



PROPOSAL ON A MANAGEMENT PROCEDURE FOR YELLOWFIN TUNA IN THE IOTC AREA OF COMPETENCE

SUBMITTED BY: Australia, Indonesia, Maldives, South Africa, European Union

Explanatory memorandum

The co-sponsors are committed to effective management of yellowfin tuna in the Indian Ocean. This is a working draft for a binding resolution on a management procedure for yellowfin tuna. The sponsors submit this as a way to facilitate discussion on a management procedure; it is intended that this outline continue being developed while the scientific work is concurrently progressed, with a view to adoption as soon as possible.

The outline reflects decisions and recommendations of the IOTC made to date and also highlights key decisions that still need to be made (e.g. in square brackets).

The co-sponsors welcome feedback on the outline and invite all CPCs to engage in discussions intersessionally and at future TCMP and Commission meetings, which will feed into development of a revised proposal in the 2020-2021 intersessional period for possible adoption by the Commission in 2021.

The development of a management procedure for yellowfin tuna is important to rebuild the stock and ensure long term sustainability of the resource.

In 2017 the Commission adopted the '**Schedule of work for the development of management procedures for key species in the IOTC Area**' (IOTC-2017-S21-R, Appendix 9). For 2018-2019, in relation to yellowfin tuna, the work plan sets out the following tasks:

- Working Parties/Scientific Committee: Consider recommendations from the Commission and undertake MSE to provide advice on the performance of candidate MPs.
- Technical Committee on Management Procedures (TCMP): Provide advice to Commission on elements of candidate MPs that require a decision by the Commission, including the performance of candidate MPs against Commission objectives
- Commission: Consider work and advice from subsidiary bodies. Decision and adoption of an MP or provide direction to the WPs/SC on the need for further MSE of candidate or alternative MPs.

According to the most recent **Scientific Committee** advice, yellowfin tuna are assessed as overfished and subject to overfishing and the Commission should ensure that catches are reduced to end overfishing and allow the SSB to recover to SSBMSY levels (IOTC-2019-SC22-R[E], Appendix 11).

The **Technical Committee on Management Procedures** will continue to consider and advise the Commission on the elements and performance of candidate management procedures, in accordance with the Schedule of Work.

- In respect of yellowfin tuna, the TCMP has advised on specific management objectives and timeframes for achieving target reference points and will continue to provide advice as required.

Given the important role of the TCMP, and the cancellation of the March 2020 meeting of the Management Strategy Evaluation group due to COVID-19 pandemic, the co-sponsors propose the **Commission request the Management Strategy Evaluation group to meet in the first quarter of 2021** to progress the work on all five species and the TCMP to meet adjacent to the 2021 IOTC Commission meeting to further progress the development of the yellowfin tuna management procedure for possible adoption in 2021.

This outline is designed to bring together and give effect to the work done to date in accordance with the Schedule of Work, and to be updated as further advice is provided. It represents the logical next step in developing a management procedure for yellowfin tuna, in keeping with the Commission's commitment.

Recommendations

That the Commission

Note the progress made on the yellowfin tuna management procedure by relevant IOTC bodies

Encourage CPCs to engage with the proponents on the development of the management procedure

Request that the MSE group meet (virtually) in the first quarter of 2021

RESOLUTION XX/XX**ON A MANAGEMENT PROCEDURE FOR YELLOWFIN TUNA IN THE IOTC AREA OF COMPETENCE.**

Keywords: *Yellowfin tuna, Management Procedure, Harvest Strategy, Target reference point, MSY.*

The Indian Ocean Tuna Commission (IOTC),

HAVING responsibility for the conservation and optimum utilization of tuna and tuna-like species in the Indian Ocean;

RECOGNISING the need for action to ensure the achievement of IOTC objectives to conserve and manage tuna resources in the IOTC area of competence;

MINDFUL of Article XVI of the IOTC Agreement regarding the rights of Coastal States and of Articles 87 and 116 of the UN Convention of the Law of the Sea regarding the right to fish on the high seas;

RECOGNISING the special requirements of developing States, particularly Small Island developing States, in Article 24 of the Agreement for the Implementation of the Provisions of the United Nations Convention of the Law of the Sea of December 1982, relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA);

RECALLING *Resolution 15/10 On Target and Limit Reference Points and a Decision Framework*, which identifies objectives of the Commission to maintain stocks in perpetuity and with high probability, at levels not less than those capable of producing their maximum sustainable yield as qualified by relevant environmental and economic factors including the special requirements of developing States in the IOTC area of competence; and identifies reference points for IOTC stocks including yellowfin tuna;

CONSIDERING *Resolution 19/01 On an Interim Plan for Rebuilding the Indian Ocean Yellowfin Tuna Stock in the IOTC Area of Competence*, which intends to reduce catch to promote rebuilding of the yellowfin tuna stock to levels not less than those capable of producing their maximum sustainable yield;

ACKNOWLEDGING the Scientific Committee advice that the most recent stock assessment in 2018 demonstrated yellowfin status is more pessimistic than the stock assessment undertaken in 2016 due to the steeper declining trend of the composite longline CPUE series and sustained large catches in the most recent years; and that the 2017 catches of yellowfin exceeded the management measures agreed by the Commission, which places further stress on an already stretched resource;

RECOGNIZING the intent of the Commission to adopt Management Procedures aimed at achieving the objectives of the Commission (Resolution 15/10) aided by advice of the Technical Committee on Management Procedures (TCMP), as established in *Resolution 16/09* and as further expounded in the *Schedule of work for the development of management procedures for key species in the IOTC Area*;

FURTHER CONSIDERING the advice and recommendations of the [XXth] meeting of the Scientific Committee regarding a management procedure for yellowfin tuna ... [*insert advice and recommendations*];

FURTHER CONSIDERING the advice and recommendations of the [XXth] meeting of the Technical Committee on Management Procedures regarding a management procedure for yellowfin tuna ... [*insert advice and recommendations*].

ADOPTS in accordance with paragraph 1 of Article IX of the IOTC Agreement:

1. The Management Procedure (MP) for yellowfin tuna as described in **Annex I**, which shall be used to guide the setting of the global total allowable catch (TAC) to ensure:
 - a) the yellowfin tuna spawning stock biomass achieves the target as specified in paragraph 6(a); and
 - b) the yellowfin tuna spawning stock biomass avoids breaching the interim limit reference point specified in Resolution 15/10 with high probability.
2. The Scientific Committee shall run the MP and advise the Commission of the outcome, including a recommended TAC and any advice on exceptional circumstances in accordance with **Annex II**.
3. The Commission shall set the TAC based on the outcome of the MP, unless the Commission decides otherwise based on exceptional circumstances in accordance with **Annex II**.
4. The TAC shall apply in each of the subsequent three years following the year it is set by the Commission (e.g. a TAC set in 2021 would be applied in each of 2022, 2023 and 2024).
5. In accordance with paragraphs 2-4, the repeating six year schedule for setting and applying the TAC, beginning the calendar year immediately following adoption of this Resolution, will be as follows:

[Commencement Year. Adopt MP measure and set the first TAC for each of the following 3 years (Commission).]

Year 1. Apply the TAC.

Year 2. Apply the TAC. Run the MP (Scientific Committee).

Year 3: Apply the TAC. Set the TAC for each of the following 3 years (Commission).

Year 4. Apply the TAC. Perform full stock assessment (Scientific Committee).

Year 5. Apply the TAC. Run the MP (Scientific Committee).

Year 6. Apply the TAC. Set the TAC for each of the following 3 years (Commission).

Year 1. Apply the TAC.

Etc.

6. The parameters of the yellowfin tuna MP shall be as follows:
 - a) To rebuild the yellowfin tuna spawning stock to the target reference point of B_{MSY}^1 (or an equivalent depletion-based reference point in accordance with Resolution 15/10) by **[2029]** **[2034]**;

¹ The spawning stock biomass associated with achieving maximum sustainable yield.

- b) The MP shall be tuned to a 50% probability of achieving the target reference point by [2029] [2034];
 - c) The maximum increase or decrease in the TAC shall be [X%] relative to the previous TAC;
7. Allocation of the TAC among CPCs for each three year period will take place according to [X process agreed external to this measure].
 8. The process set out in this measure shall be used to set the TAC for the three year period [20XX-20XX] and beyond.
 9. For the first three year period [20XX-20XX] the TAC shall be [X] tonnes in each year. This is a change of [X] tonnes compared with the catch in [insert most recent full year catch].
 10. This Resolution will be reviewed by the Commission and its subcommittees no later than [insert two year period 20XX-20XX immediately prior to rebuilding target year], with a view to updating the MP to ensure the yellowfin tuna spawning stock biomass is maintained at or around the target reference point.

ANNEX I Management Procedure for IOTC Yellowfin Tuna

Background and Introduction

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MP“estimator”

[CPUE Standardization specifications, including all input data and assumptions]

[Surplus Production model specifications, including all input data and assumptions]

Harvest Control Rule

[Specify and illustrate form of the harvest control rule]

References

[Operating Model Specifications (required for exceptional circumstances considerations)]

[MP performance]

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ANNEX II – EXCEPTIONAL CIRCUMSTANCES

Exceptional circumstances meta-rules pre-specify what should happen in unlikely, exceptional circumstances when it is considered to be highly risky or highly inappropriate for the Commission to set the TAC generated by the MP. Such meta-rules are not a mechanism for making regular, small adjustments to the TAC from the MP but rather should only be invoked where, through an agreed process, the operation of the MP has been demonstrated to be highly risky or inappropriate. This annex provides guidance on a process for determining whether exceptional circumstances exist and the necessary actions but does not seek to provide firm definitions of all possible exceptional circumstances.

Process to determine whether exceptional circumstances exist

Schedule of the SC:

- [Annual evaluation of potential exceptional circumstances as needed based on evaluation of fishery and stock indicators and other information presented and reviewed at the SC.]
- [Focused evaluation of potential exceptional circumstances every [six] years coincident with the stock assessment.]
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Examples of what might constitute an exceptional circumstance include, but are not limited to:

- Recruitment, or a series of recruitment values, outside the range for which the MP was tested;
- Substantial improvements in knowledge, or new knowledge, concerning the dynamics of the population which would have an appreciable effect on the operating models used to test the existing MP; and
- Missing input data for the MP, resulting in an inability to calculate a TAC from the MP.
- Stock assessment biomass estimates substantially outside the range of simulated stock trajectories considered in MP evaluations, calculated under the reference set of operating models.
- []

Every six years (not coinciding with years when a new TAC is calculated from the MP) the SC will:

- Review the performance of the MP; and
- On the basis of the review, determine whether the MP is on track to meet the objective or a new MP is required.

If the SC concludes there is no or insufficient evidence for exceptional circumstances, the SC will:

- Report to the Commission that exceptional circumstances do not exist.

If the SC agrees that exceptional circumstances exist, the SC will:

- Determine the severity of the exceptional circumstances through examination of potential impacts, where possible, on the performance of the MP; and
- Follow the “*Process for Action on Exceptional Circumstances*” below.

Process for Action on Exceptional Circumstances

Having determined that there is evidence of exceptional circumstances, the SC will in the same year:

- Consider the severity of the exceptional circumstances (for example, how severely “out of bounds” is the biomass or recruitment);
- Follow the “*Guidelines for Action*” if TAC change is considered necessary (see below);
- Formulate advice on the action required (for example, there may be occasions, if there appears to be ‘exceptional circumstances’ but the severity is deemed to be low, when the advice is not for an immediate change in TAC, but rather a trigger for a review of the MP or collection of ancillary data to be reviewed at the next SC);
- Report to the Commission that exceptional circumstances exist and provide advice on the action to take.

Guidelines for Action

If there is a risk associated with the TAC being too high, then consider TAC changes where:

- a) The MP-derived TAC should be an upper bound;
- b) Action should be at least an x% reduction to the TAC, depending on severity.

If there are risks that the TAC is too low, then consider changes to the TAC where:

- a) The MP-derived TAC could be a minimum;
- b) Action should be at least an x% change to the TAC, depending on severity.

The values of x% referred to above will be based on an updated stock assessment or review of indicators.

The Commission shall:

- Consider the advice from the SC; and
- Decide on the action to take.