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Mr John McKendrick QC
MSC Independent Adjudicator

Marine House
1 Snow Hill
London
EC1A 2DH

20 June 2018

Dear Sir,

Please find below the CAB response to the Notice of Objections to the certification of the Echebastar Indian Ocean Skipjack Tuna Purse Seine Fishery. Acoura hope that this provides the information to your, and the objectors', satisfaction.

Should you have further questions then please contact Jason on 0044 (0) 7515 586 596 or Polly on +44 (0)131 357 3294.

Yours sincerely

A handwritten signature in black ink that appears to read "Polly Burns".

Polly Burns
MSC Technical Officer

A handwritten signature in black ink that appears to read "J. Combes".

Jason Combes
Head of Fisheries
Acoura

MSC SUSTAINABLE FISHERIES CERTIFICATION

Echebaster Indian Ocean Skipjack Tuna Purse Seine Fishery



Acoura response to the PNA Western and Central Pacific skipjack and yellowfin, unassociated / non FAD set, tuna purse seine fishery Notice of Objection under CR2.0: PD2.5

June 20, 2018

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1. Introduction

In compliance with PD2.5.1 this submission presents the CAB response to the three Notices of Objection (NoO) presented by three parties – WWF, IPNLF and the Shark Project.

Acoura and the assessment team welcome the detailed review of the final report given in the NoO.

There is some inconsistency in the categories to which the various objections are grounded (see table below taken from the MSC Notice of Objection proforma at section 3)

MSC Notice of objection template	WWF	SP	IPNLF
Are you objecting on the basis that, in your opinion, there was a serious procedural or other irregularity in the fishery assessment process that was material to the fairness of the assessment, as per PD2.7.2.1 of the objections procedure?	No	Yes	Yes
Are you objecting on the basis that, in your opinion, the setting of conditions by the CAB in relation to one or more performance indicators cannot be justified because the conditions fundamentally cannot be fulfilled, or the condition setting decision was arbitrary or unreasonable in the sense that no reasonable CAB could have reached such a decision on the evidence available to it, as per PD2.7.2.2 of the objections procedure?	No	Yes	Yes
Are you objecting on the basis that, in your opinion, the score given by the CAB in relation to one or more performance indicators cannot be justified, and the effect of the score in relation to one or more of the particular performance indicators in question was material to the determination, as per PD2.7.2.3 of the objections procedure?	Yes	Yes	Yes
Are you objecting on the basis that, in your opinion, additional information not forming part of the record ¹ that is relevant to the circumstances at the date of the determination has not been considered, as per PD2.7.3 of the objections procedure?	No	Yes	Yes

The reader will see that the NoO has several repeating themes, so many responses apply to more than one part of the Objection. The reader will also see there are some places where the CAB accepts that further clarifications and interpretation may be helpful.

At this stage, the attention of the IA and Objectors are drawn to this fishery assessment being part of the streamlining (formerly simplification) pilot.

It is helpful to remember that an MSC assessment takes place by applying the requirements and process of the MSC certification requirements (CR V2.0) adapted by the streamlining pilot process. There is often an understandable stakeholder objective to desire that the MSC assessment process deliver particular outcomes that are either beyond those required by the CR, or to the exclusion of alternative outcomes that are equally valid. In order to achieve certification a score of at least 80 for each principle is required with each performance indicator scoring 60 or more. The highest possible score being 100. There is commendable merit in going beyond the 80 requirements, even beyond the 100 requirements, but certification does not require it.

The CAB and the assessment team acknowledge the Echebaster client response to the NoO (dated 12 Jun 2018) made under CR PD 2.4.8. There were no submissions made stakeholders other than the objectors under CR PD 2.4.8.

¹ As defined in paragraph PD2.6.5.1 (a) of the objections procedure.

The detailed response of the CAB to the Objector's NoO is now provided in the following sections. In summary, though, the response follows the extract below from the CR in relation to the powers if the IA:

PD2.7.2 The independent adjudicator shall remand the determination to the CAB if he or she determines either:

PD2.7.2.1: There was a serious procedural or other irregularity in the fishery assessment process that was material to the fairness of the assessment; or

PD2.7.2.2: The setting of conditions by the CAB in relation to one or more performance indicators cannot be justified because the conditions fundamentally cannot be fulfilled, or the condition setting decision was arbitrary or unreasonable in the sense that no reasonable CAB could have reached such a decision on the evidence available to it; or

PD2.7.2.3: The score given by the CAB in relation to one or more performance indicators cannot be justified, and the effect of the score in relation to one or more of the particular performance indicators in question was material to the determination because either:

- a. The CAB made a mistake as to a material fact.*
- b. The CAB failed to consider material information put forward in the assessment process by the fishery or a stakeholder.*
- c. The CAB failed to consider material information put forward by the peer reviewer(s).*
- d. 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.*

In response to all aspects of the Objection Pursuant to PD 2.7.2.1, PD 2.7.2.2 and PD 2.7.2.3, Acoura disagrees with the arguments put forward by the Objector. Acoura has laid out its position and believes there is no case to answer. Acoura offers to provide clarifications comprising of minor edits to the scoring commentary. As such, subject to any requirement to amend the text as offered, we respectfully request that the IA consider dismissing the Objections in their entirety.

Acoura maintain the determination that the fishery should be recertified. The application of the eight conditions, three recommendations and the annual surveillance cycle will ensure that Acoura and stakeholders can monitor the certified operation. Acoura ask the objectors to consider the responses contained within this document. Upon hearing the IA directions (PD2.5.3) on the matters and/or if agreement can be reached between the parties then Acoura will implement any changes to the final report, along with some typographical errors, using tracked changes. The revised Final Report will be shared with the objector and IA to see if the objection can be concluded. The following timeline is respectfully proposed to the IA and objector:

- 1700 BDT 20 June 2018 – 1700 BDT 20 July 2018 allocated for the parties and IA to consider the CAB response and, if necessary, counter respond with written responses.
- 1700 BDT 20 July 2018 – 1700 BDT 20 August 2018 allocated for Acoura to consider any counter responses.
- If matters remain unresolved then the IA can instigate whatever next steps provided for within MSC CR2.0.

If matters become intractable then Acoura would prefer to avoid protracted attempts at negotiations and will seek an oral hearing and adjudication to resolve the matters.

2. Presentation

This document contains the verbatim Objections extracted from the NoO and the Acoura (Conformity Assessment Body - CAB) response to the matters raised. Each objection is presented below in order of the performance indicators. To allow comment, the individual paragraphs in the separate objections of WWF and SP have been numbered. The numbering of the original IPNLF objection were not consistent and we have revised the numbers, but not the content.

3. MSC Interpretations Log

This assessment makes use of and reference to the MSC interpretation log in keeping with MSC CR2.0:

"PD2.6.5.4 The FCR current at the time of the assessment in question, together with GFCR and amendments thereof made by the MSC Technical Advisory Board and the Board of Trustees, any related interpretations to these documents whether or not of mandatory effect with regard to CAB conformity made by the MSC and MSC's accreditation body."

The MSC is undertaking a review of the Interpretations Log following the PNA objection and Stakeholder comments in relation to the information currently inaccessible to them. While this change is underway, the MSC have instructed CABs to include the related interpretations in assessment reports to ensure that everyone has access to the rationale driving decisions made by the assessment team.

The following communication (emphasis by Acoura) was sent by the MSC to all CABs on the 9th May 2018:

"The MSC is undertaking an internal review of the interpretation log and in the interim will not be releasing any further fishery or CoC relevant interpretations. Once the review is complete it is anticipated that the interpretation log will be made public on a new platform that is currently under development. Its hoped that the review and work on the new platform will conclude this Summer (2018). Whilst the review is being conducted, the interpretation log will remain operational and CABs can continue to make use of its contents, however we would urge that if interpretations are used in assessments, that these be referenced in full within the relevant public facing reports (E.g. in an Annex of the PCDR/FR/PCR). The decision to undertake this review follows stakeholder feedback and the decision of the Independent Adjudicator (Objection Related Documents) in the PNA objection."

Considering the above and to avoid this assessment being prejudiced by the outcome and implications of decisions made in relation to the PNA objection, Acoura propose to modify the Final Report as published to include MSC interpretations which have been used in the report.

Any ambiguity or lack of transparency in using the MSC interpretations was not the intention of Acoura and rather due to the nature of the MSC's Interpretation Log at the time of the assessment.

Interpretations used are below:

Use of 'if necessary' in P2 management PIs (2.1.2, 2.2.2, 2.4.2, 2.5.2)

Does the 'if necessary' clause in scoring issue (a) of PIs 2.1.2, 2.2.2, 2.4.2 and 2.5.2 mean that it applies to scoring issues (b) and (c), which refer back to the measures or partial strategy? i.e. If measures or partial strategy are not needed because there is no or negligible impact on the specific component, do you still need to score the SG60 and SG80 for 'management strategy evaluation' and 'management strategy implementation'?

1 Answer

Although it is not specified in the requirements, the MSC's intent is that the 'if necessary' in scoring issue (a) also pertains to scoring issues (b) and (c). If the fishery does not need to have measures or partial strategy because there is no or negligible impact on Primary, Secondary, Habitats or Ecosystem components, it would meet at least the SG80 level in scoring issues a-c. However, additional scoring issues like shark finning, unwanted catch or compliance with management requirements for VMEs would still need to be scored at all levels if they apply (the shark finning scoring issue is only scored if there is a secondary species that is a shark, as indicated by the curly brackets and confirmed in the guidance).

P2 species outcome PIs – scoring when no main or no minor (or both)

When using the scoring element approach for 2.1.1 and 2.2.1 (version 2.0), what scores would you achieve in the following scenario:

Scenario 1: no main species, minor species meet Sib SG100. Here I think we can agree the score is 100

Scenario 2: no main species, minor species do not meet Sib SG100. Here it's confusing because the score is different whether you consider that Sla is 'not applicable' or scores 100. So the score here is either 80 or 90.

So in essence my question is, in the absence of main species, do you score Sla as not applicable or SG100 met? The same would need to be true for Sib (in the absence of minor species). I'm hoping it's not applicable as that would make a lot more sense from a practical scoring perspective, particularly if you're dealing with multiple scoring elements (it makes no sense for example to score a main species against Sib). On the other hand, if a fishery has no primary or secondary species, you would want to score both SIs as 100 being met.

1 Answer

Basically you only score the main species in the 'main' (Sla) scoring issue and the minor in the 'minor' (Sib) for 2.1.1 and 2.2.1.

So in your scenario 1, if the fishery has no main species, scoring issue (a) is not applicable, and scoring issue (b) is scored at the 100 level. If it meets it for all species, then score is 100.

In scenario 2, if the fishery has no main species, scoring issue (a) is still not applicable. In scoring issue (b) each species will score either 80 or 100 depending on whether the SG100 is met or not (noting [previous interpretation](#) on grouping these).

Clause SA3.2.1 applies when there are no species within a component at all ('If a team determines that a UoA has no impact on a particular component, it shall receive a score of 100 under the Outcome PI'). If no main or minor primary species, for example, then the automatic 2.1.1 score is 100.

Application of interpretations

For completeness, it is also confirmed that during this assessment Acoura have in all cases applied expert professional judgement to considering the proper interpretation and application of the CR, including those where as above the MSC has given guidance on the interpretation log. It is normal for professional judgment and technical expertise to be applied when considering a scoring issue in the context of a particular fishery and the practical considerations which arise, and this is part of why scoring under the CR requires discussion between team members (CR, 7.10.1.1) (and also harmonisation when required for consistency of outcomes (CR Annex PB)).

Acoura has assured itself that it agrees with the MSC's guidance as set out in the Interpretation Log.

Acoura considers that the use of "if necessary" in P2 management is to be applied in a common-sense manner, having regard to the overall intention of P2 ("*fishing operations should allow for the maintenance of the structure, productivity, function and diversity of the ecosystem (including habitat and associated dependent and ecologically related species) on which the fishery depends*") and the indicator being assessed, and the application of that scoring indicator in the particular fishery context in which it is being applied. In particular Acoura have considered the table in GSA 3, and GSA 3.5.1, and consider that where appropriate it is right to give credit where credit is due, i.e. if there were no or negligible impact on e.g. primary/secondary/habitats/ecosystem components, then scoring issues (a) –(c) will in general be at least at the 80 level. A fishery should achieve a score which accurately reflects the impacts it is having and thus if it is not having a negative impact then this can be recognized. Acoura also consider for the same reasons that in a particular context, such as for example unwanted catch, then such issues should be scored in their particular fishery context.

Similarly, Acoura agrees with the common-sense and practical interpretation of how to approach P2 species outcomes PIs when scoring when there are no main species or no minor species, and agrees that the intention is to score main species in the “main” SI(a) scoring issue, and the minor in the “minor” SI(b) scoring issue in 2.1.1 and 2.2.1. In this case it is appropriate that N/A is applicable Sla for when there are no main species but there *are* minor species.

4. WWF Preamble

WWF

1, WWF actively engages with key governments in the Indian Ocean, as well as tuna processors, producer organisations and their fishing vessels, and local and international NGOs. This engagement aims to support improvement in the practice and management of tuna fisheries in the Indian Ocean so that consumers may in the future be assured that the tuna they purchase has been harvested sustainably.

2, As a stakeholder in a number of Marine Stewardship Council (MSC) fishery assessments, WWF ensures the proper application of the MSC standard that aims to improve and reward fisheries sustainability. While WWF recognises the MSC as the leading wild-caught seafood sustainability certification system, albeit one that needs improvement in key areas, WWF does not believe that the Echebaster Indian Ocean Purse Seine Skipjack Tuna fishery has been shown to meet the MSC standard. WWF has grave concerns regarding the certification of the Echebaster Indian Ocean Purse Seine Skipjack Tuna Fishery, including:

3, The simplified version of the MSC assessment has been used to evaluate a complex fishery. We believe that this simplified process is inappropriate to assess this specific fishery.

4, There are no Harvest Control Rules or harvest strategies in place for yellowfin tuna. This species is the main catch (58% of the annual total Echebaster catch) of the Echebaster Indian Ocean Purse Seine Skipjack tuna fishery. This stock has been recognised as overfished and is highly unlikely to be over the Point of Recruitment Impairment (PRI). It should be recognised that the fishery is a mixed fishery and should have been assessed accordingly - which has not been the case.

5, Inadequate Fish Aggregating Device (FAD) management. The fishery is not clearly using all FAD best practices on every FAD set; the fishery does not have a credible, written and audited FAD management plan; IOTC does not collect sufficient FAD operational data nor inventory of FADs; and IOTC does not have an adopted FAD management plan that covers this fishery. The fishery should not be certified as sustainable as there is inadequate FAD management.

6, There is no strategy in place to address the bycatch of silky shark or the impact of the fishery on other Endangered Threatened or Protected (ETP) species. This is related to inadequate FAD management within the fishery.

7, The operational activities of the Echebaster fleet are unclear. The current Monitoring Control and Surveillance (MCS) implementation is not sufficient. AIS units are commonly turned off, although mandatory in some coastal states that do not have Vessel Monitoring System (VMS) infrastructure.

8, WWF contends that the evidence presented by Acoura Marine in the Final Report does not show that the fishery meets the threshold set out in the MSC Principles and Criteria for Sustainable Fishing.

We therefore do not believe that a MSC certification would be justified at this stage and hope that the Echebaster Indian Ocean skipjack purse seine fishery will continue their efforts to meet sustainability indicators under a Fishery Improvement Project until the above mentioned issues are resolved.

CAB Response:

Although we would have found greater value if WWF had engaged with the team from the start of the process including meeting the team in the site visits, we thank WWF for their contribution to the assessment of the Echebaster fishery.

The decision to use the streamlined (formerly 'simplification') process was made by the MSC.

We are unable to comment on the choice of the Echebaster fishery as a pilot project in the simplification process. Acoura was not consulted by MSC when they made that decision. However, we would point out that the simplified process does not change the approach to the scoring of the fishery; rather it refers to the process. This process has changed several times (as decided by the MSC) over the last year in response to issues uncovered by its practical application.

A 'mixed fishery' is a particular MSC phrase (several species would be considered under P1 and be able to carry the logo). The client in this case has asked for the skipjack fishery to be assessed. The proportions of species in the catch has no bearing.

In accordance with MSC CR, yellowfin tuna is considered as a P2 species in this assessment. The stock is highly likely to be above PRI. Please see our response to PI 2.1.1.

Spain was one of the first countries to define a FAD management strategy. In addition, Echebaster has a FAD management plan previously met and exceeded that IOTC requirements (until 2018, using less than the IOTC maximum number of FADs, the use of a single supply vessel (note that since late 2017 Echebaster has used two supply vessels - as allowed by IOTC regulations), early introduction of 100% non- entangling FADs, and participation in research on biodegradable FADs, and programs to recover lost FADs. Please see details in PI2.4.1.

Please see our response to PI 2.3.2.

For security reasons, AIS is not used all the time. VMS is fully monitored by EU and Seychelles. There is no evidence provided from WWF that there is not 100 % VMS coverage of Echebaster fishing operations. Regardless the use of AIS and VMS whilst helpful is not mandatory for MSC certification.

Please see our specific responses to the individual objections below. We have reviewed the Final Draft Report and find no basis for a change in the determination to certify the Echebaster fishery according to the MSC standard. At the same time, we recognise some issues in the drafting of individual performance indicators and we propose to make some changes to the Final Report.

5. Shark Project Preamble

SHARK PROJECT
<p>1, SHARKPROJECT submitted comments on the Second Report (see 281 of Final Report v2). Our comments were not as detailed or substantial as we'd have liked but we are a small NGO with limited resources and the person responsible for MSC engagement was on holiday for much of the limited time allowed for stakeholders to respond. We requested, but were denied, an extension.</p> <p>2, We requested, and the CAB provided, (although only at the last minute- see below) some of the raw Observer data on catches - an Excel spreadsheet of catches by set and by vessel for 2016.</p> <p>3, SHARKPROJECT is an international campaigning organisation founded in 2002 with offices in Germany, Austria, and Switzerland. SHARKPROJECT Germany was founded in 2008 with the aim of supporting the international goals and campaigns of SHARKPROJECT at a national level in Germany.</p> <p>4, SHARKPROJECT campaigns for the protection of sharks and the marine ecosystem.</p> <p>5, It is difficult to know where procedures were correctly followed, as this pilot version of the assessment process has different rules which appeared flexible at some points (e.g. increasing feedback time for stakeholders following the release of the desktop report; allowing CAB to withdraw, correct, and repost the Final Report v2) but inflexible at others, such refusing requests for extensions from stakeholders with few, if any, staff able to review and respond to reports in the timeframes given.</p> <p>6, We do not have time or resources we would like to read the Final Report and respond in the detail we'd like, let alone read through all the accompanying rules and regulations. For this reason we have focused on scoring issues only on Principle 2 regarding major species (yellowfin), ETP species, especially sharks, and on FAD impacts. Lack of comments on the scoring of any other PIs should not be taken as agreement with them.</p> <p>7, We hope in view of all this that the MSC and IA allow some flexibility in this final Objection process.</p> <p>8, We appreciate that the new procedures and timelines imposed by the MSC for this assessment under the pilot simplification process were difficult for all involved – time limitations especially were mentioned as was raised by the CAB, the peer reviewers (e.g. PR B, page 318) and many stakeholders in meetings and their written responses.</p> <p>However the CAB did not make this any easier for us. Releasing the Second Report for comment on 18th August, during peak northern hemisphere summer holidays was not very sporting for a start.</p> <p>On 6th September 2016, during the stakeholder response period for the Second Draft Report, SHARKPROJECT requested the 2016 observer data for Echebaster vessels that was available from AZTI, in order to get a better understanding of the significant increase in bycatch that was apparent from new data provided since the Certifier Desk</p> <p>Review report.</p> <p>Billy Hynes replied on 7th Sept that the Assessment team would send this by the following day but it was not provided until 12.24pm on 11th September - just 1 day before the stakeholder deadline.</p> <p>When we referred to this observer data in our submission for the Report Two, the CAB claimed not to know what we referred to and didn't adequately respond to our points on this.</p> <p>SHARKPROJECT had very little time to analyse the observer data in order to answer some key questions we had about the CAB's statements and apparent discrepancies between bycatch figures shown in Second Draft Report compared to the previous reports.</p> <p>The CAB did not respond to our point in our submission on Report Two regarding an observer reporting from Alakrana that two Carcharhinus longimanus (oceanic white tip sharks) were taken to the kitchen (see line 262 of the original data sheet in the excel file), which is in breach of IOTC regulations.</p> <p>References Email trail between CAB and SHARKPROJECT and the Excel spreadsheet of 2016 observer data for Echebaster from AZTI (Attached)</p>
CAB Response:
<p>We appreciate the comments. In our view the time provided was sufficient in the circumstances of this case but we recognise the streamlining pilot has created challenges. Below we provide our response to the SP comments and objections.</p> <p>We look to accommodate a variety of different needs within the assessment process. We followed all MSC defined procedures and timelines.</p>

We are only able to consider the comments received.

We will respect any decisions made by MSC and the IA.

We agree that the process has been complicated.

The release of the report followed the required process. We appreciate that in the period, June to end August, people in the northern hemisphere take vacations. However, in other parts of the world holidays are taken at different times. We consider the time provided was adequate in all the circumstances of this case.

Clearly, the data should have been sent earlier and we apologise. We are unclear what the comment relating to claiming ignorance over the observer data but we apologise if we were in error.

Please note that objections relate to the content of the Final Report. Please see the response in other parts of this submission.

We have reviewed the SP comment / objection.

We can add to text to the Final Report if required.

We see no reason to change our scores and determination.

6. **IPNLF Objection 1**

IPNLF

4, IPNLF, in its response to the Second Report, wrote that:

"The UoA, and proposed UoC, applies to Skipjack only. Yet Skipjack is not the only species targeted by the Echebaster vessels: they also target Yellowfin and Bigeye. This is stated at just one point in the Second Report (p.54), as follows:

"Skipjack, the target (MSC P1) species under MSC assessment represents 36.7% of the landed catch, and yellowfin and bigeye are targeted species representing 54.8 and 8.3% of the landed tuna catch, but are not considered as P1 species in this assessment."

[Emphasis added]

It is important to note that the UoA comprises only 37% of the landed catch. This issue is not clearly emphasised throughout the report."

5, The CAB responded (at p.271) as follows:

"We consider that the report is clear on the breakdown of the total catch. We followed the MSC requirements for identifying the P1 and P2 species. This is the same approach adopted in the recently recertified Maldives pole and line fishery for skipjack where a significant part of the total catch is yellowfin."

IPNLF notes the reference by the CAB to yellowfin in the Maldives pole and line fishery (hereafter "Maldives PNL").

6, In Echebaster, skipjack is the UoA species and yellowfin and bigeye are "primary main" species (see pp.39 and 42 of Final Report). According to text at p.37, the proportion of yellowfin is 54.8%. (That is the same figure as is used in the Second Report – see above.) That figure, or something similar to it, is explained at p.44: "Based on observer data, the average annual yellowfin tuna catches of 10,617 t (2014 -16) in the Echebaster FAD sets was 38.8% of the estimated total catch; respective figures for the FSC sets are 2,723 t and 72% of the total catch." The average of 38.8% and 72% is 55.4% - i.e. very close to 54.8%.

7, In Maldives PNL, skipjack is the UoA species and yellowfin and bigeye are 'primary main' (see pp.24-26 of Maldives Final Report). According to the text at p.24, the proportion of yellowfin averaged over 5 years is 17%.

8, So the CAB is right that the same approach is adopted for yellowfin in both Echebaster and Maldives PNL. However, there are also two important differences between Echebaster and Maldives PNL in respect of yellowfin:

Firstly, in Maldives PNL, the bycatch of yellowfin is much smaller, in terms of proportion, than in Echebaster: 17% (averaged over 5 years) in Maldives PNL compared to more than 54% (averaged over 3 years), i.e. more than three times as much in terms of proportion, in Echebaster.

Secondly, in Maldives PNL, yellowfin is not targeted (see Maldives National Report of 2016 (IOTC-2016-SC19-NR17 Rev 1-Maldives); Miller KI, Nadheeh I, Jauharee AR, Anderson RC, Adam MS (2017) Bycatch in the Maldivian pole-and-line tuna fishery. PLoS ONE 12(5): e0177391.

<https://doi.org/10.1371/journal.pone.0177391>) whereas in Echebaster it is targeted (see pp.37 and 304 of the Final Report).

9, IPNLF sees the Echebaster fishery as a fishery for yellowfin that also catches skipjack. In those circumstances, and in view of (a) yellowfin forming the majority of the catch and (b) being targeted, it is arbitrary and/or unreasonable for the CAB to define the UoA in terms of skipjack.

CAB Response

The FCR at SA2.1.1 is clear: "*In Principle 1, teams shall score the whole of the target stock(s) selected for inclusion in the Unit of Assessment (UoA)*". The use of 'selected for inclusion' clearly indicates a choice that clients can make as to species to be included at P1.

The breakdown of the total catch is noted as appropriate throughout the report.

The designation of the P1 species and stock is a client decision when specifying the UoA. This fishery assessment is complaint with MSC requirements. Prevalence in the catch has no bearing

We do not consider the IPNLF's points about the Maldives fishery are relevant but may expand upon these in final written submissions and/or at an oral hearing.

We have followed MSC CR in defining the target, primary and secondary species.

We disagree that the definition of skipjack as the target species is either arbitrary or unreasonable.

We have reviewed the IPNLF objection.

We see no reason to edit the Final Report or change our scores and determination.

7. IPNLF Objection 2

IPNLF
10, The CAB, in the Final Report (p.3), states that: “The CDR did not identify FADs as an “enhanced fishery”. MSC FCR2.0 G7.4.3 states “the use of man-made structures associated with the capture of fish that are not strictly ‘fishing gear’ including fish attracting devices” and “artificial habitat modifications either enhance the productivity of the fishery or facilitate the capture or production of commercial marine species”. Table 1 of the MSC FCR 2.0 notes that habitat enhanced fisheries can only be considered for MSC certification if they are considered “in scope”, specifically “any modifications to the habitat of the stock are reversible and do not cause serious or irreversible harm to the natural ecosystem’s structure and function”. FADs enhance fishing operations by aggregating fish to more efficiently capture them.”
11, The CAB further states (Final Report p.4): “The assessment team conducted a review and determined that the PIs within the default assessment tree are suitable to address the issues associated with FAD use in the Indian Ocean purse seine fishery. This was confirmed by information gained from the site visit and stakeholder input that were not initially considered in the client submission and the CDR. In particular, the assessment team recognizes that there is ongoing discussion of the “ecological trap hypothesis”, but also notes that a recent review of the issue by Dagorn et al (2012) concluded that there was no unequivocal empirical evidence that FADs represent an ‘ecological trap’ that inherently disrupts tuna biology, although the authors state that further research should focus on this issue. The assessment team also recognizes the concern over lost FADs, and their possible impact on coral reefs. However, the team believes that Echebaster Fisheries is addressing this issue by using less FADs than allowed so as to reduce the potential for lost FADs interacting with coral reefs, by using non-entangling FADs that will cause less damage if they do interact with a reef when lost, and finally by experimenting with biodegradable FADs that will further reduce the impact of lost FADs on reefs These issues have been fully considered in the scoring of the PIs in the default assessment tree contained in this report.”
12, The scope criteria for enhanced fisheries in Table 8 in the FCR (p.25) states that: “Any modifications to the habitat of the stock are reversible and do not cause serious or irreversible harm to the natural ecosystem’s structure and function.
13, The deployment of, and fishing on FADs, makes the UoA an enhanced fishery. The use of FADs is a modification of the pelagic habitat (Wang 2014) and it has not been demonstrated by the CAB that such modifications to the habitat of skipjack (i.e. “the stock”) are reversible and cause neither serious nor irreversible harm to the natural ecosystem’s structure and function. Accordingly the UoA should have been determined as out of scope.
14, As a result of MSC’s technical oversight, the CAB has stated (p.104) that “MSC requires that the assessment team consider “serious and irreversible harm” as reductions in habitat structure and function below 80%.”. This is patently implausible and there is no apparent basis for this in the FCR.
15, The ecological trap hypothesis is 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. Such concentrations also may increase competition and exposure to predators.
16, In summary:
1, The ecological trap hypothesis for tuna was originally proposed by Marsac & Fonteneau (2000) ² and they proposed additional studies to look at the validity of the hypothesis.
2, Hallier et al. (2008) ³ provided evidence from the Atlantic that tunas caught in association with FADs were less healthy than free school tuna. They argued that these findings support the hypothesis that FADs act as a super-stimulus, misleading tunas to make inappropriate habitat selection and suggested that additional research is required to investigate the long-term effect of FADs on the entire life cycle of tunas.

² Marsac F., Fonteneau A. M. F. (2000). Drifting FADs used in tuna fisheries : an ecological trap ?. In Le Gall J.Y. (ed.), Cayré Patrice (ed.), Taquet M. (ed.) Pêche thonière et dispositifs de concentration de poissons. Plouzané : IFREMER, (28), 537-552. (Actes de Colloques - IFREMER ; 28).

³ Hallier J., Gaertner D. (2008). Drifting fish aggregation devices could act as an ecological trap for tropical tuna species. Marine Ecology Progress Series, 353, 255-264.

3, Dagorn et al (2013)⁴ found that (i) the processes for FADs to drive tunas to new areas, and possible consequences of such movements on the biology of individuals, could occur at scales smaller than originally thought and (ii) that the processes for FADs to retain tuna longer in some areas should be investigated, considering that the density of floating objects has been multiplied by a factor of 40 in some areas in recent years due to large-scale deployment of FADs by purse seiners.

17, These and other studies show that the ecological trap hypothesis may be causing serious and irreversible harm to ecosystems. Accordingly, the CAB is required to apply the precautionary approach and cannot dismiss the theory unless clear evidence is produced that it is not a problem. The current overfished state of yellowfin and the impact that the Echebaster UoA (and the rest of the Indian ocean purse seine fleet) has on this species, together with the high number of dFADS that are being deployed by purse seine vessels, makes it clear that fishing on FADs has the potential to cause major negative impacts on ecosystems.

18, Mass deployment of dFADs, as well as the massive use of GPS buoys to track dFADs and natural floating objects since the 1990s, has raised serious concerns for the state of tropical tuna stocks and ecosystem functioning.

19, In a recent study by Maufroy et al, (2017) tracks were combined from a large proportion of the French GPS buoys from the Indian ocean with data from observers aboard French and Spanish purse seiners and French logbook data to estimate the total number of dFADs and GPS buoys used within the main fishing grounds over the period 2007–2013. In the Indian Ocean, the number increased from 2250 dFADs in October 2007 to 10 300 dFADs in September 2013.

20, Though the relative proportion of natural to artificial floating objects varies geographically, 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.

21, Far from being reversible, deploying further FADs is adding to the problem. 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).

22, The CAB based all their calculations on the supposed facts that (i) Echebaster deploys 400 FADs per year per vessel (Final Report p. 104: “The UoA has a total of 2,000 active FADs (5 vessels each with 400 FADs)”, and (ii) that all their FADs are non-entangling and that this has ensures no entangling/ghost fishing impact on silky sharks.

23, However, the reality is different:

23, 1, Firstly under Resolution 17/01 (adopted in May 2017) each purse seiner is limited to 350 active FADs, but can deploy up to 700 FADs per year - Resolution 17/01: “b) The number of Fish Aggregating Devices (FADs) as defined in Resolution 15/08 [superseded by Resolution 17/08], paragraph 7 will be no more than 350 active instrumented buoys and 700 acquired annually instrumented buoys per purse seine vessel per year.”

23, 2, 400 active FADs per vessel would now be in breach of 17/01, which has a maximum of 350 active ones as from 3 October 2017.

23, 3, When FADs are lost they are replaced by others, and every purse seiner can in fact deploy 700 FADs/year although only 350 of those are allowed to be active at any given time.

23, 4, There appears to be no independent verification of FAD numbers.

23, 5, Secondly, it is the usual practice for purse seiners to attach their own satellite buoy to someone else’s FAD when encountered out at sea. There is no evidence that Echebaster does not follow the same practice. This would entail taking over entangling FADs. Discarded netting and other floating objects opportunistically encountered at sea are also claimed as FADs by purse seiners attaching a satellite buoy. There is no evidence that Echebaster does not also follow this practice, with further entangling FADs being added to the equation.

23, 6, Thirdly, it is inconceivable that an Echebaster purse seiner will give up the opportunity to set their net around an entangling FAD encountered by chance.

⁴ Dagorn L., Bez N., Fauvel T., Walker E. (2013). How much do fish aggregating devices (FADs) modify the floating object environment in the ocean?. *Fisheries Oceanography*, 22 (3), 147-153. (IOTC-2013-WPTT15-INF03).

23, 7, Fourthly, there is evidence⁵ to show that non-entangling FADs can untangle and become entangling FADs. There is no empirical evidence that no entanglements happen on any of the FAD sets that involves Echebaster purse seiners.

23, 8, The precautionary approach requires a higher level of precaution in the absence of scientific data. The CAB has failed to adopt that approach.

24, The fact that FADs are lost itself means that the impact is not reversible (Echebaster even keeps a database of lost FADs (Report p.3).). Annually 20% of dFADs are lost at sea and the fishery has no possibility to recover them. Some of the lost dFADs will beach while the rest will continue to drift in the IO (Imzilen 2016).

25, Many FADs are still constructed of non-biodegradable materials, and can be more than 100m in length. Synthetic materials such as nylon, polyethylene, and polypropylene are impervious to natural biodegradation and can remain unchanged in the marine environment for decades (Stelfox 2016).

26, Three distinct impacts of lost FADs are noted by Moreno et al (2017), namely (1) damages to sensitive coral reefs, (2) marine pollution as well as (3) ghost fishing. Since 2015, ISSF has been working on finding solutions to the impacts of lost FADs that become marine debris and the potential damages by lost FADs that end up in sensitive habitats. There is general agreement that to address these impacts, there is a need to return to biodegradable floating objects (natural, biodegradable floating objects preceded man-made ones which are often constructed of long-lasting, stronger materials, with deeper and sophisticated structures for greater tuna aggregation capabilities). During an ISSF workshop which specifically convened fishers and scientist from the Indian, Atlantic and Pacific Oceans to look for solutions regarding FADs, the use of biodegradable fish aggregating devices. Seven different types of biodegradable FADs were designed and a protocol for at-sea trials was defined (Moreno et al., 2016). Moreno et al (2017) reported that despite an ongoing research project, which includes a number of pilot trials a solution has not been found yet.

Refs

Moreno, G., Restrepo, V., Dagorn, L., Hall, M., Murua, J., Sancristobal, I., Grande, M., Le Couls, S., Santiago, J., 2016. Workshop on the use of biodegradable fish aggregating devices (FAD). ISSF Technical Report 2016-18A. International Seafood Sustainability Foundation, Washington, D.C., USA.

Moreno, G., Jauharee, R., Muir, J., Schaefer, K., Adam, S., Holland, K., Dagorn, L. & Restrepo, V. 2017 FAD structure evolution: from biodegradable FADs to biodegradable FADs. Joint t-RFMO FAD Working Group meeting, April 5, 2017, Madrid, Spain.

27, The full biodegradability of the FADs at present is questionable as the flotation material is usually still non-degradable. The efforts at this stage to find the right biodegradable materials is inconclusive and ongoing. There also needs to be independent verification of the use of true biodegradable FADs before any recognition can be given to the fishery.

28, See also Doc. No. j-FAD_06/2017 as to lost echosounder buoys and the need for the FAD to float with all of the weight it has underneath.

29, There are anecdotal reports (e.g. Stelfox et al., 2015), a report by the Maldives government⁶, and a further paper by Davies et al⁷ as to negative environmental impact of dFADs washing ashore and become grounded or beached, potentially causing damage to marine habitats. Furthermore,

29, 1, On the occurrence of observed dFAD beaching events, Balderson and Martin (2015) present a detailed investigation into the location, characteristics and source of beached dFADs in Seychelles. They show categorically that dFADs used by fleets in the region are washing ashore, and that coral reefs are the most impacted habitat, with dFAD sub-surface structure becoming entangled on reef structure. However, their study did not attempt to quantify the damage caused to habitat during entanglement.

29, 2, From a different perspective, and using a large dataset of GPS buoy positions, Maufroy et al. (2015) estimated that almost 10% of all dFADs deployed by French vessels in the Indian and Atlantic Oceans ultimately became beached. In the Indian Ocean, beaching events occurred more widely than in the Atlantic, with most events observed in Somalia, the Seychelles, the Maldives, and Sri Lanka. Beaching events were also observed in the British Indian Ocean Territory (BIOT) marine protected area. These beaching events generally occur due to the dFAD drifting outside of the main fishing grounds and

⁵ The ISSF Purse Seine Skipper Guidebook refers to the use as a temporary step of old tuna fishing nets rolled up in “sausage” shapes and securely wrapped, though “the nets can eventually unroll and pose an entanglement hazard”; see also What does well-managed FAD use look like within a tropical purse seine fishery? (Doc. No. j-FAD 35/2017).

⁶ Maldives Government report to joint RFMO meeting on FAD management, Madrid, Apr 2017 (Doc. No. j-FAD_12/2017: Drifting FADs contribution to marine litter and ghost fishing: a perspective from the Maldives.

⁷ Doc. No. j-FAD_19/2017 Davies et al. 2017. Potential Environmental Impacts Caused by Beaching of Drifting Fish Aggregating Devices and Identification of Management Uncertainties and Data Needs.

malfunction/or loss of the tracking buoy. In the Indian Ocean this could be 1,000-1,400 beaching events per year from dFADs deployed by the EU and Seychelles flagged fishing fleet alone. These figures are probably an underestimation of the number of beaching events as they do not account for the dFADs that are dumped at sea with no Satellite buoy attached. As dFADs are built primarily from non-biodegradable materials this is a significant source of marine pollution that adds to the environmental impact already caused by 'ghost nets' from other forms of fishing such as trawling and gill nets (Stelfox, et al., 2014).

29, 3, The lack of research on this topic means that the problem of beaching dFADs is not well defined, with the risk of dFADs beaching events being mostly assumed and the extent and severity of beaching impacts uncertain.

29, 4, Balderson & Martin 2015 and Maufroy et al. 2015 ascertain that dFADs may result in some ghost fishing and that it is therefore essential to assess the magnitude of overall mortality of turtles through entangling in dFADs at sea or beached [from Rees et al., 2016. Research priorities for sea turtles: a review].

29, 5, There are reports of Echebaster satellite trackers that are usually deployed on dFADs being found on a beach in South Africa (<http://southcoastherald.co.za/73075/fishing-tracker-discovered-off-shelly-beach>) and another report of an Echebaster satellite buoy washing up on a beach in Cape Vidal, South Africa in March 2017. In the Indian Ocean, beaching events have also been reported from Somalia, the Seychelles, the Maldives, Sri Lanka and in the British Indian Ocean Territory (BIOT) marine protected area (Davies et al, 2017). There are numerous other reports of dFADs drifting onto sensitive reef ecosystems and causing habitat damage.

29, 6, At the Global FAD Science Symposium held in Santa Monica, California, 20-23 March 2017 and the Joint t-RFMO FAD Working Group meeting held in Madrid on 10 April 2017, one of the studies presented (Davies et al, 2017), specifically investigated the potential for FAD beaching events to occur in the Indian Ocean, characterising beaching risk and identified knowledge gaps. Their case study examined the spatio-temporal dynamics of dFAD dispersal in the Indian Ocean, specifically estimating the probability of dFAD beaching events on coral reefs and examining the potential environmental impacts of dFAD beaching in terms of physical damage to coral reef and other shallow water habitats. They also identified and critically discussed possible approaches to managing the issue of beaching dFADs.

29, 7, The CAB entirely fails to engage with this critically important evidence (a serious non-procedural irregularity) and adopts an approach so superficial as to be arbitrary and/or unreasonable.

30, As long as the UoA does not use bio gradable FADs, the annual input of lost non-degradable FADs must be classified as a non-reversible habitat modification.

31, Furthermore, and more particularly:

31, 1, The Moir Clark et al.(2015) paper, which is primarily focused on catch and bycatch composition of IUU fishing activities in the British Indian Ocean Territory (BIOT), specifically also states that they wanted to "bring[s] to the attention of the WPEB [Working Party on Ecosystem and Bycatch] an apparent recent increase in lost or abandoned fishing gear during 2014 and 2015, the majority of which have been fish aggregating devices (FADs) that have been found washed on shore". They state that while abandoned gear had been encountered in the past it had been a relatively rare occurrence. Between March and April 2015 however 18 items were found and the authors conclude that these numbers are very much an underestimation of the true impact on the ecosystem as abandoned fishing gear was only encountered opportunistically, while on patrol, rather than during any systematic surveys. Most of the gear was found washed up on shore, on the seaward side or trapped on the seaward side reef.

31, 2, Of all 22 items listed that had been encountered, all but one of these items, a longline flag, were FADs. In some cases the name of the vessels could be distinguished. Out of the 14 lost and abandoned FADs that could be connected to specific vessels through markings, 3 could be linked to Echebaster vessels, namely the Alakrana, Elai Alai, Campolibre Alai. The report also stated that "[t]he risk to some animals posed by FADs was demonstrated by the sighting of a juvenile green turtle trapped in the netting of a FAD which washed up on Ile Anglaise, although in this case the turtle was released alive. It should be noted that, following IOTC Resolution 13/08, it is recommended that the sub-surface component of a FAD is made from non-meshed materials such as ropes or canvas sheets instead of netting. FADs evidently utilising netted material were encountered on a number of occasions".

31, 3, The waters of the British Indian Ocean Territory (BIOT) were declared a Marine Protected Area (MPA) on 1 April 2010 and from 1 November 2010 became a no-take MPA to commercial fishing. Mees and Stevens (2016) identified discarded fishing gear abandoned or lost FADs as one of the threats to the ecosystem. According to them the discarded, lost and abandoned fishing gear and FADs are

"causing inter alia hazards to nesting turtles and ghost fishing". It should be of particular concern and relevant that the Echebaster fishery is having direct impacts on sensitive ecosystems, and that one negative environmental impact of dFADs is that they have the potential to wash ashore and become grounded or beached, potentially causing damage to marine habitats. However, other than anecdotal reports, this issue has received very little research attention to date. The lack of research on this topic means that the problem of beaching dFADs is not well defined, with the risk of beaching events mostly assumed and the extent and severity of impacts uncertain.

31, 4, Davies et al. (2017) mention that dFADs can have a number of negative environmental impacts. This includes 'ghost fishing, degradation and damage to benthic habitats and causing marine pollution. When they wash ashore and become grounded or beached, there is a serious risk of causing damage to marine habitats. However, other than anecdotal reports, this issue has received very little research attention to date. The lack of research on this topic means that the problem of beaching dFADs is not well defined, with the risk of beaching events mostly assumed and the extent and severity of impacts uncertain.

31,5, Davies et al (2017) contend that the beaching of dFADs has the potential to cause physical impacts to marine habitats and could also constitute marine pollution. Old fishing nets are a common material used in dFAD construction and previous studies have shown ALDFG nets to entangle significant numbers of animals, a process termed 'ghost-fishing'. This entangling impact is likely to be variable by habitat. For example, nets in shallow sandy bottom habitats may follow this pattern, yet nets caught on rocky bottoms, structures, or reefs could tear and form larger holes for larger animals to become entangled thus altering the catch selectivity of the net (Stelfox et al., 2016). In addition, ALDFG material may get colonised by smaller animals looking for food and shelter, which in turn could attract larger predators that may become entangled, potentially prolonging the fishing effect (Carr, 1987). Ghost fishing may be particularly damaging if it occurs in important foraging, spawning and nesting grounds, or if it intercepts migration routes (Gilman et al., 2010).

31, 6, The design and nature of dFADs is widely variable but usually consist of sub-surface aggregating material made of old fishing nets tethered to a floating surface frame. Where nets are used, it is likely that monofilament nets are likely to have greater ghost fishing capacity. This is due to the higher visibility of the multifilament nets (Ayaz et al., 2006). Driven by concerns over shark and turtle entanglement within these nets, there has been a move towards changing dFAD designs to reduce entanglement (for details see MRAG, 2017). These consist of using smaller mesh sizes and replacing the sub-surface net curtains with rolled net 'sausages' (Franco et al., 2009; Balderson and Martin, 2015). However, these 'sausages' have been shown to unravel, questioning their efficacy at reducing entanglement rates. In addition, 'sausage' nets do not prevent the entanglement of corals, although dFADs built with synthetic rope appear to be less likely to become entangled (Balderson & Martin 2015).

31,7 These factors have led to organisations, such as the International Seafood Sustainability Foundation (ISSF), calling for the term 'non-entangling' dFADs to be reserved for solely for 'ther coral and thus the process repeats itself. Depending on the species and size of coral colonies, it may take long periods for the reef to recover from intense physical trauma as corals grow between 0.4-1.5 cm per year for massive species and up to 20 cm per year for branching species (e.g. Crabbe and Smith, 2005). Recovery from other physical traumas have been estimated at between five and ten years to recover from blast fishing (Fox and Caldwell, 2006), or ten (Connell, 1997) to 40-70 years (Dollar and Tribble, 1993) to recover from storm damage. In some cases, recovery can then follow a different trajectory and the reef becomes an altered community (Hughes et al., 2005). It is difficult to ascertain the impact of nets on other habitats, such as seagrasses, as few have studied the impact of ALDFG. However, seagrass growth is known to be very slow, 0.4-7.4 cm per year (Boudouresque and Jeudy de Grissac, 1983), and previous studies have shown that seagrass communities take can between 1.4-9.5 years to recover from mechanical scarring from boats (Kenworthy et al., 2002).

31,8, However, the impact of ALDFG is not restricted to the sub-tidal zone. If the ALDFG is not caught within an ocean gyre or caught on the benthos, then it will most likely come to rest along coastal beaches and shorelines. In some areas, ALDFG can account for more than half of the litter found on beaches (Hong et al., 2014). Beached litter can have both economic and ecological consequences. For example, beach litter may reduce a beach's aesthetic appeal to tourists and possibly reduce visitor numbers. Alternatively, litter can form a significant proportion of sea-bird nest building material (Schernewski et al., 2017; Votier et al., 2011) and can negatively affect turtle hatchlings trying to reach the sea (Özdilek et al., 2006).

31, 9, Most dFADs are constructed from non-biodegradable materials, including nylon, polyethylene, metal, plastics and electronic components. These materials typically degrade very slowly, often only break up into smaller pieces through mechanical action, and have the potential to pollute the marine environment. Synthetic materials such as these can then enter food-webs through ingestion by plankton (Setälä et al., 2014), turtles (Schuyler et al., 2012) and corals (Hall et al., 2015), potential

severely inhibiting animal fitness (Wright et al., 2013). In addition to this chemical pollution, ALDFGs also have the potential to biologically pollute ecosystems through the transportation of invasive species which can disrupt community structure and cause local extirpations of native species (Derraik, 2002; Macfadyen et al., 2009).

31, 10, There is no clear consensus on whether dFADs breach international laws on marine pollution as it is difficult to define when it has become ALFDG. If a dFAD was deliberately discarded this would likely violate MARPOL Annex V, and would also likely contravene the London Convention. The definition is complicated by the frequent ‘stealing’ of dFADs at sea, when the GPS buoy belonging to one vessel is removed and replaced with another from the new vessel.

31, 11, Balderston & Matis (2015) looked at lost FADs in Seychelles and found that the increased number of deployments in recent years has led to an increase number of lost dFADs. These lost dFADs continue to drift with ocean currents and a large number eventually come into contact with land and ‘beach’, becoming stuck in a wide range of habitats. In their paper they detail the first attempt to assess the environmental impact and causation of lost dFADs that have become beached on and around Seychelles islands. showed that vessels owned by Spanish companies were responsible for 76% of the dFADs found beached in the study area. The data also shows that there has been a move by the fishing industry towards ‘non-entangling’ dFADs that make use of ‘sausage nets’ to reduce the entanglement of sharks and turtles in the open ocean but that these devices still pose an entanglement risk when they come into contact with coral reefs.

31, 12, Balderston & Matis (2017) state that there are a number of concerns about the environmental impacts of DFADs. Entanglement of marine life within the net of the DFAD itself has been shown to be having a major impact on pelagic species such as sea turtles and sharks. Sea turtles, particularly the vulnerable Olive Ridley Turtles (ORTs) (*Lepidochelys olivacea*) (Abreu-Grobois, et al., 2008), spend their juvenile years associated with floating objects in the open ocean. ORTs are attracted to DFADs and can become entangled in the nets which have been shown by researchers to be composed of the mesh size most dangerous to turtles (Stelfox, et al., 2014).

31, 13, An estimated annual DFAD entanglement mortality of 480,000-960,000 silky sharks (*Carcharhinus falciformis*) in the Indian Ocean (Filmalter, et al., 2013) is a similar figure to the combined world fisheries catch of Silky Sharks (400,000-2million), a situation that clearly needs addressing (Filmalter, et al., 2013). These concerns have lead towards changes in FAD design to try to limit entanglement (Tolotti, et al., 2015). Net curtains are being replaced by rolled net ‘sausages’ (Franco, et al., 2009) and smaller mesh sizes are being used in so called ‘Ecological FAD’ designs. The non-entangling nature of these dFAD designs has been called into question as sausage nets have been shown to unravel and small mesh netting can tear creating larger holes, as such the International Seafood Sustainability Foundation (ISSF) has refined its definition of ‘non-entangling’ FADs to only include those that contain no netting in the construction (ISSF, 2015).

31, 14, As well as impacts on non-target species there are growing concerns about the effect of DFADs on the tuna fisheries themselves. The use of DFADs has significantly increased the catches of juvenile bigeye (*Thunnus obesus*) and yellowfin tuna (*Thunnus albacares*) causing a reduction in yield per recruit (Dagorn, et al., 2013) and average sizes that are well below that of first spawning (Fonteneau & Chassot, 2014). Although significant stock declines have not yet been observed, with so many unknowns with regards to the effect of this type of fishing pressure surely a precautionary approach to FAD use should be adopted.

31, 15, Balderson & Martin (2015) reported that in April 2015 ICS teams conducted DFAD surveys around St. Francois and Farquhar atolls in Seychelles to determine the number of DFADs currently beached at these locations. A total of 96 DFADs were found during these surveys. 214 separate DFADs were recorded by ICS between 2011 and 2015. Of these, 210 were recorded as beached after they had become stuck and were no longer drifting. As the majority of the data was recorded opportunistically then there would have been DFADs passing by that were missed and these figures therefore represent the minimum number of DFADs that beached on the islands during this time period. Of the DFADs, 128 (60%) were found with a Satellite buoy attached, and it was possible to determine the fishing vessel that was using the DFAD for 115 (90%) of these. 16 of the FADs that could be linked to a particular vessel belonged Echebastar.

31, 16, Balderson & Martin (2015) mention that a relatively low proportion (18.4%) of DFADs had hanging curtain nets as the aggregator. The use of fishing nets rolled up into a sausage (sausage net) was found to be the most common form of aggregator (62.1%). What was apparent was a lack of bio-degradable materials used in DFAD construction. In all the DFADs observed the aggregator components were made entirely of synthetic materials. Of DFADs using curtain nets that could be identified to a vessel 100% were from Spanish companies. Where the aggregator was recorded for French vessels, 77% used sausage nets, with the others using synthetic rope.

31, 17, The materials used to cover the raft of the DFADs were also entirely synthetic. 85% of DFADs had fishing net stretched across the frame, whilst 44% had shade cloth or a combination of both fishing net and shade cloth. Of DFADs that still had the aggregator part attached (119) only one was found to have no netting used in its construction. This FAD was constructed using a steel frame with shade cloth stretched across (Figure 5), the aggregator was a synthetic rope hanging down from the centre to a depth of >30m, attached to the rope were woven sacks (salt bags) placed at regular intervals.

32, FAD management at IOTC has the following weaknesses (which mean that it cannot be determined that the use of FADs is within scope):

32,1, The impact of current FAD numbers on tuna populations and the broader ecosystem are poorly understood. The Precautionary Approach requires as a minimum a freeze of the dFAD footprint. Adopting 'limits' that incentivise an increase in overall dFAD use are counterproductive.

32, 2, There is an absence of mechanisms to share data collected by dFADs with fisheries managers, relevant scientific bodies, secretariats, and research institutes, in line with confidentiality provisions of the RFMOs, not later than 6 months after they are collected. Such data would provide clarity on dFAD numbers, benefit future stock assessments, and aid development of more effective FAD management measures. To accomplish this, dFAD data should be shared with

32, 3, There is a lack of understanding as to how FAD fishing and densities of dFADs in tropical areas impact the distribution and CPUEs of tropical tunas to higher latitude coastal fisheries.

32, 4, The absence of mechanisms to track and monitor dFADs on the high seas by the IOTC to complement measures in coastal state EEZs.

32, 5, If non-biodegradable dFADs are not recovered, then they should be considered abandoned and this should be recorded as a violation of MARPOL Annex V and the London Convention (see Davies et al, 2017), reported to the Flag State, and appropriate action should be taken minimize losses in the future.

32, 6, Vessels should be accountable for all of the FADs they deploy, and should recover them as part of their fishing strategy. This is consistent with the UN Fish Stock Agreement, which calls on States to, "minimize pollution, waste, discards, catch by lost or abandoned gear, catch of non-target species, both fish and non-fish species, and impacts on associated or dependent species." When lost or stranded, dFAD owners should be liable for recovery and rehabilitation costs in case of damage to coastal habitats, such as reefs.

33, Purse seine fisheries in the Indian Ocean catch several ecologically important groups including other tunas and sharks. In particular, sharks are considered top predators in many ecosystems and play a critical role in how these ecosystems are structured and function (Piraino et al. 2002) (Stevens et al. 2000). The loss of these predators can cause many changes, such as to prey abundances, which can lead to a cascade of other affects (Myers et al. 2007) (Duffy 2003) (Ferreira et al. 2010) (Schindler et al. 2002) and behavioural changes (Heithaus et al. 2007).

34, The use of FADs in the Indian Ocean impacts the surrounding ecosystems. Smaller tuna, specifically bigeye and yellowfin, are often associated with FADs and this can lead to growth and recruitment overfishing (Freon and Dagorn 2000). In addition, behavioural changes in tunas may be associated with the introduction of FADs. These include increases in the biomass of tunas under FADs, reduced free-school abundance, changes in school movement patterns and structure, and differences between the age and size of free and FAD associated schools (Fonteneau 1991) (Menard et al. 2000a) (Menard et al. 2000b) (Josse et al. 1999) (Josse et al. 2000).

35, The negative long-term impacts of FAD fishing are difficult to evaluate due to insufficient qualitative data (Fonteneau et al. 2000), so additional research needs to be undertaken to determine the potential effects of FADs on the ecosystem, including monitoring the number of FADs being used (Dagorn et al. 2012). Recently, the Indian Ocean Tuna Commission (IOTC) required individual countries to provide a management plan for FADs to be submitted to the Commission in 2013. Within this plan, countries must identify designs and deployment options that will reduce the incidental capture of sharks, marine turtles, or other bycatch species (IOTC 2013).

36, For both yellowfin and bigeye, catches of small tunas on dFADs reduce the yield per recruit of each cohort recruited in the fisheries. The development of the DFAD EU and associated flags purse seine fishery has resulted in a major increase in the catch of small YFT in the IO over the last decades. Annual numbers of small yellowfin caught under dFADs have been steadily increasing since 1991, from less than 4 million fishes caught in 1991 to more than 20 million in 2013 (Fontenau & Chassot, 2014)⁸.

⁸ Fontenau, A. & Chassot, E. 2014. Managing tropical tuna purse seine fisheries through limiting the number of drifting fish aggregating devices in the Indian Ocean: food for thought IOTC–2014–WPTT16–22

37, It is estimated that the total number of DFADs numbers had increased by about 70% since the early 2000s and that they had reached around 10,500-14,500 in 2014. A good knowledge of the total numbers of DFADs is urgently needed to better estimate the fishing effort and capacity of purse seine fisheries. Future limitations in the number of DFADs could be a direct and efficient way to reduce fishing effort exerted by purse seiners and their support vessels.

38, Fontenau and Chassot (2014) suggested that by IOTC following the precautionary approach, they should consider setting a cap on the number of DFADs drifting at-sea and that threshold reference levels could be based on the year 2013, at least to slow down the trend observed in the overall fishing capacity on DFADs. They went further to say that any such reduction measures should first be carefully analysed by an ad hoc IOTC DFAD multidisciplinary working group to ensure their efficient implementation and to allow an improved sustainability of the concerned fisheries.

39, It should be noted that the FAD limits under current IOTC resolutions were not derived through informed scientific analysis, but were rather based on compromise measures underpinned by political discussions. It cannot be said with confidence that the current limits on FAD numbers, or even the voluntary commitment of Echebaster under ANABAC, are precautionary. Fontenau & Chassot (2014) suggested that a return to 2013 levels might be precautionary.

40, There have been estimates of the number of FADS being deployed annually in the Indian Ocean, although they are often described as ‘back of the envelope’ calculations (Blaha, 2015) as the information is not readily available. Blaha (2015)⁹ asserts that “Information on FAD deployments remains hard to find. Much of the data that would be needed to develop a precise estimate of their numbers exist but are confidential as industry invest heavily on the construction and electronics of it (just think how much 3 km of Polyethylene line will cost!) and they don't want other companies to use their FADS, so this information proprietary”.

41, Maufroy et al (2017)¹⁰ stated that despite the recent implementation of dFAD management plans by tuna RFMOs to collect data on dFADs and GPS buoy use (ICCAT Recommendation 14/01; IOTC Resolution 13/08), it is still difficult to evaluate the magnitude and ecological impacts of dFAD use. In this context of growing concerns for tropical tunas and pelagic ecosystems, it is necessary to have a good understanding of how many dFADs are currently drifting at sea and how many dFADs and logs are equipped with GPS buoys.

42, This information is still currently lacking at the IOTC. Without a good understanding of the total number of dFADS drifting in the Indian Ocean at any given time as well as the number of potential deployments that can be made based on available GPS buoys, FAD limits based on IOTC resolutions are applied arbitrarily and without scientific basis.

43, There is also no independent monitoring of the numbers of dFADs that are actually deployed. This lack of transparency is not conducive to applying the precautionary approach.

44, The impacts of dFADs on the ecosystem is undeniable. Maufroy et al (2017) summarised these impacts as follow: “The development of dFAD-fishing has had several consequences (Dagorn et al., 2013b; Fonteneau et al., 2013). First, this increased fishing effort and overall capacity of the fishery by (i) enhancing the aggregation of tropical tunas, including juveniles of yellowfin and bigeye tuna; (ii) reducing search time dedicated to locating tuna schools; and (iii) increasing the fraction of sets with non-zero catch (Ariz et al., 1999). Secondly, dFADs may have modified the natural habitat of tropical tunas and other species. There are concerns that the increased use of dFADs has modified the dynamics and structure of tuna schools, their feeding ecology and movements (Fonteneau et al., 2000a; Marsac et al., 2000; Ménard et al., 2000; Hallier and Gaertner, 2008). It has been hypothesized that dFADs act as an “ecological trap” by maintaining tunas in suboptimal areas and/or reducing school size (Marsac et al., 2000; Hallier and Gaertner, 2008; Sempo et al., 2013), though evidence for such effects remains limited (ISSF, 2014). In addition, FOB fisheries have potential to severely negatively impact coastal and pelagic ecosystems via increased levels of bycatch and discarding (Amandé et al., 2010, 2012; Hall and Roman, 2013), ghost fishing of sensitive species (Filmalter et al., 2013), and potential damage to fragile ecosystems when lost FOBs end up beaching on coral reefs (Balderson and Martin, 2015; Maufroy et al., 2015).”

45, Without fully understanding all these impacts, and having a better understanding of what level of FAD reductions will have the desired effect to maintain healthy ecosystems, it cannot be claimed that the Echebaster operation, which is heavily reliant on FAD fishing, is sustainable and will not cause irreparable harm to sensitive ecosystems.

⁹ Blaha, F. 2015. Fish aggregating devices (fads) are not a fad... <http://www.franciscoblaha.info/blog/2015/11/17/fish-aggregating-devices-fads-are-not-a-fad>

¹⁰ Maufroy, A., Kaplan, D. M., Bez, N., Delgado De Molina, A., Murua, H., Floch, L., Chassot, E., 2017. Massive increase in the use of drifting Fish Aggregating Devices (dFADs) by tropical tuna purse seine fisheries in the Atlantic and Indian oceans, ICES Journal of Marine Science, Volume 74, Issue 1, 1 January 2017, Pages 215–225, <https://doi.org/10.1093/icesjms/fsw175>

46, There is a clear potential for negative ecological impacts from FADs, and management is not designed to avoid these impacts.

47, FAD fishing has a large bycatch of juvenile silky sharks. An increase in the proportion of artificial to natural FADs increases the bycatch of such sharks (as well as other species). This has not been shown to be either reversible or a non-serious change to the pelagic ecosystem:

47, 1, The status of silky sharks in the Indian Ocean is uncertain. In the eastern and western Indian Ocean, along with globally, silky sharks are considered Near Threatened by the International Union for the Conservation of Nature (IUCN) (Bonfil et al. 2009).

47, 2, No qualitative assessment has been conducted in the Indian Ocean, due to a lack of information. The information that does exist indicates that significant declines in abundance have occurred over time, and silky shark is considered one of the most vulnerable shark species in the Indian Ocean (IOTC 2012) (IOTC 2013g). They are the main shark species (79% of all shark bycatch) in Indian Ocean purse seine fisheries (Amande et al. 2008). Monterey Aquarium's Seafood Watch programme says "the worst scoring species in the associated (Indian Ocean) purse seine fishery is the silky shark, due to the potentially low population size and large negative impacts from fishing."

47, 3, Current fishing mortality rates are unknown but it is generally thought that maintaining or increasing fishing effort will likely cause the biomass to decline (IOTC 2013).

47,4, The incidental capture of ecologically important species by FADs has the potential for negative ecological impacts, and management is not designed to avoid these impacts.

47, 5, A recent study by Poisson et al. (2014) has also shown that the overall mortality rate of silky shark individuals brailed on board purse seiners operating in the Indian Ocean was 85%.

48, If the CAB is seeking to disregard the effect of dFADs on the basis that this UoA comprises only a small number of vessels out of the total number deploying and/or fishing on dFADS, then that must be wrong in principle; it would allow the overall impact to be disregarded, with the standard being met by all vessels, provided they were considered in sufficiently small groups. This would remove all pretence of legitimacy from the standard.

49, The CAB states (p.89 of the Final Report) that concerns as to the effects of dFADs on the migratory patterns of tuna as **well** as the effects of lost dFADs on coral reefs are addressed in Components 2.4 and 2.5. Without accepting that these are the only components where such matters are properly to be considered, the flaws in the CAB's report set out above fundamentally undermine the scoring in 2.4 and/or 2.5, such that the scoring there is seriously irregular and/or arbitrary and/or unreasonable.

CAB Response

It is not clear which scoring IPNLF is referring to in objection 2 and in our view does not support "*an orderly, structured, transparent and independent process by which objections to the Final Report and Determination of a Conformity Assessment Body (CAB) can be resolved*" (PD 2.1.1) as it does not "*set out clearly and precisely the basis upon which (PD2.7.2) is said to apply*".

In the report, we clearly outline our rationale "*Table 1 of the MSC FCR 2.0 notes that habitat enhanced fisheries can only be considered for MSC certification if they are considered "in scope", specifically "any modifications to the habitat of the stock are reversible and do not cause serious or irreversible harm to the natural ecosystem's structure and function".*

The MSC defines modified habitats as habitats modified in order to increase production or favour desirable species. Included in the list of potential modified habitats are FADs. The MSC also defines enhanced fisheries as any activity aimed at, inter alia, raising total or elemental production, including, potentially, by habitat modification. Enhanced fisheries may necessitate an alternative assessment tree and it is necessary, therefore, to consider whether any fishery using FADs constitutes an enhanced fishery.

Many tuna fisheries use anchored or drifting FADs. To date, large scale tuna fisheries using purse seines in the WCPFC and Indian Ocean have not been regarded as enhanced fisheries and have been assessed using the default tree, even though many thousands of FADs are involved. For example, the Maldives pole and line fishery uses 50 anchored FADs for some of its activity. That fishery has not been considered as an enhanced fishery.

Whether FADs affect stock production as opposed to fishery production is the key issue.

FADs are used to attract target species for a period of time and to increase catch rates. They are an efficiency-enhancing device but do not increase total production as such.

We have no evidence that FADs affect stock production.

We concluded that Echebaster is an enhanced fishery (in line with G7.4.3 Scope Criteria C) but doesn't require a modified tree (in line with G7.4.3).

Our scoring rationale includes the following from Dagorn et al "Modify the natural behaviour of tropical tunas (Hallier and Gaertner, 2008; Marsac et al., 2000; Sempo et al., 2013). *The hypothesis that FADs may modify the natural behaviour of tropical tunas has not been proven. The tagging information available from IOTC-RTTP does not suggest any behaviour modification of tuna species. This is an ongoing area of research.*

The scoring rationale in the final report also notes "*The UoA average annual catch of yellowfin tuna is about 20,000 t, being 5% of total Indian Ocean removals, and therefore it is considered highly unlikely to disrupt underlying ecosystem function*".

We note several of IPNLF's comments are a direct cut and paste from Maufroy et al (2016).

We presume that IPNLF is referring to Maufroy et al 2016. (Maufroy, A., Kaplan, D. M., Bez, N., De Molina, A. D., Murua, H., Floch, L., and Chassot, E. Massive increase in the use of drifting Fish Aggregating Devices (dFADs) by tropical tuna purse seine fisheries in the Atlantic and Indian oceans. – ICES Journal of Marine Science, 74: 215–225). IPNLF fails to note that the research relates to tuna fisheries in the Indian and Atlantic Oceans.

This comment appears to relate to the issue of whether or not FADs represent a modification to the habitat. As articulated above, we contend that although FADs are an example of an enhanced fishery, our expert judgement concluded the default assessment tree was appropriate to assess the impacts of this UoA.

We question the use of "supposed fact(s)".

400 FADs were in use at the time of the site visit at the beginning of April 2017.

The reality is that Echebaster reduced the number of FADs it uses in compliance with Resolution 17/01. Observers verify the use of FADs.

The MSC approach relies on evidence. The assessment team apply professional judgment to all information before them. In particular it is noted that Observers verify the use of FADs. We disagree that this is "no evidence". In contrast to the IPNLF claims of "usual practice", which is not supported beyond assertion, we note that Echebaster report that its vessels do not set on entangling nets, and as noted above observers verify the use of FADs.

There is no empirical evidence that entanglements happen on any of the Echebaster FADs.

Echebaster states that their maximum purchase is of 700 satellite buoys / vessel / year. The purchase is controlled by independent bodies accepted and recognised by fishing authorities in Spain and Seychelles. The manufacturers have the supporting documents (invoices) to support the purchases. These may be made available if required.

Echebaster states that their FADs are not made using old tuna fishing nets; nor are they the "sausage" design. The assessment team are not aware of any evidence that this is not correct. Echebaster does not claim use of fully bio-degradable FADs.

The precautionary approach is about assessing evidence appropriately in its context. Allegations without evidence are of limited weight. We do not agree that it is "inconceivable" that a fishery would not set their net around an entangling FAD "encountered by chance". This is a subjective point of view that is not supported by evidence.

We are unsure of the meaning of the last part of the paragraph "with further entangling FADS being added to the equation".

24 - We fully cover this point in the Final Report. However, for clarification on the potential number of lost buoys please see our response to SP (Section 63 Paragraph 2). The IPNLF comment on the database is incorrect – we recommend that Echebaster maintain a data base as Echebaster does not "even keeps a database of lost FADs.

IPNLF refers to Moreno et al (2016) and Moreno et al (2017) as evidence that the potential for damage to sensitive habitats had led to the recommendation for the use of biodegradable FADs. We note that one section of the former is "3.5 Strategy to test biodegradable FADs during fishing operations".

IPNLF make reference to the paper by Stelfox et al (2015) implying this is evidence of "negative environmental impact of dFADs washing ashore and become grounded or beached, potentially causing damage to marine habitats". Our reading of the paper presents a different perspective. The paper relates to the interaction of derelict FADs with olive ridley turtle. The authors make a single reference to coral reefs; "in order to prevent and reduce the number of ghost nets that end up in the wider Indian

Ocean, injuring marine fauna, and also damaging coral reefs and other benthic habitats, we recommend that a series of actions be implemented". There is no analysis of ghost nets and coral reefs. The authors review ghost nets from all types of fisheries and do not categorise where these were found over the whole period; however; "59 ghost nets were recorded in the Maldives, between July 2013 and July 2014. All ghost nets were found near-shore (and all were removed from the water)". Further, of all the ghost net conglomerates (59), "a minimum of four net conglomerates recovered from the Maldives between July 2013 and July 2014 were identified as FADs due to the presence of bamboo frames and floats" i.e. they were not from Echebaster. There would be some possibility that a "fifth ghost net conglomerate found in Ari Atoll in September 2014 was also identified to be a FAD with a tracker" was from Echebaster.

IPNLF refers to the paper by the Government of the Maldives to support the contention that negative environmental impact of dFADs washing ashore and become grounded or beached potentially cause damage to marine habitats. Our review of this report indicates concern over the potential for damage of corals by derelict FAD but provides no support evidence.

29.1 IPNLF refers to the paper by Balderson & Martin (2015) when stating "FOB fisheries have potential to severely negatively impact coastal and pelagic ecosystems via potential damage to fragile ecosystems when lost FOBs end up beaching on coral reefs" that leads to the conclusion that "Without fully understanding all these impacts and having a better understanding of what level of FAD reductions will have the desired effect to maintain healthy ecosystems, it cannot be claimed that the Echebaster operation, which is heavily reliant on FAD fishing, is sustainable and will not cause irreparable harm to sensitive ecosystems".

It is interesting to note other parts of the report:

In the Indian Ocean this could be 1,000-1,400 beaching events per year from DFADs deployed by the EU and Seychelles flagged fishing fleet alone. This figure seems to be acceptable; of this we are calculating that up to 200 (the total that beach on all structures including coral and beach) may come from Echebaster vessels. Please see our response to SP (Section 63 Paragraph 2) for clarification on the number of buoys that may be lost by Echebaster vessels.

The total number of derelict FADs located in the study area identifiable by vessel was 114.9 (sic) that came from 38 vessels. The number identified as being from the four Echebaster vessels was 12.3 (sic).

One of the stated objectives of the paper is to "describe (the FAD) environmental impact" While the authors quantify the number of FADs beached in the study area, there is little consideration of the potential impact; "The netting and ropes of the DFADs becomes caught more easily on corals and once attached rarely drift away again. The marine organisms most impacted by DFADs are corals with 37% of DFADs found with corals entangled in the structure, 100% of these were DFADs using nets as the aggregator. 46% of DFADs using sausage nets were found with corals entangled in the nets". No evidence is presented to quantify the damage to corals from derelict FADs.

In terms of DFAD construction there was a relatively low proportion (18.4%) of DFADs that had hanging curtain nets as the aggregator. The use of fishing nets rolled up into a sausage (sausage net) was found to be the most common form of aggregator (62.1%). What was apparent was a lack of bio-degradable materials used in DFAD construction. In all the DFADs observed the aggregator components were made entirely of synthetic materials. Of DFADs using curtain nets that could be identified to a vessel 100% were from Spanish companies.

This leads us to conclude that there is a potential for damage to corals from interaction with derelict FADs e.g. from the breaking of the stems. However, such damage will be coral species specific. At the same time, it may be considered that the issue may be more related to the issue of marine litter as opposed to the UoA reducing the structure and function of the VME habitats to a point where there would be serious or irreversible harm. Thus, we agree with the IPNLF statement that "the lack of research on this topic means that the problem of beaching dFADs is not well defined, with the risk of dFADs beaching events being mostly assumed and the extent and severity of beaching impacts uncertain" (our emphasis).

29.2, IPNLF presumably refers to the paper by Maufroy et al to provide evidence of the number of lost and derelict FADs and the associated potential negative interaction with corals in the Indian Ocean.

We agree that lost and derelict FADs are a source of marine pollution; we cannot comment as to whether or not it is "significant" as we have no indication of this relative to other sources. In our opinion, the paper supports our analysis that the scale of the lost and derelict FADs associated with Echebaster is relatively small. We quote from the conclusions of the authors, with lost FADs "potentially impacting sensitive habitat areas, such as the coral reefs of the Maldives, the Chagos Archipelago, and the Seychelles". The risk is acknowledged; the nature and extent of potential damage is uncertain.

29,4 We would be grateful if IPNLF could confirm the relevance of this paragraph to the Echebaster fishery.

29.5 We do not dispute IPNLF's point (<http://southcoastherald.co.za/73075/fishing-tracker-discovered-off-shelly-beach-and-Davies-et-al-2017>) about the reports of beached Echebaster FADs in South Africa and (assuming the second part of the point is specifically related to Echebaster vessels) that similar events have been reported in Somalia, Seychelles, Maldives, Sri Lanka and BIOT marine protected area. This fits with our own conclusion that that beached Echebaster FADs will be found over a wide geographic area, depending on the location where they were originally set, currents and weather conditions.

29.6 IPNLF refers to a paper by Davies et al as further evidence of the negative environmental impacts of FADs.

As noted by the authors "One negative environmental impact of dFADs is that they have the potential to wash ashore and become grounded or beached, potentially causing damage to marine habitats. However, other than anecdotal reports, this issue has received very little research attention to date. The lack of research on this topic means that the problem of beaching dFADs is not well defined, with the risk of beaching events mostly assumed and the extent and severity of impacts uncertain. The aim of this paper is to better characterise the potential problem of beaching dFADs." Due to the lack of direct evidence, the authors look to develop understanding by reference to the impacts of other gears. This is apposite when FADs are partially constructed using abandoned, lost, or otherwise discarded fishing gear (ALDFG). The authors write "ALDFG has also been shown to degrade benthic habitats), such as coral reefs as nets are prone to snagging on rocks, sponges and corals. Once snagged, the wind and wave forces exerted on the net may break away from the reef, damaging habitat in the process. Fishing gear is then free to snag on another coral and thus the process repeats itself. Depending on the species and size of coral colonies, it may take long periods for the reef to recover from intense physical trauma as corals grow between 0.4-1.5 cm per year for massive species and up to 20 cm per year for branching species . Recovery from other physical traumas have been estimated at between five and ten years to recover from blast fishing or 10 to 40-70 years to recover from storm damage".

A further point made by Davies et al shows that the distribution of derelict FADs is not uniform around the Indian Ocean. "Our simulations show that risk and location of dFAD beaching events are strongly dependent on areas and periods of deployment. Risks of beaching estimated as the proportion of six-month duration simulations intersecting with coral reef coverage of BIOT, Comoros, Maldives, and Seychelles are overall high (overall mean of 32.3%), with a large variability between seasons and simulations".

Compare these time periods to MSC CR "SA3.13.4 The team shall interpret "serious or irreversible harm" as reductions in habitat structure and function such that the habitat would be unable to recover at least 80% of its structure and function within 5-20 years if fishing on the habitat were to cease entirely". While there are number of uncertainties (e.g. the length of time a derelict FAD interacts on a specific part of the coral), plausible argument would point to the negative impact of derelict FADs being less than blast fishing and thus recovery may be less than 5 to 10 years and certainly less than 20 years.

29,7, We disagree. We have reviewed the evidence provided by IPNLF and we do not agree that the various papers support IPNLF's contentions. Above, we clearly articulate the reasons why we disagree with IPNLF. As our report clearly identifies, bio-degradable FADs have not been introduced by Echebaster and this is taken into account in our report, we are uncertain of the point that IPNLF is making. We do not consider the progress and issues related to the development process for biodegradable FADs as this is not relevant to the scoring of the fishery.

31,1 IPNLF refers to the paper by Moir Clarke on the increased number of derelict FADs in BIOT. What IPNLF omit to note in 31.1 is the authors concluding "As this information hasn't been collected systematically in the past, evidence of this trend is only anecdotal".

31,2 This evidence would appear to support our contention that the impact of derelict Echebaster FADs on local areas of coral is limited. While the impact on the specific small area of the coral may be significant (although the extent of any damage has not been quantified), in relation to the total area of the local reef, potential damage is negligible.

31,3 The paper by Meers and Stevens¹¹ is the BIOT national report to IOTC. We find it difficult to understand the use of this reference to arrive at its conclusion that "*It should be of particular concern and relevant that the Echebaster fishery is having direct impacts on sensitive ecosystems ...*" as it refers

¹¹ C.C. Mees and H. Stevens (2016) UK (British Indian Ocean Territory) National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2016, IOTC-2016-SC19-NR31, 18 pp

to the Indian Ocean fleet as a whole and not the impact specific to the UoA. We have addressed the impacts of the UoA.

31,5 IPNLF provides no evidence that Echebaster constructs its FAD using Abandoned, lost or otherwise discarded fishing gear (ALDFG). If IPNLF provides evidence we would be happy to review it. Echebaster states that it does not use ALDFG to construct its FADs.

31,16 This evidence supports our contention that the impact of derelict Echebaster FADs on local areas of coral is limited. While the impact on the specific small area of the coral may be significant (although the extent of any damage has not been quantified), in relation to the total area of the local reef potential damage is negligible.

Please see above why we conclude that the fishery is in scope.

IOTC did set a limit on the number of DFADs.

Echebaster states that an average of 350 active FADs per vessel in 2013. This is relatively close to the current limit of 300. In regard to the MSC standard, the question is the impact of the UOA on the ecosystem.

We do not seek to disregard the effect of DFADs; we follow the MSC standard that in P2 refers to the impact by the UOA.

The cumulative impacts of MSC certified fisheries are also considered under Pls2.1.1, 2.2.1 and 2.4.2. This is speculation by IPNLF.

We disagree with the IPNLF point of view. We have reviewed the IPNLF objection.

We see no reason to change the Final Report or our scores and determination

8. IPNLF Objection 3

IPNLF		
50, Tables 14–17 at p.36 of the Final Report set out tuna “landings” by Echebaster seiners, by species, for each of 2012, 2013, 2014 and 2015. Tables 40 and 41 at pp.132-133 of the Final Report set out “catch” of skipjack by Echebaster vessels (Seychelles-flagged and Spanish-flagged, respectively) for each of 2014, 2015 and 2016. Therefore figures for 2014 and 2015 can be compared, as follows:		
	Skipjack (tonnes) 2014	Skipjack (tonnes) 2015
Tables 14–17 at p.36 ('landings')	13,903	15,263
Tables 40 and 41 at pp.132-133 ('catch')	1,893 (Seychelles-flagged) 7,102 (Spanish-flagged) Total 8,995	6,752 (Seychelles-flagged) 6,500 (Spanish-flagged) Total 13,252
51, Therefore there is a significant discrepancy between the figures in the tables at p.36 and the figures in the tables at pp.132-133, particularly for 2014. The result is that catches are lower than landings. This discrepancy must be explained by the CAB, otherwise the scoring for each and every SI which refers to or is based on the tuna landings is arbitrary and/or unreasonable		
CAB Response		
Table 16 (2014) provides data on landings by Alkarana, C. Alai, Demiku, Elai. Alai, and Izaro (i.e five boats). Table 17 (2015) provides data on Alkarana, C. Alai, Elai Alai, Euskadi Alai, Izaro and J Alai (i.e. six boats). Table 42 (2014) provides data on Izaro, Alkarana and Elai Alai (i.e three boats) Table 42 (2015) provides data on Euskadi Alai, J Alai, Izaro, Alkarana and C. Alai (i.e five boats). The names of the boats are clearly shown in the tables. The difference in quantities reflects the number of boats taken into account. At the same time, we asked AZTI for clarification and they stated that after adjusting the numbers there is a small discrepancy between the two as they are extracted from different data sets. The net total differences between the two sets of data taking into account the vessels active in April 2014, were: 2014: 312 mt (albacore 15 mt; yellowfin 903 mt; bigeye -449 mt and; skipjack -176 mt) 2015: 261 mt ((albacore 25 mt; yellowfin 825 mt; bigeye -132 mt and; skipjack - 458 mt) We have reviewed the IPNLF comment / objection. As requested by the IPNLF, we have explained the discrepancy. This data will be included in the final report. Given the respective uses of the tables, there are no implications for the relative justifications and related scoring. We see no reason to change our scores and determination.		

9. IPNLF Objection 4

IPNLF
52, The Final Report, at least for P2, places a great deal of weight on data gathered by observers.
53, At p.236 of the Final Report, MSC Technical Oversight (item 27282) states, regarding the Second Report, the following: "Only one source of catch data is used in this assessment. It is unclear whether the catch data from the fishery observer program is adequate to assess the impact of the UoA on P2 species, information on how observer data is collected and analysed is not included in this assessment (see SA3.6.3, subclauses and associated guidance)." The CAB responds by stating that: "The report has been revised (section 7.3) to provide a more detailed description of the SFA observer program, the training of observers, and analysis of the data that was provided by AZTI to the assessment team."
54, Section 7.3 of the Final Report (p.37) just states: "The SFA observer programme is described under P3." There is indeed a description under P3, at pp.148-149. The description does indeed refer to training. However, it is silent about the analysis of data, apart from stating that the data is forwarded to national fisheries management division at SFA which ensures that observer data complies with IOTC resolution 11/04. In turn, IOTC resolution 11/04 is silent about data analysis. Therefore, the Final Report is deficient regarding information about the observer programme in terms of analysis – notwithstanding the MSC Technical Oversight and the CAB's response to it.
55, In addition, no information is provided at pp.148-149 about the following key aspects of the observer scheme: what minimum qualifications the observers need to have; what nationalities they are compared to the flag States of the vessels concerned; and how they are paid. This information, together with more information about the analysis of the data, needs to be provided by the CAB in order that stakeholders, including IPNLF, can form their own view as to the credibility of the observer scheme. Otherwise the scoring for each and every SI which refers to or is based on the observer data is arbitrary and/or unreasonable.
CAB Response
This is very specific and not typically the level at which certification assessment takes place. Essentially, IPNLF is saying that the team should review on a technical level the observer sampling regime. This type of review is not carried out during assessment, any more than the stock assessment for the target species is reviewed at a deep, technical level. The team applies professional judgment to consider inputs and reports provided to the team for review. Where technical reviews are carried out on stock assessments, observer schemes, etc, typically they are undertaken by teams of experts, with the required time and direct access to all data and documentation, key personnel, etc. The IPNLF seems to be suggesting a level of scrutiny and review that is well beyond what is reasonable or practicable for an assessment..
However, we did provide a detailed section of the report on the At Sea Observer Program. In that section, we refer to On Board Observer Manual prepared by OD and IRD, and used by the SFA in its training of observers, and its operation of the observer program. We also noted that AZTI takes all the digitized data from the SFA and summarizes it. We are satisfied with at-sea observer program and the data provided by AZTI. As the quantity of tabulated observed data was relatively low (but still fit for purpose), we include a recommendation and a condition on its availability and completeness.
IPNLF appears to believe that we should have presented data on the qualifications, nationalities and payment of the observers. The MSC does not <u>generally</u> require analysis of these matters. If the IPNLF's point is directed at credibility / veracity, the CAB is satisfied with the procedures in the observer manual and evidence provided. Stakeholders may refer to the observer manual
We have reviewed the IPNLF comment / objection.
We see no reason to change the Final Report, our scores and determination.

10. IPNLF Objection 5

IPNLF
56, At p.229 of the Final Report, the CAB (in response to PNA) states that observers “physically subsample the catch before any species are discarded”. At p.377, the Final Report (in the Meeting Record, Seychelles Observer Programme, paragraph 4) states that: “Observers identify tuna discard, sample bycatch and the impact of FADs.” As far as we are aware, these are the only two references in the Final Report to sample or sub-sampling by observers. These references are in the appendices, rather than in the main body of the report. In other words, the matter of catch sampling and subsampling seems to have been marginalised by the CAB. Yet the regime for sampling and sub-sampling is crucial to understanding the veracity of the data presented in Tables 23 and 24. Having acknowledged that sampling occurs, the CAB must explain what criteria are used to determine the sampling regime. Otherwise the scoring for each and every SI which refers to or is based on the observer data is arbitrary and/or unreasonable.
CAB Response
This is very specific and not typically the level at which certification assessment takes place. Essentially, IPNLF is saying that the team should review on a technical level the observer sampling regime. This type of review is not carried out during assessment, any more than the stock assessment for the target species is reviewed at a deep, technical level. see the response to IPNLF Objection 4 above. That being noted, we did provide a detailed section of the report on the At Sea Observer Program that refers to On-Board Observer Manual prepared by OD and IRD, and used by the SFA in observer training of observers and the implementation of the observer program. We also noted that AZTI takes all the digitized data from SFA and summarizes it. We discussed the details of the observer program with AZTI and SFA during the site visit. We were satisfied with at-sea observer program and the data provided by AZTI, although for a variety of reasons a large part of the data collected had not been tabulated. Nevertheless, we considered it sufficient as evidence (as fully described in the report). At the same time, we include a recommendation and a condition in the report on observer data availability and completeness. We disagree with IPNLF, any scoring based on the observer data is not arbitrary and / or unreasonable. We have reviewed the IPNLF comment / objection. We see no reason to change the Final Report, our scores and determination.

11. IPNLF OBJECTION 6

IPNLF
57, At p.366 of the Final Report, Peer Reviewer A (reviewing the Second Report) states that: “The information on catches presents no CVs [CV = coefficient of variation] or other measure of variability, and no power tests to estimate the % of samples needed for rarer species. Although average catches of minor species are generally low, data is unlikely to be normally distributed and at the least there needs to be some confidence levels around the estimates to determine the impacts.”
58, These comments have not been addressed by the CAB in the Final Report. In particular, the information on catches presents no CVs. That is very significant, in view of the fact, as pointed out by the peer reviewer, that “data is unlikely to be normally distributed and at the least there needs to be some confidence levels around the estimates”. The CAB must address this omission. Otherwise the scoring for each and every SI which refers to or is based on the catch data is arbitrary and/or unreasonable.
CAB Response
This objection is very specific and not typically the level at which certification assessment takes place. Essentially, IPNLF is saying that the team should review on a technical level the observer sampling regime. This type of review is not carried out during assessment, any more than the stock assessment

for the target species is reviewed at a deep, technical level. The team has to rely on inputs and reports. Where technical reviews are carried out on stock assessments, observer schemes, etc, they typically are undertaken by teams of experts, typically assigned more time and with direct access to all data and documentation, key personnel, etc.

We have reviewed the IPNLF objection.

We see no reason to change the final report, our scores and determination.

12. IPNLF OBJECTION 7

IPNLF

58a, We note that data from the vessel Demiku are missing for 2014 in Table 19 (cf. Table 16, where Demiku is shown as fishing for 2014), suggesting that the percentage figure in Table 22 for 2014 may be wrong. This matter (regarding Demiku) has not been addressed from the Second Report, despite the CAB stating (p.273) that: “In response to the INPLF comment, we requested AZTI to review their observer data. Revised data are contained in the report.” The CAB must check the potential anomaly regarding Demiku, Otherwise the scoring for each and every SI which refers to or is based on data from the vessels is arbitrary and/or unreasonable.

CAB RESPONSE

Echebaster states that from the 5th April to 2nd May 2014 Demiku was not fishing (it was in Port Louis for repairs). On 20th of June, 2014 the vessel was sold to another fishing company to operate in the WPO.

We have reviewed the IPNLF objection.

We see no reason to change the final report, our scores and determination.

13. IPNLF OBJECTION 8

IPNLF

59, Much of the assessment of the P2 Pls uses the data set out in Tables 23 and 24. These two tables contain data from observers for the years 2014, 2015 and 2016. Yet the percentages of observer data available for each of 2014, 2015 and 2016 are (only) 29%, 53% and 34% respectively (see Table 22).

60, These relatively low percentages raise doubts about the representativeness of the data in Tables 23 and 24. In that respect, the Final Report states (at p.38) that:

"IOTC considers that 25 % observer coverage or data availability is required to accurately characterize the bycatch of the major species (particularly sharks and billfish) in Indian Ocean purse seine fisheries (Lennert-Cody, 2001; Sánchez, et al. 2007)."

61, The wording "IOTC considers" is a softening from the Second Report (p.55), which stated instead that "IOTC has determined". Nevertheless, we take issue with the reference to "IOTC considers". What part of IOTC "considers"? It is the Scientific Committee? Is it the plenary? Or is it the authors of the two papers cited. This needs to be clarified by the CAB, so that it is possible to understand better what weight should be applied to the 25% figure.

62, This is important because the 25% figure is used several times in the Final Report to justify the representativeness of the observer data (see for example pp.67, 68 and 84), except in respect of some ETP species. We note that the most recent of the two papers cited by the CAB is now 10 years old.

63, As presently set out, the scoring for P2 is therefore arbitrary and/or unreasonable.

CAB RESPONSE

Firstly, it is important to understand that the MSC requirement is 20 % GCR: GSA 2.4.5 – 2.4.7 & 3.6.3. All of the observer data figures for 2014, 2015, and 2016 are above 25%.

Secondly, we do not understand IPNLF's complaint between "considers" and "determined". We do not consider this change indicates irrationality, simply that the language reflects professional judgment.

Thirdly, Numerous references cited in the report refer to that 25% observer coverage or data available if representative is adequate to characterize the catch of a fishery except for (for example) the catch of rare species, e.g. [INSERT]. In our judgment we consider these observer figures are acceptable.

In our view 25% justifies the representativeness of the observer data, as set out above.

We note the comment about the age of the papers. We are not sure of IPNLF's point in relation to the age. The data in the reports remains relevant.

We have reviewed the IPNLF objection.

We see no reason to change the final report, our scores and determination

14. IPNLF OBJECTION 9

IPNLF

64, noted above, the percentages of observer data available for each of 2014, 2015 and 2016 are 29%, 53% and 34% respectively. However, in terms of those percentages, the Final Report - in Table 22 - makes no distinction between observed FAD sets and observed FSC sets. Instead, it lumps these two set types together for each year. Thus it seems to assume that the percentage of observed sets is the same across both set types.

65, The CAB's response to IPNLF raising this point in respect of the Second Report is (p.273): "The observer catch data are not summarized or presented by vessel, it is summarized for the fleet by set type, and then expanded to an estimated total observed catch by the percentage of observed sets". This statement is opaque. It also fails to address the point made above.

66, To understand the situation better, we have done our own analysis, for each of 2014, 2015 and 2016, using the data available in Tables 20 and 21:

2014, FAD sets:

Number of sets with processed observer data (Table 20): 163

Total number of sets (Table 21): 567

Percentage of total sets with processed observer data: 28.7%

2014, FSC sets:

Number of sets with processed observer data (Table 20): 68

Total number of sets (Table 21): 237

Percentage of total sets with processed observer data: 28.7%

2015, FAD sets:

Number of sets with processed observer data (Table 20): 610

Total number of sets (Table 21): 1158

Percentage of total sets with processed observer data: 52.7%

2015, FSC sets:

Number of sets with processed observer data (Table 20): 124

Total number of sets (Table 21): 235

Percentage of total sets with processed observer data: 52.7%

2016, FAD sets:

Number of sets with processed observer data (Table 20): 518

Total number of sets (Table 21): 1510

Percentage of total sets with processed observer data: 34.3%

2016, FSC sets:

Number of sets with processed observer data (Table 20): 65

Total number of sets (Table 21): 190

Percentage of total sets with processed observer data: 34.2%

We would have expected the percentage figures to vary between FAD sets and FSC sets: it would be an odd coincidence if, for any given year, across all the Echebaster vessels, the ratio of observed FSC sets to total FSC sets and the ratio of observed FAD sets to total FAD sets was the same. And yet that 'odd coincidence' is exactly what comes out of our analysis. This is quite surprising. The CAB must explain why this result is obtained – and, what is more, not just for one year but for all three years concerned.

CAB Response

AZTI responds to this issue

"As disaggregated data for total sets by FAD or FSC were not available, an estimate was made. To do so and taking into account that 100% of sets were to be covered, it was assumed that each set had the same probability of being observed, so that the distribution of available observed sets was the same as the actual distribution of sets. This is why the same raising was considered for FAD and FSC."

If we focus on the percentage of observed sets, it is considered equal for FSC and FAD by year but if we focus on the number of observed sets, it is different.

A higher number of FAD hauls are observed, which are considered more sensitive for the bycatch issue. Reviewing the observer coverage, IOTC determined that the level of observer coverage or data available required to be able to accurately characterize the bycatch of the major bycatch species (particularly sharks and billfish) in Indian Ocean purse seine fisheries is 25% (Lennert-Cody, 2001; Sánchez, et al. 2007). So, the percentage of observer data available for Echebaster purse seine sets for the period 2014, 2015, 2016 is 29%, 53% and 34% respectively both types of set (FAD and FSC) and it should be considered accurate to characterize the bycatch of the fishery"

Subsequently, on May 21 2018, AZTI presented real data to confirm the situation. This table below presents the confirmed data.

The key points to this are:

- 1, The proportion of observed FAD sets with processed data in 2014 is 20% (FSC 30%). This compares to the estimated 28.7 %.
2. The respective proportions for 2015 are 53 % and 52.7%; and for 2016, 34 % and 34.2 %.
- 3, The differences using estimated and real sets by gear show that the proportions of FAD % observed set coverage decreases in 2014 but remains stable in 2015, 2016. However, in the case of FSC the % observed set coverage increases for the 3 analysed years.
4. The breakdown of the Campolibre Alai sets between FAD and FSC is not known. It has been calculated on the basis of the annual average for the other active vessels. While Campolibre cannot be excluded from the data for analytical purposes, it is interesting to note that if that vessel was excluded from the data in 2014 and 2015 (it existed the Echebaster fleet in 2015), the proportion of FAD sets of the other vessels would be 27 % and 61 %.
5. AZTI emphasizes that "*this is not a change in the data, this is an improvement in the data provided. First the number of total sets were estimated as this information was not available from Echebaster, but after the query, this information was provided by Echebaster trying to clarify the concern in relation to the data. The aim of this new data is to improve the knowledge, to avoid credibility issues and it is a progress made during the certification to be as transparent as possible*".

As requested by IPNLF, we have explained the reason and presented the corrected results (table below). Given that (i) the MSC requirement is for a minimum of 20%; (ii) 2014 was the first year of the observer programme and related data analysis (i.e. it is likely that a high number of observer forms were not usable for analytical purposes; and (iii) the sample rate for subsequent years active vessels was >25 %; we conclude that the reduced proportion for 2014 does not affect the related scoring rationales and related scoring.

AZTI has informed us (May 2018) for 2017:

There was a total of 1,463 sets, of which 213 (15 %) were FSC and 1,250 (85 %) were FAD. Of this data, 59 % (126) of FSC and 79 % (985) has been tabulated.

2014	FADS	FSC	TOTAL	% FAD
Alakrana	255	65	320	80%
CampolibreAlai	236	63	299	79%
ElaiAlai	185	19	204	91%
EuskadiAlai	0	0	0	
Izaro	155	80	235	66%
JaiAlai	0		0	
	831	227	1058	79%
Observed	163	68	231	71%
	20%	30%	22%	
2015				
Alakrana	290	60	350	83%
CampolibreAlai	156	25	181	86%
ElaiAlai	173	24	197	88%
EuskadiAlai	111	11	122	91%
Izaro	247	29	276	89%
JaiAlai	184	43	227	81%
	1161	192	1353	
Observed	610	124	734	
	53%	65%	54%	

2016				
Alakrana	279	25	304	92%
CampolibreAlai	0	0	0	
ElaiAlai	334	23	357	94%
EuskadiAlai	363	38	401	91%
Izaro	251	24	275	91%
JaiAlai	285	50	335	85%
	1512	160	1672	
Observed	518	65	583	
	34%	41%	35%	

We have reviewed the IPNLF objection.

We can add to text to the Final Report if required.

We see no reason to change our scores and determination.

15. **IPNLF OBJECTION 10**

IPNLF
<p>67, The Final Report refers to “expanded” data (see, for example, pp.38, 51, 52 and 67). At p.38, it states that: “The total catch of all species by weight and number for non-tuna species was expanded using the ratio of observed sets to total sets for each year and set type”.</p> <p>68, This assumes that the distribution of by-catch species (e.g. sharks, including Silky sharks) over time and distance is homogenous and hence that it is representative to “expand” as has been done. The natural environment of the Indian Ocean is not that simple. We consider that careful consideration should be given to whether or not it is representative to expand as has been done, before reliance is placed on ‘expanded’ data.</p> <p>69, The CAB’s response to IPNLF raising this point in respect of the Second Report is (p.274) (emphasis added):</p> <p>“The expansion of limited observer coverage or available observer data to the full scale of a fishery is a standard procedure in fisheries science. <u>Assuming that the observer data are representative of the fishery</u>, then limited observer data can be expanded to estimate the total catch of any species by using either some measures of effort (the proportion of observed sets to the total number of sets), or some measure of catch of the target species, (the proportion of observed catch of tuna) to the total catch of tuna. While there are assumptions, we believe that the analysis allows for the reasonable estimation of the catch of individual species, including silky sharks.”</p>
<p>70, The key words in the above extract are: “Assuming that the observer data are representative of the fishery”. The CAB provides no evidence that the observer data are indeed representative of the fishery and there is reason to believe otherwise (see Babcock & Pikitch, below). This important omission must be rectified by the CAB, failing which it is impossible to rely on the data in Tables 23 and 24 and the scoring is arbitrary and/or unreasonable</p>

CAB Response

We have reviewed Babcock & Pikitch “How Much Observer Coverage is Enough to Adequately Estimate Bycatch?”

(<https://pdfs.semanticscholar.org/2701/9495207287c8786170af3c88e50ea4a5e5f5.pdf>).

We do not understand the relevance in the context of IPNLFs complaint i.e. to support the statement “The CAB provides no evidence that the observer data are indeed representative of the fishery and there is reason to believe otherwise”. AZTI reports that the data represents the whole fishing season and covers the geographic range of the fishery. On that basis, the expansion of the available observer data is appropriate and valid.

We have reviewed the IPNLF objection.

We can add to text to the Final Report if required.

We see no reason to change the final report, our scores and determination.

16. **IPNLF OBJECTION 11**

IPNLF

71, The percentages of observed sets for each of 2014, 2015 and 2016 are 29%, 53% and 34% respectively (see text and Table 22, at p.39). The UoA's bid for certification, regarding Principle 2, is based on data arising from these percentages.

72, Draft Condition 1 (as set out at p.111 of the Second Report) acknowledged that, for ETP species, (a) "the data should represent at least at the 50% of observer sets" [sic] and (b) "a minimum of five years should be used".

73, The wording of Condition 1 in the Final Report (p.185) is different. It reads as follows:

"By the fourth annual surveillance audit, the client must demonstrate that information is adequate to measure trends and support a strategy to manage impacts on ETP species."

74, Despite the generic wording of the Condition 1, the "client action plan" for Condition 1 refers to a minimum of 50% of observer sets – as specified in the draft Condition 1 in the Second Report. However, the reference in draft Condition 1 in the Second Report to "a minimum of five years" has been replaced with (in the "rationale" at p.185 of the Final Report) to "[m]ore than three years". So five has been reduced to three, but no reason for this reduction is given.

75, IPNLF, in its response to the Second Report stated that: "The observer data reveal a large by-catch of sharks, particularly Silky sharks. We consider that the content of Condition 1 means that any decision on the certification of this UoA must wait till observer coverage has risen to 50% and until there are 5 years of data at that level of coverage. Anything else does not allow the FCR's PIs on ETP species to be applied meaningfully."

76, The CAB responded (p.272) that: "We maintain our analysis in the report.¹⁸ The observer data used are in excess of 20%. Condition 1 requires more years to better evaluate trends." Footnote 18 read as follows: "Essentially, 20-25% observer coverage or data is considered adequate to characterize the catch in most fisheries, and the MSC CR states that at the SG80 level with regard to sharks, 20% observer coverage is adequate (GSA 2.4.5-2.4.7), and generally, for more normal species that 20% observer coverage provides diminishing returns in terms of the precision of the estimate of catch of a particular species."

77, This is not answer. Condition 1 is therefore not supportable and the scoring of P2 is unreasonable.

CAB Response

The INPLF objection compares the wording of the condition between versions of the report. In response to comments received from stakeholders, we redrafted the condition to (i) provide clarification; and (ii) to meet MSC requirements in terms of conditions not being "prescriptive".

IPNLF is confusing the "rationale" ("More than three years of information is needed to measure trends and support a strategy to manage impacts on ETP species. and ensure that ETP bycatch levels remain at levels consistent with those for 2014-2016") with the condition ("By the fourth annual surveillance audit, the client must demonstrate that information is adequate to measure trends and support a strategy to manage impacts on ETP species"). Accordingly "five" has not been replaced by "three"; we are clearly stating that more than three years data is required.

IPNLF considers that certification of the fishery should await until 50 % of observer data has been tabulated and there are 5 years of data available (in itself implying that 5 years of less than 50 % coverage would be acceptable to IPNLF). This is not a requirement in the CR. We agree that more data is required to measure trends, which is why a condition has been set. This will be reviewed in the surveillance audits.

The MSC CR leads a fishery to fail certification if any one of the three Principles fails to achieve a weighted average score of at least 80, or if an individual PI fails to achieve the minimum threshold score of 60. In specific relation to PI 2.3.3, we present evidence that the fishery meets PI 2.3.3 Sib SG 60 (*Information is adequate to support measures to manage the impacts on ETP species*) but not SG80 (*Information is adequate to measure trends and support a strategy to manage impacts on ETP species*). We have reviewed the IPNLF objection.

We see no reason to change the condition.

17. WWF PI 2.1.1

WWF
<p>1, The CAB made a mistake as to a material fact. The CAB failed to consider material information put forward by the peer reviewer(s).The CAB failed to consider material information put forward in the assessment process by the fishery or a stakeholder.</p> <p>2, The CAB failed to justify why one of the main primary species (Yellowfin Tuna) is highly likely to be above PM. Spawning Biomass in 2014 (SB2o14/SBo) was estimated as 0.23 (80% CI = 0.21-0.36) meaning that the stock was at or very close to point of impaired recruitment (PRI=0.2). The poor stock status is driven by unsustainable catches of yellowfin tuna taken over the last four (4) years including 2015. The latest stock assessment stated that "On the weight-of evidence available in 2016, the yellowfin tuna stock is determined to remain overfished and subject to overfishing" and that "the quantified uncertainty in these estimates is an underestimate of the underlying uncertainty of the assessment". Based on the high uncertainty of the assessment models and based on the extremely poor stock status of yellowfin tuna, several stakeholders advised the CAB to score below 80.</p> <p>3, Additionally, the failing to achieve SG80 and the need for a precautionary approach was confirmed by peer reviewer A:"2.1.1a YFT is justified as primary major species but does not meet SG80 for FAD and FSC The 2015 stock assessment for YFT found that the biomass SB2o14/SBo was estimated as 0.23 (80% CI = 0.21-0.36). The 2016 update was 0.29 with no CI listed.</p> <p>4, The justification given for the 'highly likely' to be above PM was cited as guidance from the Third Surveillance Report from the Maldives Pole and Line fishery, but the link to open this report is broken, so the report is not available for review (link broken in the MSC Certification Report and on the IOTC website).</p>
<p>5, The 4th Surveillance Report is available but gives no confidence intervals and no guidance. The question of how likely 0.29 is to be above 0.20 is pertinent but not answerable by saying the model for 2016 is more optimistic so if the 2015 assessment was highly likely than the 2016 should be highly likely as well, as higher variability in the data may change the confidence intervals. Thus, the SG=80 of 'highly likely' is not justified. It is more precautionary to stick with SG=60 as being likely (70% probability).</p> <p>6, "The CAB did not adjust the score but replied that "We have strengthened the rationale for our conclusion that Sla meets SG80 (YFT)." When comparing the second draft report and the final report it becomes evident that the CAB "strengthened" the rational only by adding: "The interim value of Blim was defined as 0.4SBmsy, or 0.2SBo. The 2016 IOTC estimates of SB2015/SBmsy=0.89 (0.79-0.99) at 80%CI, and SB2015/SBo=0.29, imply that SBmsy=0.33SBo and SB2o15/SBo is in the range 0.26-0.33."</p> <p>7, However, the IOTC did explicitly not provide 80% confidence intervals for their SB2o15/SBo estimate (Table 4; IOTC 2016a) because of the high uncertainties of the assessment models. Also, extrapolating confidence intervals from one (population) parameter to a different parameter is of course statistically incorrect (Rumsey 2016). Therefore, the argumentation of stakeholders and the peer reviewer remain valid and the CAB has to adjust the score for YFT. Lowering this SG from 80 to 60 would move Principle 2 closer to an overall score of below 80.</p>
CAB Response
<p>The WWF refers to information put forward by a peer reviewer. PR A commented on this issue.</p> <p>The table PR A refers to is presumably the Kobe II Matrix (K2M) shown in the December 2016 update to the Executive Summary on Yellowfin Tuna, not the stock assessment document. Despite its labels, the K2M does not show probabilities; rather, for any given matrix of scenarios, it shows the proportion of scenarios run which "violate" reference points.</p> <p>The so-called probabilities are therefore entirely dependent on the range of assumptions and the number of scenarios, and with no weighting for scenario credibility. Nevertheless, despite major difficulties in interpretation, K2M are used to frame advice at least by IOTC.</p>

We note that PRA does not dwell on the issues raised in the WWF objection but is a constructive comment looking forward to surveillances. This is a useful suggestion and can be considered at surveillance.

We disagree with the substance of the PRA comment and the WWF objection. The FCR at SA9 outlines “probabilities” and equivalent percentiles associated with the language of the SGs.

As SA2.2.1 makes clear, however, the language in the SG is intended to allow for qualitative and quantitative evaluation.

Stock assessments sometimes provide single best estimates with confidence intervals; sometimes provide estimates with credibility intervals; and sometimes provide ranges of estimates with or without confidence intervals, etc.

Scoring at PI1.1.1 and 2.1.1 often uses a single best estimate with a confidence interval or mode with a credibility interval, but not always. In this instance, the IOTC SC did not adopt a single base or reference case with a confidence / credibility interval but, because of uncertainty surrounding that choice, provided a range of possible estimates of SB/SBO derived from a range of models, with no associated intervals.

Scoring had to take account of the best available information – in this case, the most recently available estimate with a confidence interval as well as the most recent estimates of possible values. It is not a wholly quantitative process.

Judgment is required; there is a qualitative aspect.

In our view, the previous estimate of SB/SBO (with narrow confidence interval) and the most recent range of possible central values (without any intervals for each or combined), suggest it remains highly likely the stock is above the PRI. Making the judgment requires consideration of the best possible information available and is precautionary.

Any new information would be considered in annual surveillance audits, which would review scoring and cumulative impacts if required.

We agree it is not appropriate to expand confidence intervals from one parameter to another. We have not done so.

We were not aware of any broken web links but note if the link to the Maldives report is / was broken then MSC or the responsible CAB (DNV-GL) will need to attend to that.

We have reviewed the WWF objection.

We see no reason to edit the Final Report or change our scores and determination.

18. SHARK PROJECT PI 2.1.2a

SHARK PROJECT
1, 2.1.2a Primary species management strategy - management strategy in place
2, The CAB awarded a score of 80 for "There is a partial strategy in place for the UoA, if necessary, that is expected to maintain or to not hinder rebuilding of the main primary species at/to levels which are highly likely to be above the point where recruitment would be impaired."
3, SG 60 is: There are measures in place for the UoA, if necessary, that are expected to maintain or to not hinder rebuilding of the main primary species at/to levels which are likely to be above the point where recruitment would be impaired.
4, The UoA does not meet either SG80 or 60 as in neither case are the agreed IOTC management measures "expected to maintain or to not hinder rebuilding" of yellowfin, so it is irrelevant that UoA "operates within the defined limits."
5, The CAB incorrectly states throughout scoring sections 2.1.2a-d that the measures contained in the interim plan for rebuilding yellowfin tuna stock, or IOTC Resolution 2016/01, will successfully meet the goals of the IOTC.
6, The CAB states that the (sadly unambitious) goal of IOTC Resolution 2016/01 was to rebuild the stock to B>Bmsy with 50% probability by 2024, but makes no mention of the cuts to catches required to achieve this.
7, As stated clearly in the preamble to the Resolution 2016/01, the Science Committee recommended in November 2015 (see also: SC 2015) that this goal would require a 20% catch reduction from 2014 catch levels. The negotiations at IOTC on this matter were incredibly difficult and the actual agreed levels of catch reduction for each gear type contained in this Resolution were all well below the 20% cut required: 15% for purse seiners with catches >5000t, 10% for longliners with catches >5000t, 10% for gillnets with catches >2000t, and 5% for any other gear types with catches >5000t. Given the proportion of catches taken by each of these gear groups, if these cuts were implemented the IOTC would be lucky to achieve a 10% overall cut. The Resolution came into force on 1st January 2017.
8, In late March/early April, the CAB was warned by a number of stakeholders during onsite meetings (including representatives from Seychelles Gov, point 8, p375 of Final report V2) that the Seychelles had not yet implemented the measure, and wanted Resolution 2016/01 changed to allow their fleet to base their catch reductions on their higher 2015 catches as their 2014 catches were low due to vessels being in the process of returning to the fishery after piracy issues. In May 2017 a revision was made to the recovery plan (Resolution 2017-01), and Seychelles were granted an addition that allowed them, and any other Small Island Developing States, Least Developed Countries, and Small Vulnerable Economies, to use catch levels of either 2014 or 2015 for their base year for catch reductions. This will further limit the actual catch reductions to well below what is required by the goal.
9, What level of cuts will Echebaster's Seychelles fleet take?
IOTC resolution 2016/01. http://www.iotc.org/cmm/resolution-1601-interim-plan-rebuilding-indian-ocean-yellowfin-tuna-stock
IOTC resolution 2017/01 http://www.iotc.org/sites/default/files/documents/compliance/cmm/iotc_cmm_1701.pdf
SC (2015). Report of the 18th Session of the IOTC Scientific Committee. http://www.iotc.org/documents/report-18th-session-iotc-scientific-committee
CAB Response
We consider that SP has misinterpreted the SG. The goal of IOTC is to recover the yellowfin stock to MSY i.e. to B>BMSY. In contrast to the target stock (in this case skipjack as assessed under P1), the assessment of P2 primary species does not consider the target reference point, it refers to the limit reference point (which in the MSC standard is the point below which recruitment may be impaired). SP recognises that goal of achieving BMSY could be achieved by a reduction of 20 % in the catch. Even if this is not achieved, it is anticipated that there will be some reduction in the catch.

As we state in the Final Report “The interim value of Blim was defined as 0.4SBmsy, or 0.2SB0. The 2016 IOTC estimates of SB2015/SBmsy=0.89 (0.79-0.99) at 80%CI, and SB2015/SB0=0.29, imply that SBmsy=0.33SB0 and SB2015/SB0 is in the range 0.26-0.33” i.e. the stock is above the point of recruitment impairment.

That provides the evidence that for yellowfin “*there is a partial strategy in place for the UoA, if necessary, that is expected to maintain or to not hinder rebuilding of the main primary species at/to levels which are highly likely to be above the point where recruitment would be impaired*”. While this SG applies specifically to the UOA we consider our conclusion relevant to the whole fishery.

We have reviewed the SP objection.

We see no reason to edit the Final Report or change our scores and determination.

19. SHARK PROJECT PI 2.1.2b

SHARK PROJECT

- 1, 2.1.2 b Primary species management strategy - Management strategy evaluation
- 2, The CAB scored this at 80: There is some objective basis for confidence that the measures/partial strategy will work, based on some information directly about the fishery and/or species involved
- 3, SG60 is: The measures are considered likely to work, based on plausible argument (e.g., general experience, theory or comparison with similar fisheries/species).
- 4, The UOA does not meet either SG80 or SG60. There is no objective basis to conclude with any confidence that the measures will work, as the measures cannot even meet the agreed management goal. There is no “plausible argument” that can conclude otherwise.
- 5, The CAB states that there are measures and a partial strategy in place for yellowfin, but does not mention that these measures fail to meet the IOTC’s stated goals for the recovery of yellowfin. They also state: “*There is some concern that the implementation of Res 16/01 has yet to unfold and, in particular, that measures for Seychelles fisheries have not yet been implemented. Nevertheless, given the UoA already meets Res 16-01 limits, it is reasonable to expect the UoA “measures/partial strategy” to continue to work.*”
- 6, As stated clearly in the preamble to the Resolution 2016/01, the goal of the IOTC was to rebuild the stock to B>Bmsy with 50% probability by 2024, and that the Science Committee (SC) recommended in November 2015 that this goal would require a 20% catch reduction from 2014 catch levels. The actual agreed levels of catch reduction for each gear type contained in Res 2016/01 were all well below the 20% cut required. In addition, changes to the Resolution in May 2017 (Res 2017/01) mean this is further weakened (see 2.1.2a above for details).
- 7, The SC has not specifically evaluated the impact of Res 2016/01 (or 2017/01), however, it is clear from both the 2015 and 2016 yellowfin stock assessment projections in the respective SC reports that the agreed cuts will not be enough.
- 8, The SC projections based in the 2015 yellowfin stock assessment showed that catches maintained at 80% (i.e. a 20% cut) of the 2014 level (427,440 t) had a 91% likelihood that, by 2017, the stock would still be below Bmsy, and a 50% likelihood that it will be below Bmsy in 2025 - this is the basis of the SC advice for Res 2016/01. At 90% of the 2014 level (i.e. 10% cut) there was a 90% likelihood that, by 2017, the stock would still be below Bmsy, and a 100% likelihood that it will be below Bmsy in 2025 (see Appendix XI, table 2 in SC 2015). That is, the 10% cuts likely to result from Res 2016/01 had a 100% likelihood of failing to rebuild the stock to Bmsy by 2025.
- 9, The SC projections in the slightly more optimistic 2016 yellowfin stock assessment, show that catches maintained at 90% (i.e. 10% cut) of the 2015 level (slightly lower than 2014 catch at 407,5704 t) had a 80% likelihood that, by 2018, the stock would still be below Bmsy, and a 60% likelihood that it will be below Bmsy in 2025 (see Appendix XI, table 2 in SC 2016). That is, neither the 2016/01 or 2017/01 measures can meet the stated rebuilding goals.

10, The CAB does not mention that the catch cuts required to meet the IOTC's goals were not agreed, which means it is irrelevant that the UoA meets the Res 2016/01 measures as they CANNOT work. It is NOT reasonable to expect them to 'continue to work.' The CAB also does not mention the changes in Res 2017/01 that will change the cut in catches required by Echebaster's Seychelles vessels.

IOTC resolution 2016/01. <http://www.iotc.org/cmm/resolution-1601-interim-plan-rebuilding-indian-ocean-yellowfin-tuna-stock>

IOTC resolution 2017/01 http://www.iotc.org/sites/default/files/documents/compliance/cmm/iotc_cmm_1701.pdf

SC (2015). Report of the 18th Session of the IOTC Scientific Committee. <http://www.iotc.org/documents/report-18th-session-iotc-scientific-committee>

SC (2016). Report of the 19th Session of the IOTC Scientific Committee. http://www.iotc.org/sites/default/files/documents/2017/01/IOTC-2016-SC19-RE_FINAL_DO_NOT MODIFY_0.pdf

CAB Response

As with Sla, SP appears to be confusing the MSC requirements for a target species with those for a primary species – primary species requirements make no reference to target reference points (see GSA3.4.6). We have noted SP's objection, but in our view SP's additional evidence supports our conclusions i.e. the IOTC measures may not be successful in allowing the stock to fully recover to BMSY, but in our view these "measures/partial strategy" are such that there is an objective basis for confidence that the measures/partial strategy will ensure that the UoA does not hinder the yellowfin stock being highly likely to be above the point where recruitment would be impaired (PRI).

We have reviewed the SP objection.

We see no reason to edit the Final Report or change our scores and determination.

20. SHARK PROJECT PI 2.1.2c

SHARK PROJECT

1, 2.1.2 c Primary species management strategy - Management strategy implementation

2, The CAB scored this at 80: There is some evidence that the measures/partial strategy is being implemented successfully.

There is no option for SG60

3, The UOA does not meet SG80 as the evidence clearly shows the opposite - firstly that even if the measure, IOTC resolution 2016/01, was implemented it would not be effective, and secondly there was evidence at the time of the CABs assessment, as the CAB states in every section of 2.1.2a-c, that it was NOT being fully implemented.

4, Resolution 2016/01 came into force on 1st January 2017, and yet the CAB was made aware at the time of the site visits three months later, in late March/early April, that implementation by some IOTC parties was an issue.

5, In 2.1.2a the CAB states: "However, there is concern about the fleet wide implementation of Res 16/01."

6, In 2.1.2b the CAB states: "There is some concern that the implementation of Res 16/01 has yet to unfold and, in particular, that measures for Seychelles fisheries have not yet been implemented."

7, However in this PI 2.1.2c, the CAB now says: "Therefore, there is some evidence that the measures and partial strategy are being implemented successfully." It provides no evidence to counter its previous statements other than there is a partial strategy to maintain yellowfin stock (which clearly does not and cannot work) and to point out what proportion of yellowfin catch the UoA takes, neither of which have anything to do with implementation. It then claims this 'evidence' is supported by a decline in the UoA catch but then says actually, the catch data series, is too short and the evidence is not clear!

8, In fact the catch series is for 2012-2015 and Res 2016/01 didn't come into force until 2017, so the only relevance this catch data has is for any other relevant IOTC measures prior to Res 2016/01 - these have not been mentioned by the CAB, and together had allowed the stock to decline and require a rebuilding plan.

9, The CAB was warned by a number of stakeholders during site visit meetings (including representatives from Seychelles Government, see point 8, p375 of Final Report V2) that the Seychelles in particular had not yet implemented the measure, and wanted Resolution 2016/01 changed to allow their fleet to base their catch reductions on 2015 catches as their 2014 catches were low due to vessels being in the process of returning to the fishery after piracy issues.

10, At the IOTC Commission meeting in May 2017, a revision was made to the recovery plan (Resolution 2017-01), and Seychelles were granted an addition that allowed them, and any other Small Island Developing States, Least Developed Countries, and Small Vulnerable Economies, to use catch levels of either 2014 or 2015 for their base year for catch reductions. This will further limit the actual catch reductions to well below what is required by the goal.

11, Given the seriousness of concerns regarding implementation raised in stakeholder meetings, and the statements made by Seychelles representatives, did the CAB not attend this IOTC meeting in May 2017 or at least follow-up on the outcomes?

IOTC resolution 2017/01 http://www.iotc.org/sites/default/files/documents/compliance/cmm/iotc_cmm_1701.pdf

SC (2015). Report of the 18th Session of the IOTC Scientific Committee. <http://www.iotc.org/documents/report-18th-session-iotc-scientific-committee>

SC (2016). Report of the 19th Session of the IOTC Scientific Committee. http://www.iotc.org/sites/default/files/documents/2017/01/_FINAL_DO_NOT MODIFY_0.pdf IOTC-2016-SC19-RE_-

IOTC resolution 2016/01. <http://www.iotc.org/cmm/resolution-1601-interim-plan-rebuilding-indian-ocean-yellowfin-tuna-stock>

CAB Response

As with Sla and Slb, SP appears to be confusing the MSC requirements for a target species with those for a primary species – primary species requirements make no reference to target reference points (see GSA3.4.6). All of SPs additional evidence supports our conclusions i.e. the IOTC measures may not be successful in allowing the stock to recover to BMSY, but there is an objective basis for confidence that the measures/partial strategy will ensure that the UoA does not hinder the yellowfin stock being highly likely to be above the point where recruitment would be impaired (PRI).

The evidence that the successful implementation of the measures/partial strategy to ensure that the UoA does not hinder the yellowfin stock being highly likely to be above PRI is provided by SP itself in its objection to 2.1.2 a. While the partial strategy may not be successful in recovering the stock to BMSY “ i.e. despite the difficulties if these cuts were implemented the IOTC would be lucky to achieve a 10% overall cut. i.e. a cut would be achieved”. This should be considered in the context of the current stock status above PRI.

The site visit was completed in early April 2017. Since that date, we have followed the defined MSC processes.

We have reviewed the SP objection.

We see no reason to edit the Final Report or change our scores and determination.

21. WWF PI 2.1.2

WWF

1, The CAB failed to consider material information put forward by the peer reviewer(s).The CAB failed to consider material information put forward in the assessment process by the fishery or a stakeholder. The CAB made a mistake as to a material fact.

2, The CAB failed to adequately consider material information put forward by peer reviewers and stakeholders in regard to the following scoring issues of yellowfin tuna:(Scoring issue A) there is a partial strategy in place for the UoA that is expected to maintain the main primary species at/to levels which are highly likely to be above the point where recruitment would be impaired.(Scoring issue B) there is some objective basis for confidence that the measures/partial strategy will work (Scoring issue C) there is some evidence that the measures/partial strategy is being implemented successfully.

3, In the second draft report the CAB stated that "there is therefore (due to the catch level of the UoA (6%) compared to total removals) no necessity for a partial strategy to be in place for the UoA".

However, due to criticism from peer reviewers, stakeholders and MSC technical oversight the scoring rationale for this PI was fundamentally changed in the final report.

4, Now in the final report it is argued that a partial strategy is in place, that it will work and that there is some evidence that it is being implemented successfully. This new main argumentation was neither reviewed by peer reviewers nor stakeholders had the chance to comment on it. The provided rationales why a partial strategy is in place and why it should work have major flaws and the issues regarding insufficient management measures for yellowfin tuna that were raised by stakeholders remain valid.

5, Scoring issue A: CAB argues that "The recovery plan for yellowfin (IOTC Resolution 16/01) has the objective of rebuilding the stock to $B > B_{MSY}$ with 50% probability by 2024." However, this is a mistake in reading of the IOTC Resolution 16/01.

6, The 18th IOTC Scientific Committee recommended that the catches of yellowfin tuna have to be reduced by 20% of the 2014 levels to recover the stocks to levels $B > B_{MSY}$ with 50% probability by 2024. But only a 5% to 15% reduction has been adopted by the Commission in the IOTC Resolution 16/01 (IOTC 2016 b, d). If this reduction would be fully implemented (what is unlikely, see scoring issue B & C), the annual catch of YFT would only decrease 4100 tons and the overall catch level would still be 90% of the catch level from 2014 and 2015.

7, Based on the Stock synthesis assessment Kobe II Strategy Matrix (IOTC 2016c Table 2) this catch level actually still increases the risk of serious overfishing and would lead to a 60% probability that BMSY is not reached in 2025 and a 30% probability that the stock will be below PRI in 2025.

8, It can therefore not be expected that the IOTC resolution 16/01 will maintain yellowfin tuna at levels which are highly likely to be above the point where recruitment would be impaired. SG8o is not met. Scoring issue B: There is no objective basis for confidence that the measures/partial strategy will work, based on some information directly about the fishery and therefore SG 8o is not met.

9, The CAB argued that "There is some concern that the implementation of Res 16/01 has yet to unfold and, in particular, that measures for Seychelles fisheries have not yet been implemented. Nevertheless, given the UoA already meets Re 16-01 limits, it is reasonable to expect the UoA "measures/partial strategy" to continue to work"

10, The IOTC Scientific Committee has repeatedly pointed out in the past that fishing levels of yellowfin tuna stock have exceeded recommended amounts. Catches have been over recommended level since 2011.

11, As explained in in scoring issue A, also IOTC Resolution 16/01 does not provide sufficient leverage for the IO Yellowfin tuna stock to recover. Based on the fact that the scientific advices were and are ignored and that the 16/01 Resolution is inadequate to safeguard recovery and that measures for Seychelles fisheries have not yet been implemented it cannot be concluded that there is an objective basis for confidence that the measures will work.

12, Scoring issue C: There is no evidence that the measures/partial strategy is being implemented successfully. The actual implementation of Res 16/01 has not been demonstrated and measures for Seychelles fisheries have not yet been fully implemented. And there is clear evidence that the recommended measures of the IOTC Scientific Committee (catches should not exceed the MSY levels) were ignored in the past.

CAB Response

We do not agree; this information was considered, as set out below

We note that MSC did review the final report and this led to some changes. It should be noted that the MSC TO did not make any additional comments on issues related to yellowfin. Similarly, the peer reviewers reviewed the final report. Only PRA made an additional comment

Si(a) – YFT – Table 2 in the 2016 stock assessment shows that the probability of $B_{2018} < Blim$ depends greatly on catches after 2015. $Sg=80$ seems to be supported for now and if catches after 2015 = catch in 2015, then there is an estimated 12% probability that $B_{2018} < Blim$, which would meet the SG=80 criteria. If post-2015 catches are 10% higher than 2015, then the probability rises to 21% likely of $B_{2018} < Blim$, dropping the score to SG=60. If catches are 20% higher than 2015, then the probability drops to 38% that $B_{2018} < Blim$, making it necessary to look at measures in place to ensure recovery and rebuilding. Based on this, I make a recommendation to determine the previous year's catch level at each annual surveillance to determine the likelihood of staying above Blim based on Table 2.

Our response to this is: The table PR A refers to is presumably the Kobe II Matrix (K2M) shown in the December 2016 update to the Executive Summary on Yellowfin Tuna, not the stock assessment

document. Despite its labels, the K2M does not show probabilities; rather, for any given matrix of scenarios, it shows the proportion of scenarios run which “violate” reference points. The so-called probabilities are therefore entirely dependent on the range of assumptions and the number of scenarios, and with no weighting for scenario credibility. Nevertheless, despite major difficulties in interpretation, K2M are used to frame advice at least by IOTC. The specific suggestion by PR A does not relate to the scoring in the PCR but to surveillances.

In relation to Sla:

- WWF considers that “Based on the Stock synthesis assessment Kobe II Strategy Matrix (IOTC 2016c Table 2) this catch level actually still increases the risk of serious overfishing and would lead to a 60% probability that BMSY is not reached in 2025 and a 30% probability that the stock will be below PRI in 2025” and “It can therefore not be expected that the IOTC resolution 16/01 will maintain yellowfin tuna at levels which are highly likely to be above the point where recruitment would be impaired”.

We note that

- Sla specifically relates to the UOA.
- In the final report we state, “According to the FCR, v.2, GSA 3.4.6, if MSC UoA catches are less than 30% of the overall catches of this stock, then the UoA may not normally be considered to be hindering recovery of a species”.
- The 30 % risk of the stock being below PRI applies to the year 2025 and would be subject to consideration in any recertification of the fishery (2023) and intervening annual surveillance reports.

In regard to Slc we consider the IOTC measures may not be successful in allowing the stock to recover to BMSY, but there is an objective basis for confidence that the measures/partial strategy will ensure that the UoA does not hinder the yellowfin stock being highly likely to be above the point where recruitment would be impaired, as used in the Si language within the MSC CR V2.0 and as is appropriate when dealing with primary species (see GSA3.4.6).

We have reviewed the WWF objection.

We see no reason to edit the Final Report or change our scores and determination.

22. IPNLF OBJECTION 12 PI 2.2.1 a

IPNLF
<p>78, The CAB scores the UoA at 100 for this SI. SG 100 requires that: “There is a high degree of certainty that main secondary species are within biologically based limits.”</p> <p>79, The Final Report, for both FAD and FSC, states (p.71) that: “there are no main secondary species in the UoA … As there are no main species defined, all SGs are met by default”.</p> <p>80, Other than stating that there are no main secondary species, the CAB provides no basis for its conclusion that “all SGs are met by default”. The concept of “default” scoring is not used in the FCR.</p> <p>81, SA 3.2.1 of the FCR (p.135) states that: “If a team determines that a UoA has no impact on a particular component, it shall receive a score of 100 under the Outcome PI.” A determination that the UoA has “no impact” (not even which is less significant than other fisheries) is a high hurdle. In relation to secondary species, of which thousands of individuals are caught each year in FAD sets, a determination of no impact would require the most extensive data and independent study beyond the remit of any CAB.</p> <p>82, The CAB does not refer to SA 3.2.1 in the Final Report, no doubt because it could not surmount such a hurdle. Instead, in its response to IPNLF (p.247), it states simply that:</p> <p>“There is not an option for “not applicable”. The justification has been revised. We do not agree that the sustainability credentials of a fishery should not take into account the lack of main secondary species.”</p> <p>83, However, if the CAB were to seek to rely on SA 3.2.1, it would not be entitled to do so, for the following reasons:</p> <p>83, 1, First, SA 3.2.1 requires there to be a determination that there is “no impact”. This is different from the SI being inapplicable on the basis that the UoA has only an insignificant impact on certain species, such that they are not designated as “main”.¹²</p> <p>83, 2, Secondly, where the FCR considers that scoring is only appropriate if relevant, it uses the term “if necessary” in the scoring guideposts (see, for example, SI 2.2.2(a)); yet the scoring guideposts for SI 2.2.1(a) do not use the term “if necessary”.</p> <p>83, 3, Thirdly, the CAB provides no definition of “component” as used in SA 3.2.1. In this context, the “component” consists of the secondary species as a whole.</p> <p>84, Therefore, if it is right there are no main secondary species, the correct approach for this SI should be to regard it as not applicable and therefore to attribute no score.</p> <p>85, Awarding a score of 100 by default where the FCR makes no provision for such scoring is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable</p>
CAB Response
<p>We acknowledge that the term ‘by default’ is not used in the CR and we have confirmed with the MSC that a score of ‘N/A’ is appropriate rather than SG100 when there are no main secondary species and this is our professional judgment as to the appropriate way to approach this issue. The written MSC interpretation on this issue is not clear but we have verbal clarification from MSC: SG100 is only scored by default when there are both no major <i>and</i> minor species. We make it clear there are no main secondary species in section 7.8 and at Table 23 of the Final Report.</p> <p>All our responses follow the MSC CR.</p> <p>If required we will revise the report to ensure our approach to scoring is clear, which will include the reference to the interpretation. There will be no change to scores considering this change.</p> <p>We have reviewed the IPNLF objection.</p> <p>We see no reason change our scores and determination. We may edit the final report if required.</p>

¹² Particularly where the component is said to be inapplicable not on the basis of any analysis, but on the basis of a presumption applied by virtue merely of the proportion of catches involved.

23. IPNLF OBJECTION 13 PI 2.2.1 b

IPNLF
<p>86, For both FAD and FSC, the CAB states (pp.72 and 73) that: "SG100 is not met"., As justification, the CAB states that:</p> <p>"There are no main secondary species. RBF has not been used to score minor secondary species, meaning that the fishery cannot score more than 80 for PI 2.2.1.</p> <p>Following MSC interpretation: 'P2 species: assessing negligible interactions': http://msc-info.accreditationservices.com/questions/p2-species-assessing-negligible-interactions/, and 'Minor species and scoring element approach': http://msc-info.accreditation-services.com/questions/minorspecies-and-scoring-element-approach-at-sg100/.</p> <p>This scoring rational is limited to a description of the minor secondary species taken in each set type, and concludes that the catches of these species would not hinder their recovery. The UoA is not scored at the SG100 level for either set type"</p> <p>87, The CAB's conclusion that "that the fishery cannot score more than 80 for PI 2.2.1" is not supported by any reference to the FCR. However, the conclusion may be based on PF 5.3.2 and its two sub-clauses (FCR p.95). If so, the CAB needs to provide a clear explanation of how PF 5.3.2 is applicable. Otherwise, the CAB needs to explain what provision of the FCR it has relied upon. In addition, in the absence of SGs other than for SG 100, the CAB needs to explain why a score of 80, rather than one of less than 80, is met. (In that regard, the two sub-clauses of PF 5.3.2 both state that "the final PI score shall not be greater than 80". Thus they do not preclude a score of less than 80.)</p> <p>88, The CAB's justification refers to two MSC "interpretations", namely: "P2 species: assessing negligible interactions" and "Minor species and scoring element approach". Weblinks are provided for each of these, but both of these weblinks require us to log in. We are not able to log in, presumably because we are neither a CAB nor MSC staff. Therefore, we do not have access to either of the "interpretations" (though one of them is quoted, in part at least, at p.306 of the Report). That renders the interpretations, in effect, private. That is unacceptable in the context of a standard which purports to be reviewable by third party stakeholders. We require full access to both of these interpretations in full. We reserve our position as to the CAB's scoring of this SI, and indeed the PI as a whole, and on the substantive validity of the CAB's reliance on the interpretations, until we have seen the interpretations.</p> <p>89, In the absence of a justification and in its reliance on a private interpretation, the scoring is arbitrary and/or unreasonable. Furthermore, reliance on a private interpretation is a serious procedural irregularity material to the fairness of the assessment.</p>
CAB Response
<p>Our rational "consists of" as opposed to "limited to".</p> <p>IPNLF are correct that the PI cannot score more than 80 due to PF 5.3.2.2. The team are content to add a reference to PF 5.3.2.2. and additional justification if considered necessary. The team's justification for meeting a default score of 80 when other SGs only exist at SG 100, applies MSC guidance for 'Scoring of 'minor' species and habitats' on CR 2.0 page 280.</p> <p>"For 'minor' species and habitats, scoring guideposts only exist at the SG100 level in some PIs (2.1.1-2.2.3; 2.4.1; 2.4.3). When scoring such minor species or habitats as scoring elements, the team should assume that the SG80 level is met by default, such that the scores are simply based on how many of the scoring issues that apply to minor (or all) species/habitats are met at the SG100 level."</p> <p>We concede that we need to revise the Final Report to ensure the approach to the grouping option.</p> <p>The use of the interpretation log for guidance during assessments is permissible under the MSC standard (CR 2.0 PD2.6.5.4). We are not responsible for the decisions made by the MSC on using a non-public resource for scoring. It is legitimate to use the interpretations log for the following reasons: it was introduced in 2014 by the MSC, that alone controls its contents. It is highly relevant to the MSC's standards. In addition, the peer reviewers raised no issue with the log; the CAB would have applied for a variation if the CAB was unable to rely on the Interpretation Log; the clarification of the PI by the Interpretation Log is within the intention of the scoring indicator; the approach advanced by the Objector lacks is irrational as one individual transgression would lead to a fail; the use of the Interpretation Log was not arbitrary or unreasonable; the use of the Interpretation Log did not result in any unfairness to the Objector; and the non-publication of the Log is a governance issue for the MSC. In our opinion, this is not an issue for the Adjudication.</p>

Finally, our scoring does not rely on the interpretations log and the process used for assessing the fishery is transparent as stated within the CR, though we agree it was not clear to readers in the report. We propose to modify the report to ensure clarity and include the full text of the interpretations used for transparency (publication of MSC interpretations used in assessments has now been authorised by the MSC).

The use of the interpretations log in an assessment is considered appropriate within the MSC standard.

We have reviewed the IPNLF objection.

We see no reason to change our scores and determination. We may edit the Final Report if required.

24. IPNLF OBJECTION 14 PI 2.2.1 b

IPNLF

90, SG 100, which is the only SG for this SI, requires that: “Minor secondary species are highly likely to be above biologically based limits.” or “If below biologically based limits’, there is evidence that the UoA does not hinder the recovery and rebuilding of secondary species.”

91, For both FAD and FSC, the CAB, after a brief review of secondary species bycatch, states (pp.72 and 73¹³) the following:

“The low catches of these species in the EIO tuna purse seine fleet have negligible impacts on their stocks. While there is no evidence that all these species are highly likely to be above biologically based limits, the low catches provided by the expanded observer catch data are considered sufficient evidence to conclude that the UoA does not hinder their recovery or rebuilding.”

92, The CAB provides no evidence at all to justify its bare assertion:

92, 1, First, it proceeds without any express consideration of the definitions of “biologically based limits” and “does not hinder” set out in Table SA8 (FCR, “Principle 2 Phrases”, p.134–135), which is normative.

92, 2, Secondly, despite an express acknowledgement that “there is no evidence that all these species are highly likely to be above biologically based limits”, it reaches its conclusion that the “low catches” will have “negligible impacts” on stocks without any assessment of the catches against the stock status of each of the individual species concerned. If the CAB is seeking to disregard bycatch mortality on the basis that this UoA comprises only a small number of vessels out of the total number impacting those species, then that must be wrong in principle; it would allow the overall impact to be disregarded, with the standard being met by all vessels, provided they were considered in sufficiently small groups. This would remove all pretence of legitimacy from the standard.

93, As a result, the scoring is arbitrary and/or unreasonable.

CAB Response

We accept that PI 2.2.1b cannot be scored at SG 100 without biologically based limits. The maximum and minimum score this SI can receive is 80 (see PF 5.3.2.2). The report may be updated to reflect this; there will be no material change to the scoring.

The point on the number of vessels is not relevant; the assessment considers this entire fishery and its impact on the ecosystem; cumulative impacts have been considered in regard to other certified MSC fisheries i.e. the Maldives Pole and Line fishery.

We have reviewed the IPNLF objection.

We see no reason change our scores and determination. We may edit the final report if required.

¹³ The wording differs slightly, but the differences seem immaterial

25. IPNLF OBJECTION 15 PI 2.2.2

IPNLF
<p>94, Regarding PI 2.2.2, SA 3.8.1 (FCR, p.146), which is normative, states that: "The team shall score this PI even if the UoA has no impact on this component." (Emphasis added.) The CAB takes the view that there are no secondary main species. If that is correct, and if it follows that the UoA has no impact on those species, the effect of SA 3.8.1 is that the CAB must nonetheless score the UoA against PI 2.2.2.</p> <p>95, The CAB, in its response to IPNLF (p.248), states that:</p> <p>"Component" refers to the Performance Indicator dealing with "secondary species [management strategy]". Consideration is broken down into Scoring Issues, within which there are Scoring Guidelines. In this fishery, there are no main secondary species that the fishery necessarily should manage using measures or a partial strategy..SA3.8.1 says scoring at PI2.2.2 should proceed even if there is no impact on secondary species, which is dealt with at PI2.2.1. It is necessary to distinguish the needs related to impact/no impact (S3.8.1) and scoring options within PI2.2.1 which may refer to GSA3.5.1. We acknowledge this SI a difficult and perhaps grey area."</p> <p>96, This response is entirely opaque. It is inadequate to acknowledge that the SI is a difficult and grey area. In the absence of a proper rationale (or further clarification from the CAB), the scoring is arbitrary and unreasonable.</p>
CAB Response
<p>We consider the rationale should be clarified. As the objector points out, the reference at SA 3.8.1 within the CR is explicit in that the PI still needs to be scored. The confusion stems from the guidance given at GSA 3.5.1 for 'if necessary' (see comment on the interpretations log, and our application of same, at the start of this document). We use both SA 3.5.1 and GSA 3.5.1, as we are still scoring the PI at SG60 and 80 level even if they are automatically met. The rationale does not explicitly reflect that this is the approach taken, so will be amended to ensure transparency for our approach:</p> <p>We suggest the following text:</p> <p>"As there are no secondary main species, neither measures nor a partial strategy are necessary. and the SG 60 and SG 80 guideposts are met (applying MSC FCR v.2 SA 3.5.1 and GSA 3.5.1, and an interpretation which clarifies 'if necessary' applies to SI b and c),</p> <p>SG60 is met</p> <p>SG80 is met</p> <p>For minor and major species, there are a number of measures for bycatch management implemented by Echebaster, Seychelles Fishing Authority and the EU. However, there is no testing supporting that the partial strategy/strategy will work so SG 100 is not met."</p> <p>We propose to modify the report to ensure clarity and include the full text of the interpretations used for transparency (publication of MSC interpretations used in assessments has now been authorised by the MSC).</p> <p>We have reviewed the IPNLF objection.</p> <p>We see no reason change our scores and determination. We may edit the final report if required.</p>

26. IPNLF OBJECTION 16 PI 2.2.2

IPNLF

97, SG60 and SG 80 for this SI use the term “if necessary”. Table SA 8 (FCR, “Principle 2 Phrases”, p.134–135), which is normative, defines “if necessary” as follows:

“The term “if necessary” is used in the management strategy PIs at SG60 and SG80 for the primary species, secondary species, habitats and ecosystems components. This is to exclude the assessment of UoAs that do not impact the relevant component at these SG levels.” [Emphasis added]

98, For both FAD and FSC, the CAB states (pp.74 and 75) that: “As there are no secondary main species, neither measures nor a partial strategy are necessary. and [sic] the SG 60 and SG 80 guideposts do not need to be scored (MSC FCR v.2 GSA 3.5.1)”.

99, As can be seen, the CAB cites GSA 3.5.1 (FCR, p.436), which states that: “If the UoA has no (or negligible: see below) impact on this component, scoring issue (a) does not need to be scored for SG60 and SG80 [...].”

100, GSA 3.5.1 is guidance. It is not normative. Its position in the FCR makes it clear that it is guidance relating exclusively to the use of “if necessary” where this term is used in SGs. Therefore it should be interpreted compatibly with the normative definition of “if necessary” in Table SA 8 (see above).

101, However, there is also SA 3.8.1 to be considered. Regarding PI 2.2.2, SA 3.8.1 (FCR, p.146), which is normative, states that: “The team shall score this PI even if the UoA has no impact on this component.” (Emphasis added.) The CAB takes the view that there are no secondary main species. If that is correct, and if it follows that the UoA has no impact on those species, the effect of SA 3.8.1 is that the CAB must nonetheless score the UoA against PI 2.2.2.

102, In the light of the above, it is not clear whether, in the scoring of this SI, the CAB has applied the definition of “if necessary” in Table SA 8 (coupled with the guidance in GSA 3.5.1) or SA 3.8.1. Both provisions are normative. In principle, one conflicts with the other. In the absence of clarification from the CAB as to which it has relied on and why, the scoring is arbitrary and/or unreasonable.

CAB Response

Our response to this is the same as to Objection 15. There is some lack of clarity on the guidance within the CR and Acoura may modify the report to ensure our approach is clear. The objector’s perceived contradictions with the MSC’s standard are part of the professional judgment which is applied when considering how the MSC’s standard is applied to differing practical contexts.

We have reviewed the IPNLF objection.

We see no reason change our scores and determination. We may edit the final report if required.

27. IPNLF OBJECTION 17 PI 2.2.2

IPNLF

103, All SGs for this SI use the term “in place”. Table SA 8 (which is normative) states that:

“When a measure or strategy is “in place” the measure or strategy has been implemented, and if multiple measures have been identified to address an impact of the UoA, there is a specified process with a clear timetable and endpoint for implementation of all of the measures.”

104, So for a measure or strategy (or partial strategy) to be “in place”, it must have been implemented; and if there are multiple measures, they are only “in place” if there is a specified process with a clear timetable and endpoint for implementation of all of the measures. In other words, a loose array of measures is not sufficient.

105, SG 100 and SG 80 refer to a strategy and partial strategy, respectively, “for the UoA”. In setting out evidence to score this SI, the CAB refers to management undertaken by the Seychelles Fishing Authority, Echebaster and the European Union. Of these, only Echebaster is specific to the UoA.

106, On management undertaken by Echebaster, the references by the CAB are identical for both FAD and FSC (though they appear different at first glance, because of different use of bullet points) (pp.74 and 75):

- (a) “policy on bycatch reduction, reporting and sustainability which includes research on the escape of unwanted species from purse seines through technical measures, with monitoring through full cooperation with the SFA observer programme.”
- (b) research into bycatch and into “possible bycatch mitigation measures” (2013);
- (c) crew training (or at least a study with crew training as an objective);
- (d) guidelines on onboard procedures in relation to bycatch.

107, SG 80 refers to a “partial strategy”. Table SA 8 (normative) defines a “partial strategy” as follows:

“A “partial strategy” represents a cohesive arrangement which may comprise one or more measures, an understanding of how it/they work to achieve an outcome and an awareness of the need to change the measures should they cease to be effective. It may not have been designed to manage the impact on that component specifically.”

108, Items mentioned in (a)–(d) above do not represent “a cohesive arrangement” or meet the other requirements of the definition of “partial strategy”. These items are not a “cohesive arrangement” because they are a loose arrangement of unrelated measures and there is no evidence of an understanding of how they work to achieve any particular outcome. Still less is there any evidence of an awareness of the need to change the measures should they cease to be effective. On this basis, the UoA does not reach SG 80. Indeed, we note that the CAB likewise considers that the measures it refers to “do not represent a cohesive and strategic arrangement” (citing Table SA 8).

109, SG 60 refers to “measures”. Table SA 8 (normative) defines “measures” as follows:

““Measures” are actions or tools in place that either explicitly manage impacts on the component or indirectly contribute to management of the component under assessment having been designed to manage impacts elsewhere.”

110, Some of the items mentioned in (a)–(d) above are indeed “actions or tools”, but not all are (for example, research into measures is neither a measure nor a tool). However, they are not “in place” as defined SA 8 (see above). That is because they are merely a loose array rather than being part of “a specified process with a clear timetable and endpoint for implementation of all of the measures”. On this basis, the UoA does not even reach SG 60.

111, The CAB, in its response to IPNLF (p.249), states simply that:

“We are aware of the normative and, on the basis of extensive experience, understand that there may be wide range of interpretations of it, even amongst experienced auditors. There are no main secondary species neither measures or a partial strategy are necessary. This approach follows the practice in many MSC assessments of fisheries that have been certified. The remainder of the stakeholder’s comments on SG60 and SG80 are therefore moot. The scoring rationale has been redrafted to clarify the evidence.”

112, Our objections on SG 60 and SG 80 are not “moot”, as the CAB has not merely scored all SIs on a default basis, but also on the basis of a purported partial strategy. Pending further explanation from

the CAB as to which of SA 3.8.1 and the definition of “if necessary” it has sought to rely upon when scoring SI 2.2.2(a), and why, the scoring is arbitrary and/or unreasonable.

CAB Response

IPNLF appear to be mistaken. The UoA strategy and partial strategy may include UoA specific measures, but must also include relevant supra requirements that impact the UoA.

We use both SA 3.5.1 and GSA 3.5.1, as we are still scoring the PI at SG60 and 80 level even if automatically met. Additionally, there is an interpretation (see comment on the interpretations log, and our application of same, at the start of this document). which clarifies this approach is correct; we will include this in the report. The report justification shall be amended to the following:

“As there are no secondary main species, neither measures nor a partial strategy are necessary. and the SG 60 and SG 80 guideposts are met (applying MSC FCR v.2 SA 3.5.1 and GSA 3.5.1, and an interpretation which clarifies SG 60 and 80 are met automatically),

SG60 is met

SG80 is met

For minor and major species, there are a number of measures for bycatch management implemented by Echebaster, Seychelles Fishing Authority and the EU. However, they do not form a strategy ('cohesive and strategic arrangement' (MSC FCR ver. 2 Table SA8), as gear loss or other incidental impacts are not considered.) so SG 100 is not met.”

We may modify the report to ensure clarity and include the full text of the interpretations used for transparency (publication of MSC interpretations used in assessments has now been authorised by the MSC).

We consider this point is moot, because the fishery succeeds on a “default” basis (as above), but for clarity we also considered the effectiveness of a partial strategy and on that basis also we consider the score at SG60 and SG80 are justified. We have reviewed the IPNLF objection. We see no reason change our scores and determination. We are willing to edit the final report if required.

28. IPNLF OBJECTION 18 PI 2.2.2

IPNLF

113, The CAB, in scoring SI 2.2.2(a) (see above), appears to have relied on the definition of “as necessary” in Table SA 8 to score SI 2.2.2(a) at 80 – i.e. in effect without having to have regard to the tests applied by SGs 80 and 60.

114, In its scoring of SI 2.2.2(b), for both FAD and FSC, the CAB states (p.76) that: “As there are no secondary main species, the fishery meets SG 60 and SG 80 (MSC FCR v.2 GSA 3.5.1).”

115, As can be seen, the CAB cites GSA 3.5.1 (FCR, p.436), which is guidance and states that: “If the UoA has no (or negligible: see below) impact on this component, scoring issue (a) does not need to be scored for SG60 and SG80 [...].”

116, GSA 3.5.1 refers only to scoring issue (a) – i.e. to SI 2.2.2(a). It does not refer to scoring issue (b) – i.e. to SI 2.2.2(b).

117, If the CAB has indeed relied on the definition of “if necessary” to score SI 2.2.2(a) at 80, it cannot then proceed to score the UoA against SI 2.2.2(b). That is because none of the SGs for that SI use the term “if necessary”. The CAB cannot apply the default approach it has used in the scoring of SI 2.2.2(a) to then create a fictional partial strategy for main secondary species in order to score against the SGs in 2.2.2(b). Instead, SI 2.2.2(b) must be regarded as non-applicable and therefore no score should be attributed.

118, The CAB, in its response to IPNLF (p.250) states merely that: “Please refer to the response above.” We have already dealt with that response above.

119, Awarding a score by default where the FCR makes no provision for such scoring is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.

CAB Response

There is an interpretation (see comment on the interpretations log, and our application of same, at the start of this document). which clarifies that the ‘if necessary’ clause applies to SIb and c. Our justification will be amended to the following to clarify our approach:

“As there are no secondary main species, neither measures nor a partial strategy are necessary. and the SG 60 and SG 80 guideposts are met (applying MSC FCR v.2 SA 3.5.1 and GSA 3.5.1, and an interpretation which clarifies ‘if necessary’ applies to SI b and c),

SG60 is met

SG80 is met

For minor and major species, there are a number of measures for bycatch management implemented by Echebaster, Seychelles Fishing Authority and the EU. However, there is no testing supporting that the partial strategy/strategy will work so SG 100 is not met.”

Acoura propose to modify the report to ensure clarity and include the full text of the interpretations used for transparency (publication of MSC interpretations used in assessments has now been authorised by the MSC).

We have reviewed the IPNLF objection.

We see no reason change our scores and determination. We may edit the final report if required.

29. IPNLF Objection 19 PI 2.2.2

IPNLF
<p>120, The CAB scores the UoA at 80. SG 80 requires that: “There is some objective basis for confidence that the measures/partial strategy will work, based on some information directly about the UoA and/or species involved”.</p> <p>121, Table SA8 (FCR, “Principle 2 Phrases”, pp.134–135), which is normative, states that: “Objective basis for confidence”, as used at the SG80 level in the P2 management PIs (Management Strategy Evaluation scoring issue) refers to the levels of information required to evaluate the likelihood that the management partial strategy will work.</p> <p>122, The SG60 level for these PIs requires “plausible argument” based on expert knowledge; the SG80 level requires expert knowledge augmented by some information collected in the area of the UoA and about the specific component(s) and/or UoA; and the SG100 level requires all preceding information augmented by relatively complete information on the component, much of which comes from systematic monitoring and/or research.”</p> <p>123, Therefore, the reference to “objective basis for confidence” in SG 80 requires “expert knowledge augmented by some information collected in the area of the UoA and about the specific component(s) and/or UoA”.</p> <p>124, The CAB fails to identify any expert knowledge¹⁴. Instead:</p> <p>124, 1, Regarding FADs, it refers (p.76) merely to (a) some very high level statistics, without any consideration of confidence limits, (b) the introduction of non-entangling FADs (to which, it says, without citing any scientific evidence, a decline in bycatch is “probably related”), (c) a reduced number of FADs and (d) reduced effort.</p> <p>124, 2, Regarding FSC, it refers (p.76) merely to (i) some very high level statistics, without any consideration of confidence limits, (ii) the introduction of non-entangling FADs (to which, it says, again without citing any scientific evidence, a decline in bycatch is “probably related”) and (iii) reduced effort.</p> <p>125, Items (a)–(d) and (i)–(iii) in the paragraph above do not meet the requirements of Table SA 8 regarding “objective basis for confidence”, and therefore the score of SG 80 is not justified. Scoring contrary to the provisions of the FCR is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.</p> <p>126, SG 60 requires that: “The measures are considered likely to work, based on plausible argument (e.g. general experience, theory or comparison with similar UoAs/species).” Table SA 8 (see above) states that: “The SG60 level for these PIs requires “plausible argument” based on expert knowledge”. The CAB fails to identify any expert knowledge. Therefore even a score of SG 60 is not justified and the scoring is objectionable on the same grounds as set out above.</p>
CAB Response
We respectfully request this objection be dismissed on the basis of the response to Objection 18 – SG 60 and 80 are met automatically.

¹⁴ This is a specific requirement of the FCR in relation to such SIs. It is insufficient for the CAB to rely on its own general competence, unless specific expertise is actually identified, as the competence of the CAB is assumed throughout the assessment process. Here there is a specific requirement for expertise, and the expertise must be demonstrated, not assumed.

30. IPNLF Objection 20 PI 2.2.2

IPNLF
<p>127, The CAB, in scoring SI 2.2.2(a) (see above), appears to have relied on the definition of “as necessary” in Table SA 8 to score SI 2.2.2(a) at 80 – i.e. in effect without having regard to the tests applied by SGs 80 and 60.</p> <p>128, In its scoring of SI 2.2.2(c), for both FAD and FSC, the CAB states (p.77) that: “As there are no secondary main species, the fishery meets SG 60 and SG 80 (MSC FCR v.2 GSA 3.5.1).”</p> <p>129, The CAB cites GSA 3.5.1 (FCR, p.436), which is guidance and states that: “If the UoA has no (or negligible: see below) impact on this component, scoring issue (a) does not need to be scored for SG60 and SG80 [...].”</p> <p>130, GSA 3.5.1 refers only to scoring issue (a) – i.e. to SI 2.2.2(a). It does not refer to scoring issue (b) – i.e. to SI 2.2.2(b).</p> <p>131, If the CAB has indeed relied on the definition of “if necessary” to score SI 2.2.2(a) at 80, it cannot then proceed to score the UoA against SI 2.2.2(c). That is because neither of the SGs for that SI use the term “if necessary”. The CAB cannot apply the default approach it has used in the scoring of SI 2.2.2(a) to then create fictional measures, or a fictional partial strategy or strategy, for scoring against the SGs in 2.2.2(c).</p> <p>132, Instead, SI 2.2.2(c) must be regarded as non-applicable and therefore no score should be attributed.</p> <p>133, The CAB, in its response to IPNLF (p.250) states merely that: “Please refer to the response above.” We have already dealt with that response above.</p> <p>134, Awarding a score by default where the FCR makes no provision for such scoring is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.</p>
CAB Response
<p>As with our response to Objection 18, the MSC have clarified that the intent is the use of ‘if necessary’ is applicable at SIc We will include the interpretation in the revised report for transparency. We will amend the report as follows to clarify:</p> <p>“As there are no secondary main species, neither measures nor a partial strategy are necessary. and the SG 60 and SG 80 guideposts are met (applying MSC FCR v.2 SA 3.5.1 and GSA 3.5.1, and an interpretation which clarifies ‘if necessary’ applies to SI b and c),</p> <ul style="list-style-type: none">• SG60 is met• SG80 is met <p>As identified in SI a and b, there is no strategy for minor species and no main species. Although there is evidence of implementation, with a lack of strategy (which is wording specific to minor species) SG 100 cannot be met.”</p> <p>We have reviewed the IPNLF objection.</p> <p>We see no reason to edit the Final Report or change our scores and determination.</p>

31. IPNLF Objection 21 PI 2.2.2

IPNLF
135, The CAB scores the UoA at 80. SG 80 requires that: “There is some evidence that the measures/partial strategy is being implemented successfully.” Assuming (contrary to the above) that “measures” exist, the question is: is there “some evidence” that they are “being implemented successfully”?
136, For each of FAD and FSC, CAB identifies, as evidence of successful implementation, the following (p.77):
a, some very high level statistics;
b, the introduction of non-entangling FADs (to which, it says, without citing scientific evidence, a decline in bycatch is “probably related”);
c, “14 skippers and crew members of Echebaster group attended an ISSF Bycatch reduction workshop in tuna purse seine FAD fisheries”;
d, “members of Echebaster group participated in the EU funded Sukarrieta GAP2 meeting held during 2012 to promote sustainability in Indian ocean tuna fisheries”; and
e, members of Echebaster group participated in “a further bycatch mitigation workshop for purse seine skippers held in November 2012”.
137, However, this is not evidence of successful implementation. Regarding the high level statistics, there has been no consideration of confidence limits. And participation at a workshop does not provide any proof that good practice is being applied on vessels out at sea ¹⁵ . In addition, there is no attempt made by the CAB to relate its evidence of purported implementation to the measures identified in its justification for SI 2.2.2(a). There is a lack of scientific rigour in matching the purported implementation evidence with the measures evidence. In the absence of that rigour, that SG 80 is not met. There is no SG 60 for this SI.
138, As a result, the scoring is arbitrary and/or unreasonable
CAB Response
In response, we would highlight our reply to Objection 18; the MSC have highlighted that the ‘if necessary’ clause applies to SIC and hence the objector’s comments are not applicable.
We have reviewed the IPNLF objection.
We see no reason to edit the Final Report or change our scores and determination.

¹⁵ For instance, observer records show that an observer reported from Alakrana that two oceanic white tip sharks were “taken to the kitchen” (see line 262 of the original data sheet in the excel file). This is in direct contravention of IOTC Resolution 13/06 which prohibits the retention onboard, transhipment, landing or storing any part or whole carcass of oceanic whitetip sharks. It is quite possible that the master or other crew attended some of the mentioned workshops, but this did not prevent illegal activity from taking place on board the vessel.

32. IPNLF Objection 22 PI 2.2.2 d

IPNLF

139, The CAB considers that the UoA meets SG 80, whereby: “It is highly likely that shark finning is not taking place.”

140, As evidence, the CAB cites the following for both FAD and FSC (pp.78 and 79):

a, “Shark finning is illegal on EU registered vessels”;

b, Seychelles regulations on the subject apply, though the “feasibility/effectiveness” of their enforcement “has yet to be assessed” and there is “potential to fin sharks afforded by the Seychelles regulations”;

c, Echebaster company policy states that shark finning is not permitted;

d, “Observer coverage of 100% introduced by Echebaster in 2014 would detect whether shark finning is occurring”; and

e, “there are limited opportunities for shark finning at sea” because (i) “Usually, sharks are returned to the sea from the brailer before the catch enters the hopper”, (ii) any sharks entering chill tanks cannot be accessed until discharge.

141, Items (a)–(e) above do not create the requisite high likelihood that finning is not taking place:

141, 1, Items (a), (b), (c) and (e) do not address the factual question as to whether it is taking place, but only address whether it is permitted and the degree of opportunity for finning.

141, 2, Regarding (a) and (c), EU law and Echebaster company policy themselves are not practical barriers to finning.

141, 3, Regarding (b), as can be seen, the shortfalls of the Seychelles regulations are expressly acknowledged by the CAB.

141, 4, Regarding (e), if sharks are removed from the catch in order to be returned to the sea, then they can of course be removed from the catch for finning: the CAB’s purported analysis makes no sense.

141, 5, Regarding item (d) above (observer coverage), the percentages of observed sets for each of 2014, 2015 and 2016 are (only) 29%, 53% and 34% respectively (see Table 22, at p.39). The CAB, in response to IPNLF raising these percentages, states (p.273) that: “Note the comment on observer coverage in the revised report. The report has been revised to clarify the difference between 100% observer coverage versus percentage of data available for analysis.” (Here, the reference to “revised” is a reference to the revisions made to the Second Report to convert it to the Final Report.)

142, The CAB must provide evidence, currently lacking in the Final Report, to demonstrate the existence of 100% observer coverage, in the light of the following points:

a, The Final Report (p.2) states that: “there has been 100 % observer coverage for the Echebaster fleet since 2015 ”. So, by implication, there was not 100% observer coverage in 2014. Yet, later, the Final Report states (p.100) that: “Data from the first three years of 100% observer coverage is presented in this report” (p.100). The three years referred to are 2014, 2015 and 2016. It also states (p.185) that: “SFA has agreed to provide the necessary support to ensure continued 100% observer coverage of Echebaster tuna purse seine vessels, as in place since January 2014”. (See also p.148, referred to further below.) So the statements at pp.100 and 185 (and p.148) imply 100% observer coverage in 2014 and yet the statement at p.2 implies the opposite. This internal inconsistency casts doubt on whether and when, over the period 2014 to 2016 and beyond, there is “100% observer coverage”.

b, The low percentage (53%) of data “available for analysis” for 2015 is very surprising if there really was 100% observer coverage for that year: the Second Report was published in summer 2017, approximately 18 months on from the end of 2015. One would expect the passage of approximately 18 months to have allowed full analysis of the 2015 data. A possible explanation for only 53% of sets having been observed in 2015 is that there was not in fact 100% observer coverage in 2015.

c, In practice, “100% observer coverage”, i.e. coverage of 100% of sets, is just a concept. It cannot be reality. Observers need to go to the toilet; they may get ill from time to time. For any given period when there is an observer on board, it seems far more realistic to assume that only about 80% of the sets, and 80% of the processing activity arising from any given set, can be observed.

Currently, the only reference to evidence that IPNLF has been able to find in the Final Report is the following (p.148): “When IOTC required 5% observer coverage, Echebaster committed to the goal of 100% with effect from the 2014 fishing season, and the assessors have received confirmation from SFA

that was implemented.” Thus the assessors “received confirmation” from SFA that 100% observer coverage was implemented with effect from 2014. We need to see that “confirmation”, and we reserve the right to comment on it.

143, In the Second Report (p.87), the CAB stated that: “Increased onboard observer coverage (100% of all effort) introduced by Echebaster during 2014 is considered to be a level of observer coverage that is capable of detecting whether shark finning is occurring.” In the Final Report, that statement is replaced by the following: “Observer coverage of 100% introduced by Echebaster in 2014 would detect whether shark finning is occurring”.

144, As noted in point (c) above, we consider that “100% observer coverage” is just a concept. 80% coverage is likely to be the reality for any given period when an observer is on board. The difference, i.e. 20%, is a significant opportunity for finning to take place, i.e. for the fins to be stripped from a shark and for the carcass to be thrown over the side. In addition, as noted in points (a) and (b) above, we are in doubt as to whether the CAB’s claims of “100% observer coverage” can be substantiated. Because of points (a), (b) and (c) above, not even SG 60 (which requires it to be “likely that shark finning is not taking place”) can properly be said to be met.

145, The CAB, in its response to IPNLF (p.250), states that:

“Note the difference between the number of observed sets and the available tabulation results. Research indicates that 20-25% observer coverage is adequate to characterize and quantify shark bycatch. There is no relationship between the “low” percentage of data available for analysis and the likelihood of shark finning. Several sources of evidence support a score of SG100. However, as Seychelles law allows for some shark finning, the rationale has been revised and the fishery fails to meet SI^d SG100”

146, As can be seen, the CAB states that “Research indicates that 20-25% observer coverage is adequate to characterize and quantify shark bycatch”. There are two defects in this statement. First, no reference is provided and so it is impossible for a stakeholder to refer to this research. Bare assertions are incompatible with certification. Secondly, SI 2.2.2(d) is not concerned with shark bycatch generally; it is concerned specifically with the illegal act of shark finning; and therefore the research referred to is not relevant to SI 2.2.2(d).

147, The CAB also states that: “There is no relationship between the “low” percentage of data available for analysis and the likelihood of shark finning.” This is an astonishing statement in view of the degree of certainty needed by the SGs for this SI, because the statement suggests that the data that is not available for analysis, which creates uncertainty, has no bearing on the scoring for this SI. Otherwise, we fail to see how the CAB’s response to IPNLF states anything new to challenge our Objection on SI 2.2.2(d).

148, The scoring is arbitrary and/or unreasonable.

CAB Response

With 100% observer coverage for the UoA, and the detailed measures (Echebaster’s ban on shark finning, Seychelles regulations and EU ban on shark finning mean our view is that there is a high likelihood that shark finning is not taking place in this fishery at any particular time. Even with the lower thresholds of the Seychelles regulations, the 100% coverage means we can have high confidence that it is not taking place. Any sharks caught would be reported by the observers.

IPNLF’s point that observers are unable to be present all the time because they may be briefly absent is not significant; even if an observer was temporarily unavailable it is still ‘highly likely’ shark finning is not taking place. We also note that according to IOTC, observer coverage is defined by fishing sets/operations covered, not minutes covered. According to SA2.4.6, for SI e to be scored at SG 80, there must be evidence for:

SA2.4.6.2 If sharks are processed on board:

- a. There are regulations in place governing the management of sharks; Regulations are provided by Echebaster company policy, Seychelles regulations and EU policy
- b. There is full documentation of the destination of all shark bodies and body parts; and data provided to show the destination of shark carcasses.
- c. Good external validation of the vessels’ activities is available to confirm that it is highly likely that shark finning is not taking place. External validation is provided by 100% observer coverage.

Regarding the point made around “Research indicates that 20-25% observer coverage is adequate to characterize and quantify shark bycatch”, the source of this research is provided elsewhere within the report – Page 38 of FR2. We are happy to add a clarification to this effect. The MSC consider 20% observer coverage is enough to categorise by catch, with more required for less ‘normal’ species, and

IOTC consider 25% sufficient. With this in mind, 100% coverage of Echebaster vessels is considerably higher than both these estimates. We will amend the report to ensure the sources of information are included. The point made regarding ‘bycatch categorisation’ is irrelevant given that categorising bycatch is exactly what we are looking for; the categorisation of bycatch includes whether a shark is finned.

A score of SG 80 is justified.

We have reviewed the IPNLF objection.

We see no reason to change our scores and determination. We may edit the final report if required.

33. IPNLF Objection 23 PI 2.2.2 e

IPNLF

149, As a prelude to scoring this SI [e] at 100 by means of a justification, the CAB states that “[t]here are no main secondary species” and concludes that SG 60 and SG 80 are met.

150, It is not clear how the CAB reaches this conclusion. That is because:

a, None of the scoring guideposts for this SI include the wording “if necessary”, and so the CAB cannot be relying on the definition of “if necessary” in Table SA 8 (see above);

b, The CAB cannot be relying on SA 3.2.1 (which reads “If a team determines that a UoA has no impact on a particular component, it shall receive a score of 100 under the Outcome PI”) because it does not seek to award a score of 100 by default.

151, The CAB needs to explain, with reference to provisions of the FCR, the basis by which it has concluded that SG 60 and SG 80 are met for this SI.

152, In the absence of further explanation, the scoring is contrary to the FCR and is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.

CAB Response

The scoring guidepost justifications explicitly refer to main species, and SG 60 and 80 are met automatically. This approach is confirmed by an MSC interpretation which we will include in the report for transparency.

We have reviewed the IPNLF objection.

We see no reason to change our scores and determination. We may revise the final report if required.

34. IPNLF Objection 24 PI 2.2.2 e

IPNLF
<p>153, The first step in determining whether there is the requisite review of alternative measures is to identify those measures.</p> <p>154, SA 3.5.3.1 (FCR, p.140), which is normative and is applicable by virtue of SA 3.8.4, states that the term “alternative measures”, as used in SG 60, SG 80 and SG 100:</p> <p>“shall be interpreted by the team as alternative fishing gear and/or practices that have been shown to minimise the rate of incidental mortality of the species or species type to the lowest achievable levels”.</p> <p>155, It is apparent from the Report itself that FAD fishing has a far higher bycatch than FSC fishing. An obvious “alternative measure” would be to limit fishing to FSC, alternatively to minimise FAD fishing.</p> <p>156, Such a measure is obviously “appropriate” to implement (SA 3.5.3.3: FCR p.140), in that it is more effective, comparable in terms of effect on target species and safety, does not negatively impact other species or habitats and is not cost prohibitive to implement. It would no doubt include a cost (in the expanded sense used in the guidance: see the example at FCR p.440) in that it is less profitable, but the test is whether that would be prohibitive. It is a high test and no steps have been taken even to seek to apply it.</p> <p>157, The alternative measures are concerned with “any non-negligible” proportion of the catch (GSA 3.5.3: FCR p.436). Since the CAB has scored this SI, it must have determined that the bycatch is non-negligible in accordance with the precautionary principle (as per GSA 3.5.3).</p> <p>158, Table GSA8 (FCR p.434) explains that</p> <p>158, 1, MSC Principles & Criteria in relation to bycatch require that fisheries should “make use of fishing gear and practices designed to avoid the capture of non-target species (and non-target size, age, and/or sex of the target species); minimise mortality of this catch where it cannot be avoided, and reduce discards of what cannot be released alive” (Criterion 3B.12).</p> <p>158, 2, In addition, FAO (Code of Conduct for Responsible Fisheries, 1995), states that “selective and environmentally safe fishing gear and practices should be further developed and applied, to the extent practicable, in order to maintain biodiversity and to conserve the population structure and aquatic ecosystems and protect fish quality. Where proper selective and environmentally safe fishing gear and practices exist, they should be recognized and accorded a priority in establishing conservation and management measures for fisheries.”</p> <p>159, Table GSA 8 goes on:</p> <p>“In order to operationalise the intent of criterion 3B.12 in the MSC Ps&Cs and the statement from FAO (1995), changes in the P2 Species PIs in CR v2.0 have been made with the following intent:</p> <p>a, To motivate fishers to continually “think smart” about their impact on the environment (species and habitats); both in delivering the sustainable impact most efficiently, and continuing to reduce their impact beyond that</p> <p>b, To balance this desire with efficiency by not spending a lot of money and time generating only marginal improvements.</p> <p>To achieve this for species, a new scoring issue has been added to the P1 Harvest Strategy (PI 1.2.1) and P2 Species Management PIs (PI 2.1.2, 2.2.2, 2.3.2) requiring fisheries to continually review alternative measures to encourage the development and implementation of technologies and operational methods that minimise mortality of unwanted catch or ETP species, taking into account the practicality of the measures, their potential impact on other species and habitats and on the overall cost of implementing the measures.</p> <p>Fisheries need to either review alternative measures that are shown to minimise mortality of the species or species group in question (SA3.5.3). Fisheries need also to consider alternative measures to reduce impacts on habitats. Fisheries should take account of the potential for both positive and negative impacts of alternative measures on species and habitats (refer to GSA3.14.2) when considering whether such measures should be implemented.</p> <p>Alternative measures should avoid capture of the species in the first place or increase its survivability if released. Alternatively, in the case of in-scope species, they could utilise the unwanted catch in some way so that it would no longer be ‘unwanted’. If there are no unwanted species, the scoring issue on reviewing alternative measures does not need to be scored in that PI.”</p>

160, The CAB should have considered how the alternative measures for review have been selected and whether appropriate gears and practices have been considered as part of the review (FCR 3.5.3.1 at p.438). This has not been done.

161, The CAB scores the UoA favourably for tinkering with FADs by using a non-entangling version (see below), but ignores the fishery's failure to consider and obvious alternative measure of far greater value. In the context of the PNA assessment, the same CAB scored the PNA highly for not fishing on FADs (an approach which was correct in principle, were it not for the fact that the vessels were actually still fishing on FADs "outside" the UoA).

162, The measures the CAB lists (in its justification under SI 2.2.2(e)) are as follows:

"Echebaster policy on bycatch reduction, encompasses reporting and sustainability aims includes research on facilitating the escape of unwanted species from purse seines; 100 % observer coverage (achieved from 2014 on) to identify discards and entanglement in FADs; and exclusive use of non-entangling FADs (IOTC resolutions 15/08 and 15/09) to minimize unobserved mortality.

All Echebaster vessel captains attend annual workshops run by AZTI and ISSF on best practices for reducing bycatch and improving the survival of released bycatch (evidence includes attendance records).

All unwanted catch is either released before being brailed aboard or is released immediately after being placed on the catch conveyor belt, either manually carried overboard, or placed on a second conveyor that is available on three Echebaster vessels.

Other management measures in place relate to recording of catch and effort data by fishing vessels in the IOTC area (Resolution 13/03); Resolution 13/11 on a ban on discards of bigeye, skipjack and yellowfin tuna.

Therefore, there is at least biennial review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of all secondary species and they are implemented as appropriate."

163, These may be summarised as follows:

- a, "policy on bycatch reduction";
- b, attendance by all vessel captains at annual workshops;
- c, release of "[a]ll" unwanted catch either pre-brailing or immediately post-brailing; and
- d, existence of IOTC resolutions 13/03 and 13/11

164, No attempt has been made by the CAB to apply the interpretation of "alternative measures" in SA 3.5.3.1. This is because doing so would reveal a failure by the purported measures to meet the interpretation.

165, The interpretation in SA 3.5.3.1 states that the term "alternative measures", as used in SG 60, SG 80 and SG 100: "shall be interpreted by the team as alternative fishing gear and/or practices that have been shown to minimise the rate of incidental mortality of the species or species type to the lowest achievable".

166, In that regard: items (b) and (d) above are not "fishing gear and/or practices"; the only example of "fishing gear and/or practices" in (a) above is non-entangling FADS; and the practice referred to in item (c) above reveals nothing about the state (for example dead or moribund) of the animals that are released.

167, In reality, the only measures put forward by the CAB as "alternative measures" are use of non-entangling FADS and release of "[a]ll" unwanted catch. However, these are measures that are already a part of the fishery, according to the CAB. So there is nothing "alternative" about these measures. The CAB cannot expect to rely on such measures for the purpose of meeting any of the SGs in this SI.

168, In addition, the CAB presents no empirical evidence of any benefit arising from non-entangling FADS.

169, First, there is uncertainty in the Final Report as to when non-entangling FADS were introduced or were being used exclusively. For example:

p.97 (justification for scoring of SI 2.3.2(e)): "since 2015 Echebaster exclusively uses non-entangling FADs to reduce this risk"

p.211 (CAB response to IPNLF): "The Echebaster fleet adopted the use of non-entangling FADs several years ago"

p.219 (CAB response to PEW): "The Echebaster fleet has exclusively used non-entangling FADs since 2014"

p.229 (CAB response to PNA): "since 2014, the Echebaster fleet has exclusively used non-entangling FADs"

These statements refer to, variously, "since 2015", "since 2014" and "several years ago". Clarity is needed on when (year and month) (a) non-entangling FADS were first used by the Echebaster fleet and (b) they became used exclusively.

170, Secondly, no empirical evidence is presented in the Final Report to substantiate claims that non-entangling FADS are having a beneficial effect. For example:

p.214 (CAB response to IPNLF): "With regard to sea turtle entanglement in FADs, the new non-entangling FADs have significantly reduced this problem, as is reflected in the catch data for the Echebaster fishery."

p.331 (CAB response to Peer Reviewer B): "The Echebaster fleet exclusively uses non-entangling FADs, and we believe this accounts for the difference between the higher bycatch rates in the published 2000-2010 data and the observer data for this fleet in the 2014-2016 period."

The Final Report does not contain any data on bycatch from prior to 2014 (see Tables 23 and 24). We note the use of "we believe" in the extract above. Belief is not sufficient. Scientific proof is needed. If the CAB wishes to rely on the allegedly beneficial effects of non-entangling FADS, it must present scientific evidence in the Final Report itself. If this requires data from, say, the first (failed) attempt at certification, so be it. But all of the data concerned need to be presented and analysed in the Final Report.

171, Furthermore, the CAB focuses on the exclusive use by the UoA of non-entangling FADS (see for example: p.2, "The exclusive use of non-entangling FADs"; p.47, "The Echebaster vessels exclusively use non-entangling FADs"; p.63, "Echebaster vessels exclusively use non-entangling FADs"). However, it is a fact of purse seine fisheries that vessels will set opportunistically on passing FADs. The existence of this practice is expressly acknowledged by the CAB in the Final Report (p.47), where it states: "An interesting aspect of this fishery, is that while one vessel may deploy a FAD and place its own beacon on it, any vessel can and will fish the FAD on a first come first arrival basis."

172, The emphasis in the Final Report on exclusive use of non-entangling FADS suggests that vessels in the Echebaster fleet may not undertake this opportunistic practice. If that is indeed the case, the CAB must provide a very clear statement to that effect. Failing production of such a statement, it would have to be assumed that Echebaster vessels do undertake the opportunistic practice and, therefore, they cannot be regarded as using exclusively non-entangling FADS. Indeed, the fact that the CAB has not sought to define the UoA by reference to non-entangling FADS (cf. the suggestion by Peer Reviewer B, at p.337: "Also, mention is made that all FADs are non-entangling. Can this be independently verified? Why not define this as part of the UoA?") implies some acknowledgement that this practice may or does occur.

173, A prime example of a measure that would be an "alternative measure" for the purposes of SA 3.5.3.1 would be a reduction in the use of FADs (whether non-entangling or not) within this UoA. Such a reduction would easily meet the requirement to "have been shown to minimise the rate of incidental mortality of the species". Yet the CAB does not mention that as an "alternative measure". The CAB must show why that cannot be applied as an "alternative measure".

174, The Global FAD Science Symposium¹⁶ was convened in Santa Monica, USA from March 20-23, 2017 specifically to look at best practice in tuna fisheries.

175, The symposium investigated the various management measures established by regional fishery management organisations (RFMOs) for fishing with FADs, evaluated FAD research and issued recommendations for the responsible management of fishing with FADs. They concluded as follows:

A well-managed purse seine fishery has the following attributes regarding target species: (1) target stocks are maintained around the target levels and away from biological limits that could severely impact the stocks; (2) Where a target stock is overfished, a rebuilding program is in place with a clear timetable and milestones to rebuild the stock to around the target level; (3) assessments of the target stocks are conducted regularly to inform decision makers.

¹⁶ Global FAD Science Symposium. 2017. What does well-managed FAD use look like within a tropical purse seine fishery? John Hampton, Gerry Leape, Amanda Nickson, Victor Restrepo, Josu Santiago, Justin Amande, Richard Banks, Maurice Brownjohn, Emmanuel Chassot, Ray Clarke, Tim Davies, David Die, Daniel Gaertner, Grantly Galland, Dave Gershman, Michel Goujon, Martin Hall, Miguel Herrera, Kim Holland, Dave Itano, Taro Kawamoto, Brian Kumasi, Alexandra Maufroy, Gala Moreno, Hilario Murua, Jefferson Murua, Graham Pilling, Kurt Schaefer, Joe Scott Phillips, Marc Taquet. Santa Monica, USA.

Clearly, these cannot be achieved by managing FAD use alone. They require agreement on a number of elements such as management objectives for each stock (targets, limits, etc.) and decisions about allocation, both among gears and within the purse seine fishery.

Nevertheless, there are a number of management actions for FAD use that are high priority and consistent with the above principles. These are actions that will mitigate the impact of FAD use on overfished target tuna stocks, including bigeye in the Atlantic and Pacific oceans and yellowfin in the Indian and (to a lesser extent) Atlantic oceans.

Examples of best practices for target species include:

1, Setting catch limits specifically for juvenile tunas caught by purse seine operations, particularly of overfished stocks;

2, Shifting some purse seine fishing effort from FAD sets to sets on unassociated tuna schools (free schools), either voluntarily or through annual FAD set limits;

3, Avoiding setting on FADs with large concentrations of juvenile or overfished tunas, including by: a) avoiding hotspots, where overfished species are relatively abundant or vulnerable (this could include time-area closures); b) developing techniques to use FAD acoustic technology to avoid sets that are likely to contain high numbers of overfished species, recognizing that this practice will require technological and methodological advances; c) avoiding purse seine setting techniques or equipment that are more likely to select overfished species (if such things can be identified); d) using improved datasets to develop science-based, FAD deployment limits.

176, In the light of the above, the CAB has failed to demonstrate the existence of "alternative measures", as required by the FCR. Awarding a score contrary to the FCR is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.

CAB Response

This SI is focussed on a review of the measures identified. The CR defines: SA3.5.3.1 "Alternative measures" in scoring issue (e) shall be interpreted by the team as alternative fishing gear and/or practices that have been shown to minimise the rate of incidental mortality of the species or species type to the lowest achievable levels.

The measures identified on P 79 are:

- Echebaster policies including annual workshops on best practices for reducing bycatch
- Observer coverage
- IOTC regulations
- Attendance of workshops on reducing unwanted catch

All these measures show that the client group regularly reviews how to reduce bycatch. Alternative measures are reviewed for their cost effectiveness. For the same level of catch, switching to 100% free school catches would increase costs while not affecting income. The view that the UoA should be using more free-school sets rather than FADs is not warranted as although the bycatch is slightly higher, it is not significantly so and is still at very low levels. Therefore the measures currently in place are sufficient to ensure the UoA has a minimal impact on unwanted species.

We have reviewed the IPNLF objection.

We see no reason to edit the Final Report or change our scores and determination

35. IPNLF Objection 25 PI 2.2.2 e

IPNLF
177, The CAB scores this SI at 100. SG 100 requires that: "There is a biennial review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of all secondary species, and they are implemented, as appropriate."
178, The CAB, after listing the measures referred to above, states, the following: "Therefore, there is at least biennial review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of all secondary species and they are implemented as appropriate."
179, However, no evidence at all is provided of a biennial review. Without such evidence, the CAB's assertion of the existence of such a review cannot hold. Awarding a score contrary to the FCR is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.
CAB Response
The justification is currently not as clear as it could be regarding how the reviews are biennial – though the evidence stands. The justification will be revised to the following: "As there are no secondary main species, neither measures nor a partial strategy are necessary. and the SG 60 and SG 80 guideposts are met (applying MSC FCR v.2 SA 3.5.1 and GSA 3.5.1, and an interpretation (laid out at the beginning of this document) which clarifies if there are no main secondary species PI 2.2.2e is only scored at SG100, SG60 is met SG80 is met Echebaster policy on bycatch reduction is reviewed annually and encompasses reporting and sustainability aims including research on facilitating the escape of unwanted species from purse seines; 100 % observer coverage (achieved from 2014 on) to identify discards and entanglement in FADs; and exclusive use of non-entangling FADs (IOTC resolutions 15/08 and 15/09) to minimize unobserved mortality. Therefore alternative measures are reviewed on an annual basis aimed at minimising UoA-related mortality of unwanted catch of main primary species. All Echebaster vessel captains attend annual workshops run by AZTI and ISSF on best practices to review the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of main secondary species for reducing bycatch and improving the survival of released bycatch (evidence includes attendance records). So this review of alternative measures is occurring on an annual basis. Other management measures in place relate to recording of catch and effort data by fishing vessels in the IOTC area (Resolution 13/03); Resolution 13/11 on a ban on discards of bigeye, skipjack and yellowfin tuna. IOTC resolutions are already in place but are reviewed for their effectiveness by the Commission which meets annually. Therefore, there is at least biennial review (in this case most reviews are carried out annually) of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of all secondary species and they are implemented as appropriate. The above provides evidence that the UoA meets the MSC FCR 2.0 SA 3.5.3. • SG 100 is met for both set types." We have reviewed the IPNLF objection. We see no reason to change our scores and determination. We will edit the Final Report if required.

36. IPNLF Objection 26 PI 2.2.2 e

IPNLF
180, SA 3.5.3.3 (FCR, p.140), which is normative and is applicable by virtue of SA 3.8.4, defines the term “as appropriate”, as used in SG 80 and SG 100, as follows: “ “As appropriate” ... in the context of implementing reviewed measures shall be interpreted by the team as situations where potential alternative measures reviewed are: a, Determined to be more effective at minimising the mortality of unwanted catch than current fishing gear and practices, b, Determined to be comparable to existing measures in terms of effect on target species catch, and impacts on vessel and crew safety, c, Determined to not negatively impact on other species or habitats, and d, Not cost prohibitive to implement.” 181, No attempt has been made by the CAB to apply the interpretation of “as appropriate” in SA 3.5.3.3. That is clear from the fact that, as noted above, the CAB simply states that the measures it lists “are implemented as appropriate” – i.e. it simply repeats the wording of SG 80 and SG 100. The CAB must apply SA3.5.3.3, and provide evidence in that regard, before reaching any conclusion about the scoring of this SI, unless it proposes to score the SI at SG 60. 182, The CAB, in its response to IPNLF (p.251), states simply that: “Please refer to the comments above. In addition, evidence is presented to support our conclusion that the fishery meets SG100. The scoring rationale has been redrafted to clarify the evidence supporting a score of 100 for this SI.” 183, Awarding a score contrary to the FCR is a serious irregularity (procedural and/or non-procedural) and/or the resulting score is arbitrary or unreasonable.
CAB Response
As with our response to Objection 25, the alternative measures reviewed are sufficient to meet the SG 100 level. The report may be unclear about how the measures are implemented. The rationale will be revised to: “As there are no secondary main species, neither measures nor a partial strategy are necessary. and the SG 60 and SG 80 guideposts are met (applying MSC FCR v.2 SA 3.5.1 and GSA 3.5.1, and an interpretation which clarifies if there are no main secondary species PI 2.2.2e is only scored at SG100, SG60 is met SG80 is met Echebaster policy on bycatch reduction is reviewed annually and encompasses reporting and sustainability aims including research on facilitating the escape of unwanted species from purse seines; 100 % observer coverage (achieved from 2014 on) to identify discards and entanglement in FADs; and exclusive use of non-entangling FADs (IOTC resolutions 15/08 and 15/09) to minimize unobserved mortality. Therefore alternative measures are reviewed on an annual basis aimed at minimising UoA-related mortality of unwanted catch of main primary species. All Echebaster vessel captains attend annual workshops run by AZTI and ISSF on best practices to review the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of main secondary species for reducing bycatch and improving the survival of released bycatch (evidence includes attendance records). So this review of alternative measures is occurring on an annual basis. Other management measures in place relate to recording of catch and effort data by fishing vessels in the IOTC area (Resolution 13/03); Resolution 13/11 on a ban on discards of bigeye, skipjack and yellowfin tuna. IOTC resolutions are already in place but are reviewed for their effectiveness by the Commission which meets annually. Therefore, there is at least biennial review (in this case most reviews are carried out annually) of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of all secondary species and they are implemented as appropriate. The above provides evidence that the UoA meets the MSC FCR 2.0 SA 3.5.3. • SG 100 is met for both set types.” We have reviewed the IPNLF objection.

We see no reason to change our scores and determination. We will edit the final report if required.

37. SHARK PROJECT PI 2.2.2 d

SHARK PROJECT
1, 2.2.2d - Secondary species management strategy - shark finning The CAB scored this at 80: It is highly likely that shark finning is not taking place. SG60 is: It is likely the shark finning is not taking place. 2, The UOA does NOT meet SG80 as the existence of regulations and presence of observers, as described by the CAB, have not proven effective in preventing finning in other tuna fisheries, including purse seiners. It is possible to argue the UOA meets 60 but there should certainly be a Condition attached to ensure this is addressed. 3, Silky sharks, the main species caught by the UOA represent at least 3-4% of fins auctioned in Hong Kong, the third highest after blue and hammerhead sharks. (Clarke S et al., 2006). 4, Regulations alone are not strong enough to prevent finning. The EU, IOTC, and Seychelles have finning bans, however, the later two allow fins to be landed separately, as long as they make up no more than 5% of the dressed shark carcasses. This fin-to-carcass ratio has been criticised by scientists globally, including by both IOTC and WCPFC Scientific Committees (e.g. SC 2015), and in the EU's own Regulation 605/213, as it is not a verifiable means of ensuring the eradication of finning. At the time of this UOA assessment, the 5%ratio requirement was in use in both IOTC Resolution 05/05 (superseded by 17/05) and Seychelles. The EU requires sharks landed with fins attached. (Note: The preamble in the new IOTC shark measure highlights the 5% ratio issue and now requires sharks landed fresh to be landed fins attached, but still allows frozen sharks to be landed separately.) 5, The CAB has provided insufficient evidence that regulations are followed. Observer coverage alone is not a sufficient deterrent. The CAB states that having 100% observer coverage would detect whether shark finning is occurring, despite the fact much of the UOA observer data still has to be analysed (so far only 29%, 53% and 34% of observed sets for each of 2014, 2015 and 2016, respectively). Why is the CAB so sure that it won't reveal finning? 6, In the Western & Central Pacific Fisheries Commission, which has a similar shark finning regulation (fin-to-carcass ratio), the independent Regional Observer Program with 100% coverage has been reporting (e.g. see ROP 2015) finning of both silky sharks and oceanic whitecap sharks on purse seiner vessels. 7, The CAB states that there is little opportunity to fin sharks and yet according to the data sheets provided to SHARKPROJECT by the CAB, an observer reported from Alakrana that two <i>Carcharhinus longimanus</i> (oceanic white tip sharks) were "taken to the kitchen" (see line 262 of the original data sheet in the excel file). 8, Bribery, violence and abuse are well-documented issues for observers (e.g. http://www.apo-observers.org/) who may not feel safe to reporting finning. The program in IOTC is not independent, so has a greater risk of observers turning a blind eye. Finally, observers cannot be everywhere at once - if they are sampling on deck, who is watching down below? AZTI's 2016 observer data sheets for Echebaster (attached) Association of Professional Observers (APO) website: http://www.apo-observers.org/ Clarke S, Magnusson JE, Abercrombie DL, et al (2006). Identification of shark species composition and proportion in the Hong Kong shark fin market using molecular genetics and trade records. Conserv Biol 20: 201-11. IOTC resolution 05/05 and 17/05. http://www.iotc.org/cmm/resolution-1705-%E2%80%A8on-conservation-sharks-caught-association-fisheries-managed-iotc ROP (2015). Annual Report of the Regional Observer Programme. WCPFC-TCC11-2015-RP02 https://www.wcpfc.int/node/26762 See page 26, section 6.2.2a of: SC (2015). Summary report 11th Regular Session of the Scientific Committee. WCPFC. https://www.wcpfc.int/meetings/11th-regular-session-scientific-committee
CAB Response
Shark Project's comment that Silky sharks form 3-4% of the sharks sold in Hong Kong is irrelevant because a) there is no evidence that any of this is sourced from Echebaster vessels and b) Silky sharks are ETP species are ETP species and not considered under PI 2.2.2.

The regulations implemented (finning bans) by IOTC, SFA and EU are not enough on their own, however we do not use this as evidence that shark finning does not take place. Echebaster completely bans shark finning. The 100% observer coverage ensures this ban is respected.

The point made that the observer report details 'two sharks being taken into the kitchen' is not evidence that shark finning took or takes place. The fact that observers noted this practice also highlights the high level of detail the observers report on, and improves the confidence the team have that any shark finning activity that would take place would be reported.

The only minor secondary shark species caught is the bull shark, (*Carcharhinus leucas*) (Table 24 in the final report) of which the average annual number of individuals caught is 9.2. This also strengthens the view that the opportunity for shark finning is very low.

We have reviewed the SP objection.

We see no reason to edit the Final Report or change our scores and determination.

38. SHARK PROJECT PI 2.2.2 e

SHARK PROJECT

1, 2.2.2e - Secondary species management strategy - Alternative measures

2, The most effective measures for reducing mortality of non-target species are those that prevent the interactions with fishing gear in the first place. This could include temporal and spacial closures of areas with higher bycatch (see e.g. Tolotti et al., 2015) such as for juvenile silky sharks, as well as gear modifications and limitations on using problematic gear types, such as the seasonal FAD bans and FAD set limits used in the Western and Central Pacific.

3, Setting on free schools has significantly lower bycatch than FAD sets. As the CAB shows throughout the report in its comparison of bycatch in both set types, the most effective way to reduce bycatch in the purse seine nets is to set on free schools, not on FADs.

4, We do not currently have data that would allow temporal or area closures to avoid ETP species or ways to prevent threatened species like silky sharks from being attracted to FADs, or success in releasing the majority of them safely from the purse seine nets before brailing, or for releasing them alive from deck with a high rate of survival. Therefore, reducing the number of FAD sets is currently the only available practical and simple option to reduce bycatch mortality.

5, The few positive changes made by the UoA with regard to FAD design and bycatch release are undermined by the dramatic increase in the number and proportion of sets on FADs. The introduction of non-entangling FADs that have no netting attach beneath the FAD will certainly reduce the number of deaths of silky sharks and turtles entangled under FADs. In addition the changes made by the UoA to encourage safe release of bycatch is a useful step. However, being caught in purse seine nets when they set on FADs remains a significant cause of mortality for non-target species, especially for more sensitive and threatened species like silky sharks.

6, While improvements to the release of bycatch is certainly a valuable part of the process, for sensitive species like silky sharks, it is far too late to release them after capture due to their very high post-release mortality rate. Throughout the scientific literature the mantra has been the same - the best way to protect sharks is not to catch them in the first place. Measures must focus first on reducing interactions with fishing gear, and then on safe release as early as possible in the process for those that do get caught.

7, Observer data clearly shows that between 2014 and 2016 the UoA more than doubled its total number of sets, from 804 to 1700. Free school sets declined from 237 to 190, while FAD sets increased from 567 to 1510 sets. FADs sets went from 071% to 89% of total sets in 3 years (Table 21, p40 Final report v2). So not only is the UoA not applying the most effective reduction measures, they are knowingly increasing use of the set type that takes more bycatch.

8, The UoA uses more FADs than many other fleets. The CAB likes to highlight the fact that Echebaster set their own limit to 375 active FADs at anyone time, but provides no information on how this compares to the rest of the fleets. Like the rest of the Spanish-owned vessels, Echebaster uses a large number of FADs, which is why the UoA needs a special supply vessel to carry them. It is easy to see who are the big FAD users - of 23 supply vessels registered in IOTC in 2017 13 were flagged to Spain, 7 to Seychelles and just one each to France, Mauritius and Korea (data available by year on IOTC website, or see Greenpeace 2017). IOTC measures that limit the numbers of FADs and supply vessels only really impacted these fleets - others can still increase the number of FADs they use, and there are NO limits to the number of FAD sets made.

9, The CAB provides no analysis of how often the UoA sets on FADs from other vessels, what kind of FADs these are or their impacts, and gives no evidence for how this can or will be monitored with regard to the UoA.

10, Greenpeace (2017). Supply vessels in the Indian Ocean. IOTC-2017-S21-Inf03
<http://www.iotc.org/documents/supply-vessels-operating-indian-ocean>

IOTC vessel registry: <http://www.iotc.org/vessels>

Tolotti MT, Filmalter JD, Bach P, Travassos P, Seret B, Dagorn L (2015). Banning is not enough: The complexities of oceanic shark management by tuna regional fisheries management organizations. Global Ecology and Conservation 4: 1-7. doi:10.1016/j.gecco.2015.05.003

CAB Response

Shark Project's comments relating to ETP species are not applicable for PI 2.2.2 as ETP species are dealt with at PIs 2.3.x.

The comments relating to Echebaster's use of FADs in comparison to other fleets is irrelevant as this assessment considers the UoA against the MSC standard and not in comparison to other fisheries. We have seen, as part of the assessment, the FAD logbook provided by the client which records the FADs fished. If the UoA were fishing on other FADs, then it would be obvious within this logbook and the assessment team have seen no evidence that this is the case.

We have reviewed the SP objection.

We see no reason to edit the Final Report or change our scores and determination.

39. SHARK PROJECT PI 2.2.3 a-c

SHARK PROJECT

1, 2.2.3a-c - Secondary species information - minor secondary

2, The scoring for this whole section is unclear so it is not possible to determine if it has been correctly scored.

2.2.3 a is scored as 100

3, 2.2.3 b has no score. The scoring for this section is not given. The CAB simply states it does not meet SG100 and there is no other score option presented or discussed.

4, 2.2.4 c is scored as 80 we assume, as there is no discussion of it meeting parts of 100 to gain a higher score.

5, The total score for 2.2.3 is given as 85. As this is not an average of 100 + 80, it suggests either that that 2.2.3 b or 2.2.4 c were scored differently in some way that is not made clear.

6, See Table 30 on page 81 for PI 2.2.3 , and the PI summary scores in Table 5a on page 6.

CAB Response

This PI has been scored according to the MSC CR. b) does not have a score as 100 is not met so no score is applied to that SI because there is only one scoring guidepost. As one out of the three SIs meet 100, a total of 85 for this PI is given according to 7.10.5.3 "a. If not all of the SG100 scoring issues are met, the PI shall be given an intermediate score (85, 90 or 95) reflecting overall performance against the different SG100 scoring issues. iii) Award 85 when performance against the scoring issues is slightly above SG80 (a few scoring issues are fully met, but most are not fully met)."

We have reviewed the SP objection.

We see no reason to edit the Final Report or change our scores and determination

40. IPNLF Objection 27 PI 2.2.3

IPNLF
184, The CAB scores the UoA at 100. SG 100 requires that: "Quantitative information is available and adequate to assess with a high degree of certainty the impact of the UoA on main secondary species with respect to status."
185, It is not clear to us whether this score is on the basis that, as claimed by the CAB (p.81), "[t]here are no main secondary species" or, alternatively, whether it is based on scoring despite the CAB's claim.
186, If it is the former, it is necessary to consider SA 3.2.1 and SA 3.3.1 of the FCR. SA 3.2.1 reads: "If a team determines that a UoA has no impact on a particular component, it shall receive a score of 100 under the Outcome PI." Thus the scope of SA 3.2.1 is restricted to "the Outcome PI". PI 2.2.3 is not an Outcome PI; instead, it is an Information PI. Therefore SA 3.2.1 is not directly applicable to PI 2.2.3.
187, However, SA 3.3.1 also needs to be considered. This states that: "If a team determines that the UoA has no impact on a particular component and has therefore scored 100 under the Outcome PI, the Information PI shall still be scored." The CAB has indeed scored the secondary species Outcome PI (i.e. PI 2.2.1) at 100 (see above); therefore, under SA 3.3.1, the secondary species Information PI must still be scored.
188, The three SGs of SI 2.2.3(a) each refer to main secondary species (and to no other species). Therefore it is very hard to see how the CAB has scored SI 2.2.3(a). It is highly unsatisfactory that stakeholders are left guessing about how, in relation to provisions of the FCR (including SA 3.2.1, and SA 3.3.1), the CAB has gone about scoring this SI.
189, In the absence of clarification, the scoring is arbitrary and/or unreasonable.

CAB Response

The justification for this PI is valid. There are no main species and the information available confirms this (Table 23 in Final Report). Available quantitative data allows us to assess with a high degree of certainty that the UoA has no impact on main secondary species stocks.

We have reviewed the IPNLF objection.

We see no reason to edit the Final Report or change our scores and determination

41. IPNLF Objection 28 PI 2.2.3a

IPNLF
190, SA 3.3.1 of the FCR does not allow an automatic score of 100. Yet the CAB appears to have taken that approach, in that it sets out some generic justification text (see below) and then states that:
"• SG 60 is met • SG 80 is met • SG 100 is met."
191, Clearly, the CAB has failed to work through SG 60, SG 80 and SG 100 in turn. This is required by FCR 7.10.6 (p.36 of the FCR). The CAB is therefore in breach of FCR 7.10.6
192, Awarding a score contrary to the FCR is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.
CAB Response
The justification states the reasons why all three scoring goalposts have been met. However, in the interest of clarity we will revise the justification to the following: "The observer catch monitoring program is adequate to characterize the FAD and FSC catch composition. SG 60 is met. There is quantitative data in the form of catch composition data to assess the impact of the UoA on main secondary species. SG 80 is met. This quantitative data confirms there are no main secondary species (species approaching 5% of the catch for either set type), and no single secondary species even makes up more than 1% of the catch. Therefore, there is quantitative evidence available and it is adequate to assess with a high degree of certainty the impact of the UoA on the main secondary species with respect to status. SG100 is met."

We have reviewed the IPNLF objection.

We see no reason to change our scores and determination. We will revise the Final Report if required.

42. IPNLF Objection 29 PI 2.2.3a

IPNLF

193, If SI 2.2.3(a) is to be scored in an absence of main secondary species, it is assumed that the SGs must be interpreted as referring, at least in part, to adequacy of information for detecting if, at any point in the future, secondary species change their status from "minor" to "main". Hence the degrees of certainty in the SGs must be interpreted as referring to, amongst other things, that task.

194, In that regard, SG 100 is not met and instead, only SG 80 is met. SG 100 requires that: "Quantitative information is available and is adequate to assess with a high degree of certainty the impact of the UoA on main secondary species with respect to status." (Emphasis added.)

195, Yet with the state of the processing and analysis of observer-generated data at relatively low levels (see above), it is not possible, with "a high degree of certainty" to conclude that any secondary species will, or will not, change their status from "minor" to "main".

196, Instead, the best that can be said is, as stated in SG 80, that: "Some quantitative information is available and is adequate to assess the impact of the UoA on the main secondary species with respect to status." (Emphasis added.)

197, The CAB's justification, for FAD and FSC jointly, reads as follows (p.81):

"The observer catch monitoring program is adequate to characterize the FAD and FSC catch composition. There are no main secondary species, that is species approaching 5% of the catch for either set type, and no single secondary species even makes up more than 1% of the catch. There is a high degree of certainty that there would not be any new data that would indicate that any single secondary species would reach more than 5% of the catch, and therefore there is quantitative evidence available and adequate to assess with a high degree of certainty the impact of the UoA on the main secondary species with respect to status, because it is highly unlikely that there will ever be main secondary species."

198, This purported justification cannot be sustained. First, it refers only to the 5% threshold. It makes no reference to the 2% threshold or to FCR 3.4.4. Secondly, it refers to a "high degree of certainty" that no new data would reveal a change in status. But, as noted, the state of the processing and analysis of observer-generated data is at relatively low levels (see above) – and, as is very widely known and accepted, the marine environment is heterogenous, rather than homogenous, and changes can arise over both space and time. Thirdly, it states that "it is highly unlikely that there will ever be main secondary species". This is pure speculation.. The CAB's justification is wholly inadequate, especially for a claim that the UoA meets SG 100.

199, The CAB, in its response to IPNLF (p.251), states simply that: "Please refer to the responses above."

200, The scoring is arbitrary and/or unreasonable.

CAB Response

The score of 100 is justified. This objection concentrates on whether or not the observer data are sufficient to categorise the UoA component catch as main or minor. The SG100 is not about that. Rather it is about whether there is information to assess UoA impact on the biological status of the main secondary species stock(s).

The quantitative data confirms there are no main secondary species (species accounting for greater than 5% of the total catch for each set type), and no single secondary species accounts for more than 1% of the catch. Therefore, the quantitative evidence available is adequate to assess with a high degree of certainty the impact of the UoA on the main secondary species with respect to status. SG100 is met. This leads us to conclude, with a high degree of certainty, that there is no impact on main secondary species status. While catch data available would detect a change in status of bycatch, we stress that the issue is not relevant.

We concede that statements on an uncertain environment were not relevant. These statements were unrelated to scoring and may be removed. However, they are unrelated to the scoring which requires us to have evidence data on whether there are main species, and what impact the UoA would have with respect to their status.

We have reviewed the IPNLF objection.

We see no reason to change our scores and determination. We may revise the final report if required.

43. IPNLF Objection 30 PI 2.2.3

IPNLF
201, The CAB states (p.82), for both FAD and FSC, that: "As noted in the justification to PI 2.2.1 SI a, there are no secondary main species and therefore no measures or partial strategy are necessary (MSC FCR v.2 GSA 3.5.1)."
202, As can be seen, the CAB cites GSA 3.5.1 (FCR, p.436), which is guidance and states that: "If the UoA has no (or negligible: see below) impact on this component, scoring issue (a) does not need to be scored for SG60 and SG80 [...]."
203, GSA 3.5.1 relates exclusively to the use of "if necessary" in SGs (see above). None of the SGs for SI 2.2.3(c) use "if necessary", so it is not clear why the CAB is citing GSA 3.5.1. It may be that it is seeking to rely on the use of "if necessary" in the SGs for SI 2.2.2(a), on the basis that these SGs refers to "measures", "partial strategy" and "strategy" as do the SGs for SI 2.2.3(a).
204, However, if so, that is problematic. If the CAB has indeed relied on the use of "if necessary" to score SI 2.2.2(a) at 80, it cannot then proceed to score the UoA against SI 2.2.3(c). The CAB cannot apply the default approach it has used in the scoring of SI 2.2.2(a) to then create fictional measures, or a fictional partial strategy or strategy, for scoring against the SGs in 2.2.3(c). Instead, SI 2.2.3(c) must be regarded as non-applicable and therefore no score should be attributed.
205, The CAB, in its response to IPNLF (p.253), states simply that: "Please refer to the responses above." Awarding a score contrary to the FCR is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.
CAB Response
We concede our approach is unclear at this PI. The text may be revised to the following to ensure a transparent outcome:
"The fishery retains all species encountered by the purse seine gear with the exception of large sharks, rays and sea turtles. Data from focused bycatch studies, EU data collection programmes and a recently implemented IOTC observer program provides a basis for supporting and evaluating the effectiveness of measures (SG60 is met) and as defined under 2.2.2, these measures form a partial strategy, so SG 80 is met. However, the fact that the data is not fully available (only about 50% of the collected observer data is available at the time this report is being drafted) on the catches of non-target species means that information cannot be considered adequate to manage impacts or to evaluate with a high degree of certainty whether the strategy is achieving its objective. Instances of slippage, although likely to be rare, may not be recorded in the vessel logs, but are noted in the observer data if that occurs. Many species that are taken as bycatch are not assessed and while all of these are currently considered as retained catch, there remains associated uncertainty in respect of the impact of the fishery on incidentally captured species.
A strategy that manages all secondary species has not been implemented.
• SG100 is not met."
We have reviewed the IPNLF objection.
We see no reason change our scores and determination. We may edit the final report if required.

44. WWF PI 2.3.1

WWF
1, The CAB failed to consider material information put forward by the peer reviewer(s). The CAB failed to consider material information put forward in the assessment process by the fishery or a stakeholder. The CAB made a mistake as to a material fact.
2, The rationale currently presented is based around other fisheries being worse for ETP mortality and that the numbers of vessels in the UoA is small. Scoring issue e) CAB states that "It may be the case that other indirect effects have not been identified, in particular, there may be issues related to the effects of FADs on feeding behaviour and migration ETP species, especially some shark species that have demonstrated a high affinity for FADs," but there are no studies about the effects of shark / FAD interactions.
CAB Response

We find it difficult to respond to WWF as we do not properly understand the Objection. WWF refers to PI 2.3.1 and then S1e.

However, PI 2.3.1 S1e does not exist.

We have reviewed our Final Report, and we consider WWF are referring to PI 2.3.1 S1c (ETP species, indirect effects), where the quoted CAB comment "*It may be the case that other indirect effects have not been identified, in particular, there may be issues related to the effects of FADs on feeding behaviour and migration ETP species, especially some shark species that have demonstrated a high affinity for FADs*" comes from. However, this is the rationale for why the fishery does not score 100. We have not failed to consider material information but expressly took this factor into account in scoring the fishery at 80, not 100, taking account of issues such as this.

We also consider that this rational is not based on other fisheries being "worse"; it is based on the nature of the interactions themselves. The UOA does account for a small proportion of total fishery interactions with ETP species.

Neither PRB or PRC raised any issues with the rational for the scoring of PI 2.3.1 S1c. We respond to the PRA comment; we considered all material information put forward by any peer reviewer or stakeholder.

We have also reviewed PI2.3.1, S1b, ETP species outcome direct effects, in light of WWF's comment, as PR B states "*the rationale currently presented is based around other fisheries being worse for ETP mortality and that the number of vessels in the UoA is small*", which may be the source of WWF's comment. However, PRB's comments were all taken into account. PRB's comment is directed at the need to assess the *combined impact* of the MSC's certified fishery, not only the UoA alone, to provide greater detail of the elements for a wider range of ETP species, quantified where possible. and further justification for "highly likely". Consequentially the team revised the scoring rationale to assess the fishery on ETP species, to consider specific direct effects using scaled observer data, and to account for the combined effect of MSC certified fisheries. It is not clear what the objection is related to other than potentially PRB's comment that the assessment team's analysis with regard to ETP species is limited to the impacts of the UoA, not the entire IO purse seine, but the PR B comment goes on the note that our analysis followed MSC procedures. The open issue for the PRB comment is the explanation of the probabilistic analysis differentiating between "highly likely and likely", addressed below.

On that basis, without clarification, we conclude that the WWF objection does not have merit. We have not failed to consider any material information or made a mistake of factWe have reviewed the WWF objection.

We see no reason to edit the Final Report or change our scores and determination

45. SHARK PROJECT PI 2.3.1b

SHARK PROJECT
1, 2.3.1b - ETP species outcomes - Direct effects
2, The CAB scores this at 80: Direct effects of the UoA are highly likely to not hinder recovery of ETP species
3, SG 60 is: Known direct effects of the UoA are likely to not hinder recovery of ETP species.
4, It is not reasonable to conclude from the evidence available that the direct effects of the UoA are highly likely to not hinder recovery of ETP species as data from the UoA is limited and problematic. In addition the CAB underestimates the potential impact of silky shark catches by the UoA.
Observer data
5, While the UoA has 100% observer coverage since 2014, not all of the data from these observers has been processed, so it is not available. The CAB claims that even so, with the available observer data the UoA still exceeds recommended minimum observer coverage levels, such as the IOTC's recommendation for 25% coverage.
6, However, recommendations by various science bodies and studies (e.g. Lawson 2006, Debski et al 2016) are for representational (by season, area, gear type, etc.) coverage of the entire fishery, and over a reasonable timescale. The bycatch data currently available for the UoA is clearly not representational, nor does it cover a reasonable timescale.

7, The primary data on which the CAB makes its assessment is for a small subset of purse seine vessels. Of the five vessels currently in the fleet, just two years of observer data has been processed for two vessels, and three years of data for the other three vessels (see Table 19, p39, Final report v2). 8, There is an additional two years of data (2014-2015) for a sixth vessel Campolibre Alai which was withdrawn from the fleet. The level of data processed for each vessel for 2016 ranged from just 21% to 52%.

9, There are significant variations in the numbers and proportions of different species caught - between sets on individual vessels, between the vessels, and between years. For example, based on the observer data from AZTI, which the CAB sent to SHARKPROJECT, in 2016 the Alakrana reportedly released only 30% of silky sharks alive while the Elai Alai released 95% of silky sharks alive. As juvenile silky sharks swim in groups, 5-10 silky sharks are often caught in a single set, but this can be much higher: 75 silky sharks in one set on Izaro “thrown dead into the sea” (see Excel file, original data sheet, line 2845, set 5103) and 40 dead in one set on Euskadi Alai (line 1757, set 4889). Weights were not recorded for these sharks on Izaro, but for Euskadi Alai they were small juveniles with an average weight of just 8 kg. If you are missing 79% of your data, as for Euskadi Alai in 2016, you could be missing a significant number of these high bycatch sets, and significantly underestimating bycatch mortality.

10, With such large variations evidence in the data, a full analysis of all available observer data is needed to draw reasonable conclusions, with vessel-by-vessel analysis, as well as a longer time series.

11, Bycatch rates and the proportions of FAD sets to free sets INCREASED between the time of the Certifiers Desk Review and the Secoobservers and logbooks. Hutchinson et al (2015) stated: “Comparison of the number of captured sharks obnd Report as more data was analysed. How can the CAB be sure that when the remaining data is analysed there will not be further significant changes?

12, Bycatch rates are underestimated by both served by the scientific party and those reported by the vessel and fishery observer revealed that there are significant recording discrepancies regarding the number of sharks impacted by this fishery. We found catch rates were significantly underestimated by both the observer and the vessel logbook.”

13, They noted this was not necessarily misreporting, but due to the particulars of catch-unloading and that fact that observers are occupied conducting the various catch sampling and estimation duties in addition to documenting all bycatch. They also noted significant differences between vessels: “It is also worth noting that due to the variety of vessels in the tropical tuna purse seine fishery, loading and hold styles vary dramatically, and this should be taken into account when considering these estimates.”

Silky sharks

14, Given that the current estimate of silky shark catches by the UoA can only be a minimum estimate, and that we don't know the total catches in the region, or current population size, how can the CAB claim the UoA won't impact recovery, especially when there is no recovery plan agreed? In the Western and Central Pacific, the fishing mortality on silky sharks for the purse seine FAD fleet ALONE is above sustainable levels ($F>F_{msy}$) due to the high catch of predominantly juveniles, and while this is a larger fleet than the IOTC area, FAD use is lower - 50:50 free school to associated sets increasing to 70:30 since the 3 month FAD ban was introduced in 2010 (e.g. see Williams et al 2017).

15, We note that while MSC CR v.2 GSA 3.1.5.2 only requires that species listed in the CMS are considered ETP, in Sept 2017 silky sharks were upgraded from Near Threatened to Vulnerable on the IUCN Redlist of Threatened Species (Rigby et al 2017). They note that “In the Indian Ocean, there is no stock assessment or any reliable fishery indicators of status, therefore the stock status is highly uncertain” but also note anecdotal information from Maldivian shark fishermen that abundance and size of silky sharks have declined, and that Sri Lankan silky shark fishery catches have declined.

Debski I, Pierre J, Knowles K (2016). Observer coverage to monitor seabird captures in pelagic longline fisheries. WCPFC-SC12-2016/EB-I-07. <https://www.wcpfc.int/node/27463>

Hutchinson MR, Itano DG, Muir JA, Holland KN (2015). Post-release survival of juvenile silky sharks captured in a tropical tuna purse seine fishery. Mar Ecol Prog Ser; 521: 143-54. http://www.int-res.com/articles/meps_oa/m521p143.pdf

Lawson T (2006). Scientific aspects of observer programmes for tuna fisheries in the western and central Pacific Ocean. WCPFC-SC2-2006/ST WP-1.<https://www.wcpfc.int/node/1716>

See page 13, section 4.1.4 of: Rice J, Shelton H (2013). Updated stock assessment of silky sharks in the western and central Pacific ocean. WCPFC-SC-2013/SA-WP-03. <https://www.wcpfc.int/node/3685>

Rigby, C.L., Sherman, C.S., Chin, A. & Simpfendorfer, C. 2017. *Carcharhinus falciformis*. The IUCN Red List of Threatened Species 2017: e.T39370A117721799. <http://www.iucnredlist.org/details/39370/0>

See page 7 Fig 9, and Appendix Fig A4 of: Williams P, Terawasi P, Reid C (2017). Overview of tuna fisheries in the western and Central pacific Ocean, including Economic Conditions. WCPFC-SC13-2017/GN-WP-01.<https://www.wcpfc.int/node/29628>

CAB Response

SP reviews the available observer data line-by-line, arguing that it is not complete and does not represent of the entire Echebaster fleet.

We have provided evidence to support our finding that the analysed observer data available for Echebaster meets the minimum required to draw conclusions in relation to fishery's sustainability in the context of the MSC standard.

The data we present is representational of the Echebaster fleet. It is not representational of the whole tuna purse seine fleet fishing the Indian Ocean.

We are not required to assess the fishery by individual vessels but by the unit of assessment which currently comprises 5 vessels with no other vessels eligible to share the certificate.

We looked at the overall impact of the UOA in relation to 2.3.1 Sla and not the performance of individual vessels. We are aware individual sets will lead to a higher than average by-catch (as influenced by location, season and oceanography); also a large number of sets will incur a lower level of mortality compared to the average. The situation could well change between years depending where the individual vessels are active.

The MSC standard is applied to a large number of fisheries worldwide, ranging from single vessel UOAs to those with hundreds of vessels wither certified or eligible to fish. We would never pretend to examine the sustainability credentials of all individual vessels.

If evidence becomes available after a fishery is certified that put in doubt the integrity of the certification due to an increased risk to ETP sharks, this should be considered in the annual surveillance reports.

We would be happy to review any evidence that indicates that Echebaster catch rates are underestimated.

We note that the paper by Hutchinson et al (https://www.int-res.com/articles/meps_oa/m521p143.pdf) refers to research in the WPO; a point that is not clear in the paper title or the way in which SP seeks to use the evidence.

SP has not provided any evidence to support the implication that Echebaster catch statistics are not accurate due inefficient observer coverage, design of their vessels and their operating procedures, nor that silky shark catches can only be a minimum.

SP appears to accept the veracity of data that indicates higher than average interactions with silky sharks, but questions data indicating lower than average interactions.

Our conclusion that the UOA is unlikely to impact the population and recovery of silky sharks is based on the relative low number of interactions between Echebaster and the species in comparison to other sources of fishery related mortality.

We emphasise that we are assessing the Echebaster fishery; we do not take into consideration the purse seine fishery and FAD design in the WPO and the WCPO.

We treat silky sharks as ETP species.

In conclusion:

1, The key parts of our approach to scoring of silky shark are (i) the SG refer to the impact of the UOA and not the entire purse seine fishery and (ii) available data indicates the level of mortality in the UOA. The SP objection appears to confuse the issues with their comments having limited substantive relation to the assessment of the Echebaster fishery.

2, The argument as presented in the rational is clear: the annual catch of silky shark in the Indian Ocean is between 3,200 mt and >20,000 mt; and the total estimated catch of silky shark by the UOA in the FAD sets is about 100 mt.

We have reviewed the SP objection.

We see no reason to edit the Final Report or change our scores and determination.

46. SHARK PROJECT PI 2.3.2 a

SHARK PROJECT
1, 2.3.2a ETP species management strategy - Management Strategy in place (National and International requirements)
2, The CAB scores this as 80: There is a strategy in place for managing the UoA's impact on ETP species, including measures to minimise mortality, which is designed to be highly likely to achieve national and international requirements for the protection of ETP species.
3, SG60 is: There are measures in place that minimise the UoA related mortality of ETP species, and are expected to be highly likely to achieve national and international requirements for the protection of ETP species.
4, The UoA does not meet either 60 or 80. There is little evidence for any coherent timebound strategy, there are very few national or international requirements for the key ETP species caught in the Indian Ocean, and plenty of evidence that any measures in place do NOT minimise mortality, they merely reduce it a little.
5, As described in 2.2.2e above, the UoA has minimal measures in place to reduce the catch of ETP species. Other than the use of non-entangling FADs, the measures are focused on improving the post-capture release, which may help a little, but does little for silky sharks with a >85% post-release mortality rate! Meanwhile the UoA increased the proportion of FAD sets, there are no FAD set limits, and there are no measures described for reducing or avoiding sets on entangling FADs from other vessels and no evidence of a monitoring program to ensure this.
6, CAB makes a big deal of all the IOTC resolutions available but few do anything to reduce bycatch or protect ETP species. The CAB does no analysis of their effectiveness, implementation, or monitoring, control and surveillance. For example, CITES, when properly implemented, can only ensure that traded shark products are caught according to legal regulations, so it is somewhat irrelevant when there are so few regulations that can reduce mortality of sharks in the Indian Ocean. Resolution 13/06 does reduce targeting of oceanic white tip (OWT) sharks (IUCN Vulnerable) by longline vessels, and could reduce finning, but does not prevent unintentional bycatch. There is no analysis of the effectiveness of Res 13/06 in reducing OWT shark mortality, but it is a common finding that only measures that prevent the interactions of sharks with fishing gear in the first place are effective (e.g. Tolotti et al., 2015). There are no specific IOTC measures to protect silky sharks or sea turtles.
7, There is evidence that Echebaster does not follow the few rules that are in place. An observer on board Alakrana in 2016 reported that two <i>Carcharhinus longimanus</i> (OWT sharks) were "taken to the kitchen" (see line 262 of the original data sheet in the Excel file). This is in breach of IOTC Resolution 13/06 that, as the CAB notes, "requires IOTC members to prohibit, as an interim pilot measure, all fishing vessels flying their flag and on the IOTC Record of Authorised Vessels, or authorised to fish for tuna or tuna-like species managed by the IOTC on the high seas to retain onboard, tranship, land or store any part or whole carcass of oceanic whitetip sharks. Furthermore, IOTC member vessels fishing on the high seas are required to promptly release unharmed, to the extent practicable, oceanic white tip sharks. Contracting party vessels are also required to encourage their fishers to record incidental catches as well as live releases of oceanic white tip shark."
8, Other species often reported as "taken to the kitchen" were distinctive fish species like dolphin fish, likely for crew meals. None of these can be mistaken for the distinctive <i>C. longimanus</i> . Was this incident investigated? What was the outcome? This incidence was noted in our comments to the CAB (p290 of Final report v2) but oddly dismissed as 'anecdotal'. It was the CAB itself that provided SHARKPROJECT this data, emailed to us on 11th Sept 2017 - 2016 observer data available from AZTI in an Excel sheet. AZTI's 2016 observer data sheets for Echebaster (attached) IOTC Resolution 13/06 http://www.iotc.org/cmm/ resolution-1306-scientific-and-management-framework-conservation-sharks-species-caught
Tolotti MT, Filmalter JD, Bach P, Travassos P, Seret B, Dagorn L (2015). Banning is not enough: The complexities of oceanic shark management by tuna regional fisheries management organizations. Global Ecology and Conservation 4: 1-7. doi:10.1016/j.gecco.2015.05.003.
CAB Response
As detailed in our rationale for PI 2.3.2, there are requirements for protection and rebuilding of ETP species. Notably these are:
<ul style="list-style-type: none">- UoA is signatory to CITES, which is "one of the world's most powerful tools for wildlife conservation through the regulation of trade"

- Compliance with a number of IOTC regulations
- Good practice guide signed by ANABAC and OPAGAC for releasing sea turtles
- Corporate commitment and evidence of implementation through design of new vessels to reducing bycatch
- EU and Seychellois primary and secondary fishery legislation

Therefore, requirements for the protection of ETP species are provided through national ETP legislation or international agreements. Without limits within that legislation the two PIs are appropriately scored (b scored for Sla and a scored for Slb).

Any strategy for ETP species will include measures specific for each species group, and also overall measures that address the fishery or fishing operations, in general.

Our justification for this SI in the report includes both a reiteration of the interaction levels for each ETP species group, and then a discussion of the measures (both IOTC resolutions and Echebaster Fisheries actions) that comprise the cohesive and strategic arrangement of a strategy.

Apart from the fact that over the recent period, few entangling FADs may be encountered (Echebaster states that it is rare to encounter any type of lost FAD) and the possibility of Echebaster setting on them is low to non-existent. SP does not provide any evidence to support its assertions that Echebaster vessels set on FADs lost from other vessels. Further, lost FADs will drift and no evidence is provided by SP and other stakeholders to measure the possibility that an Echebaster fishery will encounter a lost FAD.

OWT are not an ETP species under the MSC approach. We question the relevance of the reference to long line vessels.

We apologise for the use of the word "*anecdotal*".

If we were being pedantic we could argue that human consumption does not fail to meet the IOTC 13/08 re retain onboard, tranship, land or store any part or whole carcass of oceanic whitetip sharks. However, we understand the SP point.

Even so, it would be an extremely hard position to take to argue that "*Echebaster does not follow the few rules that are in place*" per se. It would appear curious that SP questions the veracity of the available observer data but highlights a reported incident related to less than 0.02 % of the total catch.

We have reviewed the SP objection.

We see no reason to edit the Final Report or change our scores and determination.

47. WWF PI 2.3.2 a

WWF
<p>1, The CAB failed to consider material information put forward in the assessment process by the fishery or a stakeholder. 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</p> <p>2, There is no management strategy in place for silky sharks (scoring issue a). WWF agrees that there are measures in place (mainly the non-entangling FADs to exclude the unobserved mortality and the fin-to-body weight regulation to prohibit the discard of finned individual sharks).</p> <p>3, The CAB lists several other "measures" in the rationale that are irrelevant for scoring this PI. e.g. IOTC resolutions 13/03; 11/04 and 10/02 require only data collection, they are no active conservation tools and should be scored in PI 2.3.3.</p> <p>4, IOTC Resolution 13/06 only addresses oceanic whitetip shark and not silky sharks. CMS Sharks MOU Programme included the identification of species - selective fishing gear and bycatch mitigation measures and came to the conclusion (Fowler 2016) that bycatch mitigation methods are relatively straightforward and consistent for purse seine fisheries.</p> <p>5, The single most important mitigation measure that can be adopted for sharks and rays is to avoid catching them in the first place. Many of the advices of the CMS best practice mitigation guidelines for sharks and rays taken in purse seine fisheries are not implemented in the Echebaster fleet: e.g. Use chum to attract sharks away from FADs before the set is made, Avoid setting on FADs when less than lot of tuna are present, Spatial closures, where FAD deployment is prohibited. Also indirect mitigation measures (Identification and protection of critical habitats) are not in place.</p> <p>6, Measures for Improved release and post - release survival seems in place for some of the vessels (e.g. Elai Alai) based on the observer data. However, other vessels including the ALAKRANA (which had the highest shark bycatch of the fleet) still have a 75-80% release mortality that indicates that Best practice is not fully implemented or not working.</p>
<p>7, There is also no objective basis for confidence that the measures will work (scoring issue c). CMS 2016 concluded that the use of Fish Aggregating Devices (FADs) is the single greatest risk factor for high levels of shark bycatch. The number of FAD sets increased in recent years and it will very likely increase further due to the mandatory reduction in Yellowfin tuna bycatch.</p> <p>8, The annual data on the bycatch of silky sharks reflects this increasing bycatch in the FADs set type by number of individuals (2014:1800 silky sharks; 2016: 7200 silky sharks). In case of silky sharks, the only information provided by the CAB that should demonstrate the effectiveness of the measures/strategy taken to reduce the impact of the UoA , was that "there is an increase in the mean weight of individual silky sharks captured by the purse seine, almost doublin from 10-15 kg per individual in 2014 (FAD-FSC respectively) to 20-55 kg per individual in 2016 (FAD FSC, respectively), and this may indicate that the silky shark stock is improving. ".</p> <p>9, However, the increase in body weight of the caught silky sharks is highly likely no indication of recovery of stock but very likely caused by changes in fishing area (e.g. less fishing activity in the northern nursery areas Amande et al 2011). Please note that population growth rates of large pelagic shark species are very low even in natural mortality situations (e.g. Liu 2015) and an increase of 100% in 3 years is impossible.</p>
CAB Response
<p>The CAB did not fail to consider material information, nor is the scoring decision unreasonable.</p> <p>Any strategy for ETP species will include measures specific for each species group, and also overall measures that address the fishery or fishing operations, in general.</p> <p>Our justification for this SI in the report includes both a reiteration of the interaction levels for each ETP species group, and then a discussion of the measures (both IOTC resolutions and Echebaster Fisheries actions) that comprise the cohesive and strategic arrangement of a strategy.</p> <p>The reason for this is clear; the MSC standard is applied to a large number of fisheries worldwide, ranging from single vessel UOAs to those with hundreds of vessels with certified or eligible to fish.</p>

We assess the fishery against the MSC standard and not the MOU standard (to which the EU is a signatory): <https://www.cms.int/sharks/en/signatories-range-states>. We articulate the evidence to conclude that a strategy is in place.

We looked at the overall impact of the UOA, which takes account at the UoA level the performance of individual vessels. We would anticipate that individual sets will lead to a higher than average by-catch (as influenced by location, season and oceanography); also a large number of sets will incur a lower level of mortality compared to the average. The situation could well change between years depending where the individual vessels are active.

We consider the rationale is sufficient to justify the score and sets out an objective basis for confidence that the measures/strategy will work, based on information directly about the fishery and the species we have involved.

We also note that data we have seen for 2017 indicates that the number of Echebaster FAD sets decreased in 2017 (from 1,512 in 2016 to 1,250 in 2017, with respective numbers for FSC of 160 and 213) we are unable to comment on the future number of FAD sets. Such data should be presented in the future to annual surveillance audits.

The rationale states that the increase in body weight “*may*” indicate that the silky shark stock is improving. We consider this is the case, and that the increase in body weight is an objective basis for confidence.

In the absence of an IOTC stock assessment there is no firm data to indicate if this related, in whole or in part, to the stock improving or a change in fishing area. but this does not mean that there is not an objective basis for confidence that the measures/strategy are working, as above. Further it is unlikely that the whole of the fishing area has changed given that it covers the entire Western Indian Ocean – the positive avoidance of nursery areas is a good strategy. The doubling of weight could indicate a positive outcome for the stock of silky sharks; it is certainly good evidence that the stock is not collapsing and that in fact it may be improving.

As WWF point out, the fishery has shown to be avoiding nursery areas for silky sharks which forms part of the measures to reduce the impact of the UoA on this species. The fishery is also a signatory to the CMS, of which Silky Shark is part. This forms part of the strategy.

We have reviewed the WWF objection.

We see no reason to change our scores and determination. We may edit the final report if required.

48. IPNLF Objection 31 PI 2.3.2 a

<p>IPNLF</p> <p>206, The CAB scores the UoA at 80. SG 80 requires that: "There is an objective basis for confidence that the partial strategy/strategy will work, based on information directly about the UoA and/or the species involved". Table SA 8 (FCR, 'Principle 2 Phrases', p.134–135), which is normative, states that: "Objective basis for confidence", as used at the SG80 level in the P2 management PIs (Management Strategy Evaluation scoring issue) refers to the levels of information required to evaluate the likelihood that the management partial strategy will work.</p> <p>The SG60 level for these PIs requires "plausible argument" based on expert knowledge;</p> <p>The SG80 level requires expert knowledge augmented by some information collected in the area of the UoA and about the specific component(s) and/or UoA;</p> <p>The SG100 level requires all preceding information augmented by relatively complete information on the component, much of which comes from systematic monitoring and/or research."</p> <p>207, Therefore, the reference to "objective basis for confidence" in SG 80 requires "expert knowledge augmented by some information collected in the area of the UoA and about the specific component(s) and/or UoA".</p> <p>207, Therefore, the reference to "objective basis for confidence" in SG 80 requires "expert knowledge augmented by some information collected in the area of the UoA and about the specific component(s) and/or UoA".</p> <p>208, The CAB fails to identify any expert knowledge. Instead, it refers merely to (a) the observer data, which has significant limitations (see above), (b) some data about sea turtles, which it seeks to use as an indicator and (c) the use of non-entangling FADS. The items (a), (b) and (c) do not meet the requirements of Table SA 8. Therefore the score of SG 80 is not justified.</p> <p>209, Furthermore: (a) because SG 80 refers to "partial strategy/strategy", as set out above regarding SI 2.3.2(a), there is no "strategy" and so SG 80 is not met; and (b) SA3.11.1 (FCR, p.152), which is normative, requires that "[w]hen scoring the ETP Management Strategy PI SGs teams shall consider the need to minimise mortality". There is no indication that the CAB has applied this requirement.</p> <p>210, SG 60 requires that: "The measures are considered likely to work, based on plausible argument (e.g. general experience, theory or comparison with similar UoAs/species)." Table SA 8 (see above) states that: "The SG60 level for these PIs requires "plausible argument" based on expert knowledge". The CAB fails to identify any expert knowledge. Therefore a score of SG 60 is not justified.</p> <p>211, The CAB, in its response to IPNLF (p.256), states that: "Table SA8 as noted by the INPLF stakeholder further defines the requirement for SG80 as: <i>expert knowledge augmented by some information collected in the area of the UoA and about the specific component(s) and/or UoA</i>".</p> <p>The assessment team justification of its scoring at the SG80 level, provides more than "<i>some information collected in the area of the UoA</i>" it presents real data. It describes the overall low bycatch of ETP species in the Echebaster purse seine fishery, as demonstrated by the observer data. For sea turtles, it compares the bycatch rates reported for the fishery in general a decade ago to bycatch rates as observed in the Echebaster fishery. This is stronger than "<i>expert knowledge augmented by some information</i>". The SI score remain [sic] at the SG80 level."</p> <p>212, The first paragraph of the CAB's response is simply a repeat of text we have already set out from Table SA 8. Regarding the second paragraph, "real data" is still just "information". We have already expressed concerns about the limitations of these data (see above). "Real data" is not "stronger" than "expert knowledge augmented by some information". That depends on the quality of the data. Babcock & Pikitch (HOW MUCH OBSERVER COVERAGE IS ENOUGH TO ADEQUATELY ESTIMATE BYCATCH?) said that If the observer samples are an unbiased sample of the fishery, their literature review and simulation studies suggest that coverage levels of at least 20 percent for common species, and 50 percent for rare species, would give reasonably good estimates of total bycatch. Furthermore (Babcock, p.10):</p>
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212,1, Even if the observed trips are representative of the fishery, estimates of total bycatch can be biased when low sample sizes are used. If the statistical distribution of the bycatch is particularly “clumped,” meaning that most sets have zero bycatch while a few have very high bycatch, then a small sample size will lead to biased estimates of total bycatch. Bycatch commonly has this sort of distribution. In 2001, for example, 25% of the dolphin bycatch in the eastern tropical Pacific tuna purse seine fishery occurred in a single set (IATTC 2001, M. Hall, IATTC, pers. comm.). With such data, a much larger sample size is needed to get an accurate bycatch estimate.

212, 2, Small sample bias is common if total bycatch is estimated with a ratio estimator. With a ratio estimator, the average ratio of bycatch to landed catch is estimated from the observer sample, and this value is multiplied by the total landed catch to estimate total bycatch. While ratio estimators generally give more precise estimates of total bycatch than can be achieved with a simple sample (Saila 1983), the ratio estimator can be biased at low sample sizes (Cochran 1977, Rao 2000). Various methods to adjust for bias in ratio estimators, including bootstrap bias correction methods (Chernick 1999), have been proposed and are sometimes used (Hall 1999 and references therein).

212, 3, The level of bias caused by small sample sizes can be estimated for a particular fishery by using simulation studies. For example, Hall (1999) reported on a study of the biases of discard ratio estimates of dolphin bycatch in tropical tuna fisheries.⁶ That study showed that for the dolphin-tuna fishery data all of the ratio estimation methods demonstrated high levels of bias at low sampling fractions (below 20%), although bootstrap bias correction methods greatly improved the estimates (Hall 1999).

212, 4, The problem of bias caused by low sample sizes is commonly ignored in observer program sampling design, but can be solved by increasing the sampling fraction. Also, simulation studies similar to Hall (1999) should be used to test the proposed estimators of total bycatch, and to develop estimation methods that are unbiased for the fishery being sampled.

213, 20-25% is therefore inadequate for sharks and rays and other rare bycatch species

214, The CAB's argument that the data is good, is therefore not sound, as the relatively low levels of sampling is would not give a reasonably good estimate of total bycatch for rare species such as the ETP species found in this fishery. The additions to the justification that have been made by the CAB to the Final Report, subsequent to the publication of the original version, make no difference in respect of our points above.

215, Scoring contrary to the FCR is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.

CAB Response

Any strategy for ETP species will include measures specific for each species group, and also overall measures that address the fishery or fishing operations, in general.

Our justification for this SI in the report includes both a reiteration of the interaction levels for each ETP species group, and then a discussion of the measures (both IOTC resolutions and Echebaster Fisheries actions) that comprise the cohesive and strategic arrangement of a strategy.

In the glossary, “the SG60 level for these PIs requires “plausible argument” based on expert knowledge; the SG80 level requires expert knowledge augmented by some information collected in the area of the UoA and about the specific component(s) and/or UoA”. Within the CR expert knowledge “can be acquired from diverse sources, including studies that may have been conducted in the area although not for the purpose of certification, studies of the same or similar species or ecosystems in other places, established ecological theory and modelling, and community or experiential knowledge.” The Acoura assessment team did collect expert knowledge, through stakeholder consultation, review of literature and ecological theory – and reverted to their own expert knowledge where applicable.

We would highlight that at SG 80 refers to ‘partial strategy’.

We agree; we are looking for 25%+. With increasing rarity of a species or of interaction with a species, greater observer rates would be required to detect interactions, then noting that for such rare species or species for which interactions are rare, it is generally considered highly unlikely the UoA would hinder recovery given its size in relation to all other similar fisheries.

IPNLF argues that a larger sample size would be better to estimate the interaction level of rare interactions, but if the interactions are rare, there is unlikely to be a problem. The fishery is highly unlikely to hinder recovery of the species.

We have reviewed the IPNLF objection.

We see no reason to change our scores and determination. We may edit the final report if required.

49. SHARK PROJECT PI 2.3.2 c

SHARK PROJECT
<p>2.3.2c ETP species management strategy - Management strategy evaluation</p> <p>1, The CAB scores this as 80: There is an objective basis for confidence that the measures/strategy will work, based on information directly about the fishery and/or the species involved.</p> <p>2, SG 60 is: The measures are considered likely to work, based on plausible argument (e.g., general experience, theory or comparison with similar /species).</p> <p>3, The UoA does not meet either 60 or 80. There is little evidence for cohesive, time bound strategy; there are very few national or international requirements to protect the key ETP species caught in the Indian Ocean, a significant lack of data to assess any measures that are in place, and plenty of evidence that what few measures are in place for both UoA and broader IOTC, do NOT “minimise” mortality, they merely reduce it a little, especially with regard to sharks.</p> <p>Sea turtles</p> <p>4, There is some evidence that the use of non-entangling FADs has reduced the primary cause of sea-turtles deaths from purse seiners, i.e. entanglement and drowning in netting hanging beneath FADs. Sea turtles are certainly much hardier than sharks, and easier to handle and release alive. However, Echebaster sets on FADs from other vessels and this impact is not quantified by the CAB; there are no measures described for reducing or avoiding sets on entangling FADs from these vessels and no evidence of a monitoring program to ensure this.</p> <p>5, The CAB also claims that the decline in sea turtle catch is most likely due to the use of non-entangling FADs rather than a decline in abundance and cites as evidence an increase in loggerhead (IUCN Endangered) nesting sites in the region. However, there is no evidence provided for the other species caught by the UoA - green turtle (Endangered), olive ridley (Vulnerable) and hawksbill (Critically Endangered). Indeed, the recent 2013 update of the IUCN listing for Leatherback lists the NE Indian Ocean sub-population as Data Deficient and the SW population as Critically Endangered, declining, and with an estimated 148 breeding adults for which a relatively small annual catch by purse seiners could certainly be significant mortality rate (Wallace et al 2013).</p> <p>6, In addition, an assessment of the conservation status of spatially and biologically distinct marine turtle Regional Management Units (RMUs), showed that of the world's 11 most endangered RMUs, five are in the Indian Ocean and included populations of loggerhead, olive ridley, and hawksbill turtles (Wallace et al (2011)). Given this evidence, how can the CAB claim it is likely that a decline in turtles catch is not, at least in part, due to a decline in sea turtles?</p> <p>7, Finally, as we noted in 2.3.1b above, there are considerable issues with the small amount of observer data available for bycatch.</p> <p>8, Therefore, there can be little “objective basis for confidence” that any of the UoA measures will work.</p> <p>Sharks</p> <p>1, As described in detail in 2.2.2e above, the UoA has minimal measures in place to reduce the catch of ETP shark species. Other than the use of non-entangling FADs, the measures are focused on improving the post-capture release, which may help some shark species, but does little for silky sharks with a >85% post-release mortality rate. Meanwhile the UoA has increased the proportion of FAD sets, and there are no FAD set limits agreed by IOTC nor does the UoA give any indication they will limit sets themselves. In addition, there are no measures described for the UoA to reduce or avoid sets on entangling FADs from other vessels, and no evidence of a monitoring program if such a measure existed.</p> <p>2, Scientists have reiterated that the most effective measures for reducing shark mortality are those that prevent the catch of sharks with fishing gear in the first place (see e.g. Tolotti et al., 2015) i.e. temporal and spacial closures of area with higher bycatch, especially where there are high numbers of juveniles, and limitations on problematic gears i.e. in this case a reduction in FAD sets.</p>

3, Neither the UoA or IOTC have these measures in place, and there is evidence that the UoA does not follow all the rules in place (see 2.3.2a above).

Tolotti MT, Filmalter JD, Bach P, Travassos P, Seret B, Dagorn L (2015). Banning is not enough: The complexities of oceanic shark management by tuna regional fisheries management organizations. *Global Ecology and Conservation* 4: 1-7. doi:10.1016/j.gecco.2015.05.003.

Wallace BP., DiMatteo AD, Bolten AB et al (2011). Global conservation priorities for marine turtles. *PLoS ONE* 6(9): e24510. doi:10.1371/journal.pone.0024510.

Wallace BP, Tiwari M, Girondot M (2013). Dermochelys coriacea (Southwest Indian Ocean subpopulation). The IUCN Red List of Threatened Species 2013: e.T46967863A46967866. <http://dx.doi.org/10.2305/IUCN.UK.2013-2.RLTS.T46967863A46967866.en>.

CAB Response

The presumption here is that Echebaster sets on FADs lost from other vessels that are entangling. Echebaster states that it is rare to encounter any type of lost FAD and the possibility of Echebaster setting on them is low to non-existent. SP does not provide any evidence to support its assertions that Echebaster vessels set on FADs lost from other vessels. Further, lost FADs will drift and no evidence is provided by SP and other stakeholders to measure the possibility that an Echebaster fishery will encounter a lost FAD.

The total estimated catch of all turtle species is 8 (table 23) representing 0.0006% of the total catch. The SG80 SG for SIC is "*There is an objective basis for confidence that the measures/strategy will work, based on information directly about the fishery and/or the species involved.*". The evidence is the low incidence of interaction, and the information from the Indian Ocean on turtles referenced in the report (Hamman et al 2013). This provides confidence that the UoA is not causing a decline in sea turtles.

At the same time, we acknowledge the need to redraft the rational so that it deals separately with each species to present evidence on individual population levels and estimates of the total impact of the Echebaster fishery.

Please note our other responses regarding the proportion of observer coverage.

Non-entangling FADs will reduce the mortality of silky sharks. Silky sharks are attracted to FADs, which is why there is a higher bycatch rate per set of silky sharks as compared to the FSC fishery. Entangling FADs present a higher risk that the fishery will interact with silky sharks and sea turtles with a consequent increase in potential fishery related mortality. That is no longer the case. Echebaster has a second conveyor on 3 of its 5 vessels, that return unwanted catch to the sea as quickly as possible. Silky sharks benefit from this. The quoted survival data do not consider this new technology. As we describe *the average annual catch of silky shark in Echebaster FAD sets is estimated to be about 101 t (4,406 individuals) or <0.4% of the total catch. About 50% of the animals were observed to be released alive. The average catch in the FSC sets is estimated to be 2 t (68 individuals) with about 50% released alive. Of the silky sharks that are released alive, between 20% and 40% survive. This implies an overall survival rate of 10% - 20% of those captured (Poisson et al. 2011, Poisson et al. 2014, Hutchinson et al. 2015, and Eddy et al. 2016)*.

The relatively low impact of the fishery on silky sharks and the measures taken to reduce UOA related mortality present an objective basis for confidence that the UOA does not hinder the recovery of silky shark. There is objective basis for confidence that the measures/strategy will work based on information directly about the fishery and/or the species involved.

We have reviewed the SP objection.

We see no reason to change the final report, scores and determination.

50. SHARK PROJECT PI 2.3.2 d

SHARK PROJECT
<p>1, The CAB scores this at 80: There is some evidence that the measures/strategy is being implemented successfully.</p> <p>2, The UoA does not meet 80 and there is no option for 60. There is little evidence for a cohesive, time bound strategy; and while there are some basic measures in place for some bycatch mortality reduction, there is little data available to assess their success and they do NOT “minimise” ETP mortality, they merely reduce it a little, especially with regard to sharks.</p> <p>3, As described in 2.2.2e and 2.3.2a above, the UoA has no cohesive strategy to minimise bycatch mortality and there are minimal measures in place to reduce the catch of ETP species.</p> <p>4, Those measures that are in place for the UoA, or the broader IOTC, do little to reduce bycatch or protect ETP species. The UoA measures are very focussed on releasing bycatch AFTER it is caught, and the CAB claims again that 50% of ETP species are released alive but this figure is meaningless without post-release mortality rates, especially for silky sharks.</p> <p>5, The CAB also claims, again, that the reduction in sea turtle bycatch is due to the use of non-entangling FADs but again has little data to back up the claim, but it could, at least in part, be due to a decline in sea turtles in the region (see 2.3.2c above).</p> <p>6, There is evidence that Echebaster does not follow the few rules that are in place. The removal of two <i>Carcharhinus longimanus</i> (OWT sharks) to the kitchen is a NOT a good indication that the UoA is doing everything to release sharks alive, and the apparent retention of two OWT sharks is in breach of IOTC Resolution 13/06. The CAB, at the very least, needs to show that this incident was investigated and provide a legitimate explanation if there is one.</p> <p>7, Finally, we reiterate that the UoA might well implement the measures for non-entangling FADs and improved bycatch release procedures, but there is no evidence that the UoA is planning to reduce bycatch by reducing FAD numbers or FAD sets. There is no evidence they will reduce or avoid sets on entangling FADs from other vessels, and no evidence of a monitoring plan if such a measure existed</p>
CAB Response
<p>It is expected that the measures of non-entangling FADs and release will ensure that the UOA does not hinder the recovery of ETP species as they build on the proven existing relatively low level of interaction.</p> <p>The matters relating to the sharks reportedly being taken to the kitchen have been dealt with in other responses.</p>

51. IPNLF OBJECTION 32 PI 2.3.2d

IPNLF
<p>221, The CAB scores the UoA at 80. SG 80 requires that: “There is some evidence that the measures/strategy is being implemented successfully.” If we assume that measures (though not a strategy) exist, the question is: is there “some evidence” that they are “being implemented successfully”?</p> <p>222, No genuine evidence is provided by the CAB of successful implementation of these measures: the CAB refers only to (a) the observer data, which has significant limitations (see above), (b) some data about sea turtles, which it seeks to use as an indicator and (c) some published papers which are not based on data collected from this UoA and about which the CAB makes no attempt to show why they should have application. Accordingly, SG 80 is not met. There is no SG 60.</p> <p>223, Regarding the second paragraph of the CAB’s response, the redrafting of the scoring rationale for SG 80 has been minimal. The only substantive changes are as follows:</p> <p>a, in the first line, “relatively low” has been replaced with “low”;</p> <p>b, in the first paragraph, the following text change has occurred:</p>
Second Report
<p>... and the interaction rates reported in the 2000-2010 period. As presented in the justification for PI 2.3.1, Sla the sea turtle</p>
Final Report
<p>... as compared to the interaction rates reported in the 1995-2011 period (Bourjea et al. 2014). The sea turtle interaction rate</p>

interaction rate in the 2000-2010 period is 1 sea turtle captured per 25 sets, and the Echebaster observer data indicated a rate of 1 sea turtle per 150 sets. This reduction is most likely due to the introduction and use of non-entangling FADs.	in the 1995-2011 period was about 1 sea turtle captured per 25 sets, and the Echebaster observer data indicated a rate of 1 sea turtle per 150 sets. This reduction is most likely due to the introduction and use of nonentangling FADs.	
c, insertion, at the end of the SG 80 justification, of the following text: "and that the measures/strategy is being implemented successfully" The response does not remedy the pre-existing defects. Scoring contrary to the FCR is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.		
CAB Response		
We find that the available observer data supports the conclusion that the rates of interaction of Echebaster do not result in unsustainable levels of impact or interaction with ETP species, and that the measures/strategy are being implemented successfully.		
The SG 80 for PI2.3.2 Sid is "there is some evidence that the measures/strategy is being implemented successfully".		
The objection relates to the content of the Final Report. IPNLF seeks to misrepresent the rationale we present by only referring to part of the text. The fully rationale supporting the conclusion that the fishery meets PI 2.3.2 SG Sid at SG80 is		
<i>"The recorded rate of interactions with ETP species for the UoA is low, and where there are interactions, 50% of the animals are released alive. Additionally, the evidence that best demonstrates the effectiveness of the recent measures to reduce the impacts on ETP species, is the reduced interaction rate that the FAD fishery has with sea turtles now (based 2014-2016 catch data), as compared to the interaction rates reported in the 1995-2011 period (Bourjea et al. 2014). The sea turtle interaction rate in the 1995-2011 period was about 1 sea turtle captured per 25 sets, and the Echebaster observer data indicated a rate of 1 sea turtle per 150 sets. This reduction is most likely due to the introduction and use of non-entangling FADs. Further, a limited number of species are affected. Published data in relation to interactions with unwanted non-tuna bycatch including ETP species given by Amande et al (2008) also shows that the rate of interactions is very low. The results of research by Amande et al (2008), Bourjea et al (2014), Poisson et al. (2011), Poisson et al. (2014), and Eddy et al. (2016), that the consequence of instances of capture of unwanted species are frequently non-lethal and captured specimens of sharks, turtles, whales and /or manta rays survive the encounter.</i>		
<i>Based on the observer data presented previously for the Echebaster fleet in the 2014-2016 period, the Echebaster purse seine fleet has achieved substantially lower interaction rates with ETP species than indicated in the historical fleet wide data and reports.</i>		
<i>Therefore the assessment team concludes that the available observer data supports the understanding that the rates of interaction of the Echebaster purse seine gear fleet (UoA) do not result in unsustainable levels of impact or interaction with ETP species, and that the measures/strategy is being implemented successfully".</i>		
We have reviewed the IPNLF objection.		
We see no reason to change the final report, scores and determination.		

52. IPNLF Objection 33 PI 2.3.2 e

IPNLF

225, The CAB scores the UoA at 100. SG 100 requires that: “There is a biennial review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality ETP species, and they are implemented, as appropriate.”

226, This requires:

- the identification of “alternative measures” to minimise UoA mortality of ETP species;
- a biennial review of the potential effectiveness and practicality of such measures; and
- implementation, as appropriate.

227, There are some key terms in SG 100, including the following: “alternative measures”; the measures’ purpose being to “minimise” mortality; “biennial” (meaning taking place every other year); “review”; the need for the measures to be “implemented”; and the caveat “as appropriate”.

228, The term “alternative measures” is defined in SA3.5.3 (FCR, p.140), as follows: “ “Alternative measures” in scoring issue (e) shall be interpreted by the team as alternative fishing gear and /or practices that have been shown to minimise the rate of incidental mortality of the species or species type to the lowest achievable levels.”

229, It can be seen that “alternative measures” is a concept with specific content. The measures must “have been shown to minimise [bycatch] to the lowest achievable levels”.

230, In the Final Report (pp.93-94), the CAB sets out a purported justification for its score of 100. We have identified the following, from this justification, as candidates for consideration as “alternative measures”:

- a, “a limitation on the number of FADs” (linked to IOTC Resolution 15/08)
- b, “more detailed specifications of catch reporting from FAD sets” (linked to IOTC Resolution 15/08)
- c, “development of improved FAD designs to reduce the incidence of interactions” (linked to IOTC Resolution 15/08)
- d, “since 2015 Echebaster exclusively uses non-entangling FADs”
- e, “Annual workshops for vessel Captains covering best practices in the fishery”
- f, “Support for research to understand and minimize entanglements of ETP species in FADs”

231, A number of things are striking from this list. First, items (a)–(d) relate exclusively to FAD fishing, yet they amount to tinkering, without addressing a change from FAD to FSC fishing. Second, Items (e) and (f) are sufficiently broad to be almost meaningless against the definition of “alternative measures”. Third, the UoA includes both FAD and FSC fishing, but the CAB has failed to set out any “alternative measures” in respect of FSC fishing. In addition, the CAB has provided no evidence at all that items (a) –(c) in the list above are being implemented – i.e. that they are anything more than text in an IOTC resolution.

232, All of the SGs for this SI require a “review”.

233, In the Final Report (p.93), the CAB states that: “Both Echebaster and IOTC conduct at least biennial review of measures and strategies to minimize bycatch, mortality and unobserved mortality of ETP species.” However, without clarity on whether some measures are being implemented and without information on FSC-related measures, it is hard to see what could actually be being reviewed.

234, At the same time, the CAB has failed to consider the definition of “as appropriate” in SA 3.5.3 and, as evidence of the alleged biennial nature of the review, it has failed to state in what years the said reviews have been conducted.

235, The fact of the matter is that the UoA cannot show that it meets this SI, even at SG 60.

236, The CAB, in its response to IPNLF (p.256) states that:

“The justification for this SI has been revised. The rationale now addresses alternative measures to minimise UoA-related mortality of ETP species. With regard to unwanted catch, all ETP catch is considered non-negligible, however, as noted previously, very low catches of ETP species are unlikely to hinder the recovery of a ETP species. We conclude that SG100 is met as evidence indicates that Echebaster regularly reviews (i.e. more often than biennial) the potential effectiveness and practicality of alternative measures to minimise UoA related mortality ETP species, and they are implemented, as appropriate.”

237, The response does not remedy the pre-existing defects. Scoring contrary to the FCR is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.

238, Furthermore, the objection with respect to 2.2.2(e) is repeated.

CAB Response

We acknowledge that the rationale does not follow the required MSC approach to allow scoring of different elements. In addition we should have reviewed each main element by each sub-element (i.e. species). At the same time, the rationale does mainly relate to the FAD fishery – which is the concern of IPNLF and other stakeholders and is precautionary.

The requirement of the SI is "*There is a review of the potential effectiveness and practicality of alternative measures to minimise UoA related mortality of ETP species.*", with the degree of the review varying with the SG".

We note MSC CR "*In situations where the proposed alternative mitigation measures are cost prohibitive or impractical for the fishery to implement, other lower cost alternative measures may be considered, such as improved education for fisheries regarding best practice approaches. This is not meant to be a means to avoid the costs associated with implementation of gear modifications or other measures, but as an alternative to achieve minimisation when other measures would render the fishery economically unviable*". (GSA 3.5.3.1).

On that basis, we directly contest the IPNLF point of view which appears to be based on the dogma that the only solution to the identified issue appears to be a prohibition on FAD fishing. FADs are within scope for the MSC standard and we are required to consider reviews in the context of the gear/operations being assessed. Such would be at a high cost to Echebaster. We contend that far from "tinkering", the limitation on FAD numbers, higher specifications for the reporting of FAD landings, FAD design and non-entangling FADs are real measures to reduce the potential impact of the Echebaster requirements FAD fishery on ETP species. These all fit with the requirements of SA3.5.3.

Furthermore, Echebaster continues to work on the introduction of biodegradable FADs that are appropriate to the reality of the fishery (i.e. they are not cost prohibitive in terms of investment or reduced catch efficiency). The annual workshops and research fit with the MSC standard relating to improved education on best practises.

MSC CR GSA3.5.3.2 requires that "*a regular review occurs at a minimum at least once every 5 years, which is at least once per certification cycle. Some fisheries may need to review alternative measures more frequently, depending on the extent and nature of the unwanted catch (e.g., due to changes in stock size). If information becomes available that the existing measures are ineffective, i.e., do not lead to any reductions in mortalities of unwanted species (e.g., at a surveillance audit), the assessment team may determine that a review should occur more frequently*".

In Echebaster the question is not whether the review is regular or biennial; Echebaster continuously reviews the potential effectiveness and practicality of alternative measures to minimise UoA related mortality ETP species, and they are implemented, as appropriate. The evidence is the past reduction in the number of FADs and supply vessels below that required by IOTC requirements (note that since late 2017 Echebaster has increased their number of supply vessel from 1 to 2. Thus number is allowed by IOTC regulations). The introduction of non-entangling FADs and 100 % observer coverage (to better understand the potential interactions). This review is current – the construction of bio-degradable FADs and the removal of derelict FADs. All these points are articulated in the final report.

We have reviewed the IPNLF objection.

We see no reason to change the scores and determination. We may edit the final report if required.

See above in our response to the objection on 2.2.2(2).

53. Shark Project PI 2.3.2 e

SHARK PROJECT
2.3.2e ETP species management strategy - Review of alternative measures
1, The CAB scores this at 100: There is a biennial review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of all secondary species, and they are implemented, as appropriate
2, SG 80 is: There is a regular review of the potential effectiveness and practicality of alternative measures to minimise UoA related mortality of ETP species and they are implemented as appropriate.
3, SG 60 is: There is a review of the potential effectiveness and practicality of alternative measures to minimise UoA related mortality of ETP species.
4, SA 3.5.3.1 (FCR, p.140) defines states that the term alternative measures as: "shall be interpreted by the team as alternative fishing gear and/or practices that have been shown to minimise the rate of incidental mortality of the species or species type to the lowest achievable levels".
5, Neither SG100 nor SG80 are met as alternative measures are NOT implemented as appropriate, there is no evidence that the CAB has considered these or other "alternatives" or considered if they are "appropriate".
6, SG60 could be met as there have been reviews on the cause of increased bycatch by purse seiners, i.e. setting on FADs instead of free schools, and there are reviews of the potential effectiveness and practicality of alternative measures to minimise FAD-related mortality of unwanted catch. However, there is no evidence that the CAB has considered these or other "alternatives" or considered if they are "appropriate".
7, The most effective measures for reducing mortality of non-target species are those that prevent the interactions with fishing gear in the first place. This could include temporal and spacial closures of areas with higher bycatch (see e.g. Tolotti et al., 2015) such as for juvenile silky sharks, as well as gear modifications and limitations on using problematic gear types, such as the seasonal FAD bans and FAD set limits used in the Western and Central Pacific.
8, Setting on free schools has significantly lower bycatch than FAD sets. As the CAB shows throughout the report in its comparison of bycatch in both set types, the most effective way to reduce bycatch in the purse seine nets is to set on free schools, not on FADs.
9, We do not currently have data that would allow temporal or area closures to avoid ETP species or ways to prevent threatened species like silky sharks from being attracted to FADs, or success in releasing the majority of them safely from the purse seine nets before brailing, or for releasing them alive from deck with a high rate of survival. Therefore, reducing the number of FAD sets is currently the only available practical and simple option to reduce bycatch mortality
10, The few positive changes made by the UoA with regard to FAD design and bycatch release are undermined by the dramatic increase in the number and proportion of sets on FADs. The introduction of non-entangling FADs that have no netting attach beneath the FAD will certainly reduce the number of deaths of silky sharks and turtles entangled under FADs. In addition the changes made by the UoA to encourage safe release of bycatch is a useful step. However, being caught in purse seine nets when they set on FADs remains a significant cause of mortality for non-target species, especially for more sensitive and threatened species like silky sharks.
11, While improvements to the release of bycatch is certainly a valuable part of the process, for sensitive species like silky sharks, it is far too late to release them after capture due to their very high post-release mortality rate. Throughout the scientific literature the mantra has been the same - the best way to protect sharks is not to catch them in the first place. Measures must focus first on reducing interactions with fishing gear, and then on safe release as early as possible in the process for those that do get caught.
12, Observer data clearly shows that between 2014 and 2016 the UoA more than doubled its total number of sets, from 804 to 1700. Free school sets declined from 237 to 190, while FAD sets increased from 567 to 1510 sets. FADs sets went from 71% to 89% of total sets in 3 years (Table 21, p40 Final report v2). So not only is the UoA not applying the most effective reduction measures, they are knowingly increasing use of the set type that takes more bycatch.
13, The UoA uses more FADs than many other fleets. The CAB likes to highlight the fact that Echebaster set their own limit to 375 active FADs at anyone time, but provides no information on how this compares to the rest of the fleets. Like the rest of the Spanish-owned vessels, Echebaster uses a large

number of FADs, which is why the UoA needs a special supply vessel to carry them. It is easy to see who are the big FAD users - of 23 supply vessels registered in IOTC in 2017 13 were flagged to Spain, 7 to Seychelles and just one each to France, Mauritius and Korea (data available by year on IOTC website, or see Greenpeace 2017). IOTC measures that limit the numbers of FADs and supply vessels only really impacted these fleets - others can still increase the number of FADs they use, and there are NO limits to the number of FAD sets made.

14, The CAB provides no analysis of how often the UoA sets on FADs from other vessels, what kind of FADs these are or their impacts, and gives no evidence for how this can or will be monitored with regard to the UoA.

Greenpeace (2017). Supply vessels in the Indian Ocean. IOTC-2017-S21-Inf03
<http://www.iotc.org/documents/supply-vessels-operating-indian-ocean>

IOTC vessel registry: <http://www.iotc.org/vessels>

Tolotti MT, Filmalter JD, Bach P, Travassos P, Seret B, Dagorn L (2015). Banning is not enough: The complexities of oceanic shark management by tuna regional fisheries management organizations. Global Ecology and Conservation 4: 1-7. doi:10.1016/j.gecco.2015.05.003.

CAB Response

6, We note MSC CR “*In situations where the proposed alternative mitigation measures are cost prohibitive or impractical for the fishery to implement, other lower cost alternative measures may be considered, such as improved education for fisheries regarding best practice approaches. This is not meant to be a means to avoid the costs associated with implementation of gear modifications or other measures, but as an alternative to achieve minimisation when other measures would render the fishery economically unviable*”. (GSA 3.5.3.1).

On that basis, we directly contest the SP point of view which appears to be based on the dogma that the only solution to the identified issue appears to be a prohibition on FAD fishing. Such would be at a high cost to Echebaster. SP does not present evidence to suggest that that the reduced number of FADs will not reduce the number of FAD sets. Under its point 3, SP acknowledges the benefit of these measures. We agree that there must be concern about silky sharks; we contend that historically Echebaster has had limited relative impact on the resource and that the measures it is taking and continue to take are aimed at further reducing its impact.

We do not dispute SP comments on the proportion of FAD sets within all sets; but that is not an issue for the application of the MSC standard. The standard relates to the impact of the fishery on ETP species.

SP does not present any evidence to support that alternative measures are not implemented.

As noted above data we have seen for 2017 indicates that the number of Echebaster FAD sets decreased in 2017 (from 1,512 in 2016 to 1,250 in 2017, with respective numbers for FSC of 160 and 213).

We are assessing the impact of the Echebaster fishery (FADs and non-associated). This is independent of how many FADs that may be used by other segments of the fleet owned by other companies.

Echebaster states that it is rare to encounter any type of lost FAD) and the possibility of Echebaster setting on them is low to non-existent.

We have reviewed the objection.

We see no reason to change the final report, scores and determination.

54. IPNLF OBJECTION 34 PI 2.3.3 a

IPNLF
<p>239, The CAB scores the UoA at 80. SG 80 requires that: "Some quantitative information is adequate to assess the UoA related mortality and impact and to determine whether the UoA may be a threat to protection and recovery of the ETP species." (There is an alternative if the MSC's risk based framework is used to score PI 2.3.1, which it is not.)</p> <p>240, SA 3.12.2 (FCR, p.154), which is normative, states that: "SA3.6.1–SA3.6.4 shall apply here (except SA3.6.2.2) noting that the paragraphs apply to all ETP species (i.e., there is no 'main' for ETP)."</p> <p>241, That means that for the assessment in hand, the following clauses shall apply: SA 3.6.2; 3.6.2.1; 3.6.3 and its sub-clauses; and 3.6.4. However, there is no evidence that the CAB has applied clauses SA 3.6.2, 3.6.2.1, 3.6.3 (and its sub-clauses) and 3.6.4 to the UoA when scoring SI 2.3.3(a). It is mandatory to do so. This omission must be rectified by the CAB.</p> <p>242, The CAB, in its response to IPNLF (p.257), states that:</p> <p>"SA3.6.3: at SG80, notes that the information adequacy required for the estimation of the impact of the UoA on the outcome of the species should be balanced against the likely impact on that particular species. In the case of ETP species, the principal source of information is independent observer data, and the details of that program have been described and total interactions by species are estimated. We do not see a need to duplicate that information. At SG80, this SI requires that some quantitative information is adequate to assess the UoA related mortality and impact and to determine whether the UoA may be a threat to protection and recovery of the ETP species. The rationale provides evidence to support the fishery meeting SG80."</p> <p>243, The CAB has missed the point. We are seeking evidence that the CAB has applied clauses SA 3.6.2, 3.6.2.1, 3.6.3 (and its sub-clauses) and 3.6.4 to the UoA when scoring SI 2.3.3(a). The CAB refers only to SA 3.6.3, but certainly does not do so adequately (in view of the important detail set out in the sub-clauses of SA 3.6.3).</p> <p>244, The response does not remedy the pre-existing defects. Scoring contrary to the FCR is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.</p>
CAB Response
<p>The objection argues that the assessment team has not considered all the points identified in the FCR SA3.6.2 through SA3.6.4, and the basis of the argument is that we did not present information related to each point in our justification. It appears, that IPNLF requires an explicit consideration in the rationale that speaks to each SA 3.6.3 bullet point.</p> <p>In our opinion, this is not an interpretation any CAB would put on the FCR. We are instructed to <u>consider</u> certain things in reaching conclusions. This we have done. Our justification presents a comprehensive discussion of the information available and the limitations of that information.</p> <p>We have reviewed the IPNLF objection.</p> <p>We see no reason to change the final report, our scores and determination.</p>

55. IPNLF OBJECTION 35 PI 2.3.3 a

IPNLF
<p>245, In assessing SI 2.3.3(b) (see below), the CAB has placed a condition on the UoA, as follows:</p> <p><i>"By the fourth annual surveillance audit, the client must demonstrate that information is adequate to measure trends and support a strategy to manage impacts on ETP species."</i> [Emphasis added.]</p> <p>(Of note, the text of this Condition differs significantly from the version in the Second Report, which reads as follows: "The fishery needs more than three years of catch data to measure trends and support the strategy to manage impacts on ETP species. At present, there are only three years of data available for evaluation in this assessment, and a minimum of five years should be used. Additionally, the data should represent at least at the 50% of observer sets. Therefore, the fishery is required to present catch data on at least 50% of all sets for the first two years following certification. This will result in a total of five years of data available to measure trends and support the strategy to manage impacts on ETP species." The CAB seems to have offloaded part of this Condition text into a (mere) Recommendation.)</p>
<p>246, The stated rationale for this Condition is as follows:</p> <p><i>"More than three years of information is needed to measure trends and support a strategy to manage impacts on ETP species. and ensure that ETP bycatch levels remain at levels consistent with those for 2014-2016."</i> [Emphasis added.]</p>
<p>247, It can be seen that this Condition relates not just to supporting a management strategy (the subject matter of SI 2.3.3(b)) but also to measuring trends. Measuring trends is relevant to SI 2.3.3(a). If the Condition is required for SI 2.3.3(b), it should also be required for SI 2.3.3(a), which indicates that the highest that SI 2.3.3(a) should score is SG 60.</p>
<p>248, The CAB, in its response to IPNLF (p.257), states that: "The Condition articulates the distinction between the need to measure trends (SIb), and the adequacy of information to assess impacts (Sla)"</p>
<p>249, The response does not remedy the pre-existing defects. The scoring is arbitrary and/or unreasonable</p>
CAB Response
<p>The objection relates to the Final Report that has been amended as required following comments on the Second Draft Report.</p> <p>IPNLF considers trend determination is necessary to score 80 at Sla. This is not correct.</p> <p>SG80 SIb requires "<i>Information is adequate to measure trends and support a strategy to manage impacts on ETP species</i>". We placed a condition on the certification for SIb, as the three years of catch data available is inadequate to measure trends. The condition requires additional years of observer data, so that trends can be better evaluated. The condition allows for careful monitoring of the trends and appropriate action can be taken depending on the results.</p> <p>We have reviewed the IPNLF objection.</p> <p>We see no reason to change the final report, our scores and determination.</p>

56. SHARK PROJECT PI 2.3.3 a

SHARK PROJECT
CONDITION 1.
1, By the fourth annual surveillance audit, the client must demonstrate that information is adequate to measure trends and support a strategy to manage impacts on ETP species
2, The requirements of the condition focus only on improving data for the UoA. This can only show trends of bycatch numbers for the UoA but will give no indication of the population trends of ETP species in the Indian Ocean to assess impacts. Without population trends being known, or an assessment of fisheries impacts for the region, how will the UoA determine necessary catch limits to ensure minimal impacts on the populations of ETP species?
3, There is nothing in the condition about working to improve data collection for ETP species in the broader purse seine fleet or the broader Indian Ocean fisheries - currently there are IOTC regulations for bycatch data collection but poor implementation and little in the way of sanctions for those who do not comply. What will the UoA do to address this?
4, The requirement to increase the analysis of observer data to 50% of total sets is simply not good enough given the currently small data set and short time period. The data has been collected so we see no good reason why the full data set for just 5 vessels cannot be fully analysed and updated annually, especially considering the serious level of shark bycatch by this fleet and the overall poor bycatch data collection in the IOTC.
5, Please refer to the Supporting Rationale and Evidence provided in Section 6 below in support of our objection to the scoring of 2.3.3a.
6, The condition milestones and deliverables as described is simply not enough to address all the current issues with available information we have highlighted.
7, 2.3.3a ETP species information - information adequacy for assessment of impacts
8, The CAB scores this at 80: Some quantitative information is adequate to assess the UoA related mortality and impact and to determine whether the UoA may be a threat to protection and recovery of the ETP species. (There is an alternative if the MSC's risk based framework is used to score PI 2.3.1, which it is not.)
9, The SG60 is: Qualitative information is adequate to estimate the UoA related mortality on ETP species.
10, The UoA does not meet SG80 as there is limited quantitative information available, and at best it can only estimate minimum likely UoA-related mortality. However, given there is very little information on the overall mortality from fishing, or the populations of ETP species, it is not possible to determine if the UoA, broader purse seine fleet, or overall fishery impacts.
11, There is insufficient observer data available on UoA catches of ETP species. While the UoA has 100% observer coverage since 2014, not all of the data from these observers has been processed, so it is not available. The CAB claims that even so, the with the available observer data the UoA still exceeds recommended minimum observer coverage levels, such as the IOTC's recommendation for 25% coverage. However, recommendations by various science bodies and studies (e.g. Lawson 2006, Debski et al 2016) are for representational (by season, area, gear type, etc.) coverage of the entire fishery, and over a reasonable timescale. The bycatch data currently available for the UoA is clearly not representational, nor does it cover a reasonable timescale
12, The primary data on which the CAB makes its assessment is for a small subset of purse seine vessels. Of the five vessels currently in the fleet, just two years of observer data has been processed for two vessels, and three years of data for the other three vessels (see Table 19, p39, Final report v2). There is an additional two years of data (2014-2015) for a sixth vessel Campolibre Alai which was withdrawn from the fleet. The level of data processed for each vessel for 2016 ranged from just 21% to 52%.
13, As mentioned in 2.3.1b above, there are significant variations in the numbers and proportions of different species caught - between sets on individual vessels, between the vessels, and between years. If you are missing 79% of your data for one of six of your vessels, as for Euskadi Alai in 2016, you could be missing a significant number high bycatch sets, and significantly underestimate bycatch mortality. This was highlighted by the fact that both bycatch rates and the proportions of FAD sets to free sets INCREASED between the time of the Certifiers Desk Review and the Second Report as more data was analysed. When the remaining data is analysed there will likely be further significant changes.

14, Even with good observer data, bycatch rates are underestimated by both observers and logbooks. Hutchinson et al (2015) stated: "Comparison of the number of captured sharks observed by the scientific party and those reported by the vessel and fishery observer revealed that there are significant recording discrepancies regarding the number of sharks impacted by this fishery. We found catch rates were significantly underestimated by both the observer and the vessel logbook."

15, They noted this was not necessarily misreporting, but due to the particulars of catch-unloading and that fact that observers are occupied conducting the various catch sampling and estimation duties in addition to documenting all bycatch. They also noted noted significant differences between vessels: "It is also worth noting that due to the variety of vessels in the tropical tuna purse seine fishery, loading and hold styles vary dramatically, and this should be taken into account when considering these estimates."

16, Data on shark entanglement is missing

A key cause of silky shark mortality is the entanglement under FADs. Filmalter et al (2013) showed that much of this mortality is unseen as sharks died and fell out within two days. With such a high abundance of FADs in the Indian Ocean the study estimated that a silky shark has a 29% chance of surviving to age 1, 9% chance of survival to 2 years, and only a 3% chance of survival to 3 years old (Filmalter et al. 2013).

17, There is no data for how often UoA sets on the standard, potentially entangling FADs released by other vessels. If the UoA is to continue setting on other FADs they must include an assessment of this mortality or have clear rules and monitoring in place to ensure they don't set on other FADs. There is no evidence that this is happening.

18, There is insufficient data available on populations of ETP species

There is insufficient data for total catches in the Indian Ocean fisheries, and there is not enough data to estimate populations of ETP species. Observer coverage requirements for IOTC are only 5% and for many fleets this is not met, and despite requirements, catch reporting and data collection for bycatch species is poor.

19, IOTC scientists have been unable to do stock assessments of key sharks species in the Indian Ocean, as noted in its silky shark update: "Mechanisms need to be developed by the Commission to encourage CPCs to comply with their recording and reporting requirement on sharks, so as to better inform scientific advice." (IOTC 2016a). There are similar issues in other oceans where observer coverage and data collection is considerably better, such as the WCPFC where scientists had significant difficulties but have developed stock assessments for silky, oceanic white tip and blue sharks, but not others.

20, Similarly, the IUCN Shark Specialist team note in their assessment of silky sharks for the IUCN Redlist that "In the Indian Ocean, there is no stock assessment or any reliable fishery indicators of status, therefore the stock status is highly uncertain" (Rigby et al 2017).

21, The 2013 update of the IUCN listing for Leatherback lists the NE Indian Ocean sub-population as Data Deficient (Wallace et al 2013). In their assessment of the conservation status of spatially and biologically distinct marine turtle Regional Management Units (RMUs), Wallace et al (2011). highlighted problems with Indian Ocean data compared with other regions, stating: "Specifically, among Indian Ocean RMUs, data uncertainty was frequently scored as high for both risk (eight of 17 RMUs scored) and threats (seven of 18 RMUs scored), while no more than three RMUs in the other ocean basins had high data uncertainty scores."

22, The IOTC notes in its 2016 update on sea turtles: "Resolution 12/04 On the conservation of marine turtles includes an annual evaluation requirement (para. 17) by the Scientific Committee (SC). However, given the lack of reporting of marine turtle interactions by CPCs to date, such an evaluation cannot be undertaken. Unless IOTC CPCs become compliant with the data collection and reporting requirements for marine turtles, the WPEB and the SC will continue to be unable to address this issue." (IOTC 2016b)

23, There is limited data on ETP species biology

Management of ETP species, especially those with high post-release mortality like silky sharks, should focus on preventing capture and include small scale measures such as temporal and spatial closures as well as large scale regulations (Tolotti et al. 2015). However there is currently insufficient data to determine where and when these closures should be in the Indian Ocean.

Conclusions

24, With such a range of issue evident in the available observer data, it is clear that a full analysis of all available observer data is needed to draw reasonable conclusions, with vessel-by-vessel analysis, as well as a longer time series, in order to fully understand the level of mortality attributed to the UoA.

25, Current ETP estimates can only be considered a minimum catch, which is insufficient to determine UoA impacts or the suitability and success of management measures for bycatch mortality reduction

26, IOTC-wide collection and analysis of bycatch data in order to assess population must be improved in order to assess fishery impacts and the suitability of measures aimed at reducing mortality.

Debski I, Pierre J, Knowles K (2016). Observer coverage to monitor seabird captures in pelagic longline fisheries. WCPFC-SC12-2016/EB-I-07. <https://www.wcpfc.int/node/27463>

Filmalter JD, Capello M, Deneubourg JL, Cowley PD, Dagorn L (2013). Looking behind the curtain: quantifying massive shark mortality in fish aggregating devices. Front in Ecol Environ 11(6): 291-6. <https://www.esa.org/esa/documents/2013/08/frontiers-in-ecology-august-2013.pdf>

Hutchinson MR, Itano DG, Muir JA, Holland KN (2015). Post-release survival of juvenile silky sharks captured in a tropical tuna purse seine fishery. Mar Ecol Prog Ser; 521: 143-54. http://www.int-res.com/articles/meps_oa/m521p143.pdf

IOTC (2016a). Executive summary: Silky sharks. Status summary for species of tuna and tuna-like species under the IOTC mandate, as well as other species impacted by IOTC fisheries. Indian Ocean Tuna Commission. http://iotc.org/sites/default/files/documents/science/species_summaries/english/Silky%20shark%20Executive%20Summary.pdf

IOTC (2016b). Executive summary: Marine turtles. Status summary for species of tuna and tuna-like species under the IOTC mandate, as well as other species impacted by IOTC fisheries. Indian Ocean Tuna Commission. http://iotc.org/sites/default/files/documents/science/species_summaries/english/Marine%20turtles%20Executive%20Summary.pdf

Lawson T (2006). Scientific aspects of observer programmes for tuna fisheries in the western and central Pacific Ocean. WCPFC-SC2-2006/ST WP-1. <https://www.wcpfc.int/node/1716>

Rigby CL, Sherman CS, Chin A, Simpfendorfer C (2017). *Carcharhinus falciformis*. The IUCN Red List of Threatened Species 2017: e.T39370A117721799. <http://www.iucnredlist.org/details/39370/0>

Tolotti MT, Filmalter JD, Bach P, Travassos P, Seret B, Dagorn L (2015). Banning is not enough: The complexities of oceanic shark management by tuna regional fisheries management organizations. Global Ecology and Conservation 4: 1-7. doi:10.1016/j.gecco.2015.05.003.

Wallace BP, DiMatteo AD, Bolten AB et al (2011). Global conservation priorities for marine turtles. PLoS ONE 6(9): e24510. doi:10.1371/journal.pone.0024510. <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0024510>

Wallace BP, Tiwari M, Girondot M (2013). *Dermochelys coriacea* (Southwest Indian Ocean subpopulation). The IUCN Red List of Threatened Species 2013: e.T46967863A46967866. <http://dx.doi.org/10.2305/IUCN.UK.2013-2.RLTS.T46967863A46967866.en>.

CAB Response

While many of the SP comments may be valid, they are not relevant to the MSC CR for this PI which addresses UoA impacts. Accordingly, condition 1 specifically relates to the additional catch information needed to measure trends and support the management strategy for ETP species interaction of the UoA. In contrast, SP indicates a need for improved information of all ETP populations in the Indian Ocean. The UoA is not able to respond to such a requirement and this is not in the scope of the fishery assessment. Echebaster must assume responsibility for its own impact and provide better information to demonstrate that its strategy is successful at minimizing UOA related mortality of ETP species.

SP makes several points that are not related to the condition or to Slb.

Firstly, we have previously responded to the comment that there is insufficient observer data, stating that we disagree. We conclude that the information is adequate to assess impacts, but not adequate to evaluate trends.

Secondly, the comment that even if the data were good it would underestimate bycatch of sharks appears to be contradictory. If the observer data were good, it would accurately estimate shark bycatch.

Thirdly, it is incorrect to say data on shark entanglement is missing. SFA observers on Echebaster vessels are required to check of entanglement on any FAD being fished. Additionally, the observers on the supply vessels check all FADs serviced for entangled species.

Fourthly & fifthly, we agree there is insufficient information on populations of ETP species and their biology across the whole Indian Ocean but Echebaster cannot be expected to resolve these issues and has shown its commitment to minimising impact within the UoA.

We have reviewed the SP objection.

We see no reason to change the final report, our scores and determination.

57. IPNLF OBJECTION 36 PI 2.3.3 b

IPNLF
250, The CAB scores the UoA at 60 (and sets a Condition – see above). SG 60 requires that: ‘Information is adequate to support measures to manage the impacts on ETP species.’
251, SA 3.12.2 (FCR, p.154), which is normative, states that: ‘SA3.6.1–SA3.6.4 shall apply here (except SA3.6.2.2) noting that the paragraphs apply to all ETP species (i.e., there is no ‘main’ for ETP).’
252, That means that for the assessment in hand, the following clauses shall apply: SA 3.6.2; 3.6.2.1; 3.6.3 and its sub-clauses; and 3.6.4. However, there is no evidence that the CAB has applied clauses SA 3.6.2, 3.6.2.1, 3.6.3 (and its sub-clauses) and 3.6.4 to the UoA when scoring SI 2.3.3(b). It is mandatory to do so. This omission must be rectified by the CAB.
253, The CAB, in its response to IPNLF (p.258), states that:
254, “Please see the previous comment. The principal source of information on interaction with ETP species is independent observer data and the estimated total interactions by species (PI2.3.1 SIb). The justification for this SI has been revised.”
255, The response does not remedy the pre-existing defects. Scoring contrary to the FCR is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.
CAB Response
As Objection 36 is the same as Objection 34, we repeat the response.
The objection argues that the assessment team has not considered all the points identified in the FCR SA3.6.2 through SA3.6.4, and the basis of the argument is that we did not present information related to each point in our justification. It appears, that IPNLF requires an explicit consideration in the rationale that speaks to each SA 3.6.3 bullet point.
In our opinion, this is not an interpretation any CAB would put on the FCR. We are instructed to <u>consider</u> certain things in reaching conclusions. This we have done. Our justification presents a comprehensive discussion of the information available and the limitations of that information.
We have reviewed the IPNLF objection.
We see no reason to change the final report, our scores and determination.

58. SHARK PROJECT PI 2.4.1

SHARK PROJECT
CONDITION 2.
1, By the fourth annual surveillance audit, the client must demonstrate that FADs are highly unlikely to reduce structure and function of coral reefs to a point where there would be serious or irreversible harm.
2, This condition lacks some clarity on the milestones and deliverables which will make it hard to assess when they have truly been met.
3, We assume, given the range of action partners involved that the FADs referred to are ALL and ANY FADs used in the Indian Ocean and it is the cumulative impacts that are being assessed, not just impacts from the UoA FAD. The condition needs to clarify the following:
<ul style="list-style-type: none">· Is this for all FADs used in the Indian Ocean, or is it only for FAD of the type and design currently used by Echebaster?· If it is only for Echebaster, does it include any other FADs released by other vessels that Echebaster sets on?· Does this refer to all coral reefs in the Indian Ocean or just the ones in the area where Echebaster operates and where Echebaster FADs are shown to, or are likely to, be entangled on?
4, Does this require consideration of impacts reef by reef or over a larger area, for both UoA impacts and other vessel impacts, and their cumulative impacts?

CAB Response

MSC defines the format of conditions. We cannot be prescriptive. In the annual surveillance audits, the expert team will review the evidence available to determine whether-or-not the client has met, or is in the process of meeting, the condition and stakeholders will have the opportunity to comment on whether or not it has "*truly been met*".

The SG for PI 2.4.1 S1b relates explicitly to the UOA. Cumulative impacts on VMEs are considered within PI 2.4.2 (management) (see MSC CR 2.0 GPB3 Page 307).

We have reviewed the SP objection.

We see no reason to change the condition.

59. SHARK PROJECT PI 2.4.2

SHARK PROJECT

CONDITION 3

1, By the third annual surveillance audit, the client must provide evidence that a partial strategy in place that is expected to result that it will be highly unlikely that derelict FADs could reduce structure and function of the coral reefs to a point where there would be serious or irreversible harm.

2, As for condition 2, which this is linked to, this condition lacks some clarity on the milestones and deliverables which will make it hard to assess when they have truly been met.

3, We assume, given the range of action partners involved, that the strategy for FADs referred to here considers impacts of ALL and ANY FADs used in the Indian Ocean and it is the cumulative impacts that are being assessed, not just impacts from the UoA FAD. The condition needs to clarify the following:

-Is this a strategy that will work for all FADs used in the Indian Ocean, or is it only for FAD of the type and design currently used by Echebaster?

-If it is a strategy only for Echebaster, does it include any other FADs released by other vessels that Echebaster sets on?

-Does this refer to all coral reefs in the Indian Ocean or just the ones in the area where Echebaster operates and where Echebaster FADs are shown to, or are likely to, be entangled on?

-Does this strategy require consideration of impacts reef by reef or over a larger area, for both UoA impacts and other vessel impacts, and their cumulative impacts?

CAB Response

Sla refers to the measures and partial strategy in place to achieve the habitat outcome 80 (i.e. 2.4.1) i.e for VMEs "The UoA is highly unlikely to reduce structure and function of the VME habitats to a point where there would be serious or irreversible harm".

Thus it is clear that the PI scoring rational and the associated condition is limited to consideration of the UoA.

Accordingly, it covers the FADs used by Echebaster.

Echebaster states that its vessels do not deploy FADs without satellite buoys; and while it may not be 100 % certain its vessels do not set on lost FADs.

We do not have any evidence on the location where Echebaster FADs are become derelict or likely to become derelict. As allowed under GSA 3.13.5 the area of habitat considered appropriate to measure the impact of derelict FADs from the UoA is the "local" reef area

SG100 requires "a strategy in place for managing the impact of all MSC UoAs/non-MSC fisheries on habitats".

We have reviewed the SP objection.

We have evidence to support keeping the condition as it is.

60. SHARK PROJECT PI 2.4.3

SHARK PROJECT
CONDITION 4
<p>1, By the fourth annual surveillance audit, the client must provide evidence that information is adequate to allow for identification of the main impacts of derelict FADs on coral reefs, and there is reliable information on the spatial extent of interaction and on the timing and location of use of the fishing gear.</p> <p>2, As for condition 2 and 3, which this is linked to, this condition lacks some clarity on the milestones and deliverables which will make it hard to assess when they have truly been met.</p> <p>3, We <u>assume</u>, given the range of action partners involved, that the information requirements for FADs referred to are ALL and ANY FADs used in the Indian Ocean so that it is an IOTC-wide strategy being developed and cumulative impacts that are being assessed, not just impacts from the UoA FADs. The condition needs to clarify the following:</p> <p>Does the information collection refer to all FADs used in the Indian Ocean, or is it only for FAD of the type and design currently used by Echebaster?</p> <p>If it is only for Echebaster, does it include any other FADs released by other vessels that Echebaster sets on?</p> <p>Does this refer to all coral reefs in the Indian Ocean or just the ones in the area where Echebaster operates and where Echebaster FADs are shown to, or are likely to, be entangled on?</p> <p>Will the information collected allow consideration of impacts reef by reef and over a larger area, for both UoA impacts and other vessel impacts, and their cumulative impacts?</p>
CAB Response
<p>MSC defines the format of conditions. We cannot be prescriptive. In the annual surveillance audits, the expert team will review the evidence available to determine whether-or-not the client has met, or is in the process of meeting, the condition and stakeholders will have the opportunity to comment on whether or not it has "<i>truly been met</i>".</p> <p>The PI scoring rational and the associated condition is limited to consideration of the UoA.</p> <p>Accordingly, it covers the FADs used by Echebaster.</p> <p>Echebaster states that its vessels do not deploy FADs without satellite buoys; and while it may not be 100 % certain its vessels do not set on lost FADs.</p> <p>We do not have any evidence on the location where Echebaster FADs are become derelict or likely to become derelict.</p> <p>As allowed under GSA 3.13.5 the area of habitat considered appropriate to measure the impact of derelict FADs from the UoA is the "local" reef area.</p>

61. WWF PI 2.5.1

WWF
1, The CAB failed to consider material information put forward in the assessment process by the fishery or a stakeholder. The scoring decision was arbitrary or un-reasonable in the sense that no reasonable CAB could have reached such a decision on the evidence available to it
2, The FAD set type is a habitat enhanced fisheries and therefore a special focus should be given on its impact on the ecosystem. However, the CAB fails to analyse the full impact on the epipelagic ecosystem and only refers to direct effects (increased bycatch) and the potential indirect effects on Tuna.
3, Stakeholder including WWF raised concern about the overall cumulative effects that were not addressed by the CAB. The use of FADs is a modification of the pelagic habitat (Wang 2014) and the extent of this modification is significant. On average there are already twice as many FADs (in some areas up to 40 times) than floating natural debris in the Indian ocean (Dagorn 2013). There is an ongoing scientific discussion if their cumulative impact is serious, the so called "ecological trap hypothesis", and there is by far not sufficient data to state that the hypothesis is not likely (especially taking into account that over 80 fish species and their different life stages are associated with FADs). In particular, this is likely an issue related to the effects of FADs on feeding behaviour and migration of shark species that have demonstrated a high affinity for FADs. Additionally, up to date, the input of FADs into the pelagic ecosystem must be classified as non-reversible. Annually 20% of dFADs are lost at sea and the fishery has no possibility to recover them. Some of the lost dFADs will beach while the rest will continue to drift in the IO (Imzilen 2016). The UoA (as the rest of the tuna purse seine fleet in the IO) uses non-degradable dFADs made mostly of synthetic materials. Synthetic materials such as nylon, polyethylene, and polypropylene are impervious to natural biodegradation and can remain unchanged in the marine environment for decades (Stelfox 2016).
4, As long as the UoA does not use biodegradable FADs, the annual input of lost non-degradable FADs must be classified as a non-reversible habitat modification in the Indian Ocean. Therefore the CAB failed to give sufficient justification to conclude that it is highly unlikely that there is no disruption. SG 80 not met. The overall score of Principle 2 will be lowered.
CAB Response
We do not agree, as set out below. This objection begins with the assertion that the FAD set type is a habitat enhanced fishery. The assessment team agrees, and has evaluated the fishery accordingly. At the beginning of the assessment report, the team states: "Table 1 of the MSC FCR 2.0 notes that habitat enhanced fisheries can only be considered for MSC certification if they are considered " <i>in scope</i> ", specifically " <i>any modifications to the habitat of the stock are reversible and do not cause serious or irreversible harm to the natural ecosystem's structure and function</i> ". FADs enhance fishing operations by aggregating fish to more efficiently capture them." The report continues: " MSC FCR 7.7.4.1. states " <i>the CAB shall review and if necessary modify the default tree taking into account the PIs required to assess the enhancements</i> ", and in particular " <i>the impacts of habitat modification under the habitats and ecosystems components in P2. The CAB shall consider environmental impacts including:</i> "
1, If serious or irreversible harm may be caused to the natural ecosystem's structure and function, including the natural food chains of predator and/or prey species.
2, The types and extent of habitat modifications and the possibility of these causing serious or irreversible impacts".
We conducted a review and determined that the PIs within the default assessment tree are suitable to address the issues associated with FAD use in the Indian Ocean purse seine fishery. This was confirmed by information gained from the site visit and stakeholder input that were not initially considered in the client submission and the CDR. In particular, we recognize that there is ongoing discussion of the "ecological trap hypothesis", but also we note that a recent review of the issue by Dagorn et al (2012) concluded that there was no unequivocal empirical evidence that FADs represent an 'ecological trap' that inherently disrupts tuna biology, although the authors state that further research should focus on this issue. The assessment team also recognizes the concern over lost FADs, and their possible impact on coral reefs. However, we believe that Echebaster Fisheries addressed this issue by using less FADs than allowed (until the IOTC limit was reduced) to reduce the potential for lost FADs interacting with coral reefs, by using non-entangling FADs that limit damage if they become derelict on a coral reef, and finally by experimenting with biodegradable FADs that would further reduce the impact of lost FADs on

reefs These issues have been fully considered in the scoring of the PIs in the default assessment tree contained in this report.

WWF makes reference to the whole Indian Ocean but this is not relevant as scoring is applicable to the UoA only. We have considered the UoA's impact on the ecosystem and scored appropriately with conditions that specifically focus on research into biodegradable FADs

The claim that we did not address submissions from stakeholders is unfounded. We considered the points raised and dealt with them according to the CR.

We have reviewed the WWF objection.

We see no reason to change the final report, our scores and determination.

62. WWF PI 2.5.2

WWF

1, The CAB failed to consider material information put forward in the assessment process by the fishery or a stakeholder. 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.

2, The fishery is not clearly using all FAD best practices on every FAD set; fishery does not have a credible, written and audited FAD management Plan; IOTC does not collect sufficient FAD operational data nor inventory of FADs; and IOTC does not have an adopted FAD management plan that covers this fishery.

CAB Response

We do not consider the justification supports reason for an objection, as WWF makes no specific reference to is made on which fishery or stakeholder information, nor does it explain why the decision was unreasonable.

As described in the justifications for PIs 2.5.2 and 2.5.3:

Echebaster policy conforms with the Best Practices Manual for Purse Seine fisheries;

There is a FAD management plan at the company level (Spain) and at IOTC;

Both are moving to reduce the number of FADs, and evaluate biodegradable FADs;

The UOA exclusively uses non-entangling FADs; and

IOTC has mandatory reporting requirements with which Echebaster fully complies.

We have reviewed the WWF objection.

We see no reason to change the final report, our scores and determination.

63. Shark Project Objection Additional Information

1, We note that the CAB is rather selective in what information it discusses from particular papers referenced, and what it leaves out, to justify its scoring. These are key examples.

2, There is a major flaw in the CABs analysis of the FAD numbers used by the UoA.

The CAB states throughout the report that 5 purse seiners comprising the UoA each use 400 active FADs per vessel, to a total of 2000 FADs. They estimate the number lost annually by the UoA is 20% or 400 FADs, and they cite one study by Maufroy et al (2015) which estimates about 10% of FADs end up grounding somewhere in the Indian Ocean.

The CAB then concludes therefore that the UoA may lose 400 FADs of which about 200 ground, with some of these arriving on coral reefs.

However, each vessel has 400 active FADs at anyone time - that is FADs with active tracking buoys on them – but the total FADs with buoys released per year can be twice this number.

The IOTC Resolution 16/01 on an interim plan on rebuilding the stock allows “no more than 425 active instrumented buoys and 850 acquired annually instrumented buoys per purse seine vessel.” That is, at any one time vessels can be monitoring no more than 425 FADs, but over the year they can release 850 FADs with active trackable buoys.

5, Also, there is no limit on how many other non-instrumented FADs each vessel can release, nor on how many other vessel's FADs they can set on, so any estimates based on instrumented buoys are a minimum estimate at best and will vastly underestimate potential impacts of FAD use and FAD loss. FADs do not cease to be the responsibility of the vessel once they are lost or inactivated, and any FADs set off, no matter the owner, should be considered part of the UoA's impact.

6, Using the UoAs self-imposed annual limit of 750 per vessel (mentioned on page 47 of the Final Report), or 3750 for the whole UoA, and assuming the 10% figure for FADs grounding is correct, then at least 375 will ground.

7. Even applying current Resolution 17/01 rules (FAD limits were adjusted in May 2017 to 350 active and 700 annually - information available to the CAB before the Second Report), then each vessel releases up to 700 annually, and the UoA releases 3500 FADs annually, of which about 350 will ground on reefs, beaches, seagrasses and other areas

8, The CAB compounds these errors when it makes some very crude estimates based on the incorrect figures above, on how many FADs would end up on coral reef on an annual and 5-yearly basis stating:

9, “If 1,000 lost FADs impact Indian Ocean coral reefs over a five year period, the estimated total area of impact would be 100,000 m² or 0.1 km² based on an estimated individual impact area of 100m² per FAD. With a total area of coral reefs in the Indian Ocean of 32,000 km² the proportion of coral reefs impacted by FADs in a 5 year certification period is less than 0.001% of the total coral reef area. Accordingly, while FAD impact on coral reefs is important on a localized basis, overall it is not a significant issue in terms of coral reef ecosystem impacts in the Indian Ocean.”

10, Aside from the fact this does not consider the cumulative impacts of all the fleets using FADs, uses the incorrect estimates for the UoA FAD numbers, and does not consider the impacts of FADs released by other vessels and used by the UoA, it also gives no real consideration to the impact of ocean currents or specific areas of operation for the fleet despite evidence that this is a problem that the CAB knows about but doesn't mention.

11, The CAB has seen evidence that local impacts of FADs are significant and that many FADs from a few fleets can have a significant impact, but it is not mentioned.

12, The CAB cites the report from ICS on FADs entangled on atolls (Balderson & Martin, 2016), but does not give the contents much consideration despite the fact it clearly shows their assumptions about distribution of lost and abandoned FADs are flawed.

13, In 2015, Island Conservation Society (ICS) in the Seychelles surveyed St François and Farquhar atolls and found 48 FADs on each entangled on the coral reef, on seagrass or sand flats, or beached. That's 96 FADs on just two atolls. With the addition of other FADs found since 2011, as they went about their conservation work, the total number of beached or entangled FADs they found was 210. 76% of the FADs found were deployed and lost by Spanish and Seychelles-flagged vessels, all of which are owned by Spanish companies including Echebaster - three of the FADs on St François were from Alakrana.

14, This makes it clear that FAD impacts by a small number of fleets can be substantial in one area, and that multiple FADs from a single vessel can end up in one small area.

15, The CBA provides no information or discussion on the issue of the UoA having its AIS switched off.

Both SHARKPROJECT and WWF noted in their comments on the Second Report (see p283 and 303 of Final Report v2) that Echebaster vessels switch off AIS for the majority of time that they are in the fishing grounds. SHARKPROJECT provided images of AIS vessel tracks for two Echebaster vessels (page 296 of Final Report v2).

As WWF notes “We are aware of the potential security issues on the East African coast, however, this information cannot be disregarded and should be made available at all times. AIS is an important surveillance tool for several coastal states that do not have full VME coverage (for example Tanzania). Several other fishing fleets (e.g. Japan, China, Taiwan) in the region have their AIS turned on.”

The CAB states in its response to SHARKPROJECT that the traceability section has been redrafted but there is not mention of this issue.

To WWF the CAB response was simply: “Certainly, after acknowledging that there are potential security issues on the eastern coast of Africa, WWF would understand turning off AIS, if pirates are using AIS to target ships?”

Given this is a major issue with regard to transparency, traceability, and implementation of regulations by the UoA, we would expect more analysis of by the CAB to determine whether the UoA is legitimately turning off the AIS, why they see this as necessary for almost the entire time given that other fleets have theirs turned on, how this is recorded in logbooks, how this is checked by various authorities, etc. We would expect the analysis to be reflected in relevant scores.

16, Resolution 16/01 cited many times by the CAB, so they should have known about the total annual numbers. The UoA will have known all of this, as would anyone working in the IOTC. The updated resolution 17/01 was agreed in the IOTC Commission meeting in May, just after the site meetings in Seychelles, and was available well before the Second Draft.

17, The information on local atoll impacts was within the ICS (Balderson & Martin 2016) report cited by the CAB. The survey data spreadsheets on which fleets FAD buoys could be traced to could be requested from the ICS. Greenpeace, which funded the 1st year of the survey work, also had a copy of the St Francois atoll survey.

Balderson S, Martin (2016). Environmental impacts and causation of ‘beached’ drifting fish aggregating devices around Seychelles islands: A preliminary report on data collected by Island Conservation Society.IOTC-2015-WPEB11-39. <http://www.iotc.org/documents/environmental-impacts-and-causation-%E2%80%98beached%E2%80%99-drifting-fish-aggregating-devices-around>

ICS survey data excel sheet attached.

18, Both SHARKPROJECT and WWF noted in their comments on the Second Report (see p283 and 303 of Final Report v2) that Echebaster vessels switch off AIS for the majority of time that they are in the fishing grounds. SHARKPROJECT provided images of AIS vessel tracks for two Echebaster vessels (page 296 of Final Report v2).

19, Points 1 &2: The assessment made the FAD impacts look much less than they really are, would likely have given the CAB support for scoring a variety of indicators higher than they should have. It may have given stakeholders and reviewers with less knowledge on the issues a sense of confidence in higher scores. If nothing else the information should be corrected for any future reference.

20, Point 3: Given this is a major issue with regard to transparency, traceability, and implementation of regulations by the UoA, we would expect more analysis of by the CAB to determine whether the UoA is legitimately turning off the AIS, why they see this as necessary for almost the entire time given that other fleets have theirs turned on, how this is recorded in logbooks, how this is checked by various authorities, etc. We would expect the analysis to be reflected in relevant scores.

CAB Response

We are not selective; we review a wide range of evidence within the assessment process and we do not omit any evidence because it may impact the scoring.

The maximum loss per year per vessel is (now) 700 or 3,500 for the UOA (since Res 17/01). However, this is highly unlikely.

The main written evidence that we employed to support the rational of the number of derelict FADs was from Maufroy, while our estimate of lost FADs (20%) was based in verbal evidence.

Clearly, as identified by SP, the concept of 20% loss of active DFADs is open to interpretation and debate, even though in relative terms an increase in the number of DFADs lost by the UOA will not affect our analysis of the consequences. On that basis, the best measure of the potential number of “lost” buoys is the number of “inventory” of DFADs used to maintain the number of active DFADs.

Echebaster states that in 2017, an average of 140 DFADs per vessel were needed to maintain the allowed number of active DFADs. The reasons for replacement were: loss, damage and theft. In regard to the latter, other fishers [not purse seiners] steal the DFADs for their own use, while local fishers may steal them to use the power system. On occasions there is malicious damage.

Accordingly, the number of “lost” buoys per vessel that may become derelict on corals etc is less than 140, with the likely figure between 80 and 140. Of these, it may be considered that about half of these (Maufray estimates 9.8 % of active DFADs) become derelict somewhere along the coast with an unknown proportion of those interacting with corals.

One reason for the number of “lost” buoys in previous years was that Echebaster used one supply vessel to service 5 purse seiners. It is anticipated that the addition of a second vessel will improve the rate of recovery. Note that the cost of a complete DFAD is in excess of \$1,000.

We note our recommendation that Echebaster maintains a log of lost buoys.

Echebaster states that: (i) its vessels do not deploy FADs without satellite buoys; and (ii) it would be extremely rare (to the point of never happening) for its vessel to set on lost FADs.

We are uncertain on SP’s meaning when it states that we compound these errors.

We agree that there may be localized damage to coral reefs resulting from interactions with derelict FADs. However, the issue is the definition of localized.

The position is clear, it is estimated that half of the FADs lost by the five Echebaster vessels become derelict on shores, in shallow water and coral reefs. Clearly, it would be preferable if no FADs were lost or that the risk to corals from damage by FADs grounding on them was minimized through changed design and / or a detection or recovery programme. However, in terms of the total area of corals within the WIO that may be impacted, the scale of the risk is extremely limited.

MSC CR 2.0 SA3.13.1 states *“The team shall assess the habitats component in relation to the effects of the UoA on the structure and function of the habitats impacted by the UoA”*. Cumulative impacts of MSC certified and in-assessment fisheries are covered in MSC CR 2.0 Annex PB3 that refers to harmonisation requirements. Principle 2 covers the impact of the unit of assessment on identified components of the fishery. On that basis, the SA point *“Aside from the fact this does not consider the cumulative impacts of all the fleets using FADs”* is not relevant.

We question the usefulness of an approach to assessing potential impacts based on a generic understanding of “coral”. It seems likely that the potential for damage to corals from any interaction between and derelict FADs would be dependent of the specific characteristic of the coral species e.g. hardness.

The FADs are lost in fishing operations over a wide area of the Western Indian Ocean as the 5 Echebaster vessels follow the tuna migrations. The lost FADs drift and about half become derelict on shore structures including coral. The remainder remain at sea within ocean gyres.

While, there is potential for the FADs to become derelict over an extremely long coastline, the likelihood is that there will be concentrations in specific locations. This view is supported by available evidence from the Seychelles and reports that indicate beaching over a wide area of the region.

Thus, the question relates to the risk that derelict FADs reduce the structure and function of the VME habitats to a point where there would be serious or irreversible harm. The

relevant MSC definitions are: (i) *Serious or irreversible harm to “structure or function” means changes caused by the UoA that fundamentally alter the capacity of the habitat or ecosystem to maintain its structure and function.* (ii) *For the habitat component, this is the reduction in habitat structure, biological diversity, abundance and function such that the habitat would be unable to recover to at least 80% of its unimpacted structure, biological diversity and function within 5-20 years, if fishing were to cease entirely, and* (iii) *In the case of VMEs the team shall interpret “serious or irreversible harm” as reductions in habitat structure and function below 80% of the unimpacted level.*

Further we note:

a, Table GSA 4 states that habitat SGs *“refer to the changes caused by the UoA that fundamentally alter the capacity of the habitat to maintain its ecological structure and function or to recover from the impact”*.

b, GSA 3.13.4.1 states *“Habitat recovery here relates to the whole habitat, not just some species within a habitat”*.

c, <http://corals.cordioea.info/taxonomy/term/3896> identifies 19 families of coral in the WIO consisting a total of about 85 species. These have a large variety of forms. <https://biot.gov.io/environment/marine-protected-area/> states there are 220 species of coral in BIOT.

The number of coral species found within the fishery area and their different characteristics influence the potential for negative impact of interactions with derelict FADs.

d, GSA 3.13.5 covers the area of consideration for habitat impact, indicating that this could be as large as the fishery area, or even further if there was to be a potential overlap of impact beyond the fishery area (as could possibly be the case with drifting lost FADs. However, it goes on to state that “it would be reasonable for the assessment team to scale up or scale down the “managed area” when determining the appropriate habitat range to consider. The team should apply expert judgement and provide rationale for such scaling”

Given the concern about the potential impact of derelict FADs on corals we consider it reasonable that the level of risk should be considered according to the local area under consideration. For example, take St Francois in the Seychelles. Possibly, this atoll has the best information on the extent of FAD interaction. However, while there is information on derelict FADs interacting with coral on St Francois, there is not an analysis of the extent of the damage and the area of interaction with a single derelict FAD. This in the context of a coastline of 9.5 km (taking the two islands that comprise the atoll). While we do not seek to

minimise the need to reduce the risk of derelict FADs damaging specific, this issue must be considered in context especially when limiting consideration to the potential impact of the UOA.

The original comment on AIS from the stakeholder was *“As the fishing vessel do not use AIS on a regular basis it can't be verified whether all transhipment really only takes place in Port Victoria. As demonstrated in Appendix 1 below the little AIS* data available show that the vessel stops at Port Said where transhipment might also take place. In general, however the unavailability of AIS coverage – not even for the European vessels, suggests that the fishery is trying to hide certain activities since the vessels obviously switch off their AIS. While there is no proof for what the vessels actually do or don't do this behaviour does not confirm any trust in a clear chain of custody or traceability within the fishery”*.

The unspecified allegations by the stakeholder may or may not have some basis, and there is lack of clarity about the point being made.

The stakeholder refers to the WWF comment on AIS. Our response (security issues) remains the same. Vessel movements may be followed through VMS. As such we do not consider there “is a major issue with regard to transparency, traceability, and implementation of regulations by the UoA”.

Koeller H. ISSF Technical Report 2016-02 1, A Survey of RFMO Vessel Monitoring Systems and Set of Best Practices provides a review of VMS and AIS usage by tuna fleets fishing the waters of the various RFMOs.

The relevant passage for IOTC is “In 2006, the Indian Ocean Tuna Commission (IOTC) adopted Resolution 06/03 (On Establishing a Vessel Monitoring System Programme), which replaced its earlier Resolution that established a pilot VMS project (Resolution 02/02 Relating to the Establishment of a Vessel Monitoring System Pilot Programme). The IOTC amended this Resolution in 2015 (Resolution 15/03 On the Vessel Monitoring System (VMS) Programme). Each Contracting Party and Cooperating Non Contracting Party (CPC) is to adopt a satellite-based vessel monitoring system for all vessels flying its flag 24 m 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 Resolution provides that the IOTC may establish guidelines for the registration, implementation and operation of VMS in the IOTC Area with a view to standardizing VMSs implemented by each CPC. However, the IOTC has not yet adopted these guidelines, and thus the requirements of each CPC's VMS requirements vary except where provided for in the Resolution and its annex (e.g., data transmission frequencies, or procedures for when an ALC unit is not functioning). IOTC has a VMS report template for the use by CPCs in providing reports on the implementation of the VMS requirements to the Secretariat. Resolution 15/03 also includes provisions to accelerate implementation of the IOTC VMS by prescribing that those CPCs that do not have a VMS for any vessel now meeting the criteria for inclusion in the VMS, as per the amended in Resolution 15/03, must submit an implementation plan to the Compliance Committee in April 2016. This plan must set out a phased approach to full implementation of their national VMS within a maximum of 3 years, with at least 50% of all qualifying vessels compliant by September 2017. Further, the revised Resolution mandates that any CPC with vessels not yet equipped with VMS (as previous required under Resolution 06/03) shall be required to fully implement its national VMS obligation within a maximum of 1 year in respect of those vessels”.

Some of the author's comments on AIS are:

Unlike VMS units, AIS units can be individually programmed by vessel operators to transmit additional data attributes (e.g., vessel type, size, length, flag State) and thus are not tamper-proof. There are currently several civilian satellites that receive AIS transmissions that are then sold to the public through

subscriptions, a practice that has been controversial within the IMO.23 The limited number of civilian satellites in orbit capable of receiving and processing AIS signals may result in gaps in global coverage of transmissions (i.e., 2-3 hours between data reports).

Concluding

“...while not a suitable substitute for VMS given particular characteristics (e.g., that the units are not tamperproof, there are no procedures for manual reporting if the unit fails, data confidentiality challenges, etc), AIS can serve to complement VMS and provide for public oversight of vessel movements at sea that is not possible with current RFMO VMS programs that are closed systems...”.

For security reasons, AIS is not used all the time. VMS is fully monitored by EU and Seychelles. We would be happy to receive any evidence from WWF that there is not 100 % VMS coverage of Echebaster fishing operations.

We did not score any PI higher than we should have; our scoring is based on the evidence available for analysis in the context of the MSC CR.

We have reviewed the SP objection

We see no reason to change our scores and determination. We may revise the Final Report if required.

64. IPNLF OBJECTION 37 PI 3.1.1 a

IPNLF

256, In the Second Report (pp.160–161), the CAB’s assessment for this SI focused on flag States (Spain and Seychelles), in the context of IOTC. With the possible exception of the Seychelles, it did not consider the various coastal States involved – i.e. the coastal States in whose waters the Echebaster vessels fish. (Those coastal States are listed in, for example, Tables 40, 41 and 42 at pp.132–134 of the Final Report; they are listed in Tables 4–6 at pp.146–147 of the Second Report.)

257, In its response to the Second Report, IPNLF pointed out that omission, stating that:

“Even though the catches in the waters of some of these coastal States may be relatively small, each of them needs to be considered.

This is a significant omission and needs to be remedied with reference to the national legal system of each coastal State concerned. One would expect to see, at the very least, a table of relevant provisions of the current national legislation of the coastal States. There is no such table. In the absence of this matter being addressed, the UoA would need to be FAILED for this SI.

The fact that some of the coastal States concerned have active SFPAs with the EU, and that SFPAs are considered earlier in the section on P3, is not sufficient. According to the CAB (p.151), the only coastal States that have active SFPAs with the EU are Madagascar, Mauritius and Seychelles. That is not all of the coastal States concerned. In addition, for Madagascar, Mauritius and Seychelles it is not sufficient to consider only the SFPAs: the coastal States’ national legislation must also be considered.”

258, The CAB, in its response to IPNLF (p.260), states that:

“The stakeholder’s comment led to a rigorous consideration of the issue. We concluded that SFPAs / private agreements / individual vessel licensing should be considered under the fishery specific Component 3.2. The three jurisdictions considered under Component 3.1 are IOTV [sic], EU and Seychelles. The rationale for this approach is provided in the main body of the text. SFPAs are now considered under Component 3.2. Due to a misunderstanding the previous draft did not consider the licenses issues to Echebaster vessels by the Governments of Kenya and Tanzania. This omission has been corrected and the two are considered under Component 3.2. The text has been edited to strengthen the scoring rationale.”

259, As can be seen, the CAB refers to “Component 3.1” and “Component 3.2” of Principle 3. The basis for this terminology is the FCR. Thus Figure SA 3 in the FCR (p.167) makes clear that P3 has two components: “Governance & Policy” and “Fishery Specific Management System”. The FCR states that the former (which the CAB refers to as “Component 3.1”) is applicable to PIs 3.1.1, 3.1.2 and 3.1.3 and that the latter (“Component 3.2”) is applicable to PIs 3.2.1, 3.2.2, 3.2.3 and 3.2.4.

260, Therefore, it is the “Governance & Policy” component of P3 that is applicable to SI 3.1.1(a).

261, The change of approach by the CAB between the Second Report and the Final Report means that the CAB's rationale under SI 3.1.1(a) has changed. The justification for the scoring of SI 3.1.1(a) has been lengthened, but the new justification in effect reverses the emphasis in the previous one: **it now focuses on IOTC, with reference to flag States** (which it now regards as EU and Seychelles – see Objection 39 below), instead of, as previously, focusing on flag States in the context of IOTC.

262, The CAB's justification regarding SI 3.1.1(a) continues to fail to refer to coastal States. Indeed, coastal States are excluded from the CAB's assessment of the "jurisdictional categories that apply to the management of the Echebaster purse seine fishery for skipjack tuna considered under Component 3.1" (p.131). Instead, those categories are stated to be the following three: IOTC; EU; and Seychelles.

263, All three SGs for SI 3.1.1(a) require, amongst other things, the existence of "an effective national legal system". However, in addition, it is clear that the national legal system is not intended to be the only element of the SGs; thus each SG also refers to "cooperation with other parties".

264, In the case of the fish stock targeted by the Echebaster UoA (i.e. skipjack tuna), "cooperation with other parties" is absolutely necessary. Indeed, in terms of cooperation through RFMOs, such cooperation is required under international law (including under UNCLOS and UNFSA). So it is right and proper that scoring of SI 3.1.1(a) considers IOTC, which is the relevant RFMO in this case.

265, But that should not preclude from scoring the consideration of (a) other forms of cooperation (including arrangements between Echebaster and coastal States or between the EU and coastal States) or (b) relevant national legal systems (including those of flag States and coastal States). As noted above, flag States (albeit as EU and Seychelles) have been mentioned in the justification but with the emphasis very much on IOTC; coastal States (whether in the context of national legal system or in the context of cooperation) have been completely omitted.

266, IPNLF objects to the CAB's omission of reference to coastal States in its justification for the scoring of SI 3.1.1(a).

267, We note that GSA 4.1 (FCR, pp.471-473), in Table GSA 9 (FCR, p.471), states that the focus of the "Governance and Policy" component of P3 "[c]aptures the broad, high-level context of the fishery management system within which the UoA is found". However, GSA 4.1 does not state at any point that, for fisheries for highly migratory species (such as skipjack), it is only the RFMO level that should be covered by the "Governance and Policy" component of P3. Indeed, that seems to be accepted by the CAB because its justification does refer to flag States (albeit as EU and Seychelles) as well as to IOTC.

268, With regard to coastal States, the CAB, at p.131, states that:

"Each of the coastal / island states is an IOTC Contracting Party (CP) / covered by the EU (France) as a CP and the three types of fishery operating within their EEZs. This ensures they "cooperate to ensure effective conservation and management of the resources". As indicated by GSA 4.1.1, the assessment team has considered which jurisdictional levels apply to the management system for Echebaster and concluded that the Echebaster fishing activities within individual EEZs do not impact directly on the delivery of P1 and P2 outcomes, and as such should not be individually assessed as jurisdictional categories under C3.1, rather they should be considered under the fishery specific analysis within C3.2." [Emphasis added.]

In the above extract, "C3.1" means Component 3.1 of P3 and "C3.2" means Component 3.2 of P3 (see above).

269, At p.135, apparently as a continuation of its rationale for the exclusion of coastal States from Component 3.1 of Principle 3, the CAB states that:

"In addition to those jurisdictions [i.e. IOTC; EU; and Seychelles, as referred to at p.131], Component 3.2 takes into consideration vessels licensed under:

- SFPAs;
- Private agreements; and
- Fisheries Law of individual countries (individual vessel licenses).

The validity of this approach i.e. not taking account of the private / SFPA / vessel licenses under Component 3.1 is justified due to the non-permanent nature of these agreements which means that they should not be considered within "the broad, high-level context of the fishery management system within which the UoA is found" (MSC CR 2.0 Table GSA 9). Any future annual surveillance audits would consider changes in the management approach and the implications for the continued certification of the fishery." [Emphasis added].

270, Taken together, the CAB's statements at pp.131 and 135, as set out above, seem to be the CAB's justification for excluding coastal States from consideration under SI 3.1.1(a).

271, The CAB's approach is wrong.

272, First, non-permanence of access agreements (p.135) is not relevant, for the following reasons:

a, There is no basis in the FCR for exclusion of a level of governance from Component 3.1 of Principle 3 based on whether or not elements of that level are permanent.

b, What is permanent is that coastal States play an essential role in this UoA by enabling, through providing access to their EEZs, Echebaster vessels to access the target stock. The fact that non-permanence may be a feature of some, or even all, of the access agreements is irrelevant. It is the permanence of the role of coastal States that is relevant.

c, If the CAB wished to use permanence of instruments as a criterion for exclusion of a level of governance from Component 3.1, it would have to exclude both IOTC and EU measures. Measures made by both of those organisations are not permanent, in that they can lapse and/or be replaced.

273, Secondly, the CAB does not provide any basis for its assertion that “Echebaster fishing activities within individual EEZs [of coastal States] do not impact directly on the delivery of P1 and P2 outcomes” (p.131).

274, It is clear that Echebaster fishing activities within coastal States’ EEZs do directly impact on the delivery of P1 and P2 outcomes because such fishing activities are significant in terms of tonnes of skipjack (and other species) fished by Echebaster vessels in those EEZs – especially, but certainly not exclusively, in the case of Madagascar, Seychelles and Tanzania.

275, The extent of the fishing in coastal States’ EEZs is set out in Tables 40, 41 and 42 at pp.132–134. Table 42, which is for “All vessels” of Echebaster shows that in 2016, 7,341 tonnes of skipjack (the target species for this UoA) were caught in (eight) coastal States’ EEZs – which is 36% of the overall catch of the UoA. (The figure of 7,341 tonnes is derived by subtracting the “international” figure of 12,905 tonnes from the “total” figure of 20,246 tonnes.)

276, A table in the Second Report (Table 6, at p.147), which has been omitted from the Final Report, shows that in each of 2014, 2015 and 2016, the catch of skipjack in coastal States’ EEZs was 3,649 tonnes, 5,968 tonnes and 13,666 tonnes respectively. This shows that the catch in coastal States’ EEZs has been growing (with a significant jump between 2015 and 2016) on an annual basis.

(Of note, there are discrepancies between Table 6 in the Second Report and Table 42 in the Final Report. The latter relates just to 2016. As noted above, it shows that 7,341 tonnes of skipjack were caught in coastal States’ EEZs. In contrast, Table 6 (Second Report) shows that, in 2016, 13,666 tonnes of skipjack were caught in coastal States’ EEZs. One of these tables must be wrong. Although, as noted, Table 6 has been omitted from the Final Report, we request an explanation from the CAB for the differences between these two tables.)

277, Thus the catch in coastal States’ EEZs, even if viewed solely through the lens of Table 42 in the Final Report (rather than Table 6 in the Second Report), is very significant.

278, What is more, the ability for Echebaster to catch tuna in coastal States’ EEZs is essential for the success of the UoA because only by this means can Echebaster vessels follow tuna in their migration around the Indian Ocean. In that respect, the Final Report (p.131) states that fisheries access agreements (whether private or public) for Echebaster vessels “allow purse seiners and other tuna catching vessels to follow the migratory patterns of tuna by fishing within the EEZs of individual coastal/island states”.

279, Thirdly, we take issue with the CAB’s statements that “[e]ach of the coastal / island states is an IOTC Contracting Party (CP) / covered by the EU (France) as a CP” and that “[t]his ensures they “cooperate to ensure effective conservation and management of the resources” (p.131). It seems that the CAB is seeking to use IOTC as a means of covering assessment of coastal States. This is unacceptable. Coastal States are not vassals of IOTC, and hence the CAB’s wording “[t]his ensures” is inappropriate, for the following reasons:

a, The CAB has provided no evidence of coastal States converting IOTC conservation and management measures into national law. In the absence of that, there is no evidence that the measures would have legal effect at the national level, whether by virtue of the domestic legal framework or constitution, despite wording in the IOTC Agreement (i.e. at the international level), such as Articles IX(1) and (4) and X(1), about binding effect.

b, Member States of IOTC are able to object to conservation and management measures, whereupon they are not binding for that State (Article IX(5) and (6)). This is noted by the CAB at p.135 of the Final Report. There has been no analysis by the CAB of which relevant IOTC conservation and management measures have been objected to by which coastal States, and the option to object anyway remains valid into the future. In any event, the capacity to object remains available for the future for any new conservation and management measure.

c, IOTC, like all RFMOs, is a forum in which politics play a significant role. In addition, with its large number of member States (more than 30), IOTC involves interests other than just those relevant to Echebaster fishing activities. There will be some subject areas of conservation and management where, for political reasons, agreement cannot be reached within IOTC and where individual objections (see above) will not solve the problem. In those instances, action at the coastal State level will be needed to fill gaps left by IOTC.

d, There will be some relevant fisheries management matters that are simply not within the competence of IOTC – for example matters that fall outside the material scope of the IOTC Agreement (cf Article V of that Agreement). Coastal States are sovereign and, as such, they have a power to act in their own right, subject to any obligations they may have under international law.

280, In addition, we note that the Final Report, at pp.150-155, includes several pages of information on coastal States (in alphabetical order: Comoros; Eparses (which, according to the Final Report (p.151) is “part of the French Southern and Antarctic Lands”); Kenya; Madagascar; Mauritius; Mayotte (which, according to the Final Report (p.154) is “an insular department and region of France”); Mozambique; Seychelles; and Tanzania. It also includes text of some fisheries access agreements at Appendix 12 (pp.405-469) (on which see Objection 38 below). This information is new compared to the Second Report. But inclusion of information in the pages preceding the scoring of P3 Pls, and inclusion of other information in an appendix, cannot be a substitute for a justification explaining the use of the information in scoring. In addition, we note that no information is included in respect of Reunion which, like Mayotte, is “an insular department and region of France”.

281, Further, we note that the information provided in respect of Kenya is quite concerning. In that respect, it is stated at p.152 of the Final Report that: “The 2017 [IOTC] compliance report (IOTC-2017-CoC14-CR12_Rev2 [E] IOTC Compliance Report) concluded: general lack of compliance with IOTC measures and response from Kenya; and not presenting reports and information as required by IOTC Resolutions and the [IOTC].” That information will be considered further below. However, it is important to note here that the CAB states: “However, these issues are not related to the UoA.” (Emphasis added.)

282, A similar view is taken by the CAB in respect of evidence regarding Madagascar (p.153), Mauritius (p.154), Mozambique (p.154) and Tanzania (p.155).

283, We disagree that “these issues are not related to the UoA”. These issues are clearly related to the UoA. Regarding Kenya, for example, Echebaster vessels fished in the EEZ of Kenya in 2016, 2015 and 2014. Though the Final Report states that Echebaster vessels “are not fishing Kenyan waters” and adds that “nor is it likely that activity will be resumed in 2018”, continued fishing in Kenyan waters is not ruled out. Kenya has been found to be showing a “general lack of compliance with IOTC measures”.

That lack of compliance may apply to how IOTC measures are enforced regarding the activities of Echebaster vessels when operating in Kenya’s EEZ. The same applies to Madagascar, Mauritius, Mozambique and Tanzania – and indeed potentially any other coastal State in whose EEZ Echebaster vessels fish.

284, This illustrates how, in seeking to minimise the role of coastal States in Principle 3, the CAB is not performing a full and proper assessment of the UoA.

285, With regard to the compliance record of coastal States, we would also like to bring attention to the matter of Comoros. Under the heading “IUU Fishing”, the Final Report (p.149) states that the EU’s IUU Regulation (EU Regulation 1005/2008, as amended; hereafter, “the IUU Regulation”) “allows steps to be taken against countries that turn a blind eye to IUU fishing: if there is not a response to a preliminary warning, a country may be identified and black listed for not acting against IUU fishing”.

286, States can be identified by the EU under the IUU Regulation as “non-cooperating” in fighting illegal, unregulated and unreported (IUU) fishing. When this happens, they are said to receive a “red card” – having first received a warning in the form of a so-called “yellow card”. A variety of serious consequences arise from receiving a red card, as set out in Article 38 of the IUU Regulation, including, amongst others, the following:

- “private trade arrangements between nationals of a [EU] Member State and such countries in order for a fishing vessel flying the flag of that Member State to use the fishing possibilities of such countries shall be prohibited” [Article 38(6)];
- “the [European] Commission shall not enter into negotiations to conclude a bilateral fisheries agreement or fisheries partnership agreements with such countries” [Article 38(9)].

287, The Final Report (p.150) states that “Comoros was warned with a yellow card in October 2015 (European Parliament 2017)”. This statement is made by the CAB, almost in passing, to explain why an

EU fishing access protocol with Comoros has not been signed. No reference to the yellow card received by Comoros was made in the Second Report, published in August 2017.

288, The reference in the Final Report to a “yellow card” is not an accurate description of the current state of affairs. In May 2017, Comoros was formally identified as “non-cooperating”, i.e. it received a red card. This happened by means of a Decision adopted by the European Commission on behalf of the EU (Commission Implementing Decision 2017/889), which entered into force on 25 May 2017. May 2017 pre-dates not only the Final Report but also the Second Report

289, Comoros was identified as “non-cooperating” for several reasons. One related to “Comorian flagged fishing and fishing-related vessels ... operating outside the Comorian EEZ and the area of competence of the IOTC, in particular in the eastern Atlantic” (recital (55)). However, there were other reasons too – including non-compliance by Comoros with various IOTC Resolutions, as explained in recitals (76)-(79) of the European Commission’s Decision. The Decision remains in force to date.

290, Irrespective of the reasons why Comoros has received its red card, the point is that Comoros has been labelled by the EU as “non-cooperating” in fighting IUU fishing.

291, The Final Report (Table 42, p.134) states that in 2016, 520 tonnes of skipjack (as well as 249 tonnes of yellowfin) were fished by Echebaster vessels in Comoros waters. 520 tonnes is 2.6% of the total Echebaster catch of skipjack for 2016.

292, It is totally inappropriate that a UoA that is seeking MSC certification should be fishing, no matter to what extent, in the waters of a coastal State that has received a red card under the IUU Regulation.

293, The CAB should have known of the existence of the red card since its coming into force in May 2017. Yet it was not mentioned in the Second Report (published in August 2017) or in the Final Report (in either version). This omission is surprising and very concerning. The existence of a red card for Comoros must now be taken into account by the CAB in its scoring of relevant SIs (notably SIs 3.2.3(a), (b) and (c) – on which see further below).

294, As noted above, one consequence of the red card is that private trade arrangements between nationals of a Member State and the Comoros in order for a fishing vessel flying the flag of that Member State to use the fishing possibilities of the Comoros shall be prohibited (Article 38(6) of the IUU Regulation, cited above).

295, Article 38(6) refers to “nationals of a Member State”. The term “nationals” is distinct from vessels flagged to a Member State; that is clear from the wording of the IUU Regulation. The term “nationals” means natural or legal persons. We note that, on page ii of the Final Report, the company address of Echebaster is stated as being in Bermeo, Spain. On that basis, we assume that Echebaster, as a company, is a legal person and hence a national (of Spain) for the purposes of Article 38(6).

296, On the basis of that assumption, by virtue of Article 38(6), private trade arrangements between Echebaster (or any entity acting on their behalf, such as ANABAC) and the Comoros in order for a fishing vessel flying the flag of that Member State to use the fishing possibilities of the Comoros shall be prohibited. That prohibition applies to the Spanish-flagged vessels within Echebaster.

297, We appreciate that the prohibition under Article 38(6) does not apply to the Seychelles-flagged vessels within Echebaster. However, in the circumstances, it would be a highly cynical move by Echebaster, and contrary to the spirit of MSC certification, if Echebaster were to allow its Seychelles-flagged vessels to be the beneficiaries of any private trade arrangement between Echebaster (or ANABAC) and the Comoros.

298, Thus it is clear that both Spanish-flagged and Seychelles-flagged Echebaster vessels should not be fishing in the waters of Comoros, the former by virtue of EU law and latter by virtue of the spirit of MSC certification.

299, That stop on fishing in Comoros waters by Echebaster vessels should have taken effect from 25 May 2017, i.e. the date of entry into force of the red card. Yet the Final Report (p.150) states that the private arrangement between ANABAC and Comoros ran till the end of 2017. Questions therefore arise about the validity, under EU law, of that agreement between 25 May 2017 and 31 December 2017. A key question for the CAB to answer is whether or not the arrangement has been renewed since 31 December 2017 and, if so, which Echebaster vessels (and of what flag), if any, are beneficiaries under that renewed arrangement.

300, The CAB’s exclusion of coastal States from its justification of scoring under SI 3.1.1(a) is a means of enabling it to purport to demonstrate compliance with SGs for SI 3.1.1(a) (and other SIs within PI 3.1.1) when in fact that compliance does not, or may not (subject to the proper assessment being carried out), exist – even at SG 60. SI 3.1.1(a) needs to be re-scored by the CAB, based on a full reassessment that takes into coastal States, including those coastal States’ fisheries management and

their fisheries access arrangements relating to Echebastar vessels, to deliver management outcomes consistent with Principles 1 and 2.

301, Scoring contrary to the FCR (by wrongly excluding consideration of coastal States) is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.

CAB Response

Objections 37 to 53 (paragraphs 256 to 366) relate to IPNLF concerns about the assessment of the fishery against Component 3.1 of the MSC standard.

A substantial number of the points specifically relate to whether or not we are correct in defining the relevant jurisdictions of the fishery as IOTC, EU and the Seychelles, to the exclusion of the coastal states within the Indian Ocean where Echebastar vessels operate in their EEZs under a variety of arrangements (EU fishery partnerships, bilateral agreements with Seychelles, private agreements between individual countries and the representative organisation of Echebastar (ANABAC) and private licensing agreements between Echebastar and individual countries.

On that basis, our response to IPNLF in terms of this specific issue in Objection 37 is also applicable to all or parts of objections 38 to 53 as cross referenced below. Where objections 38 to 53 refer to other issues, specific responses are covered under the respective objection.

This was not an omission but a professional judgment reached after consideration of the specific context of this fishery, as set out in Principle 3 (Section 8) of the Final Report, which should be read in full. We note that MSC TO and the three peer reviewers (each of which has substantial experience of the application of the MSC standard) and other stakeholders did not have any issue with the way we approached analysis of P3 in terms of the relevant jurisdictions.

Component 3.1 “Captures the broad, high-level context of the fishery management system within which the UoA is found”. We consider the high-level context to be the IOTC and the contracting parties under which the UoA operates i.e. the EU and Seychelles.

“The MSC considers UNFSA Article 10 (Functions of subregional and regional fisheries management organizations and arrangements) and the UNCLOS requirements (Articles 63(2), 64, 118, 119) as a basis for MSC requirements relating to cooperation for UoAs that are subject to international cooperation for management of the stock”.

These conditions are met by the above defined jurisdictions. Each of the Indian Ocean coastal states where tuna fishing activity takes within their EEZs is a cooperating party either directly or via another mechanism (EU / France).

Further, the activities of licensed fishing vessels within the EEZs of the Indian Ocean coastal states is provided for under UNCLOS Convention Articles 62 and 64,2 particularly *“Where the coastal State does not have the capacity to harvest the entire allowable catch, it shall, through agreements or other arrangements and pursuant to the terms, conditions, laws and regulations... give other States access to the surplus of the allowable catch”*.

Please note the following paragraphs from the MSC CR

We consider that this overarching framework is capable of delivering sustainability in the UoA in accordance with P1 and P 2. No matter where they fish, the Echebastar vessels must respond to the requirements of the IOTC and EU/Seychelles (or risk the charge of illegal fishing). This overarching framework incorporates the regional structure.

The objection process relates to the Final Report; not the contents of previous drafts that were revised following MSC TO, PR and stakeholder comments.

We do not “fail” to consider coastal states; we considered whether they should each, individually, be considered as part of the broad, high-level context of the fishery management system. As articulated above, we concluded that this was not the case.

Cooperation with other parties (as required by UNSFA and UNCLOS), including all coastal states, is covered by IOTC.

We are not clear as to IPNLF’s point but the EU and Seychelles are included as the Echebastar vessels must respond to the regulations of those countries. When fishing in the waters of coastal states the vessels must respond to the individual agreements. The vessels and the countries operate under the norms of the IOTC that provide the capacity to deliver sustainability in the UoA in accordance with P1 and P2.

Comment 269 is incorrect. Please refer our response to Objection Para. 257 for our approach to selecting the key jurisdictions. The non-permanent nature of fishing agreements (in whatever form) is beside the point.

Our rationale is "As indicated by GSA 4.1.1, the assessment team has considered which jurisdictional levels apply to the management system for Echebaster and concluded that the Echebaster fishing activities within individual EEZs do not impact directly on the delivery of P1 and P2 outcomes, and as such should not be individually assessed as jurisdictional categories under C3.1, rather they should be considered under the fishery specific analysis within C3.2".

We would be pleased to consider any evidence that IPNLF has that Echebaster fishing activities within individual EEZs [of coastal States] impact directly on the delivery of P1 and P2 outcomes beyond those already considered in the report.

About 87 % of the tuna catch is in international and Seychelles waters. The share of the catch in individual coastal states varies between 0.3 % and 4.0 %. One could argue if this was "very significant" however the portion of the catch taken in the waters of coastal states is not relevant.

As we have articulated, the IOTC process provides the broad, high-level context of the fishery management system. In no way do we, or would ever, suggest that the coastal states are vassals to the IOTC. Surely such emotive language is not needed within an MSC assessment.

If IPNLF has any evidence that individual coastal states who are cooperating parties to IOTC have not met IOTC requirements, and this has impacted the delivery of sustainability in the UoA in accordance with P1 and P 2, we would be pleased to consider it.

If IPNLF has any evidence that individual coastal states have objected to IOTC CMM (as they are allowed to do by IOTC regulations) and this has impacted the delivery of sustainability in the UoA in accordance with P1 and P 2, we would be pleased to consider it.

Reunion was not covered because Echebaster vessels have not been active within its EEZ. We presume this objection relates to component 3.1. We are clear as to why no information on the coastal states is included in the rationales. Please refer to the points made above.

We repeat, any lack of compliance had no relation to activities by Echebaster vessels and their fishing activities within individual EEZs [of coastal States] impacting directly on the delivery of P1 and P2 outcomes.

If, in the future, Echebaster vessels fish Kenyan waters and if, in the future, there is evidence to suggest that lack of compliance by Kenya was linked to Echebaster vessels and their fishing activities within the Kenyan EEZ and impacting directly on the delivery of P1 and P2 outcomes, this should be considered in future annual surveillance audits.

287 - We acknowledge the omission, which we have considered, and included. This does not detract from our substantive findings.

291 - We are unsure of the point that IPNLF is trying to make. The fishing took place in 2016. The red card was issued in May 2017. Echebaster vessels could have been active in Comoros waters in the first 4 months of 2017.

292 - The certification process takes into consideration all such issues. IPNLF has presented no evidence that Spanish flagged Echebaster vessels have been active in Comoros waters since 25 May 2017.

293 - We acknowledge the omission, but this does not detract from our substantive findings. We question why IPNLF did not inform us of this issue in their response to the second report that was published in August 2017 i.e. 3 months after the red card was issued. Given IPNLF's rigorous approach we are surprised at this omission; however, we are not concerned.

We do not understand the point being made. If IPNLF has any evidence that Spanish flagged vessels have fished Comoros waters since the issuance of the red card then it should not only provide us with the information, but also contact the responsible law enforcement agency as Echebaster would, allegedly, be guilty of IUU fishing. We are not aware of any evidence.

If IPNLF has any evidence that Spanish flagged vessels have fished Comoros waters since the issuance of the red card then it should not only provide us with the information, but also contact the responsible law enforcement agency as Echebaster would, allegedly, be guilty of IUU fishing.

The agreement was agreed before the red card is in place. If IPNLF has evidence that Echebaster considered the agreement to take precedence over the EU regulation, then it should inform us and the responsible law enforcing agency.

We have reviewed the IPNLF objection. If the IA requires it, this work can be done, but in our expert judgement it will make no difference to the assessment as the key framework is regional and the cost is disproportionate and unnecessary to the assessment.

We see no reason to change our scores and determination.

65. IPNL Objection 38 PI 3.1.1 a

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302, As noted above, the Final Report includes text of some fisheries access agreements at Appendix 12 (pp.405-469). This material is referred to at pp.150-155, where the CAB sets out information on: Comoros; Eparses; Kenya; Madagascar; Mauritius; Mayotte; Mozambique; Seychelles; and Tanzania. The various access arrangements referred at pp.150-155 can be summarised as follows:																																											
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303, The CAB needs to provide further information about those agreements where we have stated in the table above that the access arrangements are "not clear", i.e. items 3, 5, 6, 11, 14, 17 and 18.																																											
304, In addition, examination of Appendix 12 shows the following gaps, all of which need to be addressed by the CAB:																																											
a, regarding item 2 in the table above, Articles 1 and 2(d) of the instrument set out in Appendix 12 (pp.405-411) are redacted;																																											
b, regarding item 4 in the table above, Appendix 12 merely sets out a French Antarctic Territory instrument (pp.412-425), with no apparent agreement with Seychelles;																																											
c, regarding item 8 in the table above, Articles 9, 10 and 14, and potentially the latter part of Article 20, of the instrument set out in Appendix 12 (pp.426-453) are redacted and appendix 6 of the instrument appears to be missing (unless it is at p.448 – it is hard to read the numbering).																																											
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Please see our response to Objection 37 which provides our rational for excluding coastal states from consideration under Component 3.1. This covers paragraphs 302, 303, 304, & 305. We have not responded to IPNLFs comments and points of view related to coastal states.

We have reviewed the IPNLF objection. If the IA requires it, this work can be done, but in our expert judgement it will make no difference to the assessment as the key framework is regional and the cost is disproportionate and unnecessary to the assessment.

We see no reason to change our scores and determination.

66. IPNLF OBJECTION 39 PI 3.1.1 a

IPNLF

306, In the Second Report (pp.160–161), as already noted, the CAB’s assessment for this SI focused on flag States (Spain and Seychelles), in the context of IOTC. It stated that:

“The fishery policy of Spain (EU) and Seychelles, working in conjunction with IOTC and other parties, provides a coherent basis for effective management of the skipjack resource in the IO through the procedures established for data collection, stock analysis, scientific advice (UNSF A Art. 10) and management tools.”

307, IPNLF, in its response to the Second Report, raised an issue about the adequacy of this assessment, both in relation to Spain and Seychelles (see further below). However, the response of the CAB has been to fundamentally change how it addresses Spain as a flag State. In the Final Report, in its justification for scoring of SI 3.1.1(a), it has completely removed any reference to Spain and now, instead, refers to EU as the flag State for the Echebaster vessels that are flagged to Spain. Its rationale for this change of approach (p.260) is as follows:

“The fisheries responsibilities of individual member states are limited to the waters under national jurisdiction. Fisheries outside the national waters up to the limit of the EU EEZ are subject to EU regulations as encapsulated in the CFP and supported by a range of EU documents and regulations. The CFP applies to EU fisheries in distant fishing grounds such as the Indian Ocean. The direct reference to Spain was an error and the text has been edited to strengthen the scoring rationale.”

308, The statement that “[t]he fisheries responsibilities of individual member states are limited to the waters under national jurisdiction” is wrong in law. It is made in the absence of any analysis of relevant materials.

309, However, before addressing that statement, it is necessary to deal with a more fundamental error made by the CAB. The CAB refers to the EU as a flag State (p.156, and p.3 of executive summary). As a matter of law, that statement is incorrect. Article 91(1) of UNCLOS provides as follows:

“Every State shall fix the conditions for the grant of its nationality to ships, for the registration of ships in its territory, and for the right to fly its flag. Ships have the nationality of the State whose flag they are entitled to fly.”

310, It follows that the flag State of a vessel is the State that has conferred its nationality on that vessel and has authorised that vessel to fly its flag.¹⁷ Since there is no such thing as EU nationality, certainly as far as ships are concerned, it follows that the EU is not, and cannot be, the flag State of any vessel.

311, That position is confirmed by the “Basic Regulation” of the EU’s CFP (Regulation 1380/2013, as amended), Article 4(1)(5) of which defines a “Union fishing vessel” as “a fishing vessel flying the flag of a Member State and registered in the Union”.

312, That the EU is not a flag State is also recognised in the IOTC Agreement, to which the EU (but not its Member States) is a party, Article IV(5) of which provides that: “[f]or the purposes of this Agreement, the term “whose vessels” in relation to a Member Organization means vessels of a Member State of such Member Organization.” In other words, the term “whose vessels” when applied in the context of the EU means the vessels of (i.e. having the nationality and flying the flag of) relevant EU Member States.

313, It is true that in an Advisory Opinion given in response to a request from the Sub-Regional Fisheries Commission, the International Tribunal for the Law of the Sea (ITLOS) stated that where an international organization, in the exercise of its exclusive competence, has concluded an agreement with a third State that provides for access by vessels flying the flag of a Member State of that organization to the waters

¹⁷ See further Case No. 19, *M/V Virginia G (Panama v. Guinea-Bissau)* [2014] ITLOS Reports 4, at paras 109 and 113; and R. A. Barnes, “Flag States” in D. R. Rothwell et al (eds.), *The Oxford Handbook of the Law of the Sea* (OUP, 2015) 304 at 304-310.

of that third State, “the obligations of the flag State become the obligations of the international organization”.¹⁸

314, However, that statement by ITLOS needs to be treated with care and read in context. ITLOS was dealing with the liability of an international organization, specifically the EU, in the specific context of (a) a fisheries access agreement involving the EU and (b) illegal fishing by vessels flagged to EU Member States within the waters of a member State of the Sub-Regional Fisheries Commission under such an access agreement. As ITLOS observed,¹⁹ the EU noted that in the fisheries access agreements that the EU had concluded with individual coastal States, it had undertaken to ensure that vessels flying the flag of EU Member States complied with the legislation of the coastal State in question. Read in context and with reference to the question that the ITLOS was asked, the Advisory Opinion cannot be regarded as saying that the EU is a flag State in place of its Member States. Rather, ITLOS was deciding that in the specific circumstances in question, it was the EU and not its Member States that would have liability.

315, Returning to the CAB’s statement that “[t]he fisheries responsibilities of individual member states are limited to the waters under national jurisdiction”, this statement is wrong in law as demonstrated by the following:

a, The corollary of the fact that the EU is not a flag State (see above) is that, in an EU context, the rights and obligations of flag States are to be exercised by individual EU Member States, not the EU, albeit that there may be relevant EU law that governs the way in which EU Member State flag responsibilities are to be exercised. This is evidenced by the declarations relating to the division of competence between itself and its Member States that the EU made on becoming (i) a party to UNCLOS²⁰ and (ii) a party to the UN Fish Stocks Agreement.²¹

b, Various pieces of EU legislation provide evidence that flag State responsibilities are primarily to be exercised by Member States, including in areas beyond the 200-mile zones of EU Member States. For example:

- one of the basic principles of the “Control Regulation” (Regulation 1224/2009, OJ 2009 L343/1, as amended) is that “Member States shall . . . control activities outside Community [i.e. Union] waters carried out by Community fishing vessels flying their flag” (Article 5(2)). What this obligation involves is spelt out in detail in various provisions: see, for example, Articles 6, 9, 11, 26, 33-35, 46, 72, 74, 80, 85 and 86.
- Article 31(8) of the Basic Regulation provides that “Member State shall ensure that all Union fishing vessels flying their flag and operating outside Union waters are in a position to provide detailed and accurate documentation of fishing and processing activities”. Article 36(3) of the Regulation provides that “Member States shall adopt appropriate measures for ensuring control, inspection and enforcement of activities carried out within the scope of the CFP, including the establishment of effective, proportionate and dissuasive penalties”.
- Regulation 2017/2403, on the sustainable management of external fishing fleets (the new Fishing Authorisation Regulation or ‘FAR’, replacing Regulation 1006/2008), which deals with fishing beyond European Union waters, makes multiple references to obligations of flag Member States.

316, It is clear from the above that, contrary to the assertion of the CAB, the fisheries responsibilities of individual EU Member States are not limited to the waters under national jurisdiction.

317, For that reason, it is entirely wrong for the CAB to exclude consideration of Spain, as a flag State, from the scoring of SI 3.1.1(a). Spain must be considered.

318, In IPNLF’s response to the Second Report, regarding the CAB’s assessment of flag States, we stated that:

“As an assessment, both in relation to Spain (EU) and Seychelles, this is inadequate. We appreciate that earlier in the section on P3, the CAB sets out some evidence. However, the assessment of SI 3.1.1(a) needs to make proper cross-references to that evidence in order for it to be clear whether or not SGs under this SI are met.

¹⁸ Request for an Advisory Opinion submitted by the Sub-Regional Fisheries Commission (SRFC), Advisory Opinion on 2 April 2015 [2015] ITLOS Reports 4, at para.172.

¹⁹ Advisory Opinion, para.171.

²⁰ http://www.un.org/depts/los/convention_agreements/convention_declarations.htm#European Community Upon signature

²¹ http://www.un.org/depts/los/convention_agreements/fish_stocks_agreement_declarations.htm#EC. Paragraph 7 reads: “[...] measures applicable in respect of masters and other officers of fishing vessels, e.g., refusal, withdrawal or suspension of authorizations to serve as such, are within the competence of the Member States in accordance with their national legislation. Measures relating to the exercise of jurisdiction by the flag State over its vessels on the high seas, in particular provisions such as those related to the taking and relinquishing of control of fishing vessels by States other than the flag State, international cooperation in respect of enforcement and the recovery of the control of their vessels, are within the competence of the Member States in compliance with Community law.”

The assessment refers to the “fishery policy” of Spain. However, it provides, neither at pp.160–161 nor earlier in the section on P3, any evidence relating to the fishery policy of Spain (except a brief mention at p.152). Instead, the evidence earlier in the section on P3 relates only to the EU. The fishery policy of Spain itself, as the flag State, is relevant and needs to be considered with adequate evidence.”

319, In the light of our point about the need to consider Spain, specifically, as a flag State, we reiterate our point above that “[t]he fishery policy of Spain itself, as the flag State, is relevant and needs to be considered with adequate evidence”. There is simply no avoiding this. The CAB must address this omission in the scoring of SI 3.1.1(a).

320, Awarding a score contrary to the FCR (by wrongly excluding consideration of Spain as a flag State) is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.

CAB Response

While we acknowledge our original error of considering the EU as the flag state, this was corrected for the second draft report.

In our view, IPNLF presents a number of arguments to support their point of view; it does not address the key issues related to the identification of the jurisdictions to be considered within the analysis of Component 3.1.

We would also note that IPNLF was the only entity to raise questions on this issue; the MSC TO, three peer reviewers and other stakeholders did not bring this issue to our attention.

As highlighted by Table GSA 9 in MSC CR 2.0, Component 3.1 *“Captures the broad, high-level context of the fishery management system within which the UoA is found. Performance elements within this component include: The overarching legal and/or customary framework for the UoA, which may include fisheries that are subject to international cooperation for management of the stock, or other fisheries under the same management framework; the consultation processes and policies; the articulation of the roles and responsibilities of people and organisations within the overarching management system; and other overarching policies supporting fisheries management”*.

Clearly, management of the Indian Ocean tuna fishery falls under the auspices of the IOTC and it is that organisation that represents the broad, high-level context of tuna’s fishery management system. Please note the content of the covering letter to the 2015 implementation report to IOTC ([file:///C:/Users/owner/Downloads/IOTC-2016-CoC13-IR06E-European Union 0.pdf](file:///C:/Users/owner/Downloads/IOTC-2016-CoC13-IR06E-European%20Union%200.pdf))

“EU Pursuant to Article 216(2) of the Treaty on the Functioning of the European Union (EU), the EU as a Contracting Party to IOTC is bound to ensure that the measures adopted by the Commission are effectively implemented by EU vessels operating in the IOTC area of competence.

Such international obligations are also binding for EU Member States. They are bound to take the necessary direct measures designed to ensure compliance with the provisions of the IOTC measures in question by their vessels and, as appropriate, their nationals.

Moreover, in accordance with EU legislation, all EU vessels operating in the IOTC area of competence are subject to monitoring and control measures to ensure that IOTC and EU Common Fisheries Policy rules are fully respected. Therefore all measures adopted by the Commission in its last session are implemented by the EU vessels operating in the IOTC area of competence”.

This provides the evidence needed to justify that consideration of the EU represents the broad, high-level context of tuna’s fishery management system. Spain, as with other member states, and its flagged vessels, is bound by EU policy.

We have reviewed the IPNLF objection

We see no reason to change the final report, our scores and determination.

67. IPNLF OBJECTION 40 PI 3.1.1 a

IPNLF
321, There are precise requirements as to what is needed to meet SG 60, SG 80 and SG 100 under this SI: see SA 4.3.2, SA 4.3.3 and SA 4.3.4 (FCR, pp.170–172), all of which are normative. (In addition, there is guidance in GSA 4.3 (FCR, pp.474–476).) The CAB has failed to set out clearly (or at all) how the UoA meets each of the tests referred to in SA 4.3.2 (to meet SG 60) or SA 4.3.3 (to meet SG 80.) Therefore it has failed to justify that even SG60 is met. Awarding a score without due consideration of the FCR is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.
CAB Response
We are unclear as to what the IPNLF objection refers to as it is fairly nebulous and lacks specificity. However, IPNLF appears to suggest that every rationale must explicitly consider each bullet point e.g. SA4.3.2.1. This is not the approach taken at assessment In response to the IPNLF objection we have once again reviewed our rational for scoring PI 3.1.1 a. in the context of the identified paragraphs of the MSC CR. We note that contrary to the implication of IPNLF, we concluded that the fishery did not meet SG100. We note that: the MSC TO report did not find issue with our approach to the scoring of PI3.1.1. and no P3 issue was included in the second MSC TO response. None of the three peer reviewers identified issues related to the rational and scoring related to PI 3.1.1 Sla. We have reviewed the IPNLF objection. If the IA requires it, this work can be done, but in our expert judgement it will make no difference to the assessment as the key framework is regional and the cost is disproportionate and unnecessary to the assessment. We see no reason to change our scores and determination.

68. IPNLF OBJECTION 41 PI 3.1.1 a

IPNLF

322, The CAB scores the UoA at 80. SG 80 requires that: "The management system incorporates or is subject by law to a transparent mechanism for the resolution of legal disputes which is considered to be effective in dealing with most issues and that is appropriate to the context of the UoA."

323, The CAB states (p.157) that:

"As evidenced in the main text above, each jurisdiction has a mechanism for dealing with disputes: IOTC: meetings, expert panels, potential intervention through the ICJ; EU: application of IOTC procedures; and Seychelles: application of IOTC procedures, appeals board, amicable settlement."

324, This statement is made on the mistaken premise that the only jurisdictions covered under this SI are IOTC, EU and Seychelles. This premise is mistaken because, as noted under Objections 37 and 39 above, coastal States and Spain, as a flag State, have been wrongly excluded from the assessment process for this PI. Assessment of SI 3.1.1(b) needs to consider the "mechanism for the resolution of legal disputes" (a term used in all three of the SGs for this SI) in respect of the following:

- IOTC
- the relevant SFPAs
- the relevant private agreements between ANABAC and coastal States
- any kinds of relevant access arrangements other than SFPAs and ANABAC/coastal State private agreements
- disputes between coastal States and third country vessels (unless covered under access arrangements)
- disputes between Spain and its own flag vessels
- disputes between Seychelles and its own flag vessels
- disputes between the flag State of the supply vessel and the supply vessel

325, Therefore, the reference by the CAB, as cited above, to just IOTC, EU and Seychelles is completely inadequate. The assessment regarding each of the items in the list above must be specific to the terms of the SGs of SI 3.1.1(b) and cannot be simply by means of a general reference "the main text above".

326, Awarding a score contrary to the FCR (by wrongly excluding consideration of coastal States and Spain as a flag State) is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.

CAB Response

Objection 41 relates to our not considering coastal states and Spain as jurisdictions in the rationales and scoring of performance indicators in Component 3.1. We respond to these issues in our responses to other IPNLF objections.

We have reviewed the IPNLF objection. If the IA requires it, this work can be done, but in our expert judgement it will make no difference to the assessment as the key framework is regional and the cost is disproportionate and unnecessary to the assessment.

We see no reason to change our scores and determination.

69. IPNLF OBJECTION 42 PI 3.1.1 b

IPNLF

327, The CAB (p.157) states that:

"As there is no evidence of legal disputes related to the 3 jurisdictions, it may be concluded that the proactive approach is appropriate. However, this also means that the mechanisms have not been tested."

328, GSA 4.3 (FCR, p.475) states:

"The level of ... effectiveness of the systems can be determined by:

- Information on the proportion of stakeholders that are aware of the existence of any dispute resolution arrangements;
- The history and stories of how disputes have been dealt with in the past;
- Ascertaining whether the presence or absence of unresolved disputes can be considered significant indicators of the existence and/or effectiveness of dispute resolution mechanisms."

329, The CAB states that "there is no evidence of legal disputes". Yet, as can be seen, GSA 4.3 does not include absence of evidence of disputes as one of the acceptable forms of evidence it refers to. That is not surprising: lack of evidence of legal disputes should not mean that there are no legal disputes, still less that, as required by SG 80, there is a transparent mechanism for the resolution of legal disputes which meets the required criteria. The test in SG 80 is clear and the CAB, if it wishes to claim a score of 80, needs to show (for each of the items in the list in Objection 41 above) that it is met – other than by resorting to stating that "there is no evidence of legal disputes".

330, Awarding a score without due consideration of the FCR is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.

CAB Response

We have reviewed GSA 4.3. We consider that the IPNLF statement that GSA 4.3 "*does not include absence of evidence of disputes as one of the acceptable forms of evidence it refers to*". It may not *include* it; neither does it *exclude* it. That is to note, GSA4.3 includes a list of what "may" be determined, but the list is neither exhaustive nor definitive; rather, it is preceded by 'may' and is in Guidance.

The MSC TO report did not find issue with our approach to the scoring of PI3.1.1. and no P3 issue was included in the second MSC TO response.

None of the three peer reviewers identified issues related to the rational and scoring related to PI 3.1.1 Slb.

We have reviewed the IPNLF objection. If the IA requires it, this work can be done, but in our expert judgement it will make no difference to the assessment as the key framework is regional and the cost is disproportionate and unnecessary to the assessment.

We see no reason to change our scores and determination.

70. 'IPNLF OBJECTION 43 PI 3.1.1 c

IPNLF

331, The CAB scores the UoA at 80. SG 80 requires that: "The management system has a mechanism to observe the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood in a manner consistent with the objectives of MSC Principles 1 and 2.

332, The CAB (p.158) refers to some aspects of IOTC, some aspects of the EU's CFP and some aspects of Seychelles law. These limited references are made on the mistaken premise that the only jurisdictions covered under this SI are IOTC, EU and Seychelles. This premise is mistaken because, as noted under Objections 37 and 39 above, coastal States and Spain, as a flag State, have been wrongly excluded from the assessment process for this PI. Assessment of SI 3.1.1(c) needs to consider the SGs in respect of the following:

- IOTC
- the relevant SFPAs
- the relevant private agreements between ANABAC and coastal States
- any kinds of relevant access arrangements other than SFPAs and ANABAC/coastal State

<p>private - the relevant individual coastal States</p> <p>333, Awarding a score contrary to the FCR (by wrongly excluding consideration of coastal States and Spain as a flag State) is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.</p>	<p>agreements</p>
<p>CAB Response</p> <p>Objection 43 relates to the IPNLF contention that all coastal states and Spain should have been covered in the analysis of the individual performance indicators within Component 3.1. We consider these points above and conclude that related objections do not have merit.</p> <p>We have reviewed the IPNLF objection. If the IA requires it, this work can be done, but in our expert judgement it will make no difference to the assessment as the key framework is regional and the cost is disproportionate and unnecessary to the assessment.</p> <p>We see no reason to change our scores and determination.</p>	

71. IPNLF OBJECTION 44 PI 3.1.1 c

IPNLF

334, Despite the CAB having decided, wrongly, that SFPAs fall outside the scope of Component 3.1 of Principle 3, it is notable that the CAB refers (p.158) to two aspects of SFPAs. These are as follows: “The CFP that is applicable to SFPAs has a human rights clause” and “EU policy requires, that EU flag vessels only catch that part of the available quota that is surplus to the domestic catching capacity of the coastal state’s own fishing fleet”. Those references are inadequate to meet SG 80, for the following reasons:

- a, No sources beyond “[t]he CFP” and “EU policy” are specified; those sources need to be specified so that stakeholders can look for these references and read them in context.
- b, The reference to a “human rights clause” is meaningless in the absence of the wording of the clause itself. The clause must be set out.
- c, The presence a “human rights clause”, whatever that may mean, is not a “mechanism” as referred to in SG 60 or SG 80.
- d, The capacity of the domestic fleet may not be enough to catch what is needed for domestic consumption. So the policy referred to of only catching surplus is not necessarily sufficient to avoid prejudicing the needs of those dependent on fishing.

335, The CAB refers to some aspects of Seychelles. However, according to the auditors in the assessment (p.29 of Second Report):

“The decision-making process has an impact on the livelihoods of Seychelles fishers (see MSC CR GSA 4.8). While improvements have been made, local stakeholders do not recognise the existing system as effective. [...]

... there is no concrete evidence that the Seychelles government responds to the issues raised by fishers who depend on tuna for their livelihoods in a transparent, timely and adaptive manner. [...]”

336, The CAB, in the Final Report, does nothing to counter these observations by the auditors. In its response to IPNLF (p.262), the CAB states that:

“The rationale has been redrafted. The mechanisms to “observe legal rights” in Seychelles are the Fisheries Law and the need for co-management (e.g. fishery management plans). The effectiveness of those mechanisms is considered in PI 3.2.2 Sla and this results in a condition.” [Emphasis added.]

337, We assume that the CAB’s reference to “Sla” is an error, and in fact the reference should be to “SI d”. That is because, under PI 3.2.2, only SI 3.2.2(d) is scored at 60 and therefore only SI 3.2.2(d) has a condition. We have looked at the CAB’s justification for scoring of SI 3.2.2(d) (on which, see further below). No reference at all is made to Seychelles in that justification. We therefore maintain our points about Seychelles as made above

338, On that basis, SG 80 for this SI is not met, and the SI should instead be scored only at 60. The scoring is arbitrary and/or unreasonable

CAB Response

We did not “decide” anything; we assessed the available evidence in the context of the MSC CR to determine a score.

We refer IPNLF to the wording of the CR (SA 4.3) that refers to *“are considered within the legal and/or customary framework for managing fisheries”* and GSA 4.3.6 *“The main consideration in relation to performance against scoring issue (c) is whether a suitable framework exists or does not exist to address the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood, not on the effectiveness or results (e.g., allocation of access) of such a framework.”*

The IPNLF interpretation is incorrect. SFPAs *per se* are not outside the scope of Component 3.1 as they refer to overarching EU policy and not the specific SFPAS with individual coastal states.

It is impractical for any CAB to set out all the evidence in detail; stakeholders must refer to the source material. It may be that such comments by IPNLF are vexatious in nature.

We note that:

The MSC TO report did not find issue with our approach to the scoring of PI3.1.1.c and no P3 issue was included in the second MSC TO response.

None of the three peer reviewers identified issues related to the rational and scoring related to PI 3.1.1 Slc.

The human rights clause is found in the EU Reg 1380/ 2013. (Preamble point 52 and Art. 31 (6) (<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013R1380>). We apologise for only including this reference under references (n.b. the Regulation not the web link).

We are unsure of the point being made by IPNLF in Para. 334.d. and its relevance to the MSC standard.

337 - We apologise. The comment refers to PI3.1.2 Slb.

We place a condition on PI 3.1.2 as the fishery does not meet Slb as *“Evidence (Welch & Kerrigan (2015), Standing (2016), stakeholder interviews – SFBOA, SFA, MAF & Blue Economy) indicates the limited input of local stakeholders in the Seychelles decision making process. Where local stakeholders have expressed views, it is not clear how these have been taken into account. At the site visit, it was reported that meetings between the Minister and stakeholders are not minuted.”*

The lack of a mechanism to indicate if and how stakeholder information is used in the management system impacts transparency on how Seychelles fishery managers obtain and consider information and local knowledge”.

We have reviewed the IPNLF objection. If the IA requires it, this work can be done, but in our expert judgement it will make no difference to the assessment as the key framework is regional and the cost is disproportionate and unnecessary to the assessment.

We see no reason to change our scores and determination.

72. IPNLF OBJECTION 45 PI 3.1.1 c

IPNLF

339, SA 4.3.7 (FCR, p.172), which is normative, states that “[t]he team shall interpret “observe” in scoring issue (c) at SG80 to mean that”:

“There are more formal arrangements such as bylaws or regulation that make explicit the requirement to consider the legal rights created explicitly or by custom of people dependent on fishing for food or livelihood; and

Those peoples’ long-term interests are taken into account within the legal and/or customary framework for managing fisheries.”

340, The CAB has made no attempt to assess the UoA against this normative interpretation of the term “observe”, other than by presenting the evidence its says enables SG 60 to be reached and then adding without resort to any further evidence:

“The scoring of SG60 provides evidence of formal arrangements to observe the legal rights and long-term interests of people dependent on fishing for food or livelihood.”

341, This is startling. The CAB is, in effect, implying that meeting SG 60 is sufficient to meet SG 80. That is not the case, as evidenced by the different wording of the SGs. The CAB must provide evidence that SG 80 is met and must, in addition, assess the UoA against the wording of SA 4.3.7. The scoring is arbitrary and/or unreasonable.

CAB Response

We note that:

The MSC TO report did not find issue with our approach to the scoring of PI3.1.1c. and no P3 issue was included in the second MSC TO response.

None of the three peer reviewers identified issues related to the rationale and scoring for PI 3.1.1 Slc.

In retrospect we erred in not scoring SG80 specifically. Perhaps with changed wording for SG60. However, in our opinion, this is not material to the determination or the fairness of the assessment.

The difference in wording is that SG60 refers to “*generally respect*” and SG80 refers to “*observe*”.

In our opinion, the wording of the rationale for SG60 also provides evidence that SG80 is met i.e. “*The IOTC considers the legal rights of individual countries with emphasis on the needs of developing states (see, for example, the preamble IOTC Res. 16/02).*

The specific issue of the legal rights of people in the CMs dependent on fishing for food or livelihood is the responsibility of the individual countries.

The CFP that is applicable to SFPAs has a human rights clause.

The EU LDAC provides for a mechanism to observe the legal rights of EU fishers. EU policy requires, that EU flag vessels only catch that part of the available quota that is surplus to the domestic catching capacity of the coastal state’s own fishing fleet. The UoA vessels are subject to all IOTC regulations and requirements.

The Seychelles Fisheries Law requires a co-management approach and has established fisheries management planning for a number of fisheries. Increased consultation with local stakeholders leading to an FMP provides the basis to respect legal rights. Marine reserves protect stocks from industrial fishing. The UoA vessels are subject to all IOTC regulations and requirements”.

We have reviewed the IPNLF objection. If the IA requires it, this work can be done, but in our expert judgement it will make no difference to the assessment as the key framework is regional and the cost is disproportionate and unnecessary to the assessment.

We see no reason to change our scores and determination.

73. IPNLF OBJECTION 46 PI 3.1.2 a

IPNLF

Roles and Responsibilities

342, The CAB scores the UoA at 80. SG 80 requires that: "Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are explicitly defined and well understood for key areas of responsibility and interaction.

343, The CAB (p.159) refers to some aspects of IOTC and some aspects of the EU. These limited references are made on the mistaken premise that the only jurisdictions covered under this SI are IOTC, EU and Seychelles. This premise is mistaken because, as noted under Objections 37 and 39 above, coastal States and Spain, as a flag State, have been wrongly excluded from Component 3.1 of Principle 3 and hence from the assessment process for this PI. Assessment of SI 3.1.2(a) needs to consider the SGs in respect of the following:

- IOTC
- the relevant SFPAs
- the relevant private agreements between ANABAC and coastal States
- any kinds of relevant access arrangements other than SFPAs and ANABAC/coastal State
 - the relevant individual flag States
 - the relevant individual private agreements
 - the relevant individual coastal States

344, Awarding a score contrary to the FCR (by wrongly excluding consideration of coastal States and Spain as a flag State) is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.

CAB Response

Objection 46 relates to the IPNLF contention that all coastal states should have been covered in the analysis of the individual performance indicators within Component 3.1. We consider this point above and conclude that related objections do not have merit.

We have reviewed the IPNLF objection. If the IA requires it, this work can be done, but in our expert judgement it will make no difference to the assessment as the key framework is regional and the cost is disproportionate and unnecessary to the assessment.

We see no reason to change our scores and determination.

74. IPNLF OBJECTION 47 PI 3.1.2 a

IPNLF

345, The CAB states (p.159) that “the roles of the various actors are well defined and understood”. This is wrong. Amongst other things, the role of the industry and coastal State governments in making private agreements is not well defined and understood (or, to use the wording of SG 80, “explicitly defined and well understood”): see European Court of Auditors, 2015; EPRS - European Parliamentary Research Service, April 2016; EJF, Oceana, Pew, WWF, November 2016 ; EPRS - European Parliamentary Research Service, July 2017; Oceana, September 2017; European Commission, October 2017. Indeed, there is a considerable lack of transparency, including in relation to the roles of the actors concerned, about the process of making private agreements (see Condition 8, at p.8, notwithstanding that its text refers to “fishery-specific objectives”; and references above). Therefore, SG 80 cannot be met for this SI.

346, The CAB, in response to IPNLF (p.263), states that:

“The stakeholder’s point on private agreements is moot as private agreements are not considered under Component 3.1. [...]"

Our point on private agreements is far from moot, for the reasons set out above. The scoring is arbitrary and/or unreasonable.

References:

European Court of Auditors. “Special Report: Are the Fisheries Partnership Agreements well managed by the Commission?” 2015
https://www.eca.europa.eu/Lists/ECADocuments/SR15_11/SR_FISHERIES_EN.pdf

EPRS - European Parliamentary Research Service. “Briefing: Initial Appraisal of a European Commission Impact Assessment: Sustainable management of external fishing fleets: Impact Assessment (SWD (2015) 276, SWD (2015) 279 (summary)) of a Commission proposal for a Regulation of the European Parliament and of the Council on the sustainable management of external fishing fleets, repealing Council Regulation (EC) No 1006/2008 (COM (2015)636)”. April 2016
[http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/579331/EPRI\(BRI\(2016\)579331_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/579331/EPRI(BRI(2016)579331_EN.pdf)

EJF, Oceana, Pew, WWF. “European vessels fishing under the radar: The need to regulate private and chartering agreements for access to external waters”. November 2016.
<http://www.whofishesfar.org/files/Private.Agreements.ENG.1DEC.high.pdf>

EPRS - European Parliamentary Research Service. “Briefing: EU Legislation in Progress: New rules for managing the EU external fishing fleet”. July 2017
[http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/608651/EPRI\(BRI\(2017\)608651_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/608651/EPRI(BRI(2017)608651_EN.pdf)

Oceana. “Fishing the Boundaries of Law: How the Exclusivity Clause in EU Fisheries Agreements was Undermined”. September 2017. <http://usa.oceana.org/publications/reports/fishing-boundaries-law-how-exclusivity-clause-eu-fisheries-agreements-was>

European Commission. “COM(2017) 633 Communication from the Commission to the European Parliament pursuant to Article 294(6) of the Treaty on the Functioning of the European Union concerning the position of the Council on the adoption of a Regulation of the European Parliament and of the Council on the sustainable management of external fishing fleets, repealing Council Regulation (EC) No 1006/2008”. October 2017 <https://ec.europa.eu/transparency/regdoc/rep/1/2017/EN/COM-2017-633-F1-EN-MAIN-PART-1.PDF>

CAB Response

Objection 47 relates to the IPNLF contention that all coastal states should have been covered in the analysis of the individual performance indicators within Component 3.1. We consider this point above and conclude that related objections do not have merit.

IPNLF provides references to support their contention. We reviewed those references as part of our process to consider the IPNLF arguments and conclude the reports are not related to the MSC standard Component 3.1. i.e. they refer to specific parts of fishery management that depend on the broad, high-level context of the fishery management system within which the UoA is found; they do not form part of the overarching legal framework for the UoA. Accordingly, issues related to the specifics of the consultation processes and policies on such as private agreements are not relevant.

We have reviewed the IPNLF objection. If the IA requires it, this work can be done, but in our expert judgement it will make no difference to the assessment as the key framework is regional and the cost is disproportionate and unnecessary to the assessment.

We see no reason to change our scores and determination.

75. IPNLF OBJECTION 48 PI 3.1.2 a

IPNLF

347, The CAB, having referred to various actors, states (at p.159) that: “The activities of each of these actors are well known, and their role in the management process is documented and understood.” In our view, this bald assertion is wholly inadequate.

The CAB, in response to IPNLF (p.263), states that: “[...] Regarding the stakeholder’s concern about “generally understood” the scoring rationale has been strengthened.”

348, We consider that the scoring rationale has not been strengthened in any material way and that the CAB’s response does nothing to dilute our objection. The scoring is arbitrary and/or unreasonable.

CAB Response

As previously noted, Component 3.1 and the associated performance indicators do not cover private agreements.

We consider that the justification presented in the final report provides the rationale to score PI 3.1.2 Sla at SG80.

We have reviewed the IPNLF objection. If the IA requires it, this work can be done, but in our expert judgement it will make no difference to the assessment as the key framework is regional and the cost is disproportionate and unnecessary to the assessment.

We see no reason to change our scores and determination.

76. IPNLF OBJECTION 49 PI 3.1.2 b

IPNLF
<p>349, The CAB scores the UoA at 60 (in relation to which, see Condition 6 at p.8). SG 60 requires that: "The management system includes consultation processes that obtain relevant information from the main affected parties, including local knowledge, to inform the management system.</p> <p>350, The CAB (p.160) refers to some aspects of IOTC, some aspects of the EU and some aspects of Seychelles. These limited references are made on the mistaken premise that the only jurisdictions covered under this SI are IOTC, EU and Seychelles. This premise is mistaken because, as noted under Objections 37 and 39 above, coastal States and Spain, as a flag State, have been wrongly excluded from Component 3.1 of Principle 3 and hence from the assessment process for this PI. Assessment of SI 3.1.2(b) needs to consider the SGs in respect of the following:</p> <ul style="list-style-type: none">- IOTC- the relevant SFPAs- the relevant private agreements between ANABAC and coastal States- any kinds of relevant access arrangements other than SFPAs and ANABAC/coastal State private agreements- the relevant individual coastal States- the relevant individual flag States <p>351, Awarding a score contrary to the FCR (by wrongly excluding consideration of coastal States and Spain as a flag State) is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.</p>
CAB Response
<p>Objection 49 relates to the IPNLF contention that all coastal states and Spain should have been covered in the analysis of the individual performance indicators within Component 3.1. We consider these points above and conclude that related objections do not have merit.</p> <p>We have reviewed the IPNLF objection. If the IA requires it, this work can be done, but in our expert judgement it will make no difference to the assessment as the key framework is regional and the cost is disproportionate and unnecessary to the assessment.</p> <p>We see no reason to change our scores and determination.</p>

77. IPNLF OBJECTION 50 PI 3.1.2 b

IPNLF
351, SA 4.4.4–4.4.5 (FCR, p.174), which are normative, state that: “SA4.4.4 Consultation processes that exist at a multinational level and a national level shall be included and considered, subject to SA4.1.3. SA4.4.5 Teams shall interpret “local knowledge” to mean: qualitative, and/or anecdotal, and/or quantitative information, and/or data that come from individuals or groups local to the fisheries managed under the UoAs’ management system.” 352, The CAB seems to have made no attempt to assess the UoA against SA 4.4.5 or to address SA 4.4.4 in relation to relevant coastal States (other than the Seychelles). These omissions must be rectified. 353, The CAB, in response to IPNLF (p.263), states that: “The stakeholder’s point on private agreements is moot as private agreements are not considered under Component 3.1. 354, Our point on private agreements is far from moot, for the reasons set out above. Our point is anyway broader than private agreements. The CAB’s response does nothing to dilute our objection and the scoring is arbitrary and/or unreasonable
CAB Response
Objection 50 relates to the IPNLF contention that all coastal states should have been covered in the analysis of the individual performance indicators within Component 3.1. IPNLF extends this observation to specifically include private agreements. We consider these points above and conclude that related objections do not have merit. We have reviewed the IPNLF objection. If the IA requires it, this work can be done, but in our expert judgement it will make no difference to the assessment as the key framework is regional and the cost is disproportionate and unnecessary to the assessment. We see no reason to change our scores and determination.

78. IPNLF OBJECTION 51 PI 3.1.2 c

IPNLF
355, The CAB scores the UoA at 80. SG 80 requires that: “The consultation process provides opportunity for all interested and affected parties to be involved.” 356, The CAB (pp.160-161) refers to some aspects of IOTC, some aspects of the EU and some aspects of Seychelles. These limited references are made on the mistaken premise that the only jurisdictions covered under this SI are IOTC, EU and Seychelles. This premise is mistaken because, as noted under Objections 37 and 39 above, coastal States and Spain, as a flag State, have been wrongly excluded from Component 3.1 of Principle 3 and hence from the assessment process for this PI. Assessment of SI 3.1.2(c) needs to consider the SGs in respect of the following: - IOTC - the relevant SFPAs - the relevant private agreements between ANABAC and coastal States - any kinds of relevant access arrangements other than SFPAs and ANABAC/coastal State private agreements - the relevant individual coastal States - the relevant individual flag States 357, For example, the CAB presents no evidence as to whether “all interested and affected parties” in the coastal States concerned (other than the Seychelles) are provided with an opportunity to be involved, notably prior to or during negotiation by the coastal State of access arrangements with the EU or with ANABAC. In the absence of evidence in this regard, which is a requirement for SG 80, it follows that the UoA cannot meet SG 80.

358, Awarding a score contrary to the FCR (by wrongly excluding consideration of coastal States and Spain as a flag State) is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.

CAB Response

Objection 51 relates to the IPNLF contention that all coastal states and Spain should have been covered in the analysis of the individual performance indicators within Component 3.1. We consider these points above and conclude that related objections do not have merit

We have reviewed the IPNLF objection

We see no reason to change the final report, our scores and determination

79. IPNLF OBJECTION 52 PI 3.1.3 a

IPNLF

Objectives

359, The CAB scores the UoA at 100. SG 100 requires that: "Clear long term objectives that guide decision-making, consistent with MSC Fisheries Standard and the precautionary approach, are explicit within and required by management policy."

360, The CAB (pp.162-163) refers to some aspects of IOTC, some aspects of the EU and some aspects of Seychelles. These limited references are made on the mistaken premise that the only jurisdictions covered under this SI are IOTC, EU and Seychelles. This premise is mistaken because, as noted under Objections 37 and 39 above, coastal States and Spain, as a flag State, have been wrongly excluded from Component 3.1 of Principle 3 and hence from the assessment process for this PI. Assessment of SI 3.1.3(a) needs to consider the SGs in respect of the following:

- IOTC
 - the relevant SFPAs
 - the relevant private agreements between ANABAC and coastal States
 - any kinds of relevant access arrangements other than SFPAs and ANABAC/coastal State
- private agreements
- the relevant individual coastal States
 - the relevant individual flag States

361, For example, GSA 4.5 (FCR, p.479), which is guidance, states that: "The CAB should consider if decisions have been taken on the basis of the ecological health of the UoA and associated ecosystems, or for other reasons that are not compatible with achieving sustainability over the long term." The CAB should consider this for each of the coastal States concerned, including in relation to any private agreements.

362, Awarding a score contrary to the FCR (by wrongly excluding consideration of coastal States and Spain as a flag States) is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable.

CAB Response

Objection 52 relates to the IPNLF contention that all coastal states and Spain should have been covered in the analysis of the individual performance indicators within Component 3.1. We consider these points above and conclude that related objections do not have merit

Objection 52 relates to the IPNLF contention that all coastal states and Spain should have been covered in the analysis of the individual performance indicators within Component 3.1. We consider these points above and conclude that related objections do not have merit

We have reviewed the IPNLF objection. If the IA requires it, this work can be done, but in our expert judgement it will make no difference to the assessment as the key framework is regional and the cost is disproportionate and unnecessary to the assessment.

We see no reason to change our scores and determination.

80. IPNLF OBJECTION 53 PI 3.1.3 a

IPNLF

363, SG 80 and SG 100 for this SI are the same except that SG 100 adds that the objectives concerned must be not just explicit within the management policy but also “required by” the management policy.

364, In seeking to increase the score from 80 to 100, the CAB makes a reference to text from “IOTC 12-01” and then adds that:

“The evidence available for IOTC, EU and Seychelles leads to the conclusion that the long-term objectives and the need for the precautionary approach are explicit. This is evidenced by Resolution 17/01 on yellowfin.”

365, We take issue with this evidence, as used by the CAB to justify an uplift from 80 to 100, for the following reasons:

a, the evidence presented (the text from “IOTC 12-01” and a reference to “Resolution 17/01”) relates just to IOTC, rather than to any other parts of the management policy;

b, the text cited from “IOTC 12-01” focuses on aspects of the precautionary approach rather than on long-term objectives;

c, no details are provided regarding the relevance of “Resolution 17/01”, apart from that it relates to yellowfin; and

d, the text used by the CAB, as cited above, refers to the long-term objectives and the need for the precautionary approach just needing to “explicit”; there is no reference to them being “required”.

366, Overall, it is clear that the CAB, on the basis of the evidence presented, cannot justify an uplift to a score of 100. The scoring is arbitrary and/or unreasonable.

CAB Response

We are unsure what IPNLF is trying to imply in the comments “*In seeking to increase the score from 80 to 100*” and “*cannot justify an uplift to a score of 100*”.

We note the MSC TO response to the second draft report that covered PI 3.1.3.

“Within P3 rationales and associated background information, the team repeatedly references a report produced Medley and Powers (2016). However, this report is an assessment of information similar to the current report, but is in essence a less detailed examination compared to what the current assessment would be able to undertake. As such, relying on this report without referencing primary sources to demonstrate evidence of scoring being met/not met, as seems to be currently the case, does not allow justification to support the team’s conclusion”

We note that MSC TO, PRA and PRC did not comment on the scoring of PI 3.1.3 Sla.

We note the comment by PRB to the Draft Version 2.

Justification is adequate for SG80. The objectives are clearly there. For SG100 it is critical to point to where within management policy there is an explicit “requirement” that clear long-term objectives (consistent with MSC/precautionary principle) are set. Clearly demonstrating this “requirement” means that SG100 is met. If not only SG80 is met resulting in the overall Principle level score falling below 80. The reference for the EU Common Fisheries Policy does sets out objectives, but not a “requirement” for objectives. The justification provided does not state how the Seychelles fisheries law specifies such a “requirement”. So, the focus rightly falls on IOTC 12-01. This clearly “requires” that the precautionary principle is followed and “requires” that reference points and HCRs are implemented. The question is: does this count as a requirement that clear and long-term objectives (consistent with MSC) are set. IOTC 12-01 goes on to “require” that “In the determination of appropriate reference points and harvest control rules, consideration must be given to major uncertainties, including the uncertainty about the status of the stocks relative to the reference points, uncertainty about biological, environmental and socio-economic events and the effects of fishing activities on non-target and associated or dependent species”. Perhaps this “requirement” captures some of the wider MSC objectives, so could be included in the justification to help support scoring at SG100”.

On the basis of that comment we revised the SG100 scoring rational.

We have reviewed the IPNLF objection. If the IA requires it, this work can be done, but in our expert judgement it will make no difference to the assessment as the key framework is regional and the cost is disproportionate and unnecessary to the assessment.

We see no reason to change our scores and determination.

81. IPNLF OBJECTION 54 PI 3.1.2

IPNLF

367, The CAB (pp.164-166) refers to aspects of IOTC, some aspects of the EU, some aspects of Seychelles and an ANABAC/OPAGAC “code of good practice”. Regarding private agreements, the justification (p.164) states simply that: “The approach to private agreements / vessel licensing is within the context of the IOTC. The coastal / island states with agreements / licensing are all members of the IOTC.”

368, These limited references are made on the mistaken premise that the only jurisdictions covered under this SI are IOTC, EU and Seychelles. This premise is mistaken because, as noted under Objections 37 and 39 above, coastal States and Spain, as a flag State, have been wrongly excluded from Component 3.1 of Principle 3 and hence from the assessment process for this PI. Assessment of SI 3.1.3(a) needs to consider the SGs in respect of the following:

- IOTC
- the relevant SFPAs
- the relevant private agreements between ANABAC and coastal States
- any kinds of relevant access arrangements other than SFPAs and ANABAC/coastal State private agreements
- the relevant individual coastal States
- the relevant individual flag States

369, Awarding a score contrary to the FCR (by wrongly excluding consideration of coastal States and Spain as a flag States) is a serious irregularity (procedural and/or non-procedural) and/or the resulting scoring is arbitrary and/or unreasonable

CAB Response

We are unable to understand Objection 54 as presented by IPNLF. The heading to the objection is PI 3.1.2 – Consultation, roles and responsibilities, but under “reason” states 3.2.1(a) – Objectives, before going on to consider SI 3.1.3 (a). The subject matter refers to how we treated coastal states and Spain under Component 3.1.

At the same time, our position on Component 3.1 and coastal states and Spain is clearly articulated above. If that is the case, we disagree with IPNLF objection 54 and contend that there is no irregularity in our approach (serious or otherwise) and our scoring is neither arbitrary or unreasonable.

If the objection relates to PI 3.2.1, after reviewing the position we concluded that the fishery partially met SG80 and a condition was set. This stated

Rationale: There are no explicit short and long-term objectives for the Seychelles skipjack tuna fishery. The overall lack of information on private agreements means that there are no explicit short and long-term objectives for this element of the skipjack tuna fishery using purse seine.

Condition: By the second annual surveillance audit, short and long-term objectives, which are consistent with achieving the outcomes expressed by MSC’s Principles 1 and 2, are explicit within the fishery-specific management system.

We have reviewed the IPNLF objection. If the IA requires it, this work can be done, but in our expert judgement it will make no difference to the assessment as the key framework is regional and the cost is disproportionate and unnecessary to the assessment.

We see no reason to change our scores and determination.

82. IPNLF OBJECTION 55 PI 3.2.2 c

IPNLF

Use of the precautionary approach

371, The CAB scores the UoA at 80. SG 80 requires that: “Decision-making processes use the precautionary approach and are based on best available information.” SG 80 is the only scoring guidepost for this SI.

372, The CAB states that (p.169): “The use of the precautionary approach is explicit within decision making process within the IOTC, the EU and Seychelles, and by implication private agreements”. (Emphasis added.)

373, The reference by the CAB to “by implication” seems to suggest that, because of the use of the precautionary approach being allegedly explicit within the decision-making process within IOTC, EU and Seychelles, the use of the precautionary approach will somehow arise automatically in private agreements.

374, No evidence at all is presented by the CAB to support that argument. In the absence of such evidence, it is necessary instead to consider the private agreements themselves – yet the CAB has also failed to do this.

375, In response to IPNLF’s comments on the Second Report in relation to SI 3.2.2(c), the CAB states (p.265):

“All the coastal / island states with private agreements or direct vessel licensing are members of IOTC or represented in IOTC (French OT). They follow the precautionary approach. The scoring of P3 PIs is not based on an elemental approach.”

376, Thus the CAB, in effect, repeats the argument it set out in its justification regarding this SI (see above). Again, it presents no evidence at all to support the validity of its argument and, again, it fails to consider the text of the private agreements themselves.

377, The CAB states that the scoring of P3 PIs is “not based on an elemental approach”. At p.3 of the Final Report’s executive summary, it states that: “The approach to scoring P3 does not use the elemental approach; rather it considers the way the relevant identified elements work together to meet the various guidelines.”

378, Private agreements are one of the “relevant identified elements” of the fishery. The CAB is claiming that it has considered the way in which this element works with the other elements. (We would add that it refers to meeting “the various guidelines”. We presume it means the scoring guideposts.) Yet it is clear that the CAB has not considered how private agreements work with the other elements. Instead, it has simply presented an unsubstantiated argument (i.e. “and by implication private agreements”) about them.

379, Regarding SI 3.2.2(c), SA 4.8.1 and SA 4.8.2 (FCR, p.178), which are normative, state that:

SA 4.8.1: “The team shall verify that the absence of adequate scientific information is not used as a reason for postponing or failing to take conservation and management measures.”

SA 4.8.2: “The team shall interpret that at SG80 and SG100 the precautionary approach in this PI to mean that decision-making processes use caution when information is uncertain, unreliable or inadequate.”

380, Two private agreements, albeit apparently redacted in parts in both cases, are presented in Appendix 12 of the Final Report. Those private agreements are as follows:

ANABAC–Comoros government: Seychelles-flagged vessels fishing in Comoros waters

ANABAC–Madagascar government: Seychelles-flagged vessels fishing in Madagascar waters

381, We have looked at those agreements, which are located at pp.405–411 and pp.426–453 respectively in the Final Report. The first point to make is that both agreements are provided only in French. The working language of the MSC Objection procedure is English, not French, and therefore both agreements must be made available by the CAB in English. (The same applies to the other materials in Appendix 12 that are currently available only in French.)

382, Regarding both the ANABAC–Comoros agreement and the ANABAC–Madagascar agreement, there are provisions relating to fisheries management. However, none can be said to expressly or implicitly require the use of the precautionary approach – including, but not limited to, as set out in SA 4.8.1 and SA 4.8.2 above.

383, We would add that the ANABAC–Comoros and ANABAC–Madagascar agreements are not the only two private agreements that are relevant in the Echebaster fishery and the CAB must provide, in English, the text of all such agreements (including, but not limited to, the agreement with TAAF; currently only a TAAF instrument, rather than an agreement, is provided).

384, In view of (a) the CAB's failure to justify its claim that the use of the precautionary approach arises "by implication" in private agreements and (b) the apparent absence, in each relevant private agreement, of provisions requiring the use of the precautionary approach, the scoring is arbitrary and/or unreasonable.

CAB Response

Note that P3 relates to the overarching institutional and operational framework; if a specific issue is not implemented that must be covered in the relevant PI within P1 and P2.

PI 3.2.2 covers the decision making process related to the size and scale of the fishery which for the purposes of Component 3.2 relates (MSC CR GSA 4.1) to "*A MSC UoA might include only a sub-set of fishers (vessels, fleet operators, and individual fishermen) within a wider fleet of fishers fishing for the same biologically distinct stock, using the same method, under the same or similar management system or arrangements. However, teams should note that it is the management of the wider fleet which denotes the specific "fishery" that is the subject of assessment under the fishery-specific management system Pls. Special or additional management arrangements or features unique to the vessels in the UoA may be considered and reflected in the scores under the fishery-specific management system Pls*".

Cooperating parties to IOTC agree (Articles IX and X) to incorporate IOTC regulations within national regulations, unless a party objects to the regulation.

The Echebaster vessels and other European member state and Seychelles flagged purse seiners working within the IO are obliged to implement IOTC regulations. We clearly articulate our rationale for concluding that IOTC policy adopts the precautionary approach. Whether or not other segments of the tuna catching fleet (including the artisanal sectors of individual countries) implement a precautionary approach is not a subject for consideration in an MSC assessment; the MSC standard is not related to tuna fishing policy for all fleets.

It appears clear, that private agreements fit into IOTC, Seychelles and EU policy.

Of the peer reviewers only PRA made a comment on PI 3.2.2 SIC to which we responded. MSC TO made no comment on PI 3.2.2 c in their initial comments and their comments on the Final Report.

The requirements of SA 4.8.1 and SA 4.8.2 are covered by the IOTC in which the EU, Seychelles and the coastal states participate.

It would appear that IPNLF had no problems in reading the Comoros and Madagascar documents. We therefore do not consider this is a substantive matter. Whilst we have had regard to PD2.10.4, we consider this applies to documents provided as the submissions as part of the Objection Process, not whether the full text of every supporting document attached to a Final Report or linked to in a Final Report must always be provided additionally in English. This is not expressly required in the CR. In our view such a blanket requirement would render the process and costs of assessment not only disproportionate but in many cases unachievable and would be likely to render certification unachievable other than in the English-speaking world (see below). We have considered whether a translation should be provided in this case, and if this is required by the I.A. then this specific translation exercise will be undertaken, but in our view we consider the text currently attached is more than sufficient for the point made, being in the relevant national language, and having been reviewed by the CAB team. In our view objectors who are also stakeholders may if they wish obtain their own translations. We confirm that Acoura when commissioning an assessment team has appropriate regard to the relevant languages required, and the usual practice adopted by CABs to deal with this scenario is that where practicable the assessment team include members who are fluent in relevant languages, and where this is not possible a suitable translator is arranged. [NB please confirm!]

We do not agree, if this is IPNLF's point, that every text of any document whenever it is referred to must be in English. This is not practicable. The scale would be enormous. Self-evidently in many cases relevant national documents including national legislation, national policy, national reviews etc, will only be in the national language. There are many MSC-certified fisheries which are in non-English speaking jurisdictions, including China, Japan, Russia [add any others you wish]. The same is true of other documents a CAB may have regard to, such as academic articles, or [include other examples?]. We also note there are or may be specific legal processes around authenticating formal legal documents such as treaties into languages other than the original and that translations do not have the accuracy of original authenticated texts. In our view for all these reasons it is appropriate to retain such documents in the national language.

Component 3.2. covers the total purse seine fishery of the EU and Seychelles. A substantial amount of work would be required to assess all potential countries and we consider this would not be relevant in terms of determining the sustainability of the UOA.

As noted above, the Echebastar vessels and other purse seiners fish in the Indian Ocean on the basis of IOTC rules and regulations.

The validity of the IPNLF objection rests on whether each and every private agreement must be included and evaluated or if the agreements en masse can be regarded as in line with the IOTC and EU requirements. It would be very time consuming to go to the level of detail for every possible point that IPNLF appears to consider as a requirement.

We consider that such depth of analysis is not the intent of the MSC, and indeed we question the need for this based on MSC CR GSA 4.1 that the purpose of P3 is "*to ensure that there is an institutional and operational framework appropriate to the size and scale of the UoA for implementing Principles 1 and 2, and that this framework is capable of delivering sustainable fisheries in accordance with the outcomes articulated in these Principles*".

As such, it may be the case the IPNLF comments are vexatious rather than substantive.

We have reviewed the IPNLF objection We have reviewed the IPNLF objection

We see no reason to change our scores and determination. If required we can edit the report.

83. IPNLF OBJECTION 56 PI 3.2.2 d

IPNLF

385, The CAB scores the UoA at SG 60. SG 60 requires that: "Some information on the fishery's performance and management action is generally available on request to stakeholders."

386, SA 4.8.5 (FCR, p.179), which is normative, states that:

"At the SG60 level, at least a general summary of information on subsidies, allocation, compliance and fisheries management decisions should be available to stakeholders on request."

387, To justify the score of 60, the CAB (p.170) states that: "A wealth of information is available on the performance of the purse seine skipjack fishery, mainly through IOTC reports and statistics but also from the SFP web site."

388, However, this does not meet the test in SA 4.8.5. SA 4.8.5 requires that a general summary of information on four subjects should be available to stakeholders on request. Those four subjects are as follows: subsidies; allocation; compliance; and fisheries management decisions.

389, Simply stating that there is a "wealth of information" is not sufficient. No systematic attempt has been made by the CAB to demonstrate that SA 4.8.5, with its four clearly-stated subject areas, is met. Therefore the CAB has failed to adequately justify that even SG 60 is met.

390, The scoring is arbitrary and/or unreasonable.

CAB Response

PI 3.2.2 Slid SG60 requires "Some information on the fishery's performance and management action is generally available on request to stakeholders".

This begs the questions – what does "generally available" and who "request"?

The four areas are subsidies, allocation, compliance and fisheries management decisions.

MSC CR GSA 4.8 "*At the SG60 level, it should be expected that at least a general summary of information listed on SA4.8.5 on, subsidies, allocation, compliance and fisheries management decisions) is available to (fishery, government and non-government) stakeholders on request*".

Regarding the four areas:

Subsidies: Information on subsidies is available from the EU and the Government of Seychelles.

Allocation: we are not sure of the relevance of this issue due to the current lack of quotas and allocation between fishers. This may change in the near future (see reports of the IOTC Commission meeting in May 2018).

Compliance: Information is available from the Compliance Committee (<http://www.iotc.org/compliance/coc>) and country reports (Fisheries management decisions: See <http://www.iotc.org/cmms> and annual IOTC meetings (e.g. <http://www.iotc.org/documents/conservation-and-management-measures-adopted-iotc-its-22nd-session>).

A report responding to the IPNLF objection would require a lengthy document which, in our view, would contribute little or nothing to measuring the sustainability credentials of the Echebaster fishery in the context of the MSC standard. We can prepare this if required, but would consider such to be an inadequate response to what may be considered a vexatious objection by IPNLF.

We have reviewed the IPNLF objection

We see no reason to change our scores and determination. We can review the contents of the final report if required.

84. IPNLF OBJECTION 57 PI 3.2.2 d

IPNLF

391, The CAB scores the UoA at 60. SG 60 requires that: “Some information on the fishery’s performance and management action is generally available on request to stakeholders.”

392, SA 4.8.5 (FCR, p.179), which is normative, states that:

“At the SG60 level, at least a general summary of information on subsidies, allocation, compliance and fisheries management decisions should be available to stakeholders on request.”

393, The CAB states (p.170) that “limited specific information is available on the fisheries conducted under private arrangements”. It is not stated what “specific information”, though “limited”, is available. In addition, the CAB is silent as to whether or not this information is available to stakeholders on request (cf. SG 60 and SA 4.8.5).

394, The CAB made a similar statement in the Second Report. In response to IPNLF’s critique of that statement, the CAB responded (p.266) as follows: “The private agreements are included in a report annex. The scoring of P3 PIs is not based on an elemental approach.”

395, The CAB is referring to the inclusion of private agreements in Appendix 12 of the Final Report. In that regard, see below.

396, The CAB also states that the scoring of P3 PIs is “not based on an elemental approach”. At p.3 of the Final Report’s executive summary, it states that: “The approach to scoring P3 does not use the elemental approach; rather it considers the way the relevant identified elements work together to meet the various guidelines.”

397, Private agreements are one of the “relevant identified elements” of the fishery. The CAB is claiming that it has considered the way in which this element works with the other elements. (We would add that it refers to meeting “the various guidelines”. We presume it means the scoring guideposts.) Yet it is clear that the CAB has not considered how private agreements work with the other elements. Instead, it has simply made a single, unelaborated, statement (i.e. “limited specific information is available on the fisheries conducted under private arrangements”) about them.

398, Condition 6, which relates to SI 3.2.2(d) and reads as follows, helps to frame the problem:

“By the third annual surveillance audit ... [i]nformation on the fishery’s performance and management action relevant to the Seychelles fishery and private agreements is available on request, and explanations are provided for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring, evaluation and review activity.” [Emphasis added.]

399, The implication of Condition 6 is that information on the fishery’s performance and management action relevant to private agreements is not currently available.

400, In the Second Report, the CAB (at p.152) set out text from EJF, Oceana, Pew, WWF (November 2016), as follows:

“A major gap that limits the effective oversight of vessels fishing under private agreements is the lack of requirements for details of these agreements to be reported to the EU flag State and the European Commission, or for key information to be made publicly available. The lack of public information on these agreements makes it extremely difficult to determine the number of EU vessels fishing under such agreements, where these vessels are fishing and for which species, in order to assess the impact on local fish stocks”

Other documents, including some more recent than the above document, refer to the same problems: European Court of Auditors, 2015; EPRI - European Parliamentary Research Service, April 2016; EPRI - European Parliamentary Research Service, July 2017; Oceana, September 2017; European Commission, October 2017.

401, Two private agreements, albeit apparently redacted in parts in both cases, are presented in Appendix 12 of the Final Report. Those private agreements are as follows:

ANABAC-Comoros government: Seychelles-flagged vessels fishing in Comoros waters

ANABAC-Madagascar government: Seychelles-flagged vessels fishing in Madagascar waters

402, We have looked at those agreements, which are located at pp.405–411 and pp.426–453 respectively in the Final Report. (We reiterate the point, already made above in respect of SI 3.2.2(c), about the need for these documents to be available in English.)

403, Regarding both the ANABAC–Comoros agreement and the ANABAC–Madagascar agreement, there are provisions relating to fisheries management. However, it is not clear, for example, what number of vessels are fishing under these agreements and for what quantities of fish (and, at least in the case of the ANABAC–Comoros agreement, for what species). (Indeed, as noted above, some provisions of both agreements are redacted.) 404, We would add that the ANABAC–Comoros and ANABAC–Madagascar agreements are not the only two private agreements that are relevant in the Echebaster fishery and the CAB must provide, in English, the text of all such agreements (including, but not limited to, the agreement with TAAF; currently only a TAAF instrument, rather than an agreement, is provided).

In view of (a) the CAB’s failure to show that, in respect of private agreements, the test in SG 60 is met and (b) the apparent absence, in each relevant private agreement, of information that allows the test in SG 60 to be met, the scoring is arbitrary and/or unreasonable.

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[http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/608651/EPRI_BRI\(2017\)608651_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/608651/EPRI_BRI(2017)608651_EN.pdf)

Oceana. “Fishing the Boundaries of Law: How the Exclusivity Clause in EU Fisheries Agreements was Undermined”. September 2017. <http://usa.oceana.org/publications/reports/fishing-boundaries-law-how-exclusivity-clause-eu-fisheries-agreements-was>

European Commission. “COM(2017) 633 Communication from the Commission to the European Parliament pursuant to Article 294(6) of the Treaty on the Functioning of the European Union concerning the position of the Council on the adoption of a Regulation of the European Parliament and of the Council on the sustainable management of external fishing fleets, repealing Council Regulation (EC) No 1006/2008”. October 2017 <https://ec.europa.eu/transparency/regdoc/rep/1/2017/EN/COM-2017-633-F1-EN-MAIN-PART-1.PDF>

CAB Response

The IPNLF objection lacks clarity. It either, repeats Objection 56 (which we fully respond to above), or introduces a new issue covering private agreements.

We would argue that more than a general summary is available, but insufficient information is available on the private agreements. The condition responds to that concern.

We agree that the justification is vague here and we will amend to the following:

IOTC Reports and statistics which provides information on the fishery’s performance and management for the purse seine skipjack fishery are available for stakeholders to view and download from the website (www.iotc.org) at any point. Additionally, the Seychelles Fishing Authority website contains information on the fishery (<http://www.sfa.sc/>).

SG 60 is met.

Despite this information being available to stakeholders, it has been highlighted that it is not always clear as to how available information has been used or why it has not been used (Powers & Medley, 2016).

The EU's Long Distant Advisory Council (LDAC) and the need for explicit responses from the European Commission (EC) and Member States (MS) satisfies SG80 for the EU jurisdiction. However, specific information is limited to...for those fisheries conducted under private arrangements. As such, explanations are *not* provided for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring, evaluation and review activity.

SG80 is not met.

SG100 is not met.

Our rationale is clear; the fishery does not meet SG80 as "*All information is published by the IOTC and available to stakeholders, although, as highlighted by Powers & Medley (2016), it is not always clear as to how available information has been used or why it has not been used. The LMAC and the need for explicit responses from the EC and MS satisfies SG80 for the EU jurisdiction. However, limited specific information is available on the fisheries conducted under private arrangements*".

This leads to the Condition which requires "*Information on the fishery's performance and management action relevant to the Seychelles fishery and private agreements is available on request, and explanations are provided for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring, evaluation and review activity*" which the client is required to meet by the third annual surveillance audit.

We are unable to be prescriptive in setting definitions, the type and quality of information that is available by the third annual surveillance audit will help determine if the condition will be closed.

We consider the fishery in the context of the MSC standard. The quoted comment relates to local fish stocks, the number of vessels fishing is not an issue (any of the vessels included within the agreement may fish; indeed if the tuna does not migrate into the waters of a specific EEZ then no vessels will fish.

403 – this issue is not related to the MSC standard.

A report responding to the IPNLF objection would require a lengthy document which, in our view, would contribute little or nothing to measuring the sustainability credentials of the Echebaster fishery in the context of the MSC standard. We can prepare this if required, but would consider such to be an inadequate response to what may be considered a vexatious objection by IPNLF

We have reviewed the IPNLF objection

We see no reason to change our scores and determination. We can review the contents of the final report if required.

85. IPNLF OBJECTION 58 PI 3.2.2 d

IPNLF

405, The CAB scores the UoA at 60. SG 60 requires that: “Some information on the fishery’s performance and management action is generally available on request to stakeholders.”

406, SA 4.8.5 (FCR, p.179), which is normative, states that:

“At the SG60 level, at least a general summary of information on subsidies, allocation, compliance and fisheries management decisions should be available to stakeholders on request.”

407, Therefore, for a score of 60, there must be “at least a general summary of information” on the following four things: subsidies, allocation, compliance and fisheries management decisions. One of those four things is subsidies. Yet the CAB, in its justification, fails to state that a general summary of information on subsidies is available.

408, The Final Report states (at pp.16 and 173) that “[t]he Echebaster fleet, in common with other EU fleet segments, works without subsidy”. However, we consider that the EU’s SFPAs, in that they involve payment by the EU to the relevant coastal States, are a form a subsidy; and the Spanish-flagged Echebaster vessels benefit from SFPAs. In addition, the Final Report (p.144) states that: “Standing (2016) reports that several subsidies are provided to the fisheries sector in Seychelles [...]. Therefore, we consider that subsidies are relevant to this UoA and that the requirements of SG 60 must be shown by the CAB to be met in that regard. In that absence of that, the scoring is arbitrary and/or unreasonable.

CAB Response

There is a considerable difference between what IPNLF claims in Objection 58 (the relevance of subsidies and their existence) and whether or not subsidies are available in the EU and / or the Seychelles) and whether general information on them is available. The quoted report by Standing indicates that subsidies are available in the Seychelles – we consider that as information. We are not required to judge whether subsidies form a barrier to sustainability. Potentially, IPNLF is confusing the requirements of MSC CR 2.0 with those of MSC CR 1.3 where the standard in relation to subsidies was explicit.

A substantial body of reports is available on whether or not the EU subsidises its fishery operations i.e. substantial information is available.

That is not an issue for this assessment and we do not hold any view of whether or not EU payments under the SFPAs constitute a subsidy. Equally, the opinion of IPNLF is not relevant to the scoring of PI 3.2.2 SlD.

We disagree with IPNLF objection 58; the scoring of PI 3.2.2 d is neither arbitrary or unreasonable.

We have reviewed the IPNLF objection

We see no reason to change the final report, our scores and determination

86. IPNLF OBJECTION 59 PI 3.2.3 a

IPNLF
410, SA 4.9.2 (FCR, p.181), which is normative, states that: “SA4.9.2 The team’s judgement on this PI shall be informed, to the extent possible, by independent and credible information from relevant compliance and enforcement agencies or individuals and/or stakeholders.” 411, There is no evidence, from the CAB’s justification for this SI, that the team’s judgment has been informed “to the extent possible, by independent and credible information from relevant compliance and enforcement agencies or individuals and/or stakeholders”. Instead, the justification relates to processes and assumptions 412, SA 4.9.2 needs to be applied by the CAB, otherwise the scoring is arbitrary and/or unreasonable.
CAB Response
IPNLF Objection 59 relates to PI 3.2.3 Sla. In our opinion, the objection lacks clarity on what exactly is being objected to. We note that MSC TO, PRA, PRC and other stakeholders do not find an issue with the rationale and scoring for PI 3.2.3 Sla. PRB makes a number of comments before concluding that “overall, justification is insufficient to conclude that the control and enforcement system is comprehensive”. Following review, we reduced the score for PI 3.2.3 Sla from SG100 (<i>A comprehensive monitoring, control and surveillance system has been implemented in the fishery...</i>) to SG80 (<i>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</i>). IPNLF is correct in defining SA 4.9.2. We note there is no MSC Guidance for SI 3.2.3 Sla. Our rationale that SG80 has been implemented is based on review to copious information, mainly from the IOTC but also others such as SMARTFISH and the Seychelles officials. We have reviewed the IPNLF objection We see no reason to change the final report, our scores and determination

87. IPNLF OBJECTION 60 PI 3.2.3 a

IPNLF
413, The CAB scores the UoA at 80. SG 80 requires that: “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.” 414, The CAB states (p.172) that certain MSC requirements “are ... explicit in the private fishing agreements”. By implication from earlier text, the MSC requirements it appears to refer to are “daily reporting, entry and exit reports, transhipments and landings, VMS, areas to be fishing and observers”. 415, In response to IPNLF’s comments on the Second Report in relation to SI 3.2.3(a), the CAB states (p.267): “The main text covering fishing rights in the EEZs of the various coastal / island states has been substantially amended. All the coastal / island states with private agreements or direct vessel licensing are members of IOTC or represented in IOTC (French OT). The vessels themselves must follow the onerous regulations of their flag state. We consider that the scoring rationale provides the justification for the allocated score.” 416, By this statement, the CAB seems to consider that it does not need to assess the private agreements and that, instead, a combination of IOTC membership of the coastal States and “the onerous regulations” of the relevant flag States cover matters. That is a strange position to take in view of (a) the important role of private agreements in the fishery and (b) the express recognition by the CAB, in its justification for scoring of SI 3.2.3(a) (see above), of private agreements. 417, Two private agreements, albeit apparently redacted in parts in both cases, are presented in Appendix 12 of the Final Report. Those private agreements are as follows: ANABAC–Comoros government: Seychelles-flagged vessels fishing in Comoros waters

ANABAC–Madagascar government: Seychelles-flagged vessels fishing in Madagascar waters

418, We have looked at those agreements, which are located at pp.405–411 and pp.426–453 respectively in the Final Report. (We reiterate the point, already made above in respect of SI 3.2.2(c), about the need for these documents to be available in English.)

419, Because the documents are in French, it is not entirely clear to us what MCS provisions they contain. The contents summaries of the agreements provided by the CAB at pp.151 and 153 do refer to some MCS provisions; but this is only as one-liner summaries, and so we will need the text of the relevant provisions in English in order to be clear about what provisions do (or do not) exist

420, We would add that the ANABAC–Comoros and ANABAC–Madagascar agreements are not the only two private agreements that are relevant in the Echebaster fishery and the CAB must provide, in English, the text of all such agreements (including, but not limited to, the agreement with TAAF; currently only a TAAF instrument, rather than an agreement, is provided).

Regarding MCS provisions in private agreements more generally, see: European Court of Auditors, 2015; EPERS - European Parliamentary Research Service, April 2016; EJF, Oceana, Pew, WWF, November 2016 ; EPERS - European Parliamentary Research Service, July 2017; Oceana, September 2017; European Commission, October 2017.

421, Furthermore, SG 80 requires not only that “[a] monitoring, control and surveillance system has been implemented in the fishery” but that, in addition, that system “has demonstrated an ability to enforce relevant management measures, strategies and/or rules”

422, The CAB presents no evidence at all that the MSC provisions of the private agreements have “demonstrated an ability to enforce relevant management measures, strategies and/or rules”. (Indeed, the CAB refers to “weaknesses in individual countries”.)

423, We would add that in the scoring of this SI, the red card that Comoros has received under the IUU Regulation (see Objection 37 above) must be taken into account by the CAB.

423, We would add that in the scoring of this SI, the red card that Comoros has received under the IUU Regulation (see Objection 37 above) must be taken into account by the CAB.

424, In view of (a) the CAB’s failure to demonstrate, by reference to English translations of all relevant private agreements, its assertion that MSC requirements “are ... explicit in the private fishing agreements” and (b) the CAB’s failure to show that the MSC provisions of the private agreements have “demonstrated an ability to enforce relevant management measures, strategies and/or rules”, the scoring is arbitrary and/or unreasonable

References:

European Court of Auditors. “Special Report: Are the Fisheries Partnership Agreements well managed by the Commission?” 2015
https://www.eca.europa.eu/Lists/ECADocuments/SR15_11/SR_FISHERIES_EN.pdf

EPERS - European Parliamentary Research Service. “Briefing: Initial Appraisal of a European Commission Impact Assessment: Sustainable management of external fishing fleets: Impact Assessment (SWD (2015) 276, SWD (2015) 279 (summary)) of a Commission proposal for a Regulation of the European Parliament and of the Council on the sustainable management of external fishing fleets, repealing Council Regulation (EC) No 1006/2008 (COM (2015)636)”. April 2016
[http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/579331/EPERS_BRI\(2016\)579331_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/579331/EPERS_BRI(2016)579331_EN.pdf)

EJF, Oceana, Pew, WWF. “European vessels fishing under the radar: The need to regulate private and chartering agreements for access to external waters”. November 2016.
<http://www.whofishesfar.org/files/Private.Agreements.ENG.1DEC.high.pdf>

EPERS - European Parliamentary Research Service. “Briefing: EU Legislation in Progress: New rules for managing the EU external fishing fleet”. July 2017
[http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/608651/EPERS_BRI\(2017\)608651_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/608651/EPERS_BRI(2017)608651_EN.pdf)

Oceana. “Fishing the Boundaries of Law: How the Exclusivity Clause in EU Fisheries Agreements was Undermined”. September 2017. <http://usa.oceana.org/publications/reports/fishing-boundaries-law-how-exclusivity-clause-eu-fisheries-agreements-was>

European Commission. “COM(2017) 633 Communication from the Commission to the European Parliament pursuant to Article 294(6) of the Treaty on the Functioning of the European Union concerning the position of the Council on the adoption of a Regulation of the European Parliament and of the Council on the sustainable management of external fishing fleets, repealing Council Regulation (EC) No 1006/2008”. October 2017 <https://ec.europa.eu/transparency/regdoc/rep/1/2017/EN/COM-2017-633-F1-EN-MAIN-PART-1.PDF>

In view of (a) the CAB's failure to demonstrate, by reference to English translations of all relevant private agreements, its assertion that MSC requirements "are ... explicit in the private fishing agreements" and (b) the CAB's failure to show that the MSC provisions of the private agreements have "demonstrated an ability to enforce relevant management measures, strategies and/or rules", the scoring is arbitrary and/or unreasonable.

CAB Response

416 - We do not understand the point that IPNLF is trying to make.

We have articulated above why we do not agree with IPNLF. However, to reiterate. Rather than imply wrong-doing and question the integrity of the client and the expert team, if IPNLF has any evidence that Spanish flagged vessels have fished Comoros waters since the issuance of the red card then it should not only provide us with the information, but also contact the responsible law enforcement agency as Echebaster would, allegedly, be guilty of IUU fishing.

The weaknesses of the MCS system of individual coastal states is openly acknowledged in the report. The main cause of this has been the lack of resources. As we note, over recent years, (e.g. SMARTFISH since 2009; Regional Plan for Fisheries Surveillance (PRSP) from 2007; and FISH-I Africa from 2014) considerable international support has been provided to the region to strengthen the joint MCS capacity in the Region. This has met, and continues to meet, with some success. However, an MSC assessment is not the place to provide a critique of these issues.

If IPNLF has evidence that a "*monitoring, control and surveillance system has NOT been implemented in the fishery and has NOT demonstrated an ability to enforce relevant management measures, strategies and/or rules.*" Note, the important word is "fishery" i.e. the EU and Seychelles purse seiners fishing tuna in the Indian Ocean. If IPNLF has any evidence of infringements by this vessel group, we would be happy to consider this in the scoring of the PI.

We have reviewed the IPNLF objection

We see no reason to change our scores and determination. We can review the contents of the final report if required.

88. IPNLF OBJECTION 61 PI 3.2.3 b

IPNLF

425, The CAB scores the UoA at 80. SG 80 requires that: “Sanctions to deal with non-compliance exist, are consistently applied and thought to provide effective deterrence.”

426, SG 80 requires that there are sanctions to deal with non-compliance and that (a) they are consistently applied and (b) they are thought to provide effective deterrence.

427, The CAB cites evidence that sanctions exist under the SFPAs and under Seychelles national fisheries law. Regarding private agreements, it adds that (p.173): “Infractions and sanctions are covered to some degree in the private agreements.” No specific evidence for that statement is provided. This is inadequate. Private agreements are an important part of this UoA and their provisions on sanctions should be set out clearly to justify the CAB’s statement.

428, In response to IPNLF’s comments on the Second Report in relation to SI 3.2.3(b), the CAB states (p.268):

“The vessels are subject to the regulations of the flag states that incorporate the IOTC regulations and resolutions. Sanctions on illegal activity would be applied by the flag state. The situation is very clear – IUU fishing will be sanctioned by inclusion of an offending vessel on the IUU list. A number of other sanctions exist. The fisheries in the private agreements / direct vessel licenses are subject to the same approach and are not independent. Echebaster vessels are subject to 100 % observer coverage and strict reporting requirements. We consider that the scoring rationale provides the justification for the allocated score.”

429, By this statement, the CAB seems to imply that it does not need to assess the private agreements and that, instead, the application of sanctions by the flag State concerned would cover matters. That is a strange position to take in view of (a) the important role of private agreements in the fishery, (b) the express recognition by the CAB, in its justification for scoring of SI 3.2.3(b) (see above), of private agreements and (c) the existence in international law of an enforcement jurisdiction for coastal States in their EEZs (see Article 73 of UNCLOS).

430, Two private agreements, albeit apparently redacted in parts in both cases, are presented in Appendix 12 of the Final Report. Those private agreements are as follows:

ANABAC–Comoros government: Seychelles-flagged vessels fishing in Comoros waters

ANABAC–Madagascar government: Seychelles-flagged vessels fishing in Madagascar waters

431, We have looked at those agreements, which are located at pp.405–411 and pp.426–453 respectively in the Final Report. (We reiterate the point, already made above in respect of SI 3.2.2(c), about the need for these documents to be available in English.)

432, Because the agreements are in French, it is not entirely clear to us what sanctions are established by them. However, the contents summaries of the agreements provided by the CAB at pp.151 and 153 do not refer to any provision on sanctions in either the ANABAC–Comoros agreement or the ANABAC–Madagascar agreement.

433, We would add that the ANABAC–Comoros and ANABAC–Madagascar agreements are not the only two private agreements that are relevant in the Echebaster fishery and the CAB must provide, in English, the text of all such agreements (including, but not limited to, the agreement with TAAF; currently only a TAAF instrument, rather than an agreement, is provided).

Regarding sanctions provisions in private agreements more generally, see: European Court of Auditors, 2015; EPRS - European Parliamentary Research Service, April 2016; EJF, Oceana, Pew, WWF, November 2016 ; EPRS - European Parliamentary Research Service, July 2017; Oceana, September 2017; European Commission, October 2017.

434, Even if evidence does become available that sanctions are established by the private agreements, there needs to be evidence that they are consistently applied *and* that they are thought to provide effective deterrence. Evidence for neither of these requirements, let alone of both of them (as is required by SG 80), is provided by the CAB.

435, In that regard, we would add that GSA 4.9 (p.483), which is guidance, states that:

“At SG80 and SG100 for scoring issue (b), in some fisheries management systems, or for particular types of fisheries, it may be difficult to demonstrate an ability to enforce relevant management measures, strategies and/or rules if violations are rare. However, an absence of violations (or absence of a record of sanctions and penalties for violations) does not necessarily indicate that compliance and

enforcement are effective; it could mean that MCS is in fact ineffective and what is happening is an absence of detection.”

436, We would add that in the scoring of this SI, the red card that Comoros has received under the IUU Regulation (see Objection 37 above) must be taken into account by the CAB.

References:

European Court of Auditors. “Special Report: Are the Fisheries Partnership Agreements well managed by the Commission?” 2015
https://www.eca.europa.eu/Lists/ECADocuments/SR15_11/SR_FISHERIES_EN.pdf

EPRI - European Parliamentary Research Service. “Briefing: Initial Appraisal of a European Commission Impact Assessment: Sustainable management of external fishing fleets: Impact Assessment (SWD (2015) 276, SWD (2015) 279 (summary)) of a Commission proposal for a Regulation of the European Parliament and of the Council on the sustainable management of external fishing fleets, repealing Council Regulation (EC) No 1006/2008 (COM (2015)636)”. April 2016
[http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/579331/EPRI_BRI\(2016\)579331_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/579331/EPRI_BRI(2016)579331_EN.pdf)

EJF, Oceana, Pew, WWF. “European vessels fishing under the radar: The need to regulate private and chartering agreements for access to external waters”. November 2016.
<http://www.whofishesfar.org/files/Private.Agreements.ENG.1DEC.high.pdf>

EPRI - European Parliamentary Research Service. “Briefing: EU Legislation in Progress: New rules for managing the EU external fishing fleet”. July 2017
[http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/608651/EPRI_BRI\(2017\)608651_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/608651/EPRI_BRI(2017)608651_EN.pdf)

Oceana. “Fishing the Boundaries of Law: How the Exclusivity Clause in EU Fisheries Agreements was Undermined”. September 2017. <http://usa.oceana.org/publications/reports/fishing-boundaries-law-how-exclusivity-clause-eu-fisheries-agreements-was>

European Commission. “COM(2017) 633 Communication from the Commission to the European Parliament pursuant to Article 294(6) of the Treaty on the Functioning of the European Union concerning the position of the Council on the adoption of a Regulation of the European Parliament and of the Council on the sustainable management of external fishing fleets, repealing Council Regulation (EC) No 1006/2008”. October 2017 <https://ec.europa.eu/transparency/regdoc/rep/1/2017/EN/COM-2017-633-F1-EN-MAIN-PART-1.PDF>

437, In view of the CAB’s failure to provide evidence to show that a score of 80 is met, the scoring is arbitrary and/or unreasonable.

CAB Response

It would be helpful if IPNLF quoted the whole sentence i.e. *“Infractions and sanctions are covered to some degree in the private agreements, but in relation to Echebaster the main issues are covered by IOTC and the requirements of the flag state”*.

If required by the IA we can develop the rationale and extend consideration to other coastal states (given the absence of fishing effort by Echebaster we would exclude Comoros). However, we consider the existing rationale to justify that the fishery meets SG80 i.e. *Sanctions to deal with noncompliance exist, are consistently applied and thought to provide effective deterrence*. The sanctions exist at the level of the EU and Seychelles as monitored by the IOTC compliance committee.

What evidence does IPNLF have to support its comments. We would have welcomed its information on this but IPNLF chose not to participate in the site visit and did not present an evidence to us for consideration.

We have seen no evidence of failure of Echebaster to apply the measures, strategies and/or rules. If IPNLF has evidence of any violations by Echebaster, we would be happy to review this in the context of the scoring justification.

We have reviewed the IPNLF objection

We see no reason to change our scores and determination. We can review the contents of the final report if required.

89. IPNLF OBJECTION 62 PI 3.2.3 c

IPNLF

438, SA 4.9.1–4.9.2 (FCR, p.181), which is normative, states that:

“SA4.9.1 In scoring issue (c) the team should consider whether “fishers cooperate, where necessary, with management authorities in the collection of catch, discard and other information that is of importance to the effective management of the resources and the fishery” as one of the elements that should influence scoring.

439, SA4.9.2 The team’s judgement on this PI shall be informed, to the extent possible, by independent and credible information from relevant compliance and enforcement agencies or individuals and/or stakeholders.”

440, These requirements must be applied by the CAB. Regarding SA 4.9.2, we note that the CAB refers to a stakeholder interview with Echebaster whereas SA 4.9.2 refers to “independent” information (albeit “to the extent possible”). The CAB must demonstrate adherence to SA 4.9.2.

441, As a result of these omissions, the scoring is arbitrary and/or unreasonable.

CAB Response

See the rationale for SG60 – *“Echebaster reports (stakeholder interview) that any company related issues over recent years have related to form rather than substance e.g. due to internal issues, national authorities may not always have received vessel reports, and changes in policy in individual countries resulting from a change in government. In common with other vessels, Echebaster provides substantial information to scientists, works in conjunction with AZTI and provides data from FADs. The Seychelles authorities acknowledge that Echebaster has been to the fore in cooperating with them. Other fishers work in a similar way e.g. OPAGAC cooperating in identifying the location of derelict FADs. Both OPAGAC and ANABAC are part of the FIP to support sustainable tuna fisheries, including that in the IO. The Echebaster fleet, in common with other EU fleet segments, works without subsidy. Echebaster informs their captains and crew of their obligations and there is a good practices manual”.*

We have reviewed the IPNLF objection

We see no reason to change the final report, our scores and determination

90. IPNLF OBJECTION 63 PI 3.2.3 c

IPNLF

442, The CAB scores the UoA at 100. SG 100 requires 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.

443, The CAB, in its justification, makes no reference at all to private agreements

444, In response to IPNLF’s comments on the Second Report in relation to SI 3.2.3(c), the CAB states (p.269):

“In our view, the nature of the private agreements bears no relation to compliance as the vessels must meet the requirements of the IOTC and their flag states. Nor, is it possible to consider issues on cooperation on an EEZ by EEZ basis. As noted in the rationale, in the past (2012) a single Spanish purse seiner was subject to the judicial system. At the moment, there is an unproved allegation that an Echebaster vessel fished illegally in the Maldives EEZ. No other transgressions or potential transgressions have been identified. If there have been any, then it is for the stakeholder to provide evidence. In the absence of such evidence we must assume that the stakeholder does not have the basis to contest the scoring of the Slc. We reviewed the Maldives report. While we find it difficult to understand the scoring rationale and why Slc SG100 was not met, we presume it is due to some fishers do not complete log books. This is not the case for Echebaster vessels. We consider that the scoring rationale provides the justification for the allocated score.”

445, Thus the CAB’s position is that “the nature of the private agreements bears no relation to compliance as the vessels must meet the requirements of the IOTC and their flag states” (emphasis added). By this, the CAB seems to imply that it does not need to assess the private agreements and that, instead, the application of sanctions by the flag State concerned would cover matters.

446, That position is, in effect, brushing aside the enforcement jurisdiction of a coastal State in its EEZ pursuant to Article 73 of UNCLOS as an irrelevance – a position that is not only disrespectful of the coastal States and their sovereign rights but also without any basis in international law. It is an extraordinary position. The role of coastal States regarding compliance by foreign-flagged vessels in their EEZs, whether in the context of private agreements or otherwise, is very relevant and it is unacceptable for the CAB to focus exclusively on the role of flag States

447, 100 is too high a score for this UoA. In view of the lack of transparency about private agreements and about the activities of vessels fishing under those agreements (see SI 3.2.2(d) above), there simply cannot be “a high degree of confidence” as required by SG 100.

448, We would add that SA 4.9.1 (FCR, p.181), which is normative, states that:

“In scoring issue (c) the team should consider whether “fishers cooperate, where necessary, with management authorities in the collection of catch, discard and other information that is of importance to the effective management of the resources and the fishery” as one of the elements that should influence scoring.”

449, Regarding SA4.9.1, there is no evidence that the CAB has applied this requirement regarding private agreements.

Regarding compliance under private agreements, see also: European Court of Auditors, 2015; EPRA - European Parliamentary Research Service, April 2016; EJF, Oceana, Pew, WWF, November 2016 ; EPRA - European Parliamentary Research Service, July 2017; Oceana, September 2017; European Commission, October 2017

450, We would add that in the scoring of this SI, the red card that Comoros has received under the IUU Regulation (see Objection 37 above) must be taken into account by the CAB

451, References:

European Court of Auditors. “Special Report: Are the Fisheries Partnership Agreements well managed by the Commission?” 2015
https://www.eca.europa.eu/Lists/ECADocuments/SR15_11/SR_FISHERIES_EN.pdf

EPRA - European Parliamentary Research Service. “Briefing: Initial Appraisal of a European Commission Impact Assessment: Sustainable management of external fishing fleets: Impact Assessment (SWD (2015) 276, SWD (2015) 279 (summary)) of a Commission proposal for a Regulation of the European Parliament and of the Council on the sustainable management of external fishing fleets, repealing Council Regulation (EC) No 1006/2008 (COM (2015)636)”. April 2016
[http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/579331/EPRA_BRI\(2016\)579331_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/579331/EPRA_BRI(2016)579331_EN.pdf)

EJF, Oceana, Pew, WWF. "European vessels fishing under the radar: The need to regulate private and chartering agreements for access to external waters". November 2016.
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452, In view of the CAB's failure to provide evidence to show that a score of 100 is met, the scoring is arbitrary and/or unreasonable.

CAB Response

We do not imply anything. We measure the fishery against the MSC standard.

It is regrettable that IPNLF chooses to use such words as "irrelevance" and "disrespectful". It is IPNLF's view that this is an "extraordinary position". No other stakeholder, MSC TO or three PRs have identified an issue with this. On that basis, we respectfully propose that the IPNLF comment is not related to the application of the MSC standard but to some other purpose. We do not focus on the role of the flag states; we focus on the role of the IOTC, EU and Seychelles

If IPNLF has any evidence to contest that the fishery meets SG100 (i.e. *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*"), it should provide it to us.

We note that the MSC TO, three peer reviewers and other stakeholders did not find an issue with our approach to PI 3.2.3 SIC.

We have reviewed the IPNLF objection

We see no reason to change the final report, our scores and determination.

91. IPNLF OBJECTION 64 PI 3.2.4 a

IPNLF

453, The CAB scores the UoA at SG 80. SG 80 requires that: "There are mechanisms in place to evaluate key parts of the fishery-specific management system."

454, One "key" part of the fishery-specific management system is that part relating to fishing in the waters of coastal States under private agreements. This part is "key" because private agreements apply to access by Echebaster vessels to several EEZs.

455, The UoA would not work without that access, because of the highly migratory nature of the UoA target species (skipjack). It is notable that the UoA is not defined with reference to just (a) the high seas component of the Indian Ocean and (b) EEZs where the EU's SFPAs apply.

456, Mechanisms are not in place to evaluate this key part of the management system. Indeed, the CAB acknowledges this when it states (p.75) that: "Mechanisms to evaluate the fishery management system and local stakeholder concerns for ... private agreements are lacking." (Emphasis added.)

457, In response to IPNLF's comments on the Second Report in relation to SI 3.2.4(a), the CAB states (p.269):

"Note previous comments on private agreements. While these are an important part of the overall fishery-management system as together they account for less than 10% of the total Echebaster catch; the key parts are related to the IOTC (and indirectly to the private agreements) and flag countries. Fishing vessels in the various EEZs must respond to exactly the same regulations. For the reasons stated we do not consider that the fishery meets SG100 Sla."

458, Ignoring a part of the management system simply because it accounts for less than a certain amount of the catch is without basis in the FCR. There is no alternative: the CAB must evaluate private agreements against the scoring guideposts for SI 3.2.4(a). In the absence of doing so, any scoring is arbitrary and/or unreasonable.

CAB Response

We do not consider private agreements to be "key". While not diminishing their importance, the Echebaster vessels respond to the requirements of the IOTC, EU and Seychelles.

We do not know if the economics of a fishery would allow continued operation if access to the waters of all coastal states was to be prohibited. It would be interesting to understand how IPNLF arrives at that conclusion. Whatever, we follow the MSC standard in assessing the tuna fishing activities of the Echebaster fishery wherever in the Indian Ocean, including the EEZs of coastal states.

MSC TO, PRA, PRC and other stakeholders did not find issue with our treatment of PI 3.2.4 a. We responded to the comment by PRB by revising the scoring justification.

IPNLF misrepresents what is written in the report. We do not consider private agreements to be a key part of the management system. This is not because of their relative size but because the issues impacting the fishery's impacts on P1 and P2 elements are covered by the IOTC, of which the various coastal states are cooperating parties.

Our comment on Page 75 (*sic*) refers to SG100 i.e. *There are mechanisms in place to evaluate all parts of the fishery-specific management system.*

We have reviewed the IPNLF objection.

We see no reason to change the final report, our scores and determination.

92. IPNLF OBJECTION 65 PI 3.2.4 b

IPNLF

459, The CAB scores the UoA at SG 80. SG 80 requires that: "The fishery-specific management system is subject to regular internal and occasional external review."

460, Fishing in the waters of coastal States under private agreements is one part of the fishery-specific management system. (Indeed, as noted above regarding SI 3.2.4(a), this is a key part of the system.)

461, The CAB states (p.176) that:

"Res (IOTC) 14/05 requires the list of all fishing vessels operating under private agreements to be submitted to IOTC. Vessel licenses must be renewed annually. This indicates a review of the vessel performance."

462, The relevance of the list of vessels under IOTC Resolution 14/05 is not stated. The CAB refers to annual renewal of vessel licences, on which see below.

463, The CAB adds (p.176) that: "As yet, there is not a regular formal external review of private agreements." (Emphasis added.)

464, In response to IPNLF's comments on the Second Report in relation to SI 3.2.4(b), the CAB states (p.270):

"The annual renewal of licenses provides a basis for reviewing performance. The external review is the periodic revision of the agreements. We consider that the scoring rationale provides the justification for the allocated score."

465, The above statement refers to two things: an "annual renewal of licenses" (as a basis for reviewing performance) and a "periodic revision of the agreements" (as the external review). Only the first of these is mentioned in the justification text for this SI.

466, Several points arise, as follows:

466, 1, Regarding "annual renewal of licenses" (as a basis for reviewing performance of private agreements): First, assuming that it is vessel licences that are being referred to, it is not clear who is renewing these licences. Secondly, no evidence is presented that licences are renewed, whether on an annual basis or otherwise. Thirdly, it is not at all clear how renewal of licenses equates to a review of a private agreement.

466, 2, Regarding "periodic revision of the agreements" (as the external review): First, this argument is not presented in the justification text for this SI. Secondly, no evidence is presented that the agreements are periodically reviewed. (Instead, reference is merely made to their non-permanent nature.) Thirdly, SA 4.10.1 (FCR, p.182), which is normative, states that: "Teams shall interpret "external review" at SG80 and 100 to mean external to the fishery specific management system, but not necessarily international." Yet it is not clear how periodic revision of the agreements can be regarded as external to the fishery specific management system.

466, 3, Regarding review of private agreements, see also: European Court of Auditors, 2015; EPRS - European Parliamentary Research Service, April 2016; EJF, Oceana, Pew, WWF, November 2016 ; EPRS - European Parliamentary Research Service, July 2017; Oceana, September 2017; European Commission, October 2017.

467, In the absence of further information, the scoring is arbitrary and/or unreasonable.

References:

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CAB Response

Fishing in the waters of coastal states is a part of the fishery specific operational pattern, and Echebaster is subject to IOTC, EU and Seychelles regulations. When operating in the waters of coastal states the vessels must respect the provisions of the respective jurisdiction. These are additional to IOTC regulations, generally covering such as reporting, hailing-in and hailing-out, gear characteristics, prohibited species, closed areas and observer coverage.

Res 14/05 is covered elsewhere in the report. To avoid confusion note "*This Resolution supersedes Resolutions 13/07, 12/07, 10/07, 07/04, 05/04 & 98/04, is targeted to coastal States and is intended to create a record of foreign flagged fishing vessels licensed to fish in the EEZs of coastal CPCs, and a record of country-to-country access agreements. It also serves as a cross check to the IOTC record of authorized fishing vessels under Resolution 15/04 and carrier vessels authorized to receive transhipments from LSITVs under Resolution 17/06. One of the overall outcomes sought from this resolution is the strengthening of data collection, and the achievement of more complete statistics on fleets active in the IOTC Area of Competence*" (<http://www.fao.org/3/i8409en/I8409EN.pdf> Page 88).

Our comment on Page 176 refers to SG100 i.e. *The fishery-specific management system is subject to regular internal and external review.*

Let's reverse the question - who does IPNLF think is renewing the licenses and why does IPNLF feel the need to assume vessel licensing. This approach captures perfectly what may be considered the vexatious nature of a substantial part of IPNLF comments.

It would seem logical to assume that if the terms of private licenses had not been respected by either party, either one of the parties could chose not to renew.

We consider SG80 to refer to key parts of the fishery management system. The lack of evidence on review of private agreements leads to SG100 not being met.

We have reviewed the IPNLF objection

We see no reason to change the final report, our scores and determination