian Ocean and this objection is concerned only with the CAB's determination that the

Indian Ocean skipjack unit of assessment meets the MSC's standard. The skipjack tuna fishing takes place in the Indian Ocean and takes place by way of purse seine both using FADs and free school fishing.

16. The CAB's report sets out some background and context to the Fishery Client which is helpful background to inform readers of this decision:

The AGAC consortium, encompassing non-Spanish and Spanish flagged purse seiners including the Producers' Organization OPAGAC, includes eight fishing companies, with 47 purse seiners, fishing in tropical and sub-tropical waters of four tuna-RFMOs. Catches of the fleet in recent years have been around 385,000 t of tropical tuna species, worldwide. This represents 8% of the total catches of tropical tunas, across all fishing fleets, gear types, and oceans. The contribution of catches to the total catches of tropical tunas varies depending on the ocean, ranging from around 26% of the total catches in the Atlantic Ocean to 2% in the Western Central Pacific Ocean. Industrial purse seiners can catch schools of tuna free-swimming; aggregated beneath objects, stationary or drifting, purposely built (FAD) or not (floating objects of various types); swimming in the proximity of sea-mounts; or swimming along with various species of sharks and mammals, in particular whale-sharks, dolphins, and whales. While tropical tunas make the majority of the catches of tuna purse seiners, representing over 98% of the total catches, the remaining 1.4% is made by other species, especially other bony fish, sharks, rays, and other bycatch (Justel-Rubio and Restrepo, 2017).

The OPAGAC Code of Good Practice, which has been implemented since 2012, is in essence the culmination of the research and voluntary efforts developed by OPAGAC and reflect also the measures recommended and required by RFMOs and International legal instruments. Despite being commonly referred to as the "OPAGAC Code of Good Practice" it is implemented by the entire AGAC fleet. In 2016, WWF agreed to support OPAGAC in the implementation of a Fishery Improvement Project (FIP). The outcomes of the OPAGAC FIP (like the CGP, the FIP included all AGAC vessels) have been adopted to the Code of Good Practice and thereafter implemented fleet- wide. The activities under the FIP and Code of Good Practice are under constant review with actions modified and new projects added as RFMOs adopt new measures or the results from pilot programmes and research activities become available (Herrera & Morón, 2017; Herrera et al 2019).

17. As some time was spent at the hearing considering the practice of fishing from fish aggregating devices (“FADs”), it is important I set out some of the CAB’s over-arching discussion on the Principle 2 issues in its report from pages 156-157:

The circumstances regarding drifting Fish Aggregating Devices are considerably more complex. Different types of FADs can be deployed, conventional FADs (i.e., entangling and non-biodegradable), NEFADs (i.e., non-entangling and non-biodegradable) and BIOFADs (i.e., non-entangling and biodegradable). The AGAC fleet has committed to only deploying NEFADs or low entanglement risk FADs and evidence of compliance with this CGP initiative is available from AZTI (AZTI 2020).

Since their introduction in the early 90s purpose-built drifting FADs have become a staple of the modern day industrial tropical tuna purse seine fisheries, with over half the tropical tuna caught worldwide now fished by purse seine on FADs (ISSF, 2019). Tuna catches associated to FADs for the Spanish fleet accounted for around 80% of the yearly catches in the Indian Ocean (Báez et al., 2018). This trend is not surprising when it has been shown that FADs have contributed irrevocably to improving fishing efficiency, reducing searching time and increasing successful catch rates (Dagorn et al., 2012a; Fonteneau et al., 2013).

The concerns over the use of FADs are the same throughout each ocean basin and include: (1) reduction in yield per recruit of some target species (i.e. yellowfin and bigeye tuna); (2) increased by-catch and perturbation of pelagic ecosystem balance, including ghost fishing of sensitive species (e.g. sharks, turtles); (3) source of marine debris and impacts on coastal habitats as a result of beaching events; and (4) alteration of the tuna behaviour (Moreno et al 2019 and see references in Grande et al 2019b – Bromhead et al. 2003; Hallier and Gaertner, 2008; Dagorn et al. 2012a; Filmlalter et al., 2013). It is concern (3) that is the topic of investigation here.

The UoA has operating in the Indian Ocean 15 active vessels serviced by five support vessels. The activities of supply vessels and the use of FADs are an integral part of the fishing effort exerted by the purse seine fleet. Resolution 19/02 establishes the maximum number operational buoys followed by any purse seiner at 300 and restricts the annual purchase of instrumented buoys to 500 for each PS vessel. Thus, for the AGAC fleet a total of 4500 active buoys and maximum 7500 instrumented buoys are available annually.

The management of FADs in place in the Indian Ocean, bolstered by the efforts of the AGAC fleet, aims to reduce the likelihood and consequences of beaching events and other ecological effects of FADs through a number of specific measures. Initially considered by the IOTC for

management in 2012 the approach to increasing reforms has been iterative through the revision on successive Resolutions.

Resolution 19/02 [which superseded Resolution 12/08, 13/08, 15/08, 17/08 and 18/08] has built on the established procedures for FAD management plans, including more detailed specifications of catch reporting from FAD sets, and the development of improved FAD designs to reduce the incidence of entanglement of non-target species. CPCs are required to report the number of FADs deployed, transferred and lost annually and to complete the FAD logbook relating to fishing activities associated with FADs. FAD management plans include details to reduce the catch of small bigeye and yellowfin tuna and non-target species; and plans to prevent the loss or abandonment of FADs. Res. 19/02 further outlines the requirements for the use of non-entangling FADs and encourages the development and use biodegradable FADs (the BIOFAD project speaks to this). FAD tracking and recovery procedures are also detailed in the Resolution and effective 01 January 2020.

18. I have also paid close regard to the document by AZTI entitled “Report on data gathering program status in the different oceans (2015-2019)” dated October 2020. I set out the background to this document:

About half of the tropical tuna caught worldwide annually is fished by purse seiners mainly using fish aggregating devices (FADs). During the last decades, due to the effectiveness of this fishing strategy, tuna catches on FADs have increased. For example, fishing on FADs by the Spanish tropical purse seine fleet have accounted for around 80% of the yearly catches in the Indian Ocean (Báez et al., 2018; Báez et al. 2020). These devices, although being a very effective fishing tool are also controversial due to their potential impacts on the marine ecosystem: (1) reduction in yield per recruit of some target species (i.e. yellowfin and bigeye tuna); (2) increased by-catch and perturbation of pelagic ecosystem balance, including ghost fishing of sensitive species (e.g. sharks, turtles); (3) source of marine debris and impacts on coastal habitats as a result of beaching events; and (4) alteration of the tuna behavior (Bromhead et al. 2003; Hallier and Gaertner, 2008; Dagorn et al. 2012a; Filmalter et al., 2013). To decrease impacts and improve the long-term sustainability of the fishery, the two Spanish tuna purse seiner associations, ANABAC and OPAGAC, established in 2012 a voluntary agreement for the application of good practices for responsible tuna fishing activities, hereafter referred as the Code of Good Practices (CGP). The aim of this agreement is to use best fishing practices by reducing mortality of incidental catch of sensitive species (sharks, rays, mantas,

whale sharks, and sea turtles) and the use of non-entangling FADs. Although interaction with cetaceans are residual in the purse seiner fishery and non-intentional, following the conservation and management measures of some RFMOs (i.e. Res. 13/04 of IOTC; CMM-2011-03. of WCPFC), in 2019 cetaceans also have been included as sensitive species in the program. The good practices defined in this agreement comprise best releasing practices for sensitive fauna, the design and use of FADs that do not entangle sensitive associated species (primarily turtles and sharks), 100% observer coverage, continuous training of fishing crew and scientific observers, and the implementation of a FAD logbook for a standardized data collection on FADs. Moreover, the system also includes a Steering Committee to review the progress and functioning of the program and continuous monitoring and data analysis by the independent scientific body, i.e. AZTI. Some of these mitigation measures were adopted voluntarily before the tuna RFMOs did and they were instrumental for the adoption of similar standards at the RFMO level.

19. CTTF presented its case by way of five general presentations rather than addressing each ground of objection in detail. Therefore it is appropriate to set out a brief summary of the presentations from Mr Hofford (there were two) Ms Rattle, Dr Ziegler and Dr Schatz.
20. Mr Hofford presented an overview of CTTF's concerns which were heavily focused on the negative impacts of FADs on the marine environment, on how FADs are said to impact the life of tuna, of silky sharks and on corals and other marine environments. CTTF are concerned about the pollution caused by commercial fishing in the Indian Ocean. He told me that the ocean contains unique biodiversity and fragile ecosystems, is a valuable source of food and is also a major sink for anthropogenic carbon. In the face of the accelerating impacts of climate change, high levels of biodiversity loss, and increasing human pressures on the ocean, CTTF believes that responsible stewardship is required now more than ever to ensure that tuna fisheries are truly sustainable and that they are operated in a transparent and responsible manner. He emphasised the important roles some of the constituent members of CTTF carry out in respect of Indian Ocean fisheries. It is important to emphasise here that a number of CTTF members such as the Blue Marine Foundation, Shark Guardian, Sharkproject and the Olive Ridley Project all have official observer status at the Indian Ocean Tuna Commission (IOTC) and that their scientists and experts have for many years participated at IOTC meetings. The meetings they participated at ranged from IOTC working party meetings such

as the Working Party on Tropical Tunas and the Working Party on Ecosystems and Bycatch to meetings of the IOTC's Scientific Committee as well as the annual IOTC Commission meetings. CTTF emphasised it called expert witnesses during the objection hearing who are highly regarded experts in their fields and who have also participated in numerous IOTC meetings.

21. In terms of the adjudication Mr Hofford made an important point on the procedure. He said:

“I would like to emphasize a point again that I made during the consultation phase. If the starting point during our consultation and also during this objection hearing phase of the process was that ‘the CAB is always right’ or ‘the CAB has the necessary expertise and knowledge to score the fishery correctly’ or ‘the CAB’s rationale for awarding scores is the only conclusion that can be reached based on the science and data available’, then this objection process would be rendered a pointless waste of time and effort.

I therefore hope that we will receive a fair hearing and that the issues we’ve raised will be considered on merit.”

22. Mr Hofford quoted from MSC sources, including the Sustainable Tuna Handbook where he relied on the following excerpt about FADs:

In their Sustainable Tuna Handbook they have the following to say about the Impacts of FAD Use:

“FADs, particularly those that are left to drift on the high seas, are highly controversial because of their potential impact on the marine environment. This poses a risk to the sustainability of tuna fisheries because marine life can become entangled in the nets that are attached to some designs of FADs”.

“The aggregation of species other than tuna beneath FADs also makes them more likely to be caught as bycatch in the same nets or lines used to catch tuna. This causes concern among NGOs and creates apprehension about sourcing from fisheries that use FADs”.

“Other issues with drifting FADs include their potential effects on tuna migration and the materials they are made from: if a FAD becomes lost or derelict, it can damage corals or contribute to ocean plastic. This is problematic because there are an estimated 90,000–120,000 FADs worldwide so their cumulative impact can be damaging if not managed effectively.”

23. Mr Hofford said that nothing much has changed in the way that drifting FADs operate in the Indian Ocean since the MSC set out its approach in 2016 about the need to disincentivise ‘irresponsible’ fishing techniques such as tuna fishing on drifting FADs. He argued there is still a lack of transparency around the ownership of drifting FADs, their trajectories through the ocean, the materials they are constructed with and their dimensions and what ultimately happens to them once they are no longer useful to the purse seiners that deployed them. It was said that little was known about drifting FADs washing ashore and that there is every sign they are being constructed from non-entangling materials or that biodegradable materials are not being used. Mr Hofford said many are still made from plastics and are deliberately abandoned and discarded all over the Indian Ocean when they are no longer of use and that these discarded, abandoned, and lost FADs continue to ghost fish, entangling all sorts of marine life in the process. FADs wash up in pristine areas where they pollute and destroy coral reefs, seagrass beds and suffocate the nesting sites of marine turtles on sandy beaches. These impacts continue to be felt long after the purse seiners that catch so-called ‘sustainable tuna’ have offloaded their catch.

24. Mr Hofford turned to a second presentation to make a series of detailed critiques of the CAB’s approach to certifying the Fishery. He said the CTTF do not think the CAB adequately considered the impact of the Fishery on the already overfished yellowfin tuna stock. Although the Unit of Assessment does not include yellowfin tuna he said that the AGAC fishery has a serious impact on this stock and their ongoing operations can undermine the ability for the stock to be rebuilt and recover to a productive state. The ongoing impacts of drifting FADs on the ability of the yellowfin stock to recover should be of concern to all. Mr Hofford referenced the 20th Session of the Working Party on Tropical Tuna held in Seychelles in 2018, where concern was expressed by the scientists about the change in fishing strategy that had been observed in the purse seine fishery, which includes the vessels of the AGAC fleet. This concern was centred on the increased usage of drifting-FADs by purse seine vessels to maintain their yellowfin catch level targets, which led to a substantial increase of juvenile yellowfin tuna and bigeye tuna being caught by this fleet. As far back as 2006, the IOTC’s Scientific Committee already raised concerns about catches of juvenile YFT associated with drifting-FADs when it stated, “Since the early-1980s there has also been an increase in both

purse seine fishing on floating objects and artisanal fisheries which has led to a rapid increase in the catch of juvenile yellowfin. The rapid expansion, particularly on juvenile fish, is cause for concern, since it displays all the symptoms of a potentially risky situation.”

25. Mr Hofford said that FADs are seen as a very controversial fishing technique due to some of the following issues:

1. The entanglement of marine life while active - The netting used on FADs can entangle, maim and kill many marine species, including turtles, sharks, billfish, dolphins and whales.
2. Ghost fishing - When FADs disintegrate at sea or are abandoned, lost or discarded they continue to entangle marine organisms. So-called ‘none-entangling’ or ‘low-entangling’ FADs often becomes an entangling mess when they beach on reefs and beaches and get torn apart by the action of waves. The practice of making the tail or sub-surface structure of a FAD out of ‘sausage netting’ is therefore not a good preventative measure against entanglement and ghost fishing.
3. Pollution - Contribute to plastic pollution and there is no Polluter Pays mechanism – coastal states have to clean up the mess left by purse seiners
4. Ecological trap - Tuna get ‘trapped’ around suboptimal habitats due to the illusion created of food and shelter around FADs.

26. Reference was made to various figures showing the lack of retrieval and high levels of abandonment of FADs in the Pacific which was said to be relevant to the Indian Ocean.

27. Mr Hofford also raised concerns about transparency and access to data. He said despite a lot of FAD data being available, none of this has been written up into a report that is transparently shared with scientists and managers so that they can make informed decisions. The CAB failed in their duty of applying the precautionary approach. When data is not forthcoming, assumptions should not be made about the low environmental impacts of FADs. The burden of proof should lie with the industry to make this data accessible and transparently share it with all stakeholders so that informed opinions can be made.

28. Mr Hofford also discussed FADs in the context of marine pollution. I note everything he said in this context, but he referred me largely to an academic article by Professor Churchill, which I reference further below and in any event Dr Schatz dealt with this issue in greater detail.
29. Mr Hofford also made mention of the fact abandoned FADs can end up anywhere: washed up on beaches, stuck on coral reefs, or in mangroves. He said a study estimated that one in 10 FADs used by the French fleet in the Indian Ocean between 2007 and 2011 eventually beached. I was shown a picture of an entangled mass of rope on a beach – he told me this is what remained of a FAD after it washed ashore on Aldabra Atoll, a UNESCO World Heritage site in the Seychelles. As reported by Monga Bay, in 2019, when Jeremy Raguain, a conservationist from the Seychelles visited, he reported it was a tangle of buoys, netting and fishing ropes weighing hundreds of kilograms. The fishing aid was made of a floating raft and an underwater trail. Mr Hofford told me the Aldabra Atoll is very remote — it takes a chartered flight and a chartered boat from the main Seychellois island of Mahé to get there — and this makes cleaning operations difficult and costly. FADs stuck on coral reefs offshore are even trickier to dislodge. Those that remain at sea are also a menace, he said. Their plastic components can break down into tinier particles and enter the marine food chain.
30. Ms Rattle told me about the Blue Marine Foundation (BMF) and its work. BMF has been an observer to the IOTC since 2019 and has attended many sessions of the Commission over recent years. BMF has made presentations to the Commission and the UK Delegation. Several reports and information papers have also been published.
31. Ms Rattle took particular issue with PI 3.2.3 because she said there was widespread non-compliance with AIS regulations by the OPAGAC/AGAC Indian Ocean fleet. She quoted from MSC Fishery Standard Guidance GSA 4.9 which recognises but does not require continued improvement beyond the MSC best practice. To meet the standard there must be a monitoring and control surveillance system in place. She told me the International Convention for the Safety of Life At Sea (“SOLAS”) required AIS to be fitted aboard all ships of 300 gross tonnage and over on international voyage. She also refereed me to EU law, namely Article 10 Regulation 1224/2009 as amended and made reference to Article 6 (a) and Annex II. She made

reference to a letter from Ms Veits the acting director of EU Fisheries policy dated 06 December 2019, the contents of which I note but do not quote.

32. She presented detailed information on the extent to which the AGAC fleet was using AIS on only a limited basis over a period of analysis of 850 days. Compliance with AIS ranged between 3.8 % to 33% but well below the levels expected.

33. She told me AIS was an important tool used for safety at sea although it was not explicitly a fisheries management tool, but that it had potential to be used as fishery monitoring tool. Ms Rattle quoted the background to Principle 3 of the MSC standard which states:

“The fishery is subject to an effective management system that respects local national and international laws and standards and incorporates institutional and operational frameworks that require use of the resources to be responsible and sustainable.”

34. I was shown some guidance or opinions about when AIS should remain operational even in dangerous waters where pirates operate. It was suggested however that commercial confidentiality was also often the basis the AIS was switched off. She argued the failure to use AIS consistently meant that a score of 60 was not achievable on PI 3.2.3.

35. She then turned to explain how Spain had misreported its yellowfin tuna catch and this went to the issues of compliance and enforcement related to PI 3.2.2. She showed me statistics that were said to reflect the fact yellowfin tuna catches were 31 % higher (13, 606 t) higher than those reported in 2018. I was shown excerpts from an IOTC 2020 and 2021 compliance committee reports from where disquiet was recorded about the EU reporting. There was criticism of the EU for not responding to the IOTC concerns.

36. In effect I was asked to consider the CAB’s score of 80 could not be justified for these two reasons.

37. Dr Iris Ziegler gave evidence about silky sharks. She explained the background mission of Sharkproject. She set out the purposes of their engagement with RFMOs as follows:

- Improved reporting, monitoring & surveillance to provide adequate information on stock status to guide conservation.
- Harvest control rules & reference points for rebuilding of overfished stocks applying at least total limits for observed and unobserved mortality of bycatch species.
- Bycatch reduction of ETP species through technical and management measures driving avoidance and mitigating mortality.
- Fins Naturally Attached without exceptions is the globally acknowledged best practice to prevent shark finning.
- Sustainable management of all stocks.
- Stop overfishing immediately.
- Realistic rebuilding plans for overfished stocks with species specific probabilities to rebuild at least to BMSY in shortest possible time.
- Best available science must be applied.
- Precautionary principle as an obligation if no or insufficient data are available.

38. She set out a list of Sharkproject's stakeholder status in a large number of international fishery bodies and explained a little about the project's MSC stakeholder experience.

39. Through a variety of sources she made clear the dangers to a variety of sharks from commercial fishing and described the current sharp reduction in numbers as a "mayday call" for them. She referenced IUCN Red List 2021/3 which says 167 out of 537 shark species are "threatened". She made reference to academic papers which said the population of pelagic sharks have decreased by 71% over the last 50 years and that 30% of apps shark species and rays could go extinct with the next decades.

40. She described in detail the taxonomy, habitat and biology of silky sharks. She referenced Indian Ocean specific matters, such as their stock status which is said to be highly uncertain. There are many threats to them, from fishing as they end up as bycatch and the silky shark, she said, is the third most traded shark species. I was told about the existing regulations for conservation to protect them: the IUCN classified them as vulnerable in 2017. Dr Ziegler then linked these threats to FAD fishing and explained the need for FADs to be non-entangling and made without nets or mesh. That biodegradable material should be used. She referenced Filmater, 2013 that 7500 drifting FADs are deployed in the Indian Ocean per year by EU fleets. That

there is a lot of ghost fishing and lost gear damages the environment. Dr Ziegler showed me pictures of non-entangling FADs which she said reflected best practice but were not being used. She also said there was no proof that the lower entangling FADs were being used by the AGAC Indian Ocean fleet.

41. She turned to describe mortality rates. She set out the following based on Filmlalter 2013:

- 480,000 - 960,000 Silky Shark estimated to become entangled and subsequently die annually in Indian Ocean FADs.
- The number of Silky Sharks that die by becoming entangled in the FADs was estimated as 5-10 times higher than the number estimated to be taken as bycatch in Indian Ocean FAD-associated purse seine sets.
- Sharks that were caught in FADs died and fell out within two days, therefore, there is the potential for very high levels of cryptic mortality on FADs.

42. She was also concerned about the ecological trap hypothesis on sharks. She also described the high levels of post catch mortality, such as:

In the Indian Ocean, due to the high abundance of FADs, it was estimated (Filmlalter et al. 2013) a silky shark has a 29% chance of survival to age 1, 9% chance to age 2 and only a 3% chance of survival to 3 years old.

- The fishery-induced mortality for entangled sharks was 18% while it was 85% for brailed sharks adding up to an overall mortality of 81% (Poisson et al 2014)
- Silky Sharks have a high level of post-release mortality in tropical tuna purse seines. Survival rate of 15.8% for sharks landed during typical fishery operations (i.e. pre-set and encircled sharks excluded) which corresponds to a total mortality rate of 84.2% (Hutchinson et al. 2015)
- For comparison: hooking mortality on tropical longlines is ~56% (Coelho et al. 2012)
- Between 2011 and 2012, at-vessel mortality rate ranged from 15% to 70%, and total mortality rate (i.e. the combination of at-vessel and post-release mortalities) ranged from 80% to 95%. (Eddy 2016)

43. I was told about post catch release best practice.

44. Dr Ziegler compared the AGAC Fishery scores with those given to the Echebaster Indian Ocean fishery. She told me the scores for P1 2.31, 2.3.2 and 2.3.3 could not be justified.
45. She concluded by making reference to the forthcoming MSC “fins naturally attached” policy which will come into force in the future.
46. Dr Valentin Schatz is a research associate at the Institute for the Law of the Sea and Maritime Law at the University of Hamburg. He focused his evidence on the CAB’s score of 80 for PI 3.2.3 and made particular reference to Professor Robin Churchill’s article - “Just a harmless Fishing Fad - or Does the Use of FADs Contravene International Marine Pollution Law?” published in *Ocean Development and International Law* 52 (2) 169-192.
47. Dr Schatz began his submissions by noting the lack of data about lost or abandoned FADs in the AGAC Indian Ocean fleet and referenced the Escalle 2020 report that said 42% of FADs are classified as lost and only 9% were retrieved in the Pacific. He set out a definition of illegal, unreported and unregulated fishing by way of the UN FAO “International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing” (IPOA-IUU).
48. He went on to reference marine pollution laws and the definition of “dumping”. He referenced Article 1(1)(5) on the UNCLOS which used the term “deliberate disposal”. He then referenced the London Dumping Convention and Protocol. The latter of which contains a general prohibition on dumping at Article 4. He referenced the fact Professor Churchill argues that the abandonment of FADs does constitute dumping and therefore comes within the provisions of the London Convention and Protocol and UNCLOS.
49. Dr Schatz then discussed Annex V of the International Convention for the Prevention of Pollution from Ships (“MARPOL”). He submitted this included abandonment of FADs and was contrary to the Annex V prohibitions.
50. He helpfully set out a summary of his main submissions as:
- 1) deliberate abandonment or other loss of DFADs constitutes dumping in violation of international law (LC/LP) and domestic implementing law.
 - 2) non-accidental loss of DFADs violates MARPOL Annex V.

- 3) such fishing practices can constitute IUU fishing.
- 4) deliberate abandonment/non-accidental loss if large-scale and unmonitored “loss” is integrated into business model?
- 5) in any event systematic and predictable loss of DFADs (up to 90%?) as a business model does not ensure compliance with LC/LP and MARPOL.
- 6) doubts with respect to Principle 3 and PI 3.2.3. Compliance and enforcement: Is there really a monitoring, control and surveillance mechanism in place (SG60) or even implemented (SG80) that ensures compliance with LC/LP and MARPOL Annex V?
- 7) future: need for clarification in LC/LP and MARPOL, as well as improved RFMO regulation (“harmonization”).

51. Throughout my discussion below of the individual grounds of objection I have these five background presentations firmly in mind.

52. I take each of the grounds advanced by CTTF in turn.

2.1.1

53. Performance Indicator (PI) 2.1.1 seeks to ensure that the Unit of Assessment (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.

54. The Objector submitted the score of 80 for yellowfin tuna could not be met because of the high capture rate by the AGAC fleet of yellowfin tuna smaller than the size at first maturity in FAD sets is highly likely to be contributing to the deteriorating condition of the stock including recruitment overfishing.

55. The CAB’s report explains its score of 80 as follows:

Yellowfin tuna – The overall stock status conclusions do not differ substantially from the previous assessment; although fishing mortality is estimated to be above FMSY ($F_{2017}/FMSY = 1.12$), current (2017) spawning biomass is estimated to be well above the LRP of 0.4 BMSY ($SB_{2017}/SBMSY = 0.87$), (Fu et al. 2018). It is therefore highly likely that the yellowfin stock is above the PRI and **SG60 and SG80 are met.**

The base case estimates the SB₂₀₁₇/SB_{MSY} at 0.87 (0.73-0.82)(95% CI, Fu et al. 2018). Total catches increased slightly in 2016, 2017 (~409,000t) and 423,815 t in 2018 compared to previous four years despite that IOTC Resolution 17/01 (IOTC, 2017a) requested major fleets to substantially reduce their yellowfin catches from the 2014 or 2015 catch level, hence, although the status of the resource might be fluctuating around the MSY, with recent catches around the MSY level, the resource would possibly stay below the BMSY level. Considering that there is not a high degree of certainty that the stock is not at or fluctuating around a level consistent with MSY, **SG100 is not met**.

56. The Objector relies on a Global Tuna Alliance report from 2021 which assessed yellowfin tuna catches between 2000 and 2009 and found that some 78% were deemed immature. CTF submitted yellowfin were subjected to overfishing.

57. The CAB's response made two key points aligned to this and in the context of the MSC Standard:

The base case scenario estimates the SB₂₀₁₇/SB_{MSY} at 0.83 (0.74-0.97) with 95% Confidence Intervals (CI) (Fu et al. 2018). The stock status for 2017 spawning biomass is therefore estimated to be well above the 0.5B_{MSY} limit reference point (proxy for point of recruitment impairment - PRI) with a high degree of certainty (i.e. 95% CI = >90th %ile).

PI 2.1.1 SIa SG100 requires that there is a high degree of certainty (>90th %ile) that the stock is above the PRI; whilst this is the case for yellowfin tuna, SG100 also requires that the stock is "*fluctuating around a level consistent with MSY*". Given the stock is currently below the Bmsy level, this latter part of the SG100 requirement is not met for yellowfin tuna, and so SG100 is not met overall.

58. The CAB also considered four other Indian Ocean fisheries which have been assessed by different CABs. Each of those CABs scored 80 for PI 2.1.1 in respect of yellowfin.

59. I dismiss this ground of objection. The CAB's conclusion is well evidenced, applying a range of science and with proper application of what the MSC standard requires. The CAB's approach is well reasoned and consistent with different assessments. It cannot be said to be

unreasonable or arbitrary, based as it on a high level of confidence measured in a rigorous scientific manner. I add that I do not doubt FAD fishing is negatively impacting juvenile yellowfin tuna in the Indian Ocean, but that is not the test an IA needs to apply when considering the limited nature of a scoring challenge objection against the CAB's score.

PI 2.3.1

60. There are two separate scoring challenges in respect of this PI. The first is that the CAB's assessment fails to properly consider the damaging effects of ghost fishing/FADs and the second is that purse seine fishing process results in a high mortality of silky sharks. This PI seeks to ensure appropriate national and international protections are extended to endangered threatened and protected (ETP) species and that the UoA does not hinder recovery of ETP species. The CAB scored 80 for the UoA.
61. The Objector's key points were set out in the Notice and can be summarised. There is no independent verification that non-entangling and biodegradable dFADs are used. It has been reported that the actual implementation of non-entangling dFAD designs remains low in the Indian Ocean. Some of the promoted designs tie this netting into "sausages" or have other similar suggestions, but the netting unravels and becomes an entanglement risk as the dFAD degrades at sea or collides with a reef or other habitat. Long lasting impacts on ETP species through ghost fishing have not been applied by CAB. This submission was supported by Mr Hofford's and Dr Ziegler's evidence as summarised above.
62. The CAB's main response can be summarised as follows. The AGAC fleet operates against the Code of Good Practices (CGP 2020). Implementation of the Code is the responsibility of the vessel crew whilst compliance with the Code is monitored by observers and verified annually by the external scientific organisation AZTI. This is a reference to the AZTI report which I refer to above. The data is used to validate compliance with the CGP and inform the Steering Committee. The information is used to evaluate whether the CGP is being implemented successfully and AZTI provide annual reports summarising the vessels' level of compliance. Secondly, they argued it is no longer appropriate to assume or apply the same entanglement risk to the AGAC fishery now as was estimated previously by Filhalter et al.

2013, because the FADs now in use are of non-entangling/lower-entanglement risk (“LER”) designs. These LER FADs are designed specifically to minimise the risk of entanglement, with the AGAC fleet being amongst the earliest adopters of such FADs.

63. Evidence demonstrates that LER FADs as employed by the AGAC fleet will not often become entangling and continue to ghost fish for an extended period. In fact, the point of LER FADs is to avoid entanglement. But in any event, the CAB addressed the quantification of entanglement risk specifically by setting a condition against PI 2.3.3 (ETP information). Similarly to the last ground, the CAB checked scores on this issue against other MSC certified fishery in the Indian Ocean and noted the other CAB’s had also assessed this PI at 80 or above.
64. In respect of silky sharks, I heard persuasive evidence about the need to protect them and their vulnerability at the hands of commercial fisheries from Dr Ziegler.
65. The Objector submitted that the IUCN has classified silky sharks as vulnerable and their status as silky sharks in the Indian Ocean is uncertain as no quantitative assessment has been undertaken due to lack of information. By adding direct mortalities, retained sharks and post-release death of 90% of the reported alive sharks, mortality caused by this fishery could be as high as 12,528 sharks annually. Reliance was placed on study by Poisson et al. (2014), which showed an overall mortality of 85% of silky sharks brailed on board, with meshed sharks having a lower mortality rate of 18%. A 2013 assessment in the Western Indian Ocean showed 0.5 – 1 million juvenile silky sharks die every year due to FAD entanglement.
66. The CAB’s Report considered the impact of FAD fishing on a wide range of ETP species. The CAB were alive to the risks of silky sharks. The FDR noted:

The average 2013-2017 reported IOTC catch of silky shark is 2,967 tonnes (IOTC2018f), which is very likely to be an underestimate because catch reporting for sharks by IOTC CPCs is thought incomplete. IOTC 2016b highlights that catches of sharks are usually not reported and when they are they might not represent the total catches of this species but simply those retained on board, whilst it is also likely that the amounts recorded refer to weights of processed specimens, not to live weights. In 2015, only seven countries reported catches of silky sharks in the IOTC region (IOTC 2016b). The total catch of silky shark from all fleets

was estimated by Murua et al. 2013, who noted that underestimation of shark species catches concerned all species at an extremely high level, with total Indian Ocean silky shark catches estimated to be 10.6 times higher than declared catches.

Based on that estimate (2,967 tonnes) the catch of silky shark by the UoA represents approximately 1.59% of the total fishing mortality in the Indian Ocean (or 15.9% if catches are recorded accurately, which is not the case).

The AGAC fleet has also developed handling and release procedures which are in place. Post-release mortality (PCM) was estimated to be as high as 85% for brailed individuals and 18% for meshed individuals (combined PCM of 81%, Filmlalter et al 2014). The species is ranked by ecological risk assessment as the 5th most vulnerable species to purse seine gear due to its low productivity and high susceptibility to purse seine gear, however Murua et al. (2018) suggested reducing the silky shark's vulnerability rating because of likely lower PCM (estimated at 55%) due to implementation of best practices. Table 39 indicates that just over 61% of silky sharks are released dead from the vessel following capture and the application of safe handling and release measures however only approximately 10- 20% of the returned silky shark may be expected to survive post-release (Hutchinson et al. 2015).

.....

With increasing population trends for silky shark in two key Indian Ocean purse seine fishing areas, and with reference to GSA 3.4.6, data that indicate the AGAC fishery comprises a very small proportion of total mortality, it is considered that known direct effects of the UoA are highly likely to not hinder recovery of silky shark – **SG60 and SG80 are met.**

67. Additionally the CAB submit that, first, in respect of the known direct effects, at between 1.59% and 15.9% of the total catch the AGAC fleet is a below the MSC's threshold for 'hindering recovery' (GSA3.4.6). Secondly, on a precautionary basis, the CAB set a condition in PI 2.3.3, requiring that the client collects quantitative information on silky shark (and oceanic whitetip shark and marine turtle) entanglements in the FADs used in the fishery.
68. Having considered these grounds, there is nothing arbitrary or unreasonable about the CAB's score of 80 and they have provided solid reasons for it. Whilst I understand the Objector's concerns the CAB were entitled to apply the score they gave for the reasons they have provided both in the Report with the support of the further reasons set out in the Response to the Notice of Objection. They have considered material factors and I agree they are also

correct to point out their score under this PI is consistent with three other CAB's who carried out recent assessment in the Indian Ocean.

69. There is little doubt silky sharks are impacted by commercial fishing and that marine species are harmed by ghost fishing and entanglement of FADs, but the focus on these two grounds of objection is the narrow issue of whether or not the CAB's score is arbitrary or unreasonable. It is not for the IA to form his/her own scientific judgement based on all the evidence heard unless one of the clear grounds to permit a remand under the FCR are met. What is striking is the fact the CAB and the Objector rely on largely the same evidence but draw separate conclusions from this. The Objector points to the harm done in the Indian Ocean and the CAB points in a detailed and structured way to whether the MSC standard is met.

PI 2.3.2

70. This ground of objection challenges the CAB's score in respect of PI 2.3.2 - ETP species management and in particular the lack of management on ghost fishing said to be caused by FADs.
71. The Notice of Objection develops the Objector's submission as follows: whilst the CAB awards the score on the case of the AGAC fleet abiding by a Code of Good Practices the degree to which these practices are followed are not verified and their validity as justifications for scoring is said to be questionable. Further, data regarding the fate of drifting FADs in the Indian Ocean is mostly non-existent. Whilst there are many claims that only non-entangling and biodegradable FADs are used, there is little evidence of this actually being the case. Further and in any event, many FAD designs promoted as "non-entangling" or less entangling still use netting and other meshed materials which have been scientifically shown to cause large scale ghost fishing impacts upon sharks, turtles, porpoises and many other species. Some of the promoted designs tie this netting into "sausages" or have other similar suggestions, but the netting unravels and becomes an entanglement risk as the dFAD degrades at sea or collides with a reef or other habitat.
72. CTTF also said that the data submitted by the relevant CPCs involved in purse seine fishing operations using FADs is not accessible to IOTC scientists. It is therefore almost impossible

to make informed management decisions. Furthermore, the level of abandonment of FADs and low rates of retrieval (90.6% are not retrieved); observer coverage of 31% rather than 100%, are examples that the requirements are not actually being complied with.

73. I have in mind Mr Hofford's and Dr Ziegler's presentations.

74. The Objector took all these points together and focusing its submission on the MSC Standard, submitted that PI 2.3.2 requires there to be measures (or a strategy) in place which minimise the UoA-related mortality of ETP species. Whilst the measures in place may *reduce* mortality, they do not *minimise* it.

75. The CAB tackled the first point by submitting there was further content to the term 'minimise'. They submitted the PI 2.3.2 requirement points to the need to review and implement measures to minimise the mortality of ETP species 'as appropriate'. However, under the specific SLe requirement the 'appropriateness' of a measure shall be considered on the basis of SA3.5.3.3.

76. Evidentially, the CAB pointed to many of the measures or strategies they submitted evidenced the Fishery Client's good practice in minimising harm to ETP species. In particular they noted the following points: AGAC has demonstrated a long-standing interest and intent with regard to minimising the impact of the fishery on non-target species and the wider environment, including through the early adoption of LER FAD designs (Pilling et al. 2017); and launching the FAD-WATCH project in the Seychelles archipelago in 2017; and undertaking research into the development of non-entangling FADs.

77. The Client also participates actively in the ongoing programme of work at the IOTC to improve understanding of the interactions and implications of the different Indian Ocean fisheries on non-target species and bycatch mitigation, reviews actions and activity through regular meetings of the AGAC Steering Group, and new measures and approaches are implemented routinely through updating the CGP (e.g., in 2015, 2017 and 2020, after publication of the initial version in 2012). The Scientific Advisory Group (SAG) for the OPAGAC-FIP met annually to review progress of the FIP against milestones and discuss and advise on issues and "where possible suggest new approaches".

78. Through collaboration on a number of projects (HELEA, BIOFAD, FADWatch) and through the AGAC FIP and other FIP's (SIOTI, TUNACONS) and collaboration with numerous stakeholders (ISSF, WWF etc) and on-going evaluation of the implementation of the CGP, the review process for testing the potential effectiveness and practicality of alternative measures to minimise ETP mortality in the UoA. The CGP is implemented by vessel crew that undergo training specifically for the CGP and their implementation is monitored by human and electronic observers; the data generated by the observer programs are rigorously checked and reported on.
79. In any event the CAB noted they had imposed a condition under PI 2.4.3, because whilst the CAB has information on the number of FADs used, the data are complicated by the fact that deployments are listed currently as occasions when a new FAD is deployed as well as when an existing FAD is fished or lifted for servicing and then redeployed. Servicing in this case would include ensuring that the FAD has sufficient structural strength and buoyancy to avoid breaking apart or sinking, and that any degraded components are replaced.
80. As they have done in respect of other grounds of objection the CAB also pointed to other CAB's MSC assessments of this PI in the Indian Ocean to point to the fact their PI 2.3.2 score was consistent with other assessments.
81. Considering all the evidence and submissions within context, appropriately focused on the Fishery Standard, there is nothing arbitrary or unreasonable in respect of the CAB's score. Indeed, the CAB's overarching analysis set out in the Report as follows seems to be to proper and fully captures the approach of the Fishery Client to the important need to minimise ETP species mortality, as follows:

A “**strategy**” represents a cohesive and strategic arrangement which may comprise one or more measures, an understanding of how it/they work to achieve an outcome and which should be designed to manage impact on that component specifically (MSC 2018a, Table SA8).

...

ETP species considered include silky shark, giant manta rays and mobulid rays, oceanic whitetip shark, whale sharks, sea turtles, bigeye thresher shark, hammerhead sharks, porbeagle shark and great white sharks.

The Code of Good Practices (CGP 2020) reflects the practices implemented by the AGAC fleet and also the measures recommended and required by RFMOs and International legal instruments. It includes as its core measures the following:

1. The design and use of FADs (fish aggregating devices) that do not entangle sensitive associated species (primarily turtles and sharks) – although it is noted that some legacy FADs may still be in circulation.
2. The development and application of release techniques that minimize risk to associated species and optimise their survival. This includes materials and equipment provided specifically for releasing associated species.
3. The application of a FAD management system through the implementation of a FAD logbook and requirement for a responsible use of FADs during their lifetime.
4. 100% observer coverage, including support vessels – although it is noted that observer coverage actualised is closer to 65% for the Indian Ocean fleet.
5. Training for fishing masters, crew and scientific observers.
6. Scientific verification of activities related with good practices and continuous revision by a steering committee.

In addition the HELEA project (described in Grande et al 2019b) has the objective to develop and test new tools to release sharks and rays in tuna purse seiners that maximize their survival and are practical to use onboard. Metallic frame grids to release manta rays and manual tools like handles and specially designed fasteners will be tested to measure their efficiency for manipulating these bycatches while minimising injury to the animals and crew. In addition, the efficiency of shark releases with and without hoppers will be evaluated. It has been observed that for sharks (other than whale sharks) turtles, mantas and rays the animals are handled by hand and release time has been reduced, which can contribute positively to survival rates (Grande et al 2019a).

The incorporation of the abovementioned core activities of the Code of Good Practice has been realised through continued development of research studies and the OPAGAC-FIP and when combined with the monitoring and reporting requirements along with species-specific measures adopted by the IOTC that the measures constitute a management strategy for ETP species.”

82. The CAB’s expert assessment of this list of strategies and whether or not it appropriately minimises ETP species’ mortality is well developed and adequately reasoned. It is for the CAB

to assess the impact of the measures and their coherence in appropriately minimising ETP mortality and there is nothing identified in their approach by the Objector which is arbitrary or unreasonable. I reiterate that I accept the Objector's central premise that ETP species are likely to be harmed by purse seine fishing around FADs, but that is not the test. The MSC standard seeks to improve commercial fishing's standards to ensure strategies are in place to minimise ETP species mortality. For these reasons this ground of objection must be dismissed.

PI 2.3.3

83. This ground of objection is closely related to the previous one. CTTF submits the CAB's score cannot be justified because of the lack of data on the impact of FADs/ghost fishing. The Notice of Objection developed a number of related points. An assessment in the Western Indian Ocean showed 0.5 – 1 million juvenile silky sharks die every year due to FAD entanglement – the magnitude of this problem is not known in other oceans yet. It was suggested the CAB and the Client include tagging information as part of the plan to monitor entanglement issues of sharks/turtles in the CAP and transition to ISSF approved non-entangling, biodegradable FADs. Despite many claims that only non-entangling and biodegradable dFADs are used, there is little evidence of this actually being the case. Without independent verification, this data, was said to lack credibility. Lastly, as has been said before, some of the promoted designs tie this netting into “sausages” but the netting unravels and becomes an entanglement risk as the dFAD degrades at sea or collides with a reef or other habitat. This approach was supported by the evidence of Mr Hofford and Dr Ziegler.

84. The CAB's Response to the Notice of Objection noted many of the points raised by the Objector were also raised by the Objector against PI 2.3.1 and/or PI 2.3.2. The CAB submitted that the AGAC fleet has been at the forefront of the development and introduction of LER FAD designs, and the FADs used by the AGAC fleet are verified independently on a routine basis by AZTI and the CAB's assessment report points to various references that provide a detailed review of operations within the AGAC fleet. The reports pointed to by the Objector regarding risks posed to ETP species (e.g., Filmalter et al. 2013, Stelfox et al. 2014, Chanrachkij & Loog-on 2003, Seychelles 2021) cannot be properly or fairly be applied to the AGAC fleet, where the introduction and use of lower-entanglement FADs, since the data was

collected for those reports has greatly reduced the potential for entanglement. Whilst the CAB does not say it is impossible that lower-entanglement risk FADs will degrade over time, they highlighted that Balderson and Martin 2015 pointed to only ‘several’ cases from their study of 214 FADs that had beached and had at least partially unravelled. The CAB also referenced Pilling et al. 2017 and they pointed to work in the Indian Ocean and stated: “Only in very limited instances (0.4% of dFADs tested) did sharks appear entangled when the twine used to tie the net into bundles had become undone.”

85. Once again the CAB noted comparative scores by other CAB reports assessing MSC Indian Ocean fisheries for consistency.
86. Given the closely related nature of this ground to the previous ones, I do not consider the CAB’s score arbitrary or unreasonable. The CAB’s scores were carefully nuanced. No 100 scores were given for any ETP species. Scores of 80 were given for some ETP and scores of only 60 for others, such as silky sharks and some species of turtles. This demonstrates the careful judgement the CAB has exercised in considering whether PIS 2.3.3 is met for different species in the UoA. It is well justified for the reasons given in the CAB’s report.
87. I note a dispute about how the Objector quoted or mis-quoted from a CAB document which it is not necessary for me to comment on.

PI 2.4.1

88. This PI seeks to protect habitats outcome. The CTTF explained the ecological trap hypothesis and made a number of important environmental points. The use of FADs comprises an ecological trap, as originally explained by Marsac & Fonteneau (2000). The ecological trap studies show that the ecological trap hypothesis may be causing serious and irreversible harm to ecosystems. In no region do dFADs represent <50% of the floating objects and the proportion of natural objects has dropped over time as dFAD deployments have increased. This increased dFAD use represents a major change to the pelagic ecosystem.
89. Far from being reversible, deploying further FADs is adding to the problem, CTTF said. Slowing down the number of FADs being added to the ocean is not a reversal of the process

(even assuming that the numbers additionally deployed are in fact reducing). Many FADs are still constructed of non-biodegradable materials. Beach litter may entangle nesting females or emerging hatchlings. Lastly, as a widespread pollutant, plastic debris may cause wider ecosystem effects which result in loss of productivity and implications for trophic interactions.

90. The CAB scored 100 for PI 2.4.1 (a) and 60 for PI 2.4.1 (b). As for the former the CAB's Report stated:

There is no evidence that there is any potential for significant adverse interaction with pelagic habitats: (i) in the setting of the seine; (ii) during the fishing operation; (iii) in the movements of the vessels. Purse seine nets, due to their operational nature, size, and value, are rarely, if ever, lost at sea (Client, pers. Comm.).

Discarding of trash or pollutants could reduce some of the functions of the commonly encountered habitat and reduce water quality, however it is highly unlikely that the volume of discards would create serious or irreversible harm and observer records do not indicate this to be an issue.

Evidence is available to validate the timing, location and depth of fishing and would suggest that it is highly unlikely for the fishery to have significant adverse interaction with pelagic habitats, such that **SG60, SG80 and SG100 are met.**

91. For VME habitats the CAB submits it took a precautionary approach and relied on this rationale for refusing a score of 100, which in part justifies its scores of 80:

Cumulative studies analysing the total impact of all FADs lost by all industrial purse seine fleets since the early 90s when the use of FADs came into prominence, additional information on coastal beaching and expansion of initiatives like the FAD-Watch program to include other island or coastal vulnerable habitats such as seamounts, analysis of the degree to which fleets have converted to NEFADs and BIO-FADs and a variety of other information such as linking FAD-beaching to habitat service interruption, is not available to provide conclusive 'evidence' that the UoA has not and is not creating irreversible impacts to all impacted VME habitats structure and function. Information on likelihood of serious or irreversible harm being caused to reef VME in the Indian Ocean Basin region (as defined by Burke et al. 2011) from FADs deployed by the AGAC IO fleet, as presented in the SG80 scoring text above, indicates that there is an extremely low probability of breaching the 80% unimpacted level for reef VME,

even with unrealistic FAD beaching rates and over very extended time periods. Nevertheless, the Assessment Team was not able to obtain definitive information on the total number of FADs deployed annually by the fleet and subsequently lost and likely beached. When this information is available (see Condition on PI 2.4.3) it is anticipated that SG100 will be met for this SI, but from a precautionary perspective it is considered appropriate currently to determine that there is insufficient ‘evidence’ to score it at SG100.

92. I conclude that the CAB’s score cannot be characterised as arbitrary or unreasonable and therefore dismiss this ground of objection. The MSC sets the PI with the figure of 80% unimpacted figure in the relevant geographical area. The CAB are of the scientific view there is an extremely low probability of breaching this figure and I do not consider such a judgement call unreasonable.

PI 2.4.2

93. In respect of this PI, which considers whether there is a strategy in place designed to ensure the UoA does not pose a risk of serious or irreversible harm to the habitats, the CAB scored all elements (management strategy, implementation, evaluation and compliance) at SG 80.
94. CTTF objects in respect of a number of areas of analysis, as set out in their detailed Notice of Objection. Their primary submissions related to the lack of transparency in FAD management in the IOTC. They developed this by submitting that effective and sustainable management of FADs is critical to securing the long-term sustainability of tuna fisheries within the IOTC’s area of competence. They said that drifting FADs are deployed on a vast scale by industrial purse seine fisheries within and beyond nations economic exclusive zones (EEZs) and FADs have seen a 40-fold increase in abundance in some areas, have been shown to impact the entire west Indian Ocean with more than five seen per day in some locations, and they now represent over 85% of floating objects recorded in the region. Large volumes of data are already supplied to the fleets owning dFADs in near real time, greatly benefiting their commercial operations, much of this data is not made available to fisheries scientists and is therefore not enabled to inform sustainable fisheries management. The purse seine industry’s suggested motivation for this lack of data sharing is “commercial confidentiality”, but the same lack of transparency is

not accepted for VMS data on the movements of their actual vessels, although many purse seiners do display a lack of transparency in their movements anyway. In instances where information is relayed to fisheries managers, it is well-known that relying on self-reporting for compliance and other purposes is not reliable at all. Additionally, regular FAD positional data and data on the location of deployment and retrieval of FADs is submitted long after events and no independent verification of data is done. This lack of transparency means that there is very little understanding of the true impacts on FADs on habitats.

95. The CAB's Notice of Objection rejected CTTF's criticism of the scores. The CAB submitted CTTF were wrong to assert that no independent verification of FAD data is done. They said this was incorrect – FAD data from the AGAC fleet are verified independently on a routine basis by AZTI, using independent observer data, and the CAB's assessment report points to various references that provide a detailed review of operations within the AGAC fleet. Further the CAB said that data is assessed in context, which with respect to the AGAC fishery, includes data obtained through the independent observer programme, as well as the independent VMS system. This independent data indicates that the AGAC fleet complies with its management requirements, and has sometimes exceeded them with respect to FAD use, adopting the use of LER FADs prior to any requirement to do so.
96. The CAB's Reply also made a few further points. First, CTTF's rationale fails to recognise the independent data that are available on FAD types in use by the AGAC fleet, and further focuses on the potential impact of the FADs deployed by the entire purse seine fishery in the IO, when the assessment at SG80 for habitat management focuses on the UoA alone and its partial strategy. Further, CTTF does not engage with many aspects of the rationale presented in the FDR supporting the scoring of the PI, submission of annual FAD Management Plans, FAD deployment limits, the training in gear deployment and data collection in the AGAC fleet (without repeating all points as presented in our scoring rationale).
97. Once again the CAB pointed to comparative CAB scores for other MSC assessed fisheries in the Indian Ocean and the similarity of scores.
98. Taking all these factors into account this ground is dismissed. There is nothing arbitrary or unreasonable about the CAB's scores. The CAB, it seems to me, is entitled in the exercise of

its judgement to rely on ASTI's work observing and monitoring aspects of the Fishery. CTTF appeared critical of ASTI but such criticisms seemed to lack any real force. Therefore the CAB's approach and opinion in respect of the appropriate score is not unreasonable or arbitrary.

PI 2.4.3

99. PI 2.4.3 seeks to ensure the fishery has information adequate to determine the risk posed to the habitat by the UoA and the effectiveness of the strategy to manage the impacts on the habitat. The CAB scored SG 80 at "a" and 60 for VME and 80 for other habitats at SG "b".

100. The Objector disputes these scores. The Notice of Objection made the following points. As the CTTF has said repeatedly, data regarding the fate of dFADs in the Indian Ocean is almost non-existent. Currently, data submitted by the relevant CPCs involved in purse seine fishing operations using dFADs is not accessible to IOTC scientists at sea. In a study conducted at the Aldabra Atoll in the Seychelles, which is also a UNESCO World Heritage site, 25 tonnes of marine plastic litter was removed. The researchers estimated that 513 tonnes remain on the island, dominated by waste from the industrial tuna fishing industry in Seychelles. Seven of the 13 dFADs found in the clean-up on Aldabra had clearly decipherable identification codes and all came from purse-seine vessels registered to fish in the Seychelles Exclusive Economic Zone; five were from Seychellois vessels; one was Spanish and one French (Burt, 2020). Results show that waste generated by the fishing industry within Seychelles is polluting island ecosystems within the same nation state; and if the fishing industry is the major contributor to marine plastic litter in the region, then it is almost certainly having indirect negative impacts on the fish communities it needs to sustain. There is a clear lack of information on the impacts that lost, abandoned and discarded FADs have on VMEs and other sensitive marine ecosystems.

101. The CAB disagreed. It is of interest to set out their analysis for the scores at SI A and SI B as they set out a nuanced analysis as follows:

The following evidence indicates SG 60 and SG80 is met: The location of coastal and island coral reefs, seamounts and sea grass beds are known either by direct observation or

inference (Figure 40 and figures in Harris 2012). The extent of coral reefs in the Indian Ocean Basin is known (Burke et al. 2011). The local threats to coral reefs have been assessed (Figure 47). The vulnerabilities of coral reefs to FAD beaching events are known and have been assessed as being extremely low to negligible based on probability of encounter and initiatives are in place to continue analysis of impacts of lost or abandoned FADs on sensitive habitats. **SG 60 and SG80 are met** for the fishery.

VME habitats – Information on total FAD loss and abandonment is not available to determine the spatial extent of interactions of lost or abandoned FADs for all coastal and island habitats where it is likely that they occur. While the Assessment Team was provided with information on the total number of FADs in use over time by different UoA vessels and there is also evidence that the fleet maintains its operational buoys within the limits set by the IOTC, and information was provided to the assessment team on the instances and timing of support vessels servicing derelict or damaged FADs and re-deploying them, it was not possible to determine how many FADs might be lost annually from the system and then pose a risk to VME habitats from beaching. Further, FAD management plans lack elements of FAD traceability and FAD fate to better understand the spatial extent of interactions, quantify stranding's of abandoned or lost FADs, study FAD trajectories and target areas for FAD retrieval programs. **Therefore, information is not adequate to detect any increase in risk to the main habitats - SG80 is not clearly met for the AGAC Indian Ocean tuna fishery, and a condition of certification is set (Condition # 5).**

102. This analysis is hard to impeach and plainly demonstrates the scores are neither arbitrary nor unreasonable. I quite accept FADs will beach and cause harm to coral and other environments, however, the approach to the fishery must be scientific and not anecdotal. The CAB scientifically assessed the threat to coral reefs in Figure 47 of the FDR and I place greater weight on that analysis than the one observation of what took place on Aldabra Atoll. Even if there is much fishing debris at Aldabra and other remote atolls, it is not evidenced this comes from the UoA or the AGAC fishery. I fully accept commercial fishing causes marine pollution. The CAB were tasked to determine a different issue and their approach is neither arbitrary nor unreasonable.

P1 2.5.1

103. PI 2.5.1 seeks to protect ecosystem outcomes by requiring the UoA not to cause serious or irreversible harm to the key elements of the ecosystem structure and function. The CAB scored the Fishery at 80, which required the CAB to be satisfied on the evidence that 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.

104. In its Report the CAB's central element of analysis was:

The AGAC fishery contributes a maximum of 7,500 FADs present in the fishing area each year. If one considers that there are currently 52 industrial purse seiners (>2000 t GRT) active in the Indian Ocean and 304 purse seiners operating in total (<https://www.iotc.org/vessels/current>) and therefore a maximum of 26,000 FADs deployed annually by the active fleet and that there are 15 vessels in the client fishery, then the client fishery contributes 28.8% to the total number of FADS annually. The contribution of the AGAC fleet to the number of floating objects in the fishing grounds is significant however, in spite of this, the life-span of FADs means that if fishing activities were to stop, and the FADs were effectively removed from the fishery at the end of their short lifespan, then the ecosystem would likely rapidly recover from any potential impact that FADs are having on tuna behaviour such that 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, **SG60 and SG80 are met**. Without evidence to show that the shift to fishing predominantly on FADs is not having a significant impact on ecosystem trophic structure and functioning SG100 is not met.

105. The Objector focused their ground of objection on the ecological trap thesis and the need for a precautionary approach. CTTF underlined the MSC's importance in applying the precautionary approach. They said the ecological trap hypothesis for tuna was originally proposed by Marsac & Fonteneau (2000) and suggests that dFADs exhibit zonal drift and so the associated populations of juvenile tuna and associated fauna are transferred to, and remain in, areas where such schooling was not previously observed, and which are not necessarily favourable for tuna feeding. The ecological trap hypothesis may be causing serious and irreversible harm to ecosystems. Accordingly, the CAB should apply the precautionary approach and cannot dismiss the theory unless clear evidence is produced that it is not a

problem. Scoring discrepancies are evident regarding this issue are present with other fisheries in the WCPC (for example PNG - FAD component). It was said that it cannot be claimed that the UoA is unlikely to disrupt the key elements underlying ecosystem structure as there is not enough evidence to confirm the statement. The argument that if fishing activities were stopped and FADs effectively removed, the ecosystem would recover does not seem relevant as it is not a likely scenario when, in fact, fishing efforts are increasing (IOTC, 2021) and most of the FADs are left at sea.

106. In its Reply the CAB made a number of central points. The Objector's rationale focuses on the potential impact of the FADs deployed by the entire purse seine fishery in the IO, when the assessment at SG80 for ecosystem outcome focuses on the UoA alone and similarly, the Objector had failed to understand the MSC's requirements with respect to 'serious or irreversible' harm. The assertion that the CAB has "dismissed" the theory of the ecological trap ignores the introductory section of Principle 2 scoring in the FDR and the scoring rationales provided in PIs 2.5.1, 2.5.2 & 2.5.3.

107. In scoring PI 2.5.1 the CAB has addressed the theory from a spatial perspective, considering the extent of tuna movement, the likelihood of encountering introduced floating objects and natural floating objects, and the size of Longhurst Biogeochemical Provinces (BGCP) that represent specific environmental envelopes in which adapted species at lower trophic levels are present and through which large pelagic species (higher trophic level species) are linked by their varied feeding preferences and differences in tolerance to their environment. This argument suggests that the ecological trap effect would not likely influence the spatial distribution of large pelagic species as the BGCP extends. On this basis, the CAB concluded that at the relevant UoA level, irreversible ecosystem impacts related to the redistribution of tunas to biologically less favourable areas are highly unlikely.

108. The CAB said the Objector was wrong to point to the scoring in a WCPO fishery, which appears to have no relevance to the assessment of the AGAC IO fishery and is misplaced.

109. The CAB also showed once again that scoring in the Indian Ocean by other CAB's in this PI were very similar.

110. Having considered all the issues, evidence and representation I am persuaded the CAB's score is neither arbitrary nor unreasonable. Once again the deployment of the CAB's judgement after considering the relevant scientific data can be observed in their decision not to award a score of 100, but to consider carefully the MSC standard and focus on the issue of serious or irreversible harm. This exercise of judgement considered the relevant issues, the CAB disagree with the opinion of the CTTF, but there is nothing inherently unreasonable or arbitrary about the CAB's exercise of judgement for the reasons set out in the FDR and quoted above.

PI 2.5.2

111. This PI requires the CAB to assess the Fishery in respect of its management strategy, whether it is in place to ensure the UoA does not pose a risk of serious or irreversible harm to the ecosystem structure and function. There must also be management strategy evaluation, and implementation. The CAB scored the Fishery at 80 for each guide post.

112. The area of reasoning relevant to the CTTF's grounds of objection is as follows, taken from the CAB's FDR:

A partial strategy to restrain the effects of the AGAC fishery on the Indian Ocean mesoscale oceanographic processes is not necessary given that it is a major oceanographic feature and there is no conceivable way in which the AGAC fishery could be considered likely to have a significant effect.

Management of FADs has been in place since 2012 when Resolution 12/08 was implemented. Subsequent Resolutions have built on the original guidelines for preparation of FAD management plans culminating in the current Resolution 19/02. The active management measure restricts the number of FADs deployed by any one vessel thus implicitly contributes to and recognises the potential ecological impacts that increased FAD densities may be having on skipjack, yellowfin and bigeye tuna distribution and behaviour. AGAC has partaken in and/or led numerous studies regarding FAD-construction, FAD-recovery and tracking, FAD-fishing performance and the socio-economic impacts of FAD design innovation. All of these

initiatives have been undertaken to reduce the potential impacts of FADs on the environment and those bodies of work and project outcomes form an integral part of the partial strategy in place to restrain those impacts. **SG60 and SG80 are met.**

113. CTTF submitted that the data regarding the fate of dFADs in the Indian Ocean is almost non-existent and that although huge volumes of data are already supplied to the fleets owning dFADs in near real time, greatly benefiting their commercial operations, much of this data is not made available to fisheries scientists and is therefore not enabled to inform sustainable fisheries management. Further, with respect to abandoned and lost FADs, there are neither measures nor a partial strategy in place, nor is there compliance.
114. Further, it was said there was evidence from the WCPFC that showed 21% of FADs were deliberately abandoned and only 9.4% were actually retrieved - reference was also made to the Banks and Zaharai study of 2020 in the Western and Central Pacific.
115. The CAB's Reply made the following points. Many of the points raised by the Objector were also raised by them in respect of PI 2.3.2. The Objector's rationale focuses on the management and potential impact of the FADs deployed by the entire purse seine fishery in the IO, when the assessment at SG80 for this PI focuses solely on the management of the UoA's ecosystem impacts. The Objector fails to recognise the measures that exist within the IOTC generally to which the AGAC fishery is subject, and then the additional measures that exist within the AGAC fleet specifically.
116. Resolution 19/02 has built on the established procedures for FAD management plans, including more detailed specifications of catch reporting from FAD sets, limits on FAD numbers, and the development of improved FAD designs to reduce the incidence of entanglement of non-target species.
117. AGAC has formalised the requirements for FAD management, including the design and use of lower entangling and non-entangling FADs, a FAD logbook and responsible use of FADs, as well as training for fishing masters, crew and scientific observers, scientific verification of activities through review by AZTI and continuous revision through a regular steering committee process (AGAC 2020).

118. The CAB also pointed to similar CAB scores from other MSC assessed fisheries in the Indian Ocean for this PI.

119. I have little difficulty dismissing this ground of objection. The CAB's scoring is well reasoned, evidence based and is not irrational or unreasonable and ultimately the CAB are correct to distinguish the fact the AGAC fishery has agreed to abide by additional measures beyond those imposed by the IOTC. This provides a sound basis for the CAB's score.

PI 3.2.3

120. PI 3.2.3 looks at monitoring, control and surveillance mechanisms to ensure the management measures in the fishery are enforced and complied with. Several scoring guides are set out. The CAB scored 80.

121. The Objector objects on the basis that the AGAC fleet deliberately abandons FADs in direct contravention of international marine pollution law and as such, this constitutes "dumping" within the meaning of the international dumping regime, particularly MARPOL, or the IMO London Convention and/or London Protocol. Additionally, it would seem, but it is not clear, that CTTF also says when a FAD is drifting this amounts to "fishing" and if the FAD drifts where it has no authority to do so, this must constitute IUU fishing.

122. Secondly, the high level of abandonment of FADs without enforcement action shows that monitoring, control and surveillance mechanisms that are in place do not ensure that management measures are enforced and complied with.

123. The Objector made significant reference to the academic paper by Professor Churchill. The thesis, as that is what the article amounts to, was supported by Dr Schatz in his helpful presentation at the hearing, which I have taken into account generally and specifically under this ground of objection.

124. I have carefully read Professor Churchill's article. The abstract is set out here:

Fish aggregating devices (FADs) are widely used in artisanal fisheries in the Mediterranean Sea and in tropical tuna fisheries. Thousands of FADs are lost or abandoned each year, with many causing environmental damage. This article examines whether such loss or abandonment contravenes international marine pollution law. It finds that abandonment probably constitutes “dumping” within the meaning of the international dumping regime and thus, depending on the material of which a FAD is made, is either prohibited or subject to a permit system, and that the nonaccidental loss of a FAD breaches Annex V of MARPOL. The article also considers what action may be taken against the flag states of vessels that have abandoned or lost FADs.

125. The CAB disagreed with CTTF and I set out the key points from their Reply to the Notice of Objection. The CAB submitted that CTTF provided neither a clear definition nor evidence to their definition to show the AGAC fleet “deliberately” “abandons” dFADs. The CAB is not aware of any evidence of FADs being deliberately placed in the ocean with the intention to “dump” them. They are placed for a use. The CAB also submitted that CTTF’s argument is principally, it appears, based on Professor Churchill, which is an opinion. It discusses “abandonment” and “loss”. It states no higher than even if “abandonment” (as opposed to loss of, or non-recovery) of dFADs is taking place, “it probably” constitutes dumping under the London Convention. There are also exceptions which Professor Churchill discusses, which are or may be capable of applying. The CAB submitted it has value as an academic discussion paper, in a contested area, but it does not reach a conclusive view nor is it a view by a court or body of competent jurisdiction.

126. The CAB made a number of further arguments. The CAB’s scoring has considered the available information but given the political, legal and academic debate, has made no conclusive judgement on the extent to which the fishery under assessment complies with the international pollution laws and has no evidence to suggest that dFADs are abandoned deliberately. The interpretation of deliberate abandonment of dFADs, if it is indeed the case, and extrapolating the presumption that it occurs to either Principle 3 (non-compliance or IUU) as well as Principle 2, remains inconclusive.

127. By scoring the AGAC fishery as meeting SG80 the CAB exercised caution by noting that to score the fishery as meeting SG100, it requires high confidence in all the information available. The assessment of the fishery for PI3.2.3 has been precautionary and has not scored the fishery at SG100 as having i) “high degree of confidence” in the MCS system”, or ii) that “Sanctions to deal with non-compliance exist, are consistently applied and demonstrably provide effective deterrence” or iii) that “There is a high degree of confidence that fishers comply with the management system under assessment, including, providing information of importance to the effective management of the fishery.”
128. Further, the CAB deemed it appropriate to make a non-binding recommendation, acknowledging that the issue of impacts related to “Abandoned, Lost or otherwise Discarded Fishing Gear” is an emerging issue and one which is being addressed by the MSC in the revision of the Standard as well as by other international bodies such as the IMO and FAO.
129. Finally, the CAB commented that there are a range of other monitoring, control and surveillance mechanisms in place as are set out in the rationale and which contributed to the scoring rationale.
130. The CAB set out comparative scores of other CAB’s in the Indian Ocean in relation to MSC fisheries and pointed out the MSC’s need to harmonise. Unlike the other grounds of objection above, seeking to defend a score on the basis of such a comparative analysis does not assist in this ground. It may well be each CAB has misinterpreted the international conventions. This is a matter of the correct construction of the relevant conventions. It is not an exercise in scientific judgement. I do not therefore place much weight on the comparative scores or the ‘harmonised’ approach when seeking to properly understand and apply what the legal conventions require and therefore whether the Fishery is or is not in compliance with those international conventions that have been applied to it through national laws.
131. At the hearing I expressed concern that I was being asked to consider the conventions without the relevant texts having been placed in the bundle for the objection or hearing and without the benefit of more detailed submissions on their construction and application. All

three parties therefore filed and served further written submissions, as set out above. I turn to consider them.

132. The Fishery Client's post hearing written submissions state:

We would like to reiterate that all vessels associated in AGAC only deploy FADs with the intention of later retrieval. The deployment of FADs, each costing around 1500€ (the object itself plus the buoy, not counting the costs of satellite communication for its tracking), is intended to harvest fish and all efforts are devoted to FAD tracking, recovery, and reutilization. In addition, in recent years IOTC has adopted several measures intended to further and further reduce the number of FADs that purse seiners can acquire and utilize, with the existing numbers representing more than a 40% drop from the limits first adopted. This means that it is imperative for the vessels to maintain the network of FADs that they use to maximize the chances of harvesting tunas.

133. Whilst CTTF allege that AGAC deliberately abandons FADs, it has not taken me to any evidence that this is the case. I have been directed to articles which point to the high levels of FADs that are eventually abandoned and low levels of retrieval, but I have seen no evidence FADs are “dumped” or “deliberately abandoned” **by AGAC in the Indian Ocean**. The CAB have investigated this issue as part of their assessment of the Fishery and they have reported no evidence of dumping or deliberate abandonment of FADs in the Unit of Assessment with which I am concerned.

134. It follows that evidentially, in respect of this objection to the CAB's assessment of this Unit of Assessment, CTTF's submissions largely does not get off the ground because it lacks relevant evidence of deliberate abandonment or deliberate dumping (I deal with non-deliberate matters further below). However, out of respect for the detailed and helpful submissions I have received from all three parties I set out some brief conclusions on the legal arguments, noting this decision has no value as precedent.

135. I should also add that I have in mind the CAB's submission made in its post-hearing submissions (with which I am in broad agreement) that:

The CAB considers, further, this Independent Adjudicator is sitting to interpret the MSC Standard under the MSC Framework. It is not for this Independent Adjudicator, in the absence of a view of a Court or Body of competent jurisdiction, and in the absence of a consensus of view, to interpret these provisions of international law to determine or purport to determine whether Contracting Parties to those International Treaties are or are not complying with their international obligations.

136. I turn first to the London Convention 1972, Article 3(1) of the London Convention defines the concept of “Dumping” (emphasis added):

(a) “Dumping” means:

(i) any deliberate disposal at sea of wastes or other matter from vessels, aircraft, platforms or other man-made structures at sea.

(ii) any deliberate disposal at sea of vessels, aircraft, platforms or other man-made structures at sea.

(b) “Dumping” does not include:

(i) the disposal at sea of wastes or other matter incidental to, or derived from the normal operations of vessels, aircraft, platforms or other man-made structures at sea and their equipment, other than wastes or other matter transported by or to vessels, aircraft, platforms or other man-made structures at sea, operating for the purpose of disposal of such matter or derived from the treatment of such wastes or other matter on such vessels, aircraft, platforms or structures;

(ii) placement of matter for a purpose other than the mere disposal thereof, provided that such placement is not contrary to the aims of this Convention.

(c) The disposal of wastes or other matter directly arising from, or related to the exploration, exploitation and associated off-shore processing of sea-bed mineral resources will not be covered by the provisions of this Convention.

137. I do not consider that placing FADs in the water, attached to a satellite tracked buoy, (as AGAC does) to assist with commercial fishing comes within the definition of dumping set out in the London Convention. First, placing such FADs is not deliberate dumping. The FADs are not placed in the water to be dumped they are placed to be used to assist with commercial fishing. They are placed to be used to encourage fish to gather, to be more efficiently fished. Further, placing FADs in the water is placement for a purpose other than mere disposal and

given the FADs are attached to buoys and are tracked and fixed by AGAC's support vessels, there is nothing contrary to the aims of the London Convention. AGAC's use of FADs for commercial fishing is not dumping for the purposes of the London Convention.

138. I add that I identify the aims of the Convention as those set out in the recitals to the Convention. The MSC standard with its aims of reducing the harmful effects of pollution in the seas and this Fishery with its satellite tracked FADs and careful FAD management scheme are all consistent with the aims of the London Convention which is to manage the marine environment limiting the harm caused by pollution.

139. The fact some FADs may not be eventually retrieved does not bring the placement of them in the Indian Ocean for fishing purposes within the definition of 'dumping' for the purposes of the Convention. This is not deliberate disposal. Furthermore, whilst there might be an argument that the decision to deliberately abandon a FAD after it has been used for a period of time falls with the Article 3(1)(a) definition of dumping, this is then ruled out by the definition at Article 3(1)(b) of what is not dumping because the initial placement was for the purposes of fishing and not disposal and therefore *at the time of* 'placement' there is nothing to suggest this would be inconsistent with the aims of the Convention. It follows, for these reasons, I respectfully disagree with Professor's Churchill's analysis that:

While the initial placement of a FAD in the sea is not for the purpose of disposing of it, once a vessel has decided not to retrieve the FAD, the purpose of placing the FAD in the sea has changed to one of disposal.

140. The purpose for placing the FAD in the sea does not change, as is suggested.

141. In any event as this is an international convention, the relevant contracting party is not AGAC or the IOTC but Spain (or the EU) or the Seychelles. There is no evidence Spain or Seychelles has sought to take national measures against AGAC to implement its international treaty obligations. AGAC nor the IOTC are bound by the terms of the London convention, but would be bound by national measure to implement the Convention obligations, CTTF have made no reference to any national measures or even concerns raised by the relevant contracting states.

142. The London Protocol 1996 defines dumping similarly but differently from the Convention. Article 1 (4) states:

“Dumping” means:

1. any deliberate disposal into the sea of wastes or other matter from vessels, aircraft, platforms or other man-made structures at sea;
2. any deliberate disposal into the sea of vessels, aircraft, platforms or other man-made structures at sea;
3. any storage of wastes or other matter in the seabed and the subsoil thereof from vessels, aircraft, platforms or other man-made structures at sea; and
4. any abandonment or toppling at site of platforms or other man-made structures at sea, for the sole purpose of deliberate disposal.

“Dumping” does not include:

1. the disposal into the sea of wastes or other matter incidental to, or derived from the normal operations of vessels, aircraft, platforms or other man-made structures at sea and their equipment, other than wastes or other matter transported by or to vessels, aircraft, platforms or other man-made structures at sea, operating for the purpose of disposal of such matter or derived from the treatment of such wastes or other matter on such vessels, aircraft, platforms or other man-made structures;
2. placement of matter for a purpose other than the mere disposal thereof, provided that such placement is not contrary to the aims of this Protocol; and
3. notwithstanding paragraph 4.1.4, abandonment in the sea of matter (e.g., cables, pipelines and marine research devices) placed for a purpose other than the mere disposal thereof.

143. Where the wording above in respect of the London Convention is the same, the same logic applies as to why AGAC’s use of FADs is not dumping. Article 1(4)(1)(4) does not apply to AGAC’s deployment of FADs which are not then retrieved because Article 1(4)(2)(3) is clear that dumping does not take place when an item is abandoned in the sea which was placed for a purpose other than mere disposal. FADs are not placed for disposal, they are placed to assist with fishing. The three examples given “(e.g., cables, pipelines and marine research devices)” are not an exhaustive list. In any event I would not include a fishing vessel within the language of “platforms or other man-made structures at sea”. Article (1)(4) repeatedly uses the term

“vessel”, if Article 1(4)(1)(4) was drafted to include within “platforms or other man-made structures at sea” vessels, then the text of the Protocol would have included “vessel” in Article 1(4)(1)(4) but it does not. The intention could not be clearer.

144. I repeat what I have set out above in respect of the identification of the relevant contracting parties, which applies also to the London Protocol.

145. Turning lastly to MARPOL, I note the 2017 Guidelines to the Interpretation of Annex V of MARPOL states at paragraph 1.7.8:

Fishing gear that is released into the water with the intention of later retrieval, such as fish aggregating devices (FADs), traps and static nets, should not be considered garbage or accidental loss in the context of MARPOL Annex V.

146. Dr Schatz argued that notwithstanding this, FADs were caught by the terms of Regulation 3 of Annex V of MARPOL because FADs include plastic and Regulation 3(1)(a) states “the disposal into the sea of all plastics...is prohibited”. However, Regulation 3 must be read with the context of its heading: “Disposal of **Garbage** Outside of Special Areas” and also with the heading to Annex V which regulates “the prevention of pollution by **garbage** from ships”. It is clear that plastics are within the definition of “Garbage”, but as it is also clear from the Guidelines that FADs are not garbage, it follows that even if they are made of plastic, they are excluded from the definition of ‘garbage’ within Annex V and therefore Regulation 3 does not apply to FADs, even if they contain plastic.

147. I add that in any event, I have been provided with no information about whether or not Spain or the Seychelles have acceded to MARPOL. Nor have I seen any relevant domestic legislation that is said to have been breached by AGAC, supported by evidence from the Seychelles or Spanish authorities that their international obligations set out in MARPOL have, or may have been breached by AGAC in the Indian Ocean in respect of the Unit of Assessment. I also agree with the CAB’s post-hearing submissions at paragraph 13 of page 22.

148. I am not persuaded AGAC have acted contrary to the wording of the three international treaties mentioned, nor have I seen any proper legal basis to explain how these

international conventions have been transposed into domestic law, which bites on AGAC's operations.

149. I do not consider the deployment of FADs amounts to dumping or that FADs are 'garbage'.

150. I am not clear whether the Objector also pursued another argument that FADs which drifted into protected areas amounted to illegal fishing. The oral presentations and grounds were not entirely clear on this, but for the avoidance of any doubt I reject these arguments for the reasons set out in the CAB's post-hearing submissions at Part 3, paragraphs 1-7 on pages 24 and 25. This analysis is correct for the reasons identified by the CAB.

151. This ground of objection is dismissed, the score given by the CAB is justified and not arbitrary or unreasonable.

PI 3.2.3

152. A second ground of Objection was made in respect of PI 3.2.3. This focused on what was said to be widespread non-compliance with AIS regulations across OPAGAC/AGAC fleet in the Indian Ocean. CTTF submitted that whilst monitoring, control and surveillance mechanisms exist there is not a reasonable expectation that they are effective. The lack of AIS transmission is not limited to one vessel but all nine vessels involved in the fishery, and therefore the precautionary approach would be to treat this as systematic non-compliance.

153. On this topic CTTF relied on the evidence and presentation of Ms Rattle, which I have taken into account.

154. The CAB scored 80 and set out their reasons in the FDR to explain why there was no systematic non-compliance in respect of 3.2.3 d (with emphasis added):

Analysis of recent IOTC Compliance reports (2019 and 2020) show no evidence of systematic non-compliance in the fishery including the submission of national compliance reports by CPCs. While the IOTC compliance reports do show areas of non-compliance, including member states associated with the AGAC fishery and UoAs, the issues are recognised and are

being address by both the flag states and the IOTC. Some areas of concern raised and addressed at the site visit addressed for example misreporting of vessel positions (AIS vs VMS) and also the veracity of landings and in-port transshipments. While there are obvious areas of weakness, these could not be attributed to the AGAC operations per se, and where there are challenges (such as reconciliation of nominal YFT catch) and reporting of BET through the CDS, these are being addressed and are not considered systematic non-compliance. **SG80 is met.**

155. The CAB provided a fuller explanation in its PD 2.7.4 pre-hearing response as follows:

- “We note for Points of Objection against Principle 3, the CAB has sought to provide additional comments together with a summary of our original points, as below.
- As a CPC of the IOTC, AGAC (EU and Seychelles vessels) are obligated as follows: *“Each Contracting Party and Cooperating Non-Contracting Party (CPC) shall adopt a satellite-based vessel monitoring system (VMS) for all vessels flying its flag 24 metres in length overall or above or in case of vessels less than 24 meters, those operating in waters outside the Economic Exclusive Zone of the Flag State fishing for species covered by the IOTC Agreement within the IOTC area of competence.”*
- The only measure that required CPCs to submit VMS data for verification of implementation of the measure, was Resolution 12/13, which is no longer in force. Therefore, there is currently no measure that requires CPCs to provide VMS data, and implementation of the above measure is done purely at national level. The IOTC does not recognise AIS as an alternative to VMS.
- Additionally guidance to fishing vessel operators provided by maritime authorities and trade bodies within them such as the United Kingdom Maritime Trade Operations and within the European Union state that *“If the master believes that the continual operation of AIS might compromise the safety or security of his/ her ship or where security incidents are imminent, the AIS may be switched off”*.
- In areas with high security risk therefore, skippers at their discretion may switch off the AIS. This is the case in the West Indian Ocean related to Piracy – fishing vessels have been hijacked. Skippers of the AGAC fleet have demonstrably shown that they maintain their required Vessel Monitoring System in place and either report to the AZTI or Seychelles Fishing Authority monitoring units but will disconnect their AIS

as the AIS system is available to pirates who operate well offshore using mother vessels.

- The inference from the Ocean Mind report is that the reason AIS is switched off is most likely that the vessel(s) are fishing illegally. We do not agree. AIS is primarily a safety tool initiated under SOLAS. A reasonable skipper or vessel owner takes steps to minimise the expose of their crew to increased risk associated with piracy. The VMS data provided to the CAB is in our view, adequate to justify the score given for this PI (Compliance and Monitoring) and that the vessel(s) are not IUU fishing (as per the MSC / FAO definitions). The VMS tracks have demonstrably shown, particularly in the 2018 / 19 period that the fishing tracks were within the areas permitted to fish and with states where a fishing agreement may be in force between parties.
- AGAC also undertook an independent review through the Spanish Oceanography Institute (see bundle ref doc 41) of the claim by Ocean Mind that Spanish vessels had been fishing in the waters of coastal states. It was concluded that the events (IUU in coastal states) was either related to data capture issues, or the few that could not be verified and cross referenced with VMS data was likely due to agreement with the coastal state or different geographical data defining maritime borders.
- The CABs has nevertheless scored the fishery in a precautionary manner. The fishery does NOT meet SG100 for SIa (PI3.2.3) where it is required that “*a comprehensive monitoring, control and surveillance system has been implemented in the fishery and has demonstrated a consistent ability to enforce relevant management measures, strategies and/ or rules*” i.e. the CAB scoring recognises uncertainty (and see further the rationale) and shows the team has been precautionary in their assessment by scoring at SG80.”

156. Given the nature of this issue I was careful to hear from the Fishery Client directly. Mr Julio Moron told me that: “*Since 2009 our fleet has used security, they are armed and this is authorised. The AGAC fleet been attacked near Somalia. “Skiffs” with machine guns have fired. These people have had bazookas too. Some vessels have been hijacked*” When asked directly about whether the AIS system had been switched off for safety or other reasons by the Master of the vessels Mr Julio Moron said: “*It could have been switched off for a commercial advantage. This is not illegal or inappropriate.*”

157. I must therefore consider in the context of the MSC Standard and given the acceptance by the Fishery Client that masters of the vessels could have switched off AIS tracking for non-security related reasons, whether the CAB's score of 80 for PI 3.2.3 is justified.

158. I remind myself that the PI concerned is PI 3.2.3 which targets the following: *"Monitoring, control and surveillance mechanisms ensure the management measures in the fishery are enforced and complied with"*. The CAB scored 80, which requires:

A monitoring, control and surveillance system has been implemented in the fishery and has demonstrated an ability to enforce relevant management measures, strategies and/or rules.

159. Principle 3, in general, is described by the MSC as: "The fishery is subject to an effective management system that respects local, national and international laws and standards and incorporates institutional and operational frameworks that require use of the resource to be responsible and sustainable."

160. Further to this, the CAB set out in the FDR, in its introduction to Principle 3, the relevant "legislative and customary framework" said to apply to the Fishery at section 7.4.3 of the FDR. I note the following conclusions arrived at by the CAB (emphasis added):

National element comprising of each of the countries in which AGAC may fish. In this regard however, AGAC has some 15 vessels that are flagged either as Spanish, or Seychelles (Table 46). Because of this, the AGAC fleet must comply with two flag-state authorities, Spain and Seychelles;

The association of the AGAC fleet with Seychelles presents a unique arrangement in that part of their fleet is Spanish and must comply with the EU and IOTC governance regime, while the other part, the Seychelles flagging of vessels means they fall primarily under the authority of the Seychelles legislation and also the IOTC.

.....

All 15 of the AGAC vessels including those of the EU Flag under OPAGAC target the three UoA's which form the basis for this assessment. The Spanish flag vessels (9) are : Albacora Uno, Albatun Dos, Albatun Tres, Txori Argi, Txori Zuri, Albacan, Albacora Cuatro, Itsas Txori and Txori Gorri. All pertinent IOTC CMMs and other **fishery-specific management measures** adopted as Resolutions are translated into European legislation and updated

annually as necessary (EU, 2019). The same applies to national fishing vessel licensing authorities, and to EU-registered Producer Organisation (PO) for any EU quota allocation sharing. All vessels in the UoA are managed by the same fishing organization (AGAC) and there is a certificate sharing agreement.

The European Union enables the management of their fleets, including distant water vessels, through the **Common Fisheries Policy** (CFP). This is the main legal (fisheries) instrument that underpins the development of any specific new policies including those that might apply to waters external to the EU (External Waters).

.....

AGAC vessels must comply with the EU and Seychelles management arrangements through the EU SFPA protocols, and other bilateral agreements.

The information system for the purse seiners which include the UoA vessels (AGAC) is updated in real time from electronic logbooks into a centralised system in Spain and Seychelles. AGAC vessels are equipped with satellite-based vessel monitoring systems (VMS), which inform Spanish and EU authorities (Spanish flagged vessels) or Seychellois authorities (Seychelles-flagged vessels) of the vessel's position at any given time (note that for AGAC the technical service group AZTI-Technical provide detailed vessel reporting and monitoring on behalf of AGAC). The fleet must report their catches to SFA or the Spanish Administration (Secretary General of Fisheries in Spain or SGP) as the case may apply to each flag.

....

Other areas of concern noted relate to the VMS reporting and comparisons of vessel activity with the now globally available AIS information. Much of the AIS information suggests that the fleets working in the IOTC region might be misreporting positional data as vessel tracks suggest that proximity to EEZs, in particular of the coastal states suggests AIS and other tracking systems units might be switched off when entering coastal state waters. This area of compliance concern is problematic to assess, in particular because of the vessel hijacking issues off Somalia

161. There is a footnote in the FDR to the penultimate sentence which states: “*This was pointed out in direct discussions in the site meetings with an experienced skipper of an AGAC vessel that had fished extensively in the Indian and Atlantic oceans.*”

162. The FDR continues (emphasis added):

The most recent IOTC compliance reports suggest that overall the IOTC compliance unit has a very transparent and rigorous reporting procedure, which compared to some other RFMOs would seem comparable, if not better in some areas (such as efforts to implement PSMA). The AIS issue is global and one that is being increasingly used to determine global fishing effort, although nuances relating to the non-compliance of the AGAC fleet would seem difficult to verify. IOTC only requires 5% of purse seine effort to be monitored independently which is somewhat lower than in other RFMOs. The AGAC group, through their independent monitoring agencies (AZTI and IEO) voluntarily increase their monitoring coverage either through increased observer deployments or through Electronic Monitoring (EM) as discussed under Principle 2 (a similar approach has also been adopted by the PNA group in the WCPO with voluntary independent monitoring systems being introduced to augment those of the WCPFC). Despite this the uncertainty related to these compliance indicators is taken into consideration in the scoring.

163. The CAB's reasoning for the score of 80 is set out in the FDR at page 263 but I note this comment within the CAB's justification:

While for EU and Seychelles and French waters all vessels are constantly monitored through VMS and AIS the same is not true for coastal states and the annual compliance reports reflect weakness in the overall system, particularly to deter IUU fishing.

164. The MSC Vocabulary defines "management system" as:

The framework of processes and procedures used to ensure that an organisation can fulfil all tasks required to achieve its objectives. In a fisheries context includes agencies involved in the management of the fishery, the legislative framework within which the fishery is undertaken, and the core management measures implemented (including the TAC for the fishery for which certification is sought).

165. The CAB in its post hearing submission states:

The introduction of AIS globally, is intended as a Safety at Sea tool, and not a fishery management measure. In the IOTC, VMS is the fishery management tool.

166. I agree with the CAB that AIS is not a fishery management tool and CTTF's efforts to persuade me otherwise were not effective. AIS is a national measure to protect the safety of the vessel and its crew. I am clear that VMS is the primary fishery management tool for the IOTC and this Fishery. Does the AIS issue have any relevance to PI 3.2.3? The starting point is the FDR and as can be seen the CAB in its expert judgement makes repeated references to AIS. The CAB therefore consider AIS is relevant to PI 3.2.3 or they would not have made reference to it. Mr Japp also told me at the hearing in another fishery assessment for the MSC he conducted a review of the fishery's compliance with the requirement to use AIS, adding further support to the idea that AIS is relevant.

167. However, I disagree with the CAB's submission that: "There is no requirement for carrying AIS and a duplicate tracking system for the purposes of delivering effective management." If the AIS system is to protect the crew's safety and is not complied with, how can it be said there is in place an effective management strategy that respects national laws, if a fishery takes unnecessary risks with the safety of the crew as part of its commercial approach to fishing? VMS is a fishery management tool used by regulatory fishery authorities to monitor fishery activity. It is not a safety tool for the crew.

168. I also note that the over-arching description of Principle 3 is to ensure the fishery is subject to national laws (read EU in this context through the Fishery's connection with Spain). It states that the fishery is "subject to an effective management system that respects local, national and international laws". 'Management system' as quoted above includes "the legislative framework within which the fishery is undertaken".

169. Standing back, if AIS is principally a tool for the safety of the vessel and its crew, the consumers of MSC certified seafood, understanding that one of the assessed areas is the fishery's compliance with national laws with the framework within which the fishery takes place, might be surprised that a crew safety legislative requirement was not assessed or included within the standard. The existence of VMS does not negate this point as AIS and VMS have different roles.

170. EU Directive 2002/59/EC which applies to Spain and applies to the Fishery's Spanish flagged vessels states as follows (emphasis added):

Article 1

Purpose

The purpose of this Directive is to establish in the Community a vessel traffic monitoring and information system with a view to enhancing the safety and efficiency of maritime traffic, improving the response of authorities to incidents, accidents or potentially dangerous situations at sea, including search and rescue operations, and contributing to a better prevention and detection of pollution by ships.

Member States shall monitor and take all necessary and appropriate measures to ensure that the masters, operators or agents of ships, as well as shippers or owners of dangerous or polluting goods carried on board such ships, comply with the requirements under this Directive.

Article 5

Monitoring of ships entering the area of mandatory ship reporting systems

1. The Member State concerned shall monitor and take all necessary and appropriate measures to ensure that all ships entering the area of a mandatory ship reporting system, adopted by the IMO according to Regulation 11 Chapter V of the SOLAS Convention and operated by one or more States, of which at least one is a Member State, in accordance with the relevant guidelines and criteria developed by the IMO, comply with that system in reporting the information required without prejudice to additional information required by a Member State in accordance with IMO Resolution A.851(20).

.....

Article 6

Use of automatic identification systems

1. Any ship calling at a port of a Member State must, in accordance with the timetable set out in Annex II(I), be fitted with an AIS which meets the performance standards drawn up by the IMO.
2. Ships fitted with an AIS, shall maintain it in operation at all times except where international agreements, rules or standards provide for the protection of navigational information.

Article 6a Use of automatic identification systems (AIS) by fishing vessels

Any fishing vessel with an overall length of more than 15 metres and flying the flag of a Member State and registered in the Community, or operating in the internal waters or territorial sea of a Member State, or landing its catch in the port of a Member State shall, in

accordance with the timetable set out in Annex II, part I(3), be fitted with an AIS (Class A) which meets the performance standards drawn up by the IMO.

Fishing vessels equipped with AIS shall maintain it in operation at all times. In exceptional circumstances, AIS may be switched off where the master considers this necessary in the interest of the safety or security of his vessel.

171. I found the CAB's post-hearing submissions a little difficult to follow, however, I understand their submission to appear to argue that there was only a requirement to use AIS in the first place when the vessel was in a "mandatory ship reporting system" area, such as busy shipping area like the English channel (I am told there are none in the Indian Ocean). However, I do not read the EU Directive in that way. Rather, Article 6a places a requirement on fishing vessels to operate AIS unless the exceptional circumstances apply and Article 5 places an obligation on member states to monitor vessels' compliance when they enter mandatory ship reporting systems. If the vessel is in a mandatory ship reporting system, then the master may well be subject to additional reporting requirements as to the use of AIS in the vessel's logbook.

172. My concern therefore is whether the AGAC fleet are complying with Article 6a of the EU Directive. Compliance would involve adhering to the clear wording of Article 6a and not the gloss placed on the Article by Ms Veits of the European commission in the letter quoted by Ms Rattle.

173. The CAB in its post hearing submissions argued that:

Plainly there are good reasons for the Master in the Indian Ocean to consider it necessary to switch off AIS in the interests of the safety or security of his vessel and/or to protect his navigational information in accordance with guidance issued on the UKHO 2015 Maritime Security Chart or the UK Maritime Trade Operations best management practices guidelines. In any event the CAB considers the danger is also plainly imminent in the Indian Ocean, for the reasons given above. "Imminent" does not mean that you must have AIS on until you can actually see the pirate skiff approaching – that would be pointless including because it is in

part the function of AIS that raises the risk as it advertises in real-time when the purse seiner has stopped.

A key element with respect to exceptional circumstances when the master considers this necessary in the interest of safety or security of the vessel is that setting and retrieving a purse seine gear is a significant and time-consuming operation During that period, a small pirate skiff travelling at ≥ 30 knots may cover up to 100 miles of distance, and therefore 'imminent danger' is not just what can be seen locally. This is particularly problematic where the panga and skiffs are deployed in the water, with their crews at risk, and where even the main vessel cannot manoeuvre freely while attached to the net. During the entire operation, the vessel and its crew are highly vulnerable. Because AIS is transmitting every few seconds if switched on, it is rapidly obvious if the vessel stops and commences a purse seining operation. The operation is close to literally a "sitting duck".

174. I have no hesitation in agreeing with the CAB's submissions above and with the evidence of Mr Moron that the AGAC fleet have come under attack by pirates in the Indian ocean. This is extremely dangerous and indeed even in circumstances where an attack fails would be distressing for the crew. AIS can be intercepted and used by others and certainly by pirates. The AGAC fleet have every justification to switch off AIS to protect themselves from pirates. However, Mr Moron's clear evidence was that AIS: "... *could have been switched off for a commercial advantage. This is not illegal or inappropriate.*" The CAB do not address this evidence in their post hearing submission. Mr Moron's admirably frank and helpful admission links up with the FDR, quoted above, but repeated here:

Much of the AIS information suggests that the fleets working in the IOTC region might be misreporting positional data as vessel tracks suggest that proximity to EEZs, in particular of the coastal states suggests AIS and other tracking systems units might be switched off when entering coastal state waters. This area of compliance concern is problematic to assess, in particular because of the vessel hijacking issues off Somalia

And the footnote is relevant: "*This was pointed out in direct discussions in the site meetings with an experienced skipper of an AGAC vessel that had fished extensively in the Indian and Atlantic oceans.*"

175. Therefore, I am not satisfied with the CAB's treatment of this issue. Their scoring is not reasonable because they have not properly investigated the AGAC fleet's use of AIS and whether or not the Fishery is deliberately switching off AIS for commercial purposes and not because of the risk of pirates. To switch off AIS for commercial reasons may imperil crew

safety and is not consistent with EU law. This is part and parcel of the requirement for the fishery to comply with national legislation in respect of its management strategy. PI 3.2.2 seeks to capture such issues and clearly the CAB themselves investigated the AIS issue and whether the Fishery complied with it during their assessment and as set out in the FDR. In my judgement however, they have not fully investigated the matter. CTTF have set out evidence of widespread non-usage of AIS by the Fishery fleet in the Indian Ocean and whether this is because of pirate related safety issues or commercial reasons requires investigation. Consumers of MSC certified seafood would expect crew safety to be thoroughly and properly investigated by an assessment body, before certification.

176. The CAB has set out a series of criticisms of AIS in its post-hearing written submissions. They say AIS is unreliable and is not secure. That may be the case, but I am concerned with whether it is a requirement of EU law and whether it is related to the Fishery Client's management of the Fishery. For the reasons set out above, the obligation set out in Article 6a is clear and is related to PI 3.2.3, such that it requires the CAB to fully assess a fishery's proper compliance with the law, where that is required, as it is here.

177. The CAB's view of AIS and how it has assessed its score of 80 at PI 3.2.3 is material because it is not clear, at this stage, if the score of 80 is justified.

178. For these reasons, the score of 80 is not justified and there will be a remand on this ground.

PI 3.2.3

179. This PI is concerned with compliance and enforcement, the CTTF submits there is clear evidence of misreporting of yellowfin tuna catches by the Spanish authorities. CTTF asserts that the record of misreporting of yellowfin tuna catches by Spain, "*including various kinds of reporting inconsistencies*" is evidence of an extreme lack of transparency, as well as previous non-compliance with quota limits.

180. Ms Rattle on behalf of the Blue Marine Foundation has submitted a paper to the IOTC Compliance Committee in respect of the alleged non-compliance. It is said the European Union authorities have still not answered the issues raised by Ms Rattle. It is said there is a considerable lack of transparency and the CAB should follow the precautionary approach and should not award SG60.
181. The CAB provided a full response on this issue in their written submission for the hearing. They referred me to the Fishery Standard where it provides Guidance in SA4.9.1 through to SA4.9.3. Critical to their response to this ground of Objection is the following guidance (GSA 4.9): *“To meet the MSC Fisheries Standard, there must be a monitoring control and surveillance (MCS) system in place as evidence that fishers comply with the requirements of the management system and there is no evidence of systematic non-compliance (PI 3.2.3)”*.
182. On the substance of the issue the CAB submits that the reconciliation and “pay back” for yellowfin over-catch since 2017 is acknowledged by CTTF who focus mainly on the Spanish component of the EU purse seiners. This context is an important consideration in the CAB’s assessment as the issue is broader than just the AGAC fleet of vessels, but also affects other EU components of the purse seine fishery in the Indian Ocean as well as all others. The “pay back” or “overage” is because of issues around reconciliation of allocated quota and the Objector, through their wording of this particular part of the Notice of Objection implicitly acknowledges through the statement “previous non-compliance with quota limits” but does not then put this in the context that the issue has been resolved through a management system process and thus is demonstrably being addressed by the IOTC through the obligations on others.
183. The CAB submitted, although not stated explicitly, CTTF’s position was that the “inconsistencies” in reporting are deliberate, and therefore reflects non-compliance and should therefore influence the scoring of PI 3.2.3, in particular when responding to Slc (Compliance) and Sld (systematic non-compliance). The CAB considered the actions, explanations and rectifications taken by AGAC and the Spanish fisheries administrators did not suggest this and they said this demonstrates the management system’s effectiveness, and further we do not agree that they indicate a lack of transparency (in fact the opposite).

184. The CAB submitted that the issue of overages, how they are calculated, the data used etc is “work in progress” and importantly there is no explicit evidence or deliberate intent to misreport yellowfin catches (as well as other species of tropical tunas).

185. In this PI there is obviously less room for the CAB’s judgement to be respected by the IA. Accounting for and complying with catch regulations should be straightforward and relatively black and white. It is not an exercise in scientific judgement. Having said that, and narrowly, on balance, I consider the CAB score is not irrational or arbitrary. Others may have scored the fishery differently on this issue and given less benefit of the doubt to the discrepancies in catch figures, however, I consider the CAB score is justified.

186. The ground is dismissed.

PI 3.2.4

187. The last ground of challenge is to PI 3.2.4 which requires monitoring and management performance evaluation. Closely related to earlier grounds, CTTF submit that there is a lack of independent verification of FAD positional data and also in respect of deployment and data.

188. CTTF’s notice makes the following points taken from its Notice:

“All modern dFADs used by industrial purse seiners are tracked via satellite in near real time, and most also have sonars monitoring fish abundance beneath them. Satellite transmissions from these devices inform the fishing operations of purse seine fisheries deploying and using them. Although huge volumes of data are already supplied to the fleets owning dFADs in near real time, greatly benefiting their commercial operations, much of this data is not made available to fisheries scientists, and is therefore not enabled to inform sustainable fisheries management. The purse seine industry’s suggested motivation for this lack of data sharing is “commercial confidentiality”, but the same lack of transparency is not accepted for VMS data on the movements of their actual vessels, although many purse seiners do display a lack of transparency in their movements anyway. In instances where information is relayed to fisheries managers, it is well-known that relying on self-reporting for compliance

and other purposes is not reliable at all. Additionally, regular FAD positional data and data on the location of deployment and retrieval of FADs is submitted long after events and no independent verification of data is done.”

189. Reference was made to “Sustainable Fisheries and Communities Trust (SFACT). Limiting FAD Sets or FAD numbers – how these options compare” IOTC-2021-WGFAD02-INFO5. The CAB objected to the admission of this document, but it was provided in the agreed bundle as one of the Objector’s references, so it has been considered and read.

190. The CAB scored this PI at 80. The purpose of the PI is to assess whether there is a system of monitoring and evaluating the performance of the fishery-specific management system against its objectives and whether there is an effective and timely review of the fishery-specific management system. The CAB’s report stated:

The 2nd IOTC Performance Review concerned all parts of the IOTC system (IOTC, 2016), and will take place every 5 years. At the EU level, the CFP (EU, 2013) is reviewed every 10 years, the SFPA protocols are usually in force for 5 years and an evaluation ex-post and ex-ante is conducted prior to any renewal (Goulding et al., 2019). The Performance Review Committee reported back at the 2020 Commission meeting and there is progress. **SG80 is met.**

As at SG60, the Seychelles reports by the SFA on policy and fishery management, that include alignment with the IOTC would qualify as external review by another agency or organisation within the country (Seychelles) i.e. SG80. Some components of the fishery also are subjected to ad hoc review by the EU, specifically related to the EU- SFPAs and the LDAC). Noting that these reviews are considered appropriate relative to the intensity of each UoA as per SA4.10.2 (and GSA4.10.1). The reviews undertaken by the EU, primarily assessing the Seychelles to meet the stringent SFPA requirements (that include both the SFA and IOTC management) therefore qualifies as occasional external review as the frequency of these reviews is irregular. There has also been occasional external review by the FAO [RFMO performance review (FAO, 2018)], which as indicated in the guidance would qualify as a “peer organisation” and is occasional external review.

SG80 is met.

191. I was not addressed specifically on this ground of challenge by the Objector. I am not clear how to situate the concern within the MSC standard and PI 3.2.4. The CAB's report sets out clear rationale for how the PI is met. I readily accept access to a greater amount of commercial fishery data by the scientific and environmental communities would be beneficial, but that does not seem to me to be the purpose of PI 3.2.4 and therefore the ground of challenge rather misses the mark. There is nothing arbitrary or irrational about the CAB's score.

Conclusion

192. As can be seen all grounds of objection are dismissed with the exception of the AIS related ground against the score for PI 3.2.3 There will be a remand on this issue.

193. The CAB must re-consider the score of 80 for PI 3.2.3 and consider whether AIS is part of the management strategy, whether legislation applies to AGAC in respect of AIS and whether it should be followed and whether in fact during the period of assessment it was being followed.

194. PD 2.9.2 and 2.9.3 state:

Within 10 days of receipt of the remand instructions, unless the independent adjudicator has granted the CAB a specific amount of additional time, the CAB shall respond in writing to the items specified in the remand, with copies sent the client, the objectors, and the MSC for publication on the MSC website.

PD 2.9.2.1 The response of the CAB shall either:

- a. Include a statement of "no change" in relation to the scoring of PIs, or
- b. Indicate any proposed changes to the rationale for a score or indicate a change in the score in relation to any of the PIs, and
- c. Give reasons for its decision under either PD 2.9.2.1.a or PD 2.9.2.1.b.

PD 2.9.3 Any party to the objection may make written submissions on the items specified in the remand or on the response thereto by the CAB under PD 2.9.2. Such submissions shall be

received by the independent adjudicator no later than 5 days following the publication of the CAB response on the MSC website.

PD 2.9.3.1 The independent adjudicator shall determine what actions are necessary following submissions, if any.

195. I shall hear from the parties on the application of the remand rules and in particular whether the CAB needs more than 10 days to carry out its PD 2.9.2 instructions.

196. I thank the parties for their cooperation and helpful submissions.

Order

197. Pursuant to PD 2.8.2 (c) the CAB's score cannot be justified in respect of PI 3.2.3 without further consideration of the Fishery Client's approach to AIS as set out in this decision, otherwise pursuant to PD 2.8 all other grounds of objection are dismissed and the CAB's scoring and determination in respect of those performance indicators (but not PI 3.2.3) are confirmed.

John McKendrick QC
Independent Adjudicator
21 April 2022