

INTER-AMERICAN TROPICAL TUNA COMMISSION

94TH MEETING

Bilbao, Spain, 22-26 July 2019

PROPOSAL IATTC-94 A-2

SUBMITTED BY THE EUROPEAN UNION

**AMENDMENT OF RESOLUTION C-16-01 ON THE COLLECTION AND
ANALYSES OF DATA ON FISH-AGGREGATING DEVICES**

EXPLANATORY MEMORANDUM

The European Union (EU) is proposing to revise Resolution C-16-01 on Fish-Aggregating Devices (FADs) to consolidate into a single text all the FADs related provisions currently contained in Resolution C-18-01. This will result in a more clarity and streamlined IATTC legal texts.

More importantly, the EU proposal introduces a further gradual reduction in the number of FADs: 15% reduction in the first year and further 20% reduction as of September 2020. A

Furthermore, the proposal aims to strengthen FAD data reporting, tracking and monitoring, as well as introducing stricter norms for non-entangling FADs.

The proposed revisions also reflect the outcomes of the second Joint t-RFMOs FAD Working Group that took place in San Diego on 8-10 May 2019 and contains a number of clear definitions.

RESOLUTION 19-XX

**AMENDMENT OF RESOLUTION C-16-01 ON THE COLLECTION AND
ANALYSES OF DATA ON FISH-AGGREGATING DEVICES**

The Inter-American Tropical Tuna Commission (IATTC):

Taking into account the best available scientific information on the status of the bigeye, yellowfin and skipjack stocks;

Committed to the long-term conservation and sustainable exploitation of fisheries in the eastern Pacific Ocean (EPO);

Understanding that all fishing gears, including fish-aggregating devices (FADs), have an effect on the stocks and the pelagic ecosystem in the EPO, and that such effects should be fully understood by the Members of the Commission;

Attentive to the provisions of IATTC Resolution C-99-07 on measures related to the regulation of FADs; *Agreeing* that, to accurately provide the scientific advice necessary to effectively manage tuna fisheries in the EPO, it is necessary for the scientific staff of the IATTC to have access to, and analyze, the relevant data regarding such fisheries and gears, and for Commission Members to put in place measures as needed to collect such information in their fisheries;

Acknowledging that observers currently collect data on FADs in the EPO that have been examined by the IATTC staff (Document SAC-02-13) and that the Commission has adopted measures for further research

on FADs; the significant effect that FADs may have on bigeye tuna spawning biomass, according to IATTC estimates (Document SAC-03-06); that skipjack tuna is captured on FADs and in unassociated schools in the EPO (Document SAC-03-03), and according to IATTC estimates, its exploitation rate has been increasing in recent years (Document SAC-03-07);

Recognizing that these measures need to be expanded and improved upon to ensure that the effects of the use of FADs on highly migratory fish stocks along with non-target, associated and dependent species, are fully understood and that the Commission can receive the best available scientific advice concerning mitigation of any negative effects;

Committed to ensuring that such scientific advice is taken into account in the development of the Commission's conservation and management measures concerning fishing for tunas;

Noting that the Scientific Advisory Committee (SAC) has recommended that the Commission should strengthen the work on FADs by holding a meeting involving managers, scientists, and other stakeholders; *Noting* that, based on recent scientific analysis, the development of improved FAD designs, in particular non-entangling FADs, both drifting and anchored, helps reduce the incidence of entanglement of sharks, sea turtles and other species;

Further noting that whale sharks are particularly vulnerable to exploitation, including from fishing, and noting the ecological and economic value these species can bring to the EPO; and

Concerned about the potential effects of purse-seine operations on the status of whale sharks when deliberately or accidentally set upon;

AGREES:

SECTION 1. DEFINITIONS

1. For the purposes of this Resolution, **the following definitions shall apply:**
 - a. ~~the term~~ Fish-Aggregating Device (FAD): ~~means~~ anchored, drifting, floating or submerged objects deployed and/or tracked by vessels, including through the use of ~~radio and/or~~ satellite buoys, for the purpose of aggregating target tuna species for purse-seine fishing operations.
 - b. **Buoy: any device that sends visual, radio or satellite signals to facilitate determination of its location.**
 - c. **Satellite buoy: A buoy that uses satellites to indicate its geographical position. As required in Resolution C-16-01, all satellite buoys must be clearly marked with a unique identification code.**
 - d. **Activation of a buoy: The act of initializing network service. It is done by the buoy supplier company at the request of the vessel owner or manager. From then on, the vessel owner pays for the communication service. The buoy can be transmitting or not, depending if it has been switched on.**
 - e. **Deactivation of a buoy: The act of cancelling network service. It is done by the buoy supplier company at the request of the vessel owner or manager. From then on, the communication service is no longer paid for, and the buoy stops transmitting.**
 - f. **Reactivation of a buoy: The act of re-initializing network service. The procedure is the same as the one to be followed when activating a buoy.**
 - g. **Activated buoy: A buoy that has already been subjected to activation and, therefore, is capable of transmitting.**
 - h. **Operational buoy: Any activated buoy that is deployed at sea and is transmitting data to facilitate determination of its location.**

- i. Loss: The situation in which, without any intervention of the owner, the buoy cannot be located by the owner on monitoring device. The main causes of signal loss are buoy retrieved by another vessel or person (at-sea or on-shore), FAD sinking and buoy failure.
- j. Vessel operator and/or manager: Any legal or natural person that is recorded in the IATTC Regional Vessel Register and in the flag State registry as operating and/or managing the vessel. The operator may or may not be the owner of the vessel.

SECTION 2. LIMITS ON THE USE OF FADs

2. CPCs shall ensure that purse-seine vessels flying their flag have no more than the following number of FADs with operational buoys attached at any one time:

Class 6 (1,200 m3 and greater):	382 FADs
Class 6 (< 1,200 m3):	255 FADs
Class 4-5:	102 FADs
Class 1-3:	59 FADs

From 15 September 2020, the following limits on the number of FADs with operational buoys attached at any time shall apply:

Class 6 (1,200 m3 and greater):	350 FADs
Class 6 (< 1,200 m3):	234 FADs
Class 4-5:	94 FADs
Class 1-3:	55 FADs

3. A FAD shall always be attached with a satellite buoy. Other types of buoys such as radio buoys shall be prohibited.
4. Buoys shall be activated exclusively onboard a purse-seine vessel.
5. Buoys attached to FADs shall not be subject to deactivation unless justified grounds such as beaching or loss. CPCs shall report, or require their vessels to report, deactivations to the Secretariat using the specific data fields indicated in Annex I.
6. Remote activations of deactivated buoys at sea are strictly prohibited except in specific cases motivated by the need of the recovery of beached or loss FADs. CPCs shall report, or require their vessels to report, any remote activations to the Secretariat using the specific data fields indicated in Annex II.
7. Each CPC shall ensure that:
 - a. its purse-seine vessels do not deploy FADs during a period of 15 days prior to the start of the selected closure period established in Resolution C-17-02;
 - b. all its Class-6 purse-seine vessels recover within 15 days prior to the start of the closure period a number of FADs equal to the number of FADs set upon during that same period.

SECTION 3. FAD DATA COLLECTION

8. All purse-seine vessels, when fishing on FADs in the IATTC Convention Area, are bound to collect and report the information contained in Annex III. This will be done by the observer on purse-seine vessels with an observer aboard, and the captain should provide the observer with the identification code of the FADs and, as appropriate, the other information in Annex III. On purse-seine vessels without an observer aboard, the captain shall be responsible for recording the information on the ad hoc form defined by the IATTC.
9. ~~Beginning 1 January 2017, CPCs shall require the owners and operators of all purse-seine vessels flying their flag, when fishing on FADs in the IATTC Convention Area, to collect and report the information contained in Annex I. The data may be collected through a dedicated logbook, modifications to regional logsheets, or other domestic reporting procedures.~~ The data collected under paragraph 8 on any interactions with FADs in trips of purse-seine vessels without an observer aboard, shall be provided by the CPCs to IATTC as soon as they receive them, and no later than 60 days of the end of each trip. CPCs should report this information exclusively on the standard form developed by the IATTC staff
10. ~~PCs shall provide the data collected for the previous calendar year, pursuant to Paragraph 2, which are available at the time of submission, to the Director. CPCs shall submit the data to the Director no later than 60 days prior to each regular meeting of the SAC.~~ In order to support the monitoring of compliance with the limitation established in Paragraph 2, and the work of the IATTC scientific staff in analysing the impact of FAD fisheries, while protecting business confidential data, CPCs shall report, or require their vessels to report, daily information on all FADs with operational buoys to the Secretariat, in accordance with the procedure and data fields indicated in Annex IV, with reports at monthly intervals submitted with a time delay of at least 60 days, but no longer than 90 days.
11. No later than the IATTC annual meeting in ~~2018~~2021, the scientific staff of the IATTC, in coordination with the SAC, shall present to the Commission the preliminary results of its analyses of the information collected pursuant to Paragraphs ~~28 to 10~~, and shall identify additional elements for data collection, as well as specific reporting formats, necessary to evaluate the effects of the use of FADs on the ecosystem of the EPO fishery **and to identify indicators that adequately represent the number of effective floating objects, levels of deployment, and losses**. The analyses shall also incorporate information from data on FADs collected by observers through the *Flotsam Information Record*.
12. In addition, no later than the IATTC annual meeting in 2021 the scientific staff of the IATTC, in coordination with the SAC and taking into account the outcomes of the *Ad Hoc* Working Group on FADs, shall present to the Commission initial recommendations based on information collected, based on this resolution and through other mechanisms, for the management of FADs, including possible effects of FADs in the tuna fishery in the EPO. The Commission shall consider adopting management measures based on those recommendations, including a region-wide FAD management plan, and which may include, *inter alia*, recommendations regarding FAD deployments and FAD sets, the use of biodegradable materials in new and improved FADs and the gradual phasing out of FAD designs that do not mitigate the entanglement of sharks, sea turtles, and other species.
13. The scientific staff of the IATTC, in coordination with the SAC, shall also formulate recommendations for regulating the management of the affected stocks for presentation to the Commission in 2021, on the basis of the results of its analyses of the collected FAD information. Such recommendations shall include methods for limiting the capture of small bigeye and yellowfin tuna associated with fishing on FADs.
14. In ~~2018~~2021, compliance with the FAD reporting requirements of this Resolution will be comprehensively reviewed by the *Committee for the Review of the Implementation of Measures adopted by the Commission* and presented to the Commission.

15. Data collected pursuant to this resolution shall be treated under the rules established in the IATTC Resolution on Confidentiality.

SECTION 4. FAD IDENTIFICATION

16. ~~9-~~No later than 1 January 2017, CPCs shall require the owners and operators of their applicable flagged purse-seine fishing vessels to identify all FADs deployed or modified by such vessels in accordance with ~~the following~~ Commission identification scheme: ~~detailed in footnote 1 of Annex 1;~~

CPCs shall obtain unique alphanumeric codes from the IATTC staff on a periodic basis and distribute those numbers to the vessels in their fleets for FADs that may be deployed or modified, or in the alternative, if there is already a unique FAD identifier associated with the FAD (e.g., the manufacturer identification code for the attached buoy), the vessel owner or operator may instead use that identifier as the unique code for each FAD that may be deployed or modified.

The alphanumeric code shall be clearly painted in characters at least 5 cm in height. The characters shall be painted on the upper portion of the attached radio or satellite buoy in a location that does not cover the solar cells used to power the equipment. For FADs without attached radio or satellite buoys, the characters shall be painted on the uppermost or emergent top portion of the FAD. The vessel owner or operator shall ensure the marking is durable (for example, use epoxy-based paint or an equivalent in terms of lasting ability) and visible at all times during daylight. In circumstances where the observer is unable to view the code, the captain or crew shall assist the observer (e.g. by providing the FAD identification code to the observer).

SECTION 5. NON-ENTANGLING FADS

17. To reduce the entanglement of sharks, sea turtles or any other species, as of 1 January 2019 CPCs shall ensure that the design and deployment of FADs are based on the principles set out in Annex ~~IV~~.
18. Annex ~~IV~~ is consistent with the 2015 recommendations of the scientific staff of the IATTC. The scientific staff of the IATTC, in coordination with the SAC, shall continue to review research results on the use of non-entangling material and biodegradable material on FADs, and shall provide specific recommendations no later than the 2018 IATTC annual meeting, consistent with Paragraph 5.

SECTION 6. WHALE SHARKS

19. CPCs shall prohibit their flag vessels from setting a purse-seine net on a school of tuna associated with a live whale shark, if the animal is sighted prior to the commencement of the set.
20. CPCs shall require that, in the event that a whale shark is not deliberately encircled in the purse-seine net, the master of the vessel shall:
- a. ensure that all reasonable steps are taken to ensure its safe release; and
 - b. report the incident to the relevant authority of the flag CPC, including the number of individuals, details of how and why the encirclement happened, where it occurred, steps taken to ensure safe release, and an assessment of the life status of the whale shark on release (including whether the animal was released alive but subsequently died).

SECTION 7. AD HOC PERMANENT WORKING GROUP ON FADS

21. An *ad hoc* Permanent Working Group on FADs (Working Group) is established.
22. This Working Group shall be multi-sectorial, involving various stakeholders such as scientists, fishery managers, fishing industry representatives, administrators, representatives of non-governmental organizations, and fishers. Expressions of interest to participate in the Working Group shall be provided to the Director, who shall inform CPCs and the Chair of the FADs Working Group.

23. To the highest degree possible, the Working Group shall conduct its work electronically or, if convenient and cost-effective, in targeted face-to-face meetings that take place in conjunction with other Commission meetings.
24. The Working Group shall report on a regular basis to the Commission and present an initial report of its findings at the 2017 meeting of the SAC.
25. The Terms of Reference of the Working Group are those indicated in Annex ~~VIII~~.
26. The Working Group shall liaise, as far as possible, with other similar working groups on FAD management established in other tuna regional fisheries management organizations (tuna RFMOs), in particular the Western and Central Pacific Fisheries Commission (WCPFC).
27. During its ~~2019~~ 2021 meeting(s), the IATTC FAD Working group will evaluate materials and designs to further reduce entanglements in FADs and for biodegradable FADs and make recommendations to revise Annex ~~HV~~.
28. The Scientific Advisory Committee and the *Ad hoc* Permanent Working Group on FADs shall review the progress and results of the implementation of the FAD provisions contained in this Resolution and make recommendations to the Commission, as appropriate.
29. Resolution C-17-02 is amended as follows: Paragraphs 8 to 15 of Section on Measures for the fishery on Fish-Aggregating Devices of Resolution C-17-02 are deleted and replaced by paragraphs 2 to 7 and 21 of the present Resolution.
30. This Resolution replaces Resolution C-~~16-01~~18-05.

Annex I

CPCs shall report, or require their vessels to report, deactivations to the Secretariat using the following data fields of the first communication of the buoy after being remotely activated:

- date [YYYY/MM/DD],
- time [hh:mm],
- buoy identifier code,
- latitude [expressed in degrees and minutes in decimal values],
- longitude [expressed in degrees and minutes in decimal values],
- speed [knots], and
- reason of deactivation: loss, robbery, recovery, other (specify).

The reports shall be submitted at monthly intervals with a time delay of at least 60 days, but no longer than 90 days.

Annex II

CPCs shall report, or require their vessels to report, remote activations to the Secretariat using the following data fields of the last communication of the buoy before being deactivated:

- date [YYYY/MM/DD],
- time [hh:mm],
- buoy identifier code,
- latitude [expressed in degrees and minutes in decimal values],
- longitude [expressed in degrees and minutes in decimal values],
- speed [knots], and
- reason of remote activation: recovery of a loss buoy, other (specify).

The reports shall be submitted at monthly intervals with a time delay of at least 60 days, but no longer than 90 days.

Annex III

CPCs are required to ensure their vessel owners and operators of purse seiners without an observer aboard record and report to the appropriate national authorities any interaction with FADs, using ~~the~~ standard format ~~to be~~ developed by the Commission staff. For each interaction with a FAD, the following information shall be recorded:

- i. Position;
- ii. Date;
- iii. Hour;
- iv. FAD identification^{4,5};

~~⁴CPCs shall obtain unique alphanumeric codes from the IATTC staff on a periodic basis and distribute those numbers to the vessels in their fleets for FADs that may be deployed or modified, or in the alternative, if there is already a unique FAD identifier associated with the FAD (e.g., the manufacturer identification code for the attached buoy), the vessel owner or operator may instead use that identifier as the unique code for each FAD that may be deployed or modified.~~

~~The alphanumeric code shall be clearly painted in characters at least 5 cm in height. The characters shall be painted on the upper portion of the attached radio or satellite buoy in a location that does not cover the solar cells used to~~

- v. FAD type (e.g., drifting natural FAD, drifting artificial FAD);
- vi. FAD design characteristics (dimension and material of the floating part and of the underwater hanging structure);
- vii. Type of the activity (set, deployment, hauling, retrieving, loss, intervention on electronic equipment, other (specify));
- viii. If the activity is a set, the results of the set in terms of catch and bycatch; and
- ix. Characteristics of any attached buoy or positioning equipment (positioning system, whether equipped with sonar, etc.).

Annex IV

CPCs shall provide, or require their vessels to provide, to the IATTC staff buoy data corresponding to, (a) at a minimum resolution of one position per day, and (b) for any “search window”, when the vessel is communicating more frequently than usual with the buoy in order to locate it.

Data should be received in csv files named “X-YYYY-MM-ZZZZZZZ.csv” where X is the code of the buoy manufacturer (first letter of the brand), YYYY is the year, MM the month, and ZZZZZZZ the purse-seine vessel’s IMO number. Each file should contain the daily records of all the buoys managed by each individual vessel in month MM of year YYYY. The information included in these csv files should be:

- date [YYYY/MM/DD],
- time [hh:mm],
- buoy identifier code,
- latitude [expressed in degrees and minutes in decimal values],
- longitude [expressed in degrees and minutes in decimal values], and
- speed [knots]

The reports shall be submitted at monthly intervals with a time delay of at least 60 days, but no longer than 90 days.

Annex ~~IV~~ Principles for design and deployment of FADs

1. The surface structure of the FAD shall not be covered, or only covered with non-meshed material.
2. If a sub-surface component is used, it shall not be made from netting but from non-meshed materials such as ropes or canvas sheets.

~~1. The floating or raft part (flat or rolled structure) of the FAD can be covered or not. If it is covered with mesh net, it must have a stretched mesh size less than 7 cm and the mesh net must be well wrapped around the whole raft so that there is no loose netting hanging below the FAD when it is deployed.~~

~~2. The design of the underwater or hanging part (tail) of the FAD should avoid the use of mesh net. If mesh net is used, it must be tied as tightly as practicable in the form of sausages or have a stretched mesh size less than 7 cm in a panel with weight at the end.~~

~~power the equipment. For FADs without attached radio or satellite buoys, the characters shall be painted on the uppermost or emergent top portion of the FAD. The vessel owner or operator shall ensure the marking is durable (for example, use epoxy based paint or an equivalent in terms of lasting ability) and visible at all times during daylight. In circumstances where the observer is unable to view the code, the captain or crew shall assist the observer (e.g. by providing the FAD identification code to the observer).~~

3. To reduce the amount of synthetic marine debris, the use of natural or biodegradable materials (such as hessian canvas, hemp ropes, etc.) for drifting FADs should be promoted.

Annex VIII

The objectives of the Working Group are the following:

1. Collect and compile information on FADs in the EPO, including but not limited to data collected by the IATTC and reports prepared by the scientific staff of the IATTC;
2. Review the FAD data collection requirements established in this Resolution to assess the need for revision;
3. Develop data reporting formats and definitions of terms related to FAD fishing (*e.g.* biodegradable FADs, non-entangling FADs, *etc.*), to implement obligations under this Resolution, in cooperation with the scientific staff, to be submitted to the Commission for consideration;
4. Compile information regarding developments on FADs in other tuna RFMOs;
5. Compile information regarding developments on the latest scientific information on FADs, including information on non-entangling FADs, and identify priority areas for research;
6. Prepare annual reports for the SAC, including specific recommendations, as appropriate; and
7. Identify and review possible FAD management measures, in coordination with the scientific staff and the SAC, and make recommendations to the Commission, as appropriate.