



ON AN INTERIM PLAN FOR REBUILDING THE INDIAN OCEAN YELLOWFIN TUNA STOCK IN THE IOTC AREA OF COMPETENCE

SUBMITTED BY: South Africa and Maldives

Explanatory memorandum

The Indian Ocean Tuna Commission, through Resolution 16/01 adopted an *“Interim plan for rebuilding the Indian Ocean yellowfin tuna stock in the IOTC area of competence”* which was further modified in 2017 (*Resolution 17/01*) and in 2018 (*Resolution 18/01*).

The Scientific Committee in 2018 noted that some CPCs reduced their catches in accordance with the levels of reductions specified in the Resolution, while some CPCs that were exempted from the reductions increased their catch. Instead of the 20% reduction target specified in 18/01, overall catches increased by 3%. There are no penalty mechanisms specified in Resolution 18/01 for CPCs that have increased their catches. Moreover, CPCs are not mandated to provide the IOTC Secretariat data for less than 24m and above 24m vessels category leading to difficulties in monitoring compliance and effectiveness of the interim measure.

Furthermore, the Working Party on Tropical Tuna in 2018 expressed its concern, with the change fishing strategy of substantial increase in usage of FADs by Purse Seine vessels to maintain catch level reduction targets. This has led to a substantial increase in number of juvenile yellowfin tuna and bigeye tuna. Moreover, there is no formal data reporting mechanism, usage of tracking information for FADs in IOTC Area of Competence which has undermined the interim plan for rebuilding yellowfin tuna stock in the Indian Ocean.

Thus, the measure proposes the following:

- Mandates CPCs to nominal catch data reporting disaggregated by vessels below and above 24m.
- CPCs that have increased their catches beyond the catch limits specified in 18/01 are mandated to reduce their catches.
- Penalty mechanisms for CPCs that have increased their catch limits.
- Strengthened FAD management measures by introducing a FAD closure to reduce juveniles, FAD limits, FAD tracking and FAD and supply vessel data reporting mechanisms.
- Gillnet measures increasing observer coverage and measures to minimize bycatch.

RESOLUTION 19/xx
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STOCK IN THE IOTC AREA OF COMPETENCE**

Keywords: Yellowfin tuna, Kobe Process, MSY, Precautionary Approach

The Indian Ocean Tuna Commission (IOTC),

CONSIDERING the 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;

BEING MINDFUL of Article XVI of the IOTC Agreement regarding the rights of Coastal States and of Article 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 the 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 that Article 5, of UNFSA entitles the conservation and management of highly migratory fish stocks are based on best scientific evidence available and with special reference to Resolution 15/10 for a stock where the assessed status places it within the red quadrant, and with an aim to end overfishing with a high probability and to rebuild the biomass of the stock in as short time as possible;

FURTHER RECALLING that Article 6, of UNFSA and IOTC Resolution 12/01 “*On the implementation of the precautionary approach*”, requires the States to be cautious during the application of precautionary approach when information is uncertain, unreliable or inadequate and this should not be a reason for postponing or failing to take conservation and management measures;

CONSIDERING the recommendations adopted by the KOBE II, held in San Sebastian, Spain, June 23 – July 3 2009; implementing where appropriate a freeze on fishing capacity on a fishery by fishery basis and such a freeze should not constrain the access to, development of, and benefit from sustainable tuna fisheries by developing coastal States; FURTHER CONSIDERING the recommendations adopted by the KOBE III, held in La Jolla, California, 12- 14 July 2011; considering the status of the stocks, each RFMO should consider a scheme for reduction of overcapacity in a way that does not constrain the access to, development of, and benefit from sustainable tuna fisheries, including on the high seas, by developing coastal States, in particular Small Island Developing States, territories, and States with small and vulnerable economies; and Transfer of capacity from developed fishing members to developing coastal fishing members within its area of competence where appropriate;

FURTHER CONSIDERING the report by International Council for the Exploration of Sea and FAO Working Group on Fishing Technology and Fish Behaviour (2006), Gillnets are considered to be one of the least catch controllable and least environmentally sustainable gears;

FURTHER CONSIDERING the recommendations of the 18th Scientific Committee held in Bali, Indonesia, 23 – 27 November 2015 and the 21st session of the Scientific Committee held in Seychelles, 3 – 7 December 2018, that the catches of yellowfin tuna have to be reduced by 20% of the 2017¹⁴ levels to recover the stocks to levels above the interim target reference points with 50% probability by 2024/2027 as specified in Kobe II Strategy Matrix;

FURTHER CONSIDERING the management advice of the 21st session of the Scientific Committee on the limitations and uncertainties in the stock assessment.

FURTHER CONSIDERING the concern of the 20th Session of the Working Party for Tropical Tuna held in Seychelles, 29 October – 3 November 2018, the change in strategy by increase of usage of FADs by the purse seine vessels to maintain catch level targets has led to a substantial increase of juvenile yellowfin tuna and bigeye tuna;

~~NOTING THAT the new yellowfin tuna stock assessment produced at the 19th Scientific Committee held in Seychelles mentions: “The stock status determination did not change in 2016, but does give a somewhat more optimistic estimate of stock status than the 2015 assessment, as a direct result of the use of more reliable information on catch rates of longline fisheries and updated catch up to 2015” and that “Maximum Sustainable Yield (MSY) estimate for the whole Indian Ocean is estimated at 422,000 t with a range between 406,000–444,000 t” and “the 2011–2015 average catches (390,185 t) were below the estimated MSY level;”~~

~~FURTHER NOTING that the estimated probability of the Indian Ocean yellowfin tuna stock to be in the red zone of the Kobe plot has decreased from 94% based on 2015 stock assessment to 67.6% based on the 2016 stock assessment and considering other applicable measures within Resolution 16/01 [superseded by Resolution 17/01, then by Resolution 18/01], particularly the 23% reduction in the limit on the number of FADs deployed by tuna purse seiners from 550 to 425 per vessel per year, effective from 1st January 2017, and the supply vessel limitation could help this progressive improvement of the yellowfin tuna stock status;~~

NOTING THAT supply vessels contribute to the increase in effort and capacity of purse seiners and that the number of supply vessels has increased significantly over the years;

~~FURTHER CONSIDERING the discussions of the Working Party on Tropical Tuna held in Montpellier, France, 23–28 October 2015 on the limitations and the uncertainties in the stock assessment models due to the unavailability of standardized yellowfin tuna CPUE data;~~

FURTHER CONSIDERING the call by the United Nations General Assembly Resolution 70/75 upon the States to increase the reliance on scientific advice in developing, adopting and implementing conservation

and management measures and to take into account the special requirements of developing States, including Small Island Developing States (SIDS) as highlighted in the SIDS Accelerated Modalities of Action (SAMOA) Pathway;

NOTING THAT Article V (2)(b) of the Agreement for the Establishment of the Indian Ocean Tuna Commission give full recognition to the special interests and needs of Members in the region that are developing countries, in relation to the conservation and management and optimum utilization of stocks covered by this Agreement and encouraging development of fisheries based on such stocks;

FURTHER NOTING THAT Article V(2)(d) requires the Commission to keep under review the economic and social aspects of the fisheries based on the stocks covered by this Agreement bearing in mind, in particular, the interests of developing coastal States. This includes ensuring that conservation and management measures adopted by it do not result in transferring, directly or indirectly, a disproportionate burden of conservation action onto developing States, especially Small Island Developing States;

RECOGNIZING FURTHER the interactions that occur between the fisheries for yellowfin, skipjack and bigeye tuna;

CONSIDERING paragraph 12 of Resolution 16/01 [superseded by Resolution 17/01, then by Resolution 18/01] that allows the Commission to review this Interim Plan before 2019;

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

Application

1. This resolution shall apply to all fishing vessels targeting tuna and tuna like species in the Indian Ocean of 24 meters overall length and over, and those under 24 meters if they fish outside the EEZ of their flag State, within the IOTC area of competence.
2. The measures contained within this Resolution shall be considered as interim measure and will be reviewed by the Commission no later than at its annual Session in 2023.
3. Notwithstanding paragraph 2, this Resolution shall be reviewed when a formal Management Procedure for the management of the yellowfin tuna stock is adopted by the Commission and in effect.
4. Nothing in this resolution shall pre-empt or prejudice future allocation of fishing opportunities.

Catch limits

5. **Purse seine:** CPCs whose purse seine catches of yellowfin reported for 2014 were above 5000 MT to reduce their purse seine catches of yellowfin by 15 % from the 2014 levels.
6. **Gillnet:** CPCs whose Gillnet catches of yellowfin reported for 2014 were above 2000 MT to reduce their Gillnet catches of yellowfin by 10 % from the 2014 levels.

7. **Longline:** CPCs whose Longline catches of yellowfin reported for 2014 were above 5000 MT to reduce their Longline catches of yellowfin by 10 % from the 2014 levels.
8. **CPCs' other gears:** CPCs whose catches of yellowfin from other gears reported for 2014 were above 5000 MT to reduce their other gear catches of yellowfin by 5 % from the 2014 levels.
9. The provisions in paragraph 5, 6, 7 and 8 shall be applicable to Small Island Developing States and Least Developed Countries on catches of yellowfin tuna reported for either 2014 or 2015.
10. CPCs with fishing gear exempted from para 5- 9 that increases their catches above the threshold limits in any subsequent year (from 2017), shall reduce their catches to the levels prescribed for that particular gear as mentioned in paragraphs 5, 6, 7 and 8.
11. Flag States will determine appropriate methods for achieving these catch reductions, which could include capacity reductions, effort limits, *etc.*, and will report to the IOTC Secretariat in their Implementation Report every year.

Over catch of annual limit

12. Over catch of an annual limit for a given fleet of a CPC listed in paragraph 5 to 10, shall be deducted from the future catch limits as follows:
 - a. Over catch in 2018: To be reduced either in 2020 or 2021
 - b. Over catch in 2019: To be reduced either in 2021 or 2022
 - c. Over catch in 2020: To be reduced either in 2022 or 2023
13. CPCs shall inform the Commission via the IOTC Compliance Committee, the implementation of over catch in paragraph 12 in their implementation Report every year.
14. Notwithstanding paragraph 12, if any CPC exceed its catch limits listed in paragraph 5 to 10:
 - a. In any one year, then the amount deducted in the adjustment year shall be 100% of the over catch;
 - b. If over catch occurred during two consecutive years, the amount deducted in the adjustment year shall be 125% of the over catch.

Fish Aggregating Devices (FADs) closure

15. With the objective of reducing the fishing mortality of juvenile yellowfin tuna, purse seine vessels fishing for, or vessels supporting activities to fish for bigeye, yellowfin and skipjack tunas in association with FADs in the high seas or EEZs shall be prohibited to fish on FADs, deploy or retrieve FADs during a two-month period between 0000hrs of 1 August and 0000hrs 30th September each year.
16. In addition, each CPC shall ensure its vessels do not deploy drifting FADs during a period of 15 days

prior to the start of the selected closure period.

17. This measure in paragraph 15 and 16 shall be reviewed and, if necessary, revised based on advice by the Scientific Committee taking into account monthly trends in free school and FAD-associated catches.

FAD Limits

18. Flag States shall ensure that the vessels flying their flag apply the following provisional limits to the number of drifting FADs with instrumented buoys pursuant to paragraph 7 of Resolution 15/08 [superseded by Resolution 17/08, then by Resolution 18/08] on “Procedures on FADs Management Plan including a limitation on the number of FADs, more detailed specifications of catch reporting from FAD sets, and the development of improved FAD designs to reduce the incidence of entanglement of non-target species” that could be deployed and made active in a year in relation to each of its vessels.
- a. 2020: 300 FADs per vessel
 - b. 2021: 200 FADs per vessel
 - c. 2022: 100 FADs per vessel
 - d. 2023: 50 FADs per vessel
19. FADs shall be activated on the vessel at the time of their deployment and shall remain active until they are retrieved or lost.
20. CPCs shall limit the number of FAD sets to the levels reported at 2016 levels. The IOTC Secretariat via Scientific Committee in 2019 shall communicate a table of standardized FAD sets by CPCs for administrative purposes of the measure before 1st January 2020.

FAD Management Plans

21. Complementary to Resolution 15/08 [superseded by Resolution 17/08, then by Resolution 18/08] and Resolution 15/02 “Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non- Contracting Parties (CPCs)” CPCs shall ensure that all fishing vessels and support vessels (including supply vessels) flying their flag, and/or authorized by CPCs to fish in their jurisdiction, when fishing in association with and deploying FADs shall collect and report, for each deployment of a FAD, each visit on a FAD, whether followed or not by a set, and each loss of a FAD, the following information and data as part of annual reporting to the Secretariat;
- a. Deployment of FAD
 - i. Position
 - ii. Date
 - iii. FAD type (anchored FAD, drifting FAD)
 - iv. FAD identifier (i.e., FAD Marking and buoy ID, type of buoy – e.g. simple buoy or associated with echo-sounder)
 - v. FAD design characteristics (material of the floating part and of the underwater hanging structure and the entangling or non-entangling feature of the underwater

hanging structure)

b. Visit on any FAD

- i. Type of the visit (re-deployment of a FAD and/or buoy¹, retrieving FAD and/or buoy, strengthening/consolidation of FAD, intervention on electronic equipment, random encounter (without fishing) of a log or a FAD belonging to another vessel, visit (without fishing) of a FAD belonging to the vessel, fishing set on a FAD²)
- ii. Position
- iii. Date
- iv. FAD type (anchored, drifting natural FAD, drifting artificial FAD)
- v. FAD identifier (i.e., FAD Marking and buoy ID or any information allowing to identify the owner)
- vi. If the visit is followed by a set, the results of the set in terms of catch and by-catch, whether retained or discarded dead or alive. If the visit is not followed by a set, note the reason (e.g. not enough fish, fish too small, etc.)

c. Loss of any FAD

- i. Last registered position
- ii. Date of the last registered position
- iii. FAD identifier (i.e., FAD Marking and buoy ID)

22. CPCs shall either update their reporting system or FAD-logbooks to ensure information and data prescribed in paragraph 21 is adequately captured and shall report to the Secretariat by 1st of January 2020, the updated FAD-logbooks.

23. CPCs shall provide a summary of the information prescribed in paragraph 21 to the IOTC Compliance Committee in 2020.

Non-entangling and biodegradable FADs

24. In order to minimize the ecological impacts of FADs, in particular the entanglement of sharks, turtles and other non-targeted species, and the release of synthetic persistent marine debris, CPCs shall ensure that by 2022 that all FADs deployed are non-entangling, and constructed from biodegradable materials including non-plastics with the exception of materials used in the construction of FAD tracking buoys;

25. The target prescribed in paragraph 24 shall be reviewed in light of the Scientific Committee's recommendation pursuant to Resolution 18/04 "On BioFAD experimental project"

26. CPCs shall report the steps undertaken to reach the target prescribed in paragraph 24, 60 days prior to the Commission.

¹Deploying a buoy on a FAD includes three aspects: deploying a buoy on a foreign FAD, transferring a buoy (which changes the FAD's owner) and changing the buoy on the same FAD (which does not change the FAD's owner).

² A fishing set on a FAD includes two aspects: fishing after a visit to a vessel's own FAD (targeted) or fishing after a random encounter of a FAD (opportunistic).

FAD tracking

27. CPCs shall provide to an independent service provider/consultant hired by the IOTC Secretariat, real time tracking information of FADs used by the purse seine vessels from 1 January 2020 to 31 December 2021. The independent service provider/consultant shall provide to the IOTC Commission via its compliance committee in 2021 the level of compliance of FAD related conservation measures and establishing a long-term mechanism of FAD tracking in IOTC Area of compliance.

Supply Vessels

28. CPCs shall gradually reduce supply vessels³ by 31st December 2022 as specified below in (a), (b), (c) and (d). Flag States shall submit the status of reducing the use of supply vessel as part of the report of Implementation to the Compliance Committee.

- a. From 1st of January 2018 to 31st December 2019: 1 supply vessel in support of not less than 2 purse seiners, all of the same flag State⁴.
- b. From 1st of January 2020 to 31st December 2020: 2 supply vessels in support of not less than 5 purse seiners, all of the same flag State⁴.
- c. No CPC is allowed to register any new or additional supply vessel on the IOTC Record of Authorized Vessels after 31st December 2017.
- d. CPCs shall prohibit the use of supply vessels to support Purse Seine vessels in IOTC area of competence by 1st January 2021.

29. A single purse seine vessel shall not be supported by more than one single supply vessel of the same flag State at any point of time.

30. Subparagraphs (a) and (b) of paragraph 28 shall not apply to flag States which use one supply vessel.

31. Complementary to Resolution 15/08 [superseded by Resolution 17/08, then by Resolution 18/08] and to Resolution 15/02, CPC/flag States shall report annually before the 1st of January for the coming year of operations which Purse seiners are served by each supply vessel. This information will be published on IOTC website so as to be accessible to all CPCs and is mandatory.

32. CPCS shall report by 1 March 2019, the number of FADs that were deployed in 2018 and 2019 by purse seine vessels and associated supply vessels per 1°x1° grid

33. Complementary to Resolution 15/08 [superseded by Resolution 17/08, then by Resolution 18/08] and to Resolution 15/02, CPCs with supply vessels shall report as part of the annual data reporting requirements:

- a. the number of FADs actually deployed on a monthly basis per 1°x1° grid disaggregated by associated supply vessels and purse seine vessels;

³ For the purpose of this resolution, the term “supply vessel” includes “support vessel”

⁴ The subparagraphs (a) and (b) shall not apply to flag States which use only one supply vessel

- b. the average numbers of beacons/buoys deactivated on a monthly basis;
- c. average numbers of lost FADs with active buoys on a monthly basis;
- d. the number of days spent at sea per month

Gillnet

34. CPCs shall encourage phasing out or convert gillnet fishing vessels to other gears, considering the huge ecological impact of these gears and fast track the implementation of Resolution 17/07 “On the Prohibition to use large-scale driftnets in the IOTC”.
35. CPCs shall set their gillnets at 2m depth from the surface in gillnet fisheries by 2023 to mitigate ecological impacts of gillnets.
36. CPCs are encouraged to increase their observer coverage and field sampling in gillnet fishing vessels by 10% using alternative data collection methodologies (electronic or human) verified by the IOTC Scientific Committee by 2023.
37. CPCs shall report the level of implementation of para 34 - 36 to the IOTC Commission via the Compliance Committee.

Administration

38. The IOTC Secretariat under advice of the Scientific Committee shall prepare and circulate a table of allocated catch limits disaggregated as per the conditions set out in paragraphs 5 – 10 for preceding year, in December of the current year.
39. CPCs shall monitor the yellowfin tuna catches from their vessels in conformity with Resolution 15/01 “On the recording of catch and effort data by fishing vessels in the IOTC area of competence” and Resolution 15/02 “Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non Contracting Parties (CPCs)” and will provide a summary of most-recent yellowfin catches for the consideration of the IOTC Compliance Committee.
40. For the purposes of the implementation of this resolution, CPCs shall disaggregate nominal catches under Resolution 15/02 involving yellowfin tuna as per paragraph 1 (below and above 24m)
41. Each year, the Compliance Committee shall evaluate the level of compliance with the catch limits deriving from this Resolution and shall make recommendations to the Commission accordingly.
42. The Scientific Committee via its Working Party on Tropical Tunas shall implement the “Workplan to improve current assessment of yellowfin tuna” and shall advice the Commission the financial and administrative requirements to further strengthen the work undertaken to minimize the issues and complexities regarding yellowfin tuna stock assessment.
43. The Scientific Committee via its Working Party on Tropical Tunas shall undertake an evaluation of

the effectiveness of the measures detailed in this Resolution in 2023, taking into account all sources of fishing mortality and possible alternatives aiming at returning and maintaining biomass levels at the Commission's target level. After consideration of the results of this evaluation, the Commission shall take corrective measures accordingly.

44. This Resolution supersedes IOTC Resolution 18/01 *On an interim plan for rebuilding the Indian Ocean yellowfin tuna stock*.