



**PROCEDURES ON A FISH AGGREGATING DEVICES (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**

SUBMITTED BY: Seychelles

Explanatory memorandum

The proposed amendments are to strengthen Resolution 18/08 to mitigate the ecological impact associated with drifting FADs, especially its beaching, damage to coral reefs and marine pollution.

From the 2017 Scientific Committee report, it was requested that *FAD ownership* should form part of the mandatory information to be collected by IOTC as this was considered necessary to model and report the tracking status of all FADs.

Noting that IOTC, along with other tuna RFMOs, recommended and adopted resolutions to promote reduction of the amount of synthetic marine debris by the use of natural or biodegradable materials for drifting FADs, the proposal is to address this issue.

Cf Resolution 18/08.

RESOLUTION xx/xx**PROCEDURES ON A FISH AGGREGATING DEVICES (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**

Keywords: FAD, active instrumented buoy.

The Indian Ocean Tuna Commission (IOTC),

BEARING IN MIND that the Agreement for the implementation of the Provisions of the United Nations Convention on the Law of the Sea relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA) encourages coastal States and fishing States on the high seas to collect and share, in a timely manner, complete and accurate data concerning fishing activities on, *inter alia*, vessel position, catch of target and non-target species and fishing effort;

MINDFUL of the call upon States, either individually, collectively or through regional fisheries management organisations and arrangements in the United Nations General Assembly Resolution 67/79 on Sustainable fisheries to collect the necessary data in order to evaluate and closely monitor the use of large-scale fish aggregating devices and others, as appropriate, and their effects on tuna resources and tuna behaviour and associated and dependent species, to improve management procedures to monitor the number, type and use of such devices and to mitigate possible negative effects on the ecosystem, including on juveniles and the incidental bycatch of non-target species, particularly sharks and marine turtles;

NOTING that the United Nations Food and Agricultural Organization (FAO) Code of Conduct for Responsible Fishing provides that States should compile fishery-related and other supporting scientific data relating to fish stocks covered by sub-regional or regional fisheries management organisations and provide them in a timely manner to the organisation;

RECOGNISING that all gears deployed to target resources under the competence of IOTC should be managed to ensure the sustainability of fishing operations;

GIVEN that the activities of supply vessels and the use of Fish Aggregating Devices (FAD) are an integral part of the fishing effort exerted by the purse seine fleet;

AWARE that the Commission is committed to adopt Conservation and Management Measures to reduce juvenile Bigeye tuna and Yellowfin tuna mortalities from fishing effort on Fish Aggregating Devices (FADs);

RECALLING that [Resolution 12/04](#) established that the Commission at its annual session in 2013 should consider the recommendations of the IOTC Scientific Committee as regards the development of improved FAD designs to reduce the incidence of entanglement of marine turtles, including the use of biodegradable materials, together with socio-economic considerations, with a view to adopting further measures to mitigate interactions with marine turtles in fisheries covered by the IOTC Agreement;

RECALLING that Resolution 13/08 [~~superseded by Resolution 15/08, by Resolution 17/08, then by Resolution 18/08~~] established procedures on a fish aggregating device (FAD) management plan, including more detailed specifications of catch reporting from FAD sets, and the development of improved FAD designs to reduce the incidence of entanglement of non-target species;

NOTING that the IOTC Scientific Committee advised the Commission that only non-entangling FADs, both drifting and anchored, should be designed and deployed to prevent the entanglement of sharks, marine turtles and other species;

NOTING that the IOTC Scientific Committee advised the Commission to conduct an investigation of the feasibility and impacts of a temporary FAD closure as well as other measures in the context of Indian Ocean fisheries and stocks;

RECALLING that the objective of the IOTC Agreement is to ensure, through appropriate management, the conservation and optimum utilisation of stocks covered by the mentioned Agreement and encouraging sustainable development of fisheries based on such stocks and minimising the level of bycatch;

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

1. This Resolution shall apply to CPCs having purse seine vessels and fishing on Drifting Fish Aggregating Devices (DFADs), equipped with instrumented buoys for the purpose of aggregating tuna target species, in the IOTC area of competence.
2. This Resolution defines an instrumented buoy as a buoy with a clearly marked reference number allowing its identification and equipped with a satellite tracking system to monitor its position. Other buoys, such as radio buoys used on DFADs, not meeting this definition, ~~shall be gradually phased out by the 1st January 2017. are prohibited from being deployed.~~
3. This Resolution sets the maximum number of instrumented buoys ~~deployed~~active and followed by any purse seine vessels at ~~350-250~~ instrumented buoys at any one time, the ~~active-deployed~~ number being calculated as the number of active buoys operated by a purse seine vessel. The number of instrumented buoys that ~~shall~~ may be acquired annually for each purse seine vessel is set at no more than ~~700~~500. No purse seine vessel shall have more than 500 instrumented buoys at all time. An instrumented buoy is considered active when it has been switched on and then deployed. Activation of an instrumented buoy results in an entry in the logbook or the FAD logbook, which specifies the buoy number and the geographical coordinates of its activation. An instrumented buoy ~~may~~shall be activated only when physically present on board the purse-seine vessel to which it belongs or its supply or support vessel.
4. A CPC may adopt a lower limit than the one set out in paragraph 3 for vessels flying its flag. Further, any CPC may adopt a lower limit for DFADs deployed in its EEZ than that stated in paragraph 3. The CPC shall review the adopted limit to ensure that such limit is not more than the limit fixed by the Commission.
5. CPCs shall ensure that as from the effective date of this Resolution, each of its purse seiners already in operation does not exceed the maximum number of instrumented buoys set in paragraph 3.
6. All purse seine vessel, supply or support vessel shall declare to its respective CPC and operating port State, the number of instrumented buoys onboard, including each unique identifier of the instrumented bouy before and after each trip.
7. All drifting FADs shall be assembled ashore.

- ~~6.8.~~ The main structure of the drifting FADs shall not be constructed of metal/galvanised and PVC material, and shall be clearly marked with the IOTC registration number of its corresponding purse seine vessel.
- ~~7.9.~~ Notwithstanding the completion of any study undertaken at the request of the Commission including the study to be undertaken by the Working Group adopted at [Resolution 15/09](#) in relation to FADs, the Commission may review the maximum number of instrumented buoys set out in paragraph 3.
- ~~8.10.~~ The flag State shall ensure that no more than:
- a) ~~350-250~~ instrumented buoys are active at sea at any one time in relation to each of its vessels through such measures as for example the verification of telecommunication bills; and
 - b) ~~700-500~~ instrumented buoys may be acquired annually by each of its fishing vessel.
- ~~9.11.~~ CPCs shall require vessels flying their flag and fishing on DFADs to submit by ~~31+ December~~~~January 2016~~ of every year, the provisional purchase order for ~~following year~~~~2016~~ of instrumented buoys for their purse seine vessels under the confidentiality rules set by [Resolution 12/02](#) (or any subsequent superseding Resolution).
- ~~10.12.~~ CPCs shall require vessels flying their flag and fishing on DFADs to submit, by the ~~31 of every year~~~~end of 2016~~ the number of instrumented buoys activated, deactivated and active on each quarter during ~~2016 that year by~~ its purse seine vessel under the confidentiality rules set by [Resolution 12/02](#) (or any subsequent superseding Resolution).
- ~~11.13.~~ All CPCs shall ensure that all fishing vessels as referred to in paragraph 1 shall record fishing activities in association with FADs using the specific data elements found in **Annex I** (DFAD) and **Annex II** (AFAD) in the section of the “FAD-logbook”.
- ~~12.14.~~ CPCs having vessels fishing on FADs shall submit, to the Commission, on an annual basis, Management Plans for the use of FADs by each of their purse seine vessels covered at paragraph 1. Due to their specificity in terms of users, number deployed, type of boat/vessel involved, fishing method and gear used and materials used in their construction, the Management Plans and Reporting Requirements for Drifting FADs (DFAD) and Anchored FADs (AFAD) shall be addressed separately for the purposes of this Resolution. The Plans shall at a minimum meet the Suggested Guidelines for Preparation for FAD Management Plans by each CPC as provided for DFADs in **Annex I** and AFADs in **Annex II**. For the purpose of this Resolution, the term Fish Aggregating Device means drifting (DFAD) or anchored floating or submerged objects (AFAD) deployed for the purpose of aggregating target tuna species.
- ~~13.15.~~ The Management Plans shall be analysed by the IOTC Compliance Committee.
- ~~14.16.~~ The Management Plans shall include initiatives or surveys to investigate, and to the extent possible minimise the capture of small Bigeye tuna and Yellowfin tuna and non-target species associated with fishing on FADs. Management Plans shall also include guidelines to prevent, to the extent possible, the loss or abandonment of FADs. To reduce the entanglement of sharks, marine turtles or any other species, the design and deployment of FADs shall be based on the principles set out in **Annex III**, ~~which will be applied gradually from 2014. From 2015 on,~~ CPCs shall submit to the Commission, 60 days before the Annual Meeting, a report on the progress of the management plans of FADs, including reviews of the initially submitted Management Plans, and including reviews of the application of the principles set out in **Annex III**.
- ~~15.17.~~ ~~Starting in 2016,~~ CPCs shall submit the data elements prescribed in **Annex I** and **Annex II** to the Commission, consistent with the IOTC standards for the provision of catch and effort data, and these data shall be made available for analysis to the IOTC Scientific Committee on the aggregation level set by [Resolution 15/02](#) (or any subsequent superseding Resolution), and under the confidentiality rules set by [Resolution 12/02](#) (or any subsequent superseding Resolution). The IOTC Scientific Committee will analyse the information, when available, and provide scientific advice on additional FAD management options for consideration by the Commission in 2016, including recommendations on the number of FADs to be

operated, the use of biodegradable materials in new and improved FADs and the phasing out of FAD designs that do not prevent the entanglement of sharks, marine turtles and other species. When assessing the impact of FADs on the dynamic and distribution of targeted fish stocks and associated species and on the ecosystem, the IOTC Scientific Committee will, where relevant, use all available data on abandoned FADs (i.e. FADs without a beacon or which have drifted outside the fishing zone).

~~16.18. From January 2016,~~ CPCs shall require all artificial FADs deployed or modified by their flagged fishing vessels in the IOTC area of competence to be marked with their corresponding IOTC vessel registration number, in accordance with a detailed marking scheme, e.g. including FAD marking or beacon ID. ~~The marking scheme shall be developed and considered for adoption by the Commission at its regular annual session in 2016, based on recommendations from the IOTC Scientific Committee as requested by the Commission.~~ The marking ~~scheme shall~~ take into account, as a minimum, the following:

- ~~a) All artificial FADs shall be marked with a unique identification number, based on a specific numbering system and format to be adopted by the Commission;~~
- ~~b)a) The marking shall~~ be easy to read before the vessel operator engages in any artificial FAD related activity (e.g. setting on the artificial FAD, retrieving the artificial FAD, servicing the artificial FAD, fishing on the artificial FAD), ~~but if not visible for any reason, (time of day, weather, etc.), the vessel operator shall ensure to obtain the unique artificial FAD identifier as soon as feasible;~~
- ~~b) The marking should be easy to apply to the artificial FAD, but shall~~ be applied with all weather permanent paint resistant in such a manner that it will not become unreadable or disassociated with the artificial FAD.

19. A marking scheme shall be developed and considered for adoption by the Commission at its regular annual session in 2020, based on recommendations from the IOTC Scientific Committee as requested by the Commission.

20. Resolution 187/08 Procedures on a fish aggregating devices (FADs) management plan, including more detailed specification of catch reporting from FAD sets, and the development of improved FAD designs to reduce the incidence of entanglement of non-target species is superseded by this Resolution.