

**DRAFT RECOMMENDATION BY ICCAT REPLACING RECOMMENDATION 21-01
ON A MULTI-ANNUAL CONSERVATION AND MANAGEMENT PROGRAMME FOR TROPICAL TUNAS**

(Submitted by the Chair of Panel 1)

RECALLING the current multi-annual conservation and management programme for tropical tunas for which the last assessments of yellowfin tuna, bigeye tuna and the two skipjack stocks were conducted respectively in 2019, 2020 and 2021;

NOTING that the latest SCRS advice (year 2019) indicates that yellowfin stock status is not overfished and not subject to overfishing;

FURTHER NOTING that the latest SCRS advice (year 2021) indicates that bigeye stock status is overfished;

RECOGNISING that the bigeye catches in 2020 were 6% below the TAC and the SCRS projection that the bigeye stock will have a significantly better status at the end of 2021 (probability of being in the green zone > 80%) than at the end of the last year (2019) of the assessment;

ACKNOWLEDGING that the TAC for yellowfin tuna was also exceeded in 2016 by 38%, by 25% in 2017, 24% in 2018, 25% in 2019 and 42% in 2020;

FURTHER NOTING the SCRS's acknowledgement of the challenges in implementing TACs in the absence of comprehensive allocation schemes and of clear catch limits for most of the participants in the fisheries of bigeye tuna and yellowfin tuna, including some major harvesters;

FURTHER ACKNOWLEDGING that it is necessary to explore alternative and more effective systems or regimes for the management of tropical tunas;

TAKING INTO ACCOUNT the recommendations made by the Panel on the Second ICCAT Performance Review regarding the carryover of underage of catches from one year to another;

FURTHER TAKING INTO ACCOUNT the recommendations made by the first meeting of the Joint Tuna RFMO FAD Working Group and the third meeting of ICCAT's *Ad Hoc* Working Group on FADs, on FAD management objectives and the availability of FAD management measures to reduce juvenile tuna mortality and noting that Recommendation 19-02 already took comprehensive measures to reduce the impact of FADs used by the purse seine fleets;

NOTING that the SCRS has advised that increased harvests on FADs and its inherent challenges, coupled with the development of new fisheries and/or use of other gears that primarily impact juvenile fish could have negative consequences for the productivity of bigeye and yellowfin tuna fisheries;

FURTHER NOTING that support vessels contribute to the increase in efficiency and capacity of purse seiner vessels using FADs and that the number of support vessels has increased significantly over the years;

ACKNOWLEDGING the absence of clear ownership of FADs, and the inherent challenges this creates to manage FADs related activities;

[*RECALLING* the provisions of *Resolution by ICCAT on Criteria for the Allocation of Fishing Possibilities* [Res. 15-13] regarding the criteria for the allocation of fishing possibilities;]

RECALLING the significant body of international law that recognizes the rights and special requirements of developing States, including but not limited to, as applicable, Article 119 of UNCLOS and Article 25 and Part VII of UNFSA;

RECOGNISING the interests of developing coastal States to develop their fishing opportunities, and committing to achieve a more equitable distribution of fishing opportunities to developing coastal States over time;

FURTHER RECOGNIZING that fishing overcapacity is a pressing problem that threatens marine fisheries sustainability due to overfishing, any increase of fishing capacity should remain commensurate with fishing opportunities to achieve sustainable productive fisheries, while allowing developing coastal states to adapt their fishing capacity to take advantage of new fishing opportunities;

CONCERNED about the level of implementation of the catch limits adopted under Recommendation 19-02, and the importance of the CPCs strictly adhering to these catch limits for the TAC to be effective as a tool to limit fishing mortality from capture fishery;

EMPHASIZING the importance of preventing an uncontrolled increase of the fishing capacity, and in particular the necessity to prevent the transfer of capacity from other oceans to the Atlantic;

ACKNOWLEDGING the limitations of the current list of vessels engaging in fishing for tropical tunas, and the challenges this creates to efficiently manage fishing capacity;

NOTING the existence of significant challenges to effectively monitor transshipment operations at sea;

ALSO NOTING the potential benefits of ICCAT re-activating a Regional Observer Program to strengthen the Monitoring, Control and Surveillance of the fleets, and in turn to ensure the appropriate implementation of the management measures adopted by the Commission;

[*MINDFUL* that all CPCs shall adhere to the provisions of this Recommendation in the interest of the fisheries and for the sustainability and conservation of the stocks.]

THE INTERNATIONAL COMMISSION FOR THE CONSERVATION
OF ATLANTIC TUNAS (ICCAT) RECOMMENDS THAT:

PART I
GENERAL PROVISIONS

Multi-annual Management, Conservation, and Rebuilding Programme

1. [Without prejudice to the allocation of fishing rights and opportunities to be adopted in the future, for the years [2023, 2024, and 2025], the Contracting Parties and the Cooperating Non-Contracting Parties, Entities or Fishing Entities (hereinafter referred to as CPCs) with vessels that have been actively fishing for tropical tunas in the Atlantic will apply the following management measures with the objective of reducing current levels of fishing mortality of tropical tunas, in particular small bigeye and yellowfin, while the Commission obtains additional scientific advice to adopt a long-term multi-annual management and rebuilding programme.]
2. [CPCs whose vessels are actively fishing for tropical tunas in the Atlantic shall implement a management programme through 2034, with the goal of achieving B_{MSY} being in the green quadrant of the Kobe plot with a probability of more than 60% for each stock of tropical tunas.]

[CPCs whose vessels have been actively fishing for tropical tunas in the Atlantic shall implement a 15-year rebuilding programme for bigeye tuna starting in 2020 and continuing through 2034, with the goal of achieving B_{MSY} with a probability of more than [>50%] [60%] [70%][80%]. CPCs shall also implement management measures with the objectives of ensuring that the stocks of yellowfin and skipjack tuna continue to be exploited sustainably.]

**PART II
CATCH LIMITS**

Catch limits for bigeye tuna

3. The TAC for bigeye tuna shall be [62,500 t] [70,000 t] [75,000 t] for [2023-2025]. It shall be reviewed and amended, as necessary, based on the new stock assessment to be conducted in [2023][2024].

[The TAC for the bigeye shall be [75,000 t] The TAC shall be renewed by the commission on the basis of the SCRS advice.]

- [3bis. In reviewing the TAC in [2024][2025], the Commission shall ensure that the probability of the stock being in the green zone in [2028] is at or more than [70]%. If the probability is more than [70]%, the Commission may consider increasing the TAC, provided that the increased TAC will still ensure that the probability of the stock being in the green zone in [2028][2034] is at or more than [70][60]%. If the probability is less than [70][60]%, the Commission shall reduce the TAC to ensure that the probability in [2028][2034] is at or more than [70][60].]

- [3ter. The Commission recognizes that 70% is exceptionally high compared to the percentages used for other ICCAT stocks and that this percentage does not set a precedent for future discussion of the Commission. The Commission may review and revise, if appropriate, [70]% in light of the degree of uncertainties involved in the new stock assessment for future use.]

4. The allocation for CPCs shall be expressed as a percentage of TAC for 2023 and future years in accordance with the following criteria:

- a) [CPCs whose average catches over the period 2014-2018 have been greater than 10,000 t, shall benefit from [40-45%] of the agreed TAC];
- b) [CPCs whose average catches over the period 2014-2018 have been greater than 3,500 t and less than 10,000 t, shall benefit from [16-18%] of the TAC];
- c) [CPCs whose average catches over the period 2014-2018 have been greater than 1,000 t and less than 3,500 t, [and CPCs whose average catches over the period 2014-2018 have been less than 3,500 t and have authorized purse seine vessels] shall benefit from [22-25%] of the TAC];
- d) Option 1: [CPCs whose average catches over the period 2014-2018 have been less than 1,000 t, shall benefit from [10-13%] of the TAC];

Option 2: [The remaining [10-13%] of the TAC shall be set aside for CPCs referred to in paragraph 4bis;]

- e) [The agreed percentage allocations for the CPCs shall be shared on pro rata of their catches for the period specified in 4 (a) to 4 (d) or any other criteria agreed by the CPCs in the same category;]
- f) [The agreed percentage allocations for the coastal developing CPCs should take into account the artisanal and small-scale fisher's contributions to the CPC fishery;]
- g) [Table of allocation criteria could be added i.e., West Africa proposal.]

Table 1. Allocation key in percentage of TAC for Atlantic bigeye tuna over the period 2023-2027.

<i>Flag name</i>	<i>Category</i>	<i>Category %</i>	<i>Allocation 2023-2027 (%)</i>	
Japan	A	44.00	17.00	
EU-all	A		16.18	
Chinese-Taipei	A		10.82	
Brazil	B	17.00	7.06	
China (P.R.)	B		5.55	
Ghana	B		4.39	
Curaçao	C	23.00	4.24	
Panama	C		2.76	
Cabo Verde	C		2.66	
Belize	C		2.64	
Senegal	C		2.99	
El Salvador	C		2.45	
Korea (Rep.)	C		2.11	
Guinea (Rep.)	C		1.57	
Guatemala	C		1.58	
United States	D		11.00	2.26
Côte d'Ivoire	D			1.44
St Vincent and the Grenadines	D	1.35		
Morocco	D	1.03		
Sao Tomé and Príncipe	D	0.86		
Philippines	D	0.79		
Namibia	D	0.72		
South Africa	D	0.65		
Canada	D	0.60		
Venezuela	D	0.52		
UK-St Helena	D	0.14		
Trinity and Tobago	D	0.12		
Liberia	D	0.12		
Guyana	D	0.08		
Grenada	D	0.07		
Barbados	D	0.07		
St Lucia	D	0.04		
Equatorial Guinea	D	0.03		
Vanuatu	D	0.02		
Mexico	D	0.01		
UK-Turks and Caicos	D	0.01		
St Kitts and Nevis	D	0.01		
Angola	D	0.01		
Mauritania	D	0.01		
United Kingdom	D	0.01		
Dominica	D	0.01		
FR-St Pierre and Miquelon	D	0.01		
UK-Bermuda	D	0.01		
Equalisation quota	*	5.00		5

gbis) [EU allocation simulation]

[Table 1A. Allocation simulation table as proposed by the EU in PA1-509.]

<i>Flag name</i>	<i>Category</i>	<i>TAC Simulation EU</i>
Chinese Taipei	A	8889,51
EU	A	14925,73
Japan	A	8176,60
Brazil	B	4525,00
China	B	3821,05
Ghana	B	3977,92
Belize	C	1121,34
Cabo Verde	C	704,52
Curaçao	C	1524,77
El Salvador	C	1524,04
Guatemala	C	1035,59
Guinea Rep.	C	651,25
Korea	C	572,22
Panama	C	1618,40
Senegal	C	2359,73
Angola	D	651,25
Barbados	D	525,00
Canada	D	525,00
Côte d'Ivoire	D	651,25
Dominica	D	126,25
Guinea Ecuatorial	D	651,25
FR-St Pierre and Miquelon	D	0,00
United Kingdom	D	0,00
Grenada	D	651,25
Guyana	D	651,25
Liberia	D	651,25
Mauritania	D	126,25
Mexico	D	126,25
Morocco	D	703,56
Namibia	D	651,25
Philippines	D	287,06
Sao Tomé & Príncipe	D	651,25
South Africa	D	651,25
St Kitts and Nevis	D	0,00
Sta Lucia	D	651,25
St. Vincent and Grenadines	D	651,25
Trinidad and Tobago	D	525,00
UK-Bermuda	D	0,00

<i>Flag name</i>	<i>Category</i>	<i>TAC Simulation EU</i>
UK-Sta Helena	D	525,00
UK-Turks and Caicos	D	0,00
U.S.A.	D	787,98
Vanuatu	D	126,25
Venezuela	D	525,00
Equalisation quota		3750
Artisanal Quota		3750

- h) [There shall be a “reserve allocation” of not be less than 5% which may be allocated to developing coastal CPCs bordering the Convention Area taking into account their fishery and development plan, submitted pursuant to paragraph 24;]
- i) [The total allocations shall be adjusted yearly based on data provided by CPCs to the Secretariat and will be applied according to the adjustment year;]
- j) [In future years, the reference period for calculating average catches for allocation of TAC to CPCs should be a 5-year period. This period should end 2 years before the last stock assessment when data is published.] *E.g., An assessment for BET in 2024 will take into consideration, all catch limits for CPCs from 2018 to 2020 (provided the data is published by SCRS).*

Alternative from United States on Small harvesters for previous item 4h

- [4bis. Catch limits shall not apply to those CPCs whose annual catch of bigeye tuna in the Convention area in 1999, as provided to the SCRS in 2000, is less than 2,100 t and who are not included in paragraph 4 above. However, CPCs subject to this paragraph shall:
- endeavor to maintain their annual catch to no more than 125% of their highest reported catch prior to 2021;
 - not authorize the use of purse seine gear in their tropical tuna fisheries;
 - not be subject to any quota under harvest, carryforward or payback provisions; and
 - not be eligible to engage in transfers of fishing opportunities pursuant to *Recommendation by ICCAT regarding the temporary adjustment of quotas* (Rec. 01-12).]
- [4tris. If in any given year the catch of bigeye tuna by any CPC covered by paragraph 4bis exceeds 1,575 t or increases to an extent the Commission determines to be inconsistent with its fishery management plan referred to in paragraph 24 below, the Commission shall establish a catch limit for that CPC for the following years. In addition, any CPC subject to this paragraph that wishes to initiate a purse seine fishery for tropical tunas must be assigned a catch limit for bigeye tuna, and other tropical tunas as appropriate, by the Commission before any such fishing activity can be undertaken.]
- [4quater. If the combined total catch of all CPCs referred to in paragraph 4bis exceeds [10-13% of the bigeye TAC], the Commission shall reconsider that arrangement, including considering the need to assign catch limits.]

Alternative from South Africa on Small harvesters for previous item 4h

[4 bis. CPCs whose average annual catches over the period 2014-2018 were less than 1,000t shall be subject to the following trigger limits:

<i>Small harvesting group</i>	<i>Individual CPC trigger limit</i>	<i>Group trigger limit</i>
Developing coastal States	1,000 t	8% of the TAC
Developed coastal States	1,000 t	3% of the TAC
CPCs that are not coastal States of ICCAT	1,000 t	2% of the TAC

[4tris. If a CPC breaches their individual CPC trigger limit, Panel 1 will determine a binding catch limit to apply to that CPC in future years.]

[4quater. If the total sum of catches of all CPCs within a small harvest group exceeds that groups trigger limit, Panel 1 will review the arrangements applying to this group and may revise the arrangements that apply to the group or individual CPCs within the group.]

4quinquies Option 1. The provisions of paragraph 4 of this Recommendation shall not prejudice the rights and obligations under international law of those developing coastal CPCs in the Convention Area whose current fishing activity for bigeye tuna is limited or non-existent, but that have a real interest in fishing for the species, that may wish to develop their own fisheries targeting bigeye tuna in the future.

[quinquies Option 2. The provisions of paragraph 4 of this Recommendation is without prejudice to the rights and obligations under international law of all CPCs in the Convention Area who have a real interest in the fishery, including developing coastal States, in accordance with Article 8 of the United Nations Fish Stocks Agreement.]

Alternative from Honduras for previous item 4h

[The reference catch shall be estimated based on the catches declared (Task 1) by each CPC for a period of four consecutive years that grants a higher average catch to the CPC concerned, to choose between the years 2014-2020.]

The allocation of the TAC shall be done as follows:

- a) Group A: CPCs whose reference catch is equal or greater than 10,000 t, shall receive 44% of the TAC;
- b) Group B: CPCs whose reference catch is equal or greater than 3,500 t and less than 10,000 t, shall receive 18% of the TAC;
- c) Group C: CPCs whose reference catch is equal or greater than 1,000 t and less than 3,500 t, shall receive 23% of the TAC;
- d) Group D: CPCs whose reference catch is less than 1,000 t, shall receive 10% of the TAC;
- e) The agreed percentage allocations for the CPCs of Groups A-C shall be shared pro rata among the CPCs that comprise each Group, based on their reference catch;
- f) The CPCs included in Group D shall not be subject to a catch limit. The TAC allocation for this Group must be sufficient to avoid exceeding the TAC caused by catch increases. If during the application of this measure, the aggregate annual catch for this Group exceeds its allocation, the Commission shall consider the necessary mechanisms to prevent TAC overages;

- g) Group E: The total allocations mentioned in sections 4 (a) to 4 (d) must not be greater than 95% of the TAC. The "reserve allocation" must not be less than 5% and shall be set aside to accommodate any new catches by coastal developing CPCs of the Atlantic Ocean with a reference catch lower than 5 t, and that have presented a declaration of intent to develop their bigeye tuna fishery or have declared to ICCAT their intention to fish this species].
5. In addition to existing requirements, CPCs shall implement robust monitoring, control and surveillance measures, as applicable in relation to their capacity and resources.
 6. Small scale artisanal fishers shall be given special consideration to their specificities and needs by the Commission.
 7. [The annual quotas and catch limits described in this Recommendation do not constitute long term rights and are without prejudice to any future process of allocation.]
 8. [If the total catch exceeds in any year the TAC specified in paragraph 3, the overharvest shall be paid back by the CPCs responsible for this overage in proportion to the contributions of each to these overages and according to the provisions of paragraph 11-13].

Underage or overage of catch of bigeye tuna

Catch underages

9. [The maximum percentage a CPC can carry over of any underage in any given year shall not exceed 15% of its annual initial catch limit].

Catch overages

10. Any catch overages of the annual adjusted catch limit of bigeye tuna by CPCs included in paragraph 4 shall be deducted from the annual catch limit. This deduction of overage should take place during the two consecutive calendar years adjustment period, as shown in the following table:

<i>Year of catch</i>	<i>Years of adjustment</i>
2023	2024-2025
2024	2025-2026
2025	2026-2027
2026	2027-2028
2027	2028-2029
2028	2029-2030

11. Notwithstanding paragraph 11, if any CPC exceeds its annual adjusted catch limit:
 - a) [In one year, then the amount deducted in the adjustment year shall be 100% of the overage; and]
 - b) [During any two consecutive years, the Commission will recommend appropriate measures, which shall include reduction in the annual catch limit equal to 125% of the excess harvest.]
12. [For CPCs listed in the table below, underage or overage of an annual catch limit in 2023, 2024 and 2025 may be added to/or deducted from their 2022, 2023 and 2024 annual catch limit respectively, subject to 10% of annual catch limits in the table:

<i>[CPC]</i>	<i>Annual catch limits (t)</i>
China	5,376
European Union	16,989
Ghana	4,250
Japan	17,696
Philippines	286
Korea	1,486
Chinese Taipei	11,679]

Transfers

13. [Transfer of underage, by any CPCs should be subjected to the conditions specified in paragraph 10.]
14. [Notwithstanding paragraph 13, any CPC that wishes to transfer a part of its catch limit shall inform the Secretariat of a one-time transfer within a fishing year of its catch limit to other CPCs. Any transfer must be consistent with domestic obligations and conservation considerations. A CPC that receives a one-time catch limit transfer may not re-transfer that catch limit nor use it to cover over harvests.]

Monitoring of catch

15. CPCs shall report [quarterly] to the Secretariat the amount of tropical tunas (by species) caught by vessels flying their flag.
16. For purse seiners and large longline vessels (LOA 20m or greater), CPCs shall report on a monthly basis, increasing to weekly when 80% of their catch limits have been caught.
17. The Secretariat shall notify all CPCs once 80% of the TAC has been caught.
18. CPCs shall report to the ICCAT Secretariat the dates when their entire catch limit of bigeye tuna has been utilized. The ICCAT Secretariat shall promptly circulate this information to all CPCs.

TAC for yellowfin tuna

19. The annual TAC for 2023 and subsequent years of the Multi-annual Programme is [110,000 t] for yellowfin tuna and shall remain in place until changed based on scientific advice.
20. Based on the stock assessment and SCRS advice, the Commission may adopt additional conservation measures for yellowfin tuna at the 2023 annual meeting, which may include a revised TAC, closures or allocated catch limits.
21. If the total catch exceeds in any year the TAC in paragraph 19, the Commission shall consider additional management measures for yellowfin tuna. In developing additional conservation and management measures for yellowfin tuna, the Commission will appropriately consider relevant international law and the needs and rights of CPCs, including developing coastal States.

Fishing, Capacity and Control Plans

22. By 31 January each year, each CPC [with a TAC of more than [XXX t] [subject to catch limits under paragraph 4] intending to authorize vessels to fish for tropical tunas shall submit to the Secretariat:
 - i. An annual fishing and capacity plan which shall outline how the CPC will describe how it will implement this Recommendation, including any necessary catch reductions, to ensure compliance with its provisions and other relevant ICCAT instruments and ensure that its overall baitboat, longline and purse seine fleet capacity is commensurate with the allocated quota drawn up, including new fishing opportunities where appropriate, to include the information set out in paragraph 3.
 - ii. A monitoring, control and inspection plan with a view to ensuring compliance with the provisions of this Recommendation.
- 22bis. Prior to 1 March of each year, the Commission shall convene an intersessional meeting of Panel 1 to analyze and, as appropriate, endorse the plans referred to under paragraph 22. If the Commission finds a serious fault in the plans submitted and cannot endorse these plans, the Commission shall decide on the automatic suspension of tropical tuna fishing in that year by that CPC. Non-submission of the plans referred to above shall automatically lead to suspension of tropical tuna fishing in that year for the CPC concerned.

23. Any CPC subject to paragraph 4bis intending to initiate or further develop its tropical tuna fishery shall submit a fishery management plan by [30 January] each year describing, inter alia, its development intentions, including details of proposed or potential fleet additions, to include vessel size and gear type. It shall also describe existing or proposed management, monitoring, and control measures for the fishery, including those required by this recommendation and other ICCAT instruments. The plans shall be submitted to the ICCAT Secretariat and be made available to all CPCs for consideration at the intersessional Panel 1 meeting specified in paragraph 22 bis.

PART III CAPACITY MANAGEMENT MEASURES

Capacity limitation for tropical tunas

24. A capacity limitation shall be applied for the duration of the Multi-annual Programme, in accordance with the following provisions:
- a) [When submitting their 2023 fishing, capacity and control plans to ICCAT, CPCs shall limit the numbers of their purse seiners and large scale longliners (LOA>20m) to the numbers authorized in any given year [2015 or 2019], and shall provide the chosen year of reference to the Secretariat by 31 January 2023.
 - b) CPCs shall only be allowed to increase their number of catching vessels in a way commensurate with possible increases of their catch limits.
 - c) New catching vessels shall only be authorized to replace vessels already authorized with the same gear and, at a minimum, the same length overall.
 - d) CPCs shall only authorize purse seiners already authorized in fishing in the ICCAT convention area in the previous year.]
 - e) The Compliance Committee shall annually review CPCs' compliance with capacity management measures.
25. Any CPC having vessels that operate, part-time or full-time, in support of purse seiners shall report the names and characteristics of all their vessels to the ICCAT Secretariat, including those vessels which were active in 2019[-2022] in the ICCAT Convention area, and the names of the purse seiner(s) that received the support of each support vessel. This information shall be reported no later than 31 January 2023[2022].
26. The Secretariat shall prepare a report for the Commission to be able to consider the type of limitation that support vessels shall be subject to in the future, including a phasing-out plan, where required.
27. [CPCs shall not increase the number of support vessels from the numbers registered in 2019. This limit shall be revised based on the SCRS assessment of impacts and recommendation.]
28. For the purposes of this measure, a support vessel is defined as any vessel that carries out activities in support of purse seine vessels that increases the efficiency of their operations including, but not limited to deploying, servicing and retrieving FADs.

[28bis. The Commission shall consider comprehensive, binding capacity limits in 2023.]

**PART IV
MANAGEMENT OF FADs**

FAD management objectives

29. The general objectives for management of FADs and support vessels in the Convention area are defined as follows:
- a) To minimize potential impacts that high FAD density may have on purse seine fishing efficiency, while minimizing disproportionate impacts to the fishing opportunities of fleets that use other gear or other fishing strategies while also targeting tropical tunas;
 - b) To minimize the impact of FAD fishing on the productivity of bigeye and yellowfin stocks that result from the capture of high numbers of juveniles that aggregate with skipjack on FADs;
 - c) To minimize the impact of FAD fishing on non-target species, where appropriate, including entanglement of marine species, particularly those raising conservation concern;
 - d) To minimize the impact of FADs and fishing on FADs on pelagic and coastal ecosystems, including by preventing the beaching, stranding or grounding of FADs in sensitive habitats or the alteration of pelagic habitat.
30. For the purpose of this Recommendation, the following definitions shall apply:
- a) Floating object (FOB): Any natural or artificial floating (i.e., surface or subsurface) object with no capability of moving on its own. FADs are those FOBs that are man-made and intentionally deployed and/or tracked. Logs are those FOBs that are accidentally lost from anthropic and natural sources.
 - b) Fish-Aggregating device (FAD): Permanent, semi-permanent or temporary object, structure or device of any material, man-made or natural, which is deployed and/or tracked, and used to aggregate fish for subsequent capture. FADs can either be anchored (aFADs) or drifting (dFADs).
 - c) [FAD set: Setting a fishing gear around a tuna school associated with a FAD.]
 - d) Operational buoy: Any instrumented buoy, previously activated, switched on and deployed at sea, which transmits position and any other available information such as eco-sounder estimates.
 - e) Activation: The act of enabling satellite communication services by the buoy supplier company at the request of the buoy owner. The owner then starts paying fees for communication services. The buoy can be transmitting or not, depending if it has been manually switched on.

FAD closure

31. [In order to reduce the fishing mortality of juvenile bigeye and yellowfin tunas, purse seine and baitboat 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 from fishing on FADs during a [seventy-two-day period, from 1 January to 13 March] [three month period from 1 January to 21 March] each year, starting in 2023, throughout the Convention area, [and for an additional period of 30 consecutive days, at the choice of each CPC, which must notify to the Commission in its fishing, inspection, and capacity management plan specified in paragraph 23. This information will be published on the ICCAT website by the ICCAT Secretariat before 1 March each year.] This should be reviewed and, if necessary, revised based on SCRS advice, taking into account monthly trends in free school and FAD-associated catches and the monthly variability in the proportion of juvenile tuna in catches].
32. In addition, each CPC shall ensure its vessels do not deploy drifting FADs during a period of 15 days prior to the start date of the closure period.

FAD limitations

33. CPCs shall ensure that, for vessels flying their flag, the following limits shall apply on the number of FADs with operational buoys at any one time according to definitions given in paragraph 31:

- 300 FADs per vessel subject to review after the next bigeye stock assessment.

The buoy shall be activated exclusively on board the vessel. The number of FADs with operational buoys will be verified through telecommunication bills. Such verifications shall be conducted by the competent authorities of the CPCs:

34. With a view to establishing FAD set limits to keep the catches of juvenile tropical tunas at sustainable levels, in 2023 SCRS should provide advice to the Commission about the definition of a FAD set, the maximum number of FAD sets which should be established per vessel, category of vessel or per CPC. To support this analysis, CPCs with purse seine vessels shall urgently undertake to report to the SCRS by 31 July 2022 the required historical FAD set data. CPCs that do not report these data in accordance with this paragraph shall be prohibited from setting on FADs until such data have been received by the SCRS.

[33bis: The CoC shall provide advice to the Commission in 2023 regarding any monitoring and control aspects issues that need to be taken into account for the implementation of FAD set limits.]

35. In addition, each CPC with purse seine fishing vessels shall not increase its total fishing effort on FADs from its 2018 level. CPCs shall report the difference between the 2018 level and the [2022][2020] level to the [2023][2021] Commission meeting.

36. Starting in 2023, a Working Group shall be established to provide recommendations to the Commission on how to establish a FAD registry in ICCAT, in accordance with **Annex X**.

37. CPCs may, consistent with the terms of paragraphs 34 and 36, authorize their purse seine vessels to set on floating objects provided that the fishing vessel has either an observer or a functioning electronic monitoring system (EMS) on board which is capable of verifying set type, species composition, and is providing information on its FAD fishing activities gathered through these means to the SCRS and COC.

38. Further analysis shall be conducted by the SCRS on the impact of support vessels on the catches of juvenile yellowfin and bigeye tuna to be considered in 2023.

FAD Management Plans

39. CPCs with purse seine and/or baitboat vessels fishing for bigeye, yellowfin and skipjack tunas in association with FADs, shall submit to the Executive Secretary Management Plans for the use of FADs by vessels flying their flag by 31 January each year.

40. The objective of the FAD Management Plans shall be the following:

- a) improve the knowledge about FAD characteristics, buoy characteristics, FAD fishing, including fishing effort of purse seiners and associated support vessels, and related impacts on target and non-target species;
- b) effectively manage the deployment and recovery of FADs, the activation of buoys and their potential loss;
- c) reduce and limit the impacts of FADs and FAD fishing on the ecosystem, including, where appropriate, by acting on the different components of the fishing mortality (e.g. number of deployed FADs, including number of FADs set by purse seiners, fishing capacity, number of support vessels).

41. The Plans shall be drawn up by following the Guidelines for Preparation of FAD Management Plans as provided in **Annex 1**.

FAD logbook and list of deployed FADs

42. CPCs shall ensure that all purse seine and baitboat fishing vessels and all support vessels (including supply vessels) flying their flag, and/or authorized by CPCs to fish in areas under their jurisdiction, when fishing in association with or deploying FADs, collect and report, for each deployment of a FAD, each visit on a FAD, whether followed or not by a set, or each loss of a FAD, the information and data contained in **Annex XX**.

For the purpose of the collection and reporting of the information referred to above and where paper or electronic logbooks already in place do not allow it, CPCs shall either update their reporting system or establish FAD logbooks. In establishing FAD logbooks, CPCs should consider using the template laid down in **Annex 2** as reporting format. When using paper logbooks, CPCs may seek, with the support of the Executive Secretary, harmonized formats. In both cases, CPCs shall use the minimum standards recommended by SCRS in **Annex 3**.

43. CPCs shall also ensure that all vessels referred to in paragraph 32 keep updated on a monthly basis and per 1°x1° statistical rectangles a list of deployed FADs and buoys, containing at least the information as laid down in **Annex 4**.

Reporting obligations on FADs and on support vessels

44. CPCs shall ensure that the following information is submitted every year to the Executive Secretary by 31 January every year in a format provided by the ICCAT Secretariat. This information shall be made available to the SCRS and to the Ad Hoc Working Group on FADs in a database developed by the ICCAT Secretariat:
- a) the number of FADs actually deployed on a monthly basis per 1°x1° statistical rectangles, by FAD type, indicating the presence or absence of a beacon/buoy or of an echo-sounder associated to the FAD and specifying the number of FADs deployed by associated support vessels, irrespective of their flag;
 - b) the number and type of beacons/buoys (e.g., radio, sonar only, sonar with echo-sounder) deployed on a monthly basis per 1°x1° statistical rectangles;
 - c) the average numbers of beacons/buoys activated and deactivated on a monthly basis that have been followed by each vessel;
 - d) average numbers of lost FADs with active buoys on a monthly basis;
 - e) for each support vessel, the number of days spent at sea, per 1° grid area, month and flag State;
 - f) purse seine and baitboat catches, efforts and number of sets (for purse seines) by fishing mode (floating-object associated schools and free school fisheries) in line with Task 2 data requirements (i.e. per 1°x1° statistical rectangles and per month);
 - g) when the activities of purse seine are carried out in association with baitboat, report catches and effort in line with Task 2 and Task 2 requirements as “purse seine associated to baitboats” (PS+BB).

Non-entangling and biodegradable FADs

45. In order to minimize the ecological impact of FADs, in particular the entanglement of sharks, turtles and other non-targeted species, and the release of synthetic persistent marine debris, CPCs shall:
- a) Ensure that all FADs deployed are non-entangling in line with the guidelines under **Annex 5** of this Recommendation, in accordance with previous ICCAT Recommendations;
 - b) Ensure that all FADs deployed are constructed from biodegradable materials, including non-plastics, with the exception of materials used in the construction of FAD tracking buoys;
 - c) Report on an annual basis on the steps undertaken to comply with these provisions in their FADs Management Plans.

**PART V
CONTROL MEASURES**

Specific authorization to fish for tropical tunas

46. CPCs shall issue specific authorizations to vessels 20 meters LOA or greater flying their flag allowed to fish bigeye and/or yellowfin and/or skipjack tunas in the Convention area, and to vessels flying their flag used for any kind of support of this fishing activity (hereafter referred to as "authorized vessels").

ICCAT Record of authorized tropical tuna vessels

47. The Commission shall establish and maintain an ICCAT record of authorized tropical tuna vessels, including support vessels. Fishing vessels 20 meters LOA or greater not entered into this record are deemed not to be authorized to fish, retain on board, tranship, transport, transfer, process or land bigeye and/or yellowfin and/or skipjack tunas from the Convention area or to carry out any kind of support to those activities, including deploying and retrieving FADs and/or buoys.
48. [A CPC may allow by-catch of tropical tunas by vessels not authorized to fish for tropical tunas pursuant to paragraph 41 and 42, if this CPC establishes a maximum onboard by-catch limit for such vessels and the by-catch in question is accounted for within the CPC's quota or catch limit. Each CPC shall provide in its Annual Report the maximum by-catch limit it allows for such vessels and information about how the CPC ensures compliance with the limit. That information shall be compiled by the ICCAT Secretariat and made available to CPCs.]
49. CPCs shall notify, at the latest 15 days before the date of the start of the fishing activity, the record of its catching vessels referred to in paragraph 46 to the Executive Secretary in an electronic form and in accordance with the format set in the Guidelines for Submitting Data and Information Required by ICCAT.
50. CPCs shall, without delay, notify the Executive Secretary of any addition to, deletion from and/or modifications of the initial list. Periods of authorization for modifications or additions to the list shall not include dates more than 45 days prior to the date of submission of the changes to the ICCAT Secretariat. The ICCAT Secretariat shall remove from the ICCAT Record of Vessels any vessel for which the periods of authorization have expired.
51. The Executive Secretary shall, without delay, post the record of authorized vessels on the ICCAT website, including any additions, deletions and/or modifications so notified by CPCs.
52. Conditions and procedures referred to in the Recommendation by ICCAT amending Recommendation 13-13 concerning the establishment of an ICCAT record of vessels 20 meters in length overall or greater authorized to operate in the Convention area (Rec. 21-14) shall apply mutatis mutandis to the ICCAT record of authorized tropical tuna vessels.

Vessels actively fishing tropical tunas in a given year

53. Each CPC shall, by 31 July each year, notify to the Executive Secretary the list of authorized vessels flying their flag which have fished bigeye and/or yellowfin and/or skipjack tunas in the Convention area or have offered any kind of support to the fishing activity (support vessels) in the previous calendar year. For purse seines this list shall also include the support vessels that have supported the fishing activity, irrespective of their flag.

The Executive Secretary shall report each year these lists of vessels to the Compliance Committee and to the SCRS.

54. The provisions of paragraphs 47 to 53 do not apply to recreational vessels.

Transshipments

54bis. Starting in 2023, CPCs whose Large Scale Pelagic Longline Vessels (LSPLVs) are transshipping tuna and tuna-like species in the Convention area shall ensure that a minimum of [20]% of these transshipments take place in ports. LSPLVs shall be allowed to transship at sea only in the presence of a Regional Observer onboard, consistent with paragraph 65.

Recording of catch and fishing activities

55. Each CPC shall ensure that its vessels 20 meters LOA or greater fishing bigeye and/or yellowfin and/or skipjack tunas in the Convention area record their catch in accordance with the requirements set out in **Annex 6** and in the *Recommendation by ICCAT Concerning the Recording of Catch by Fishing Vessels in the ICCAT Convention Area* (Rec. 03-13).

Identification of IUU activity

56. The Executive Secretary shall, without delay, verify that any vessel identified or reported in the context of this Multi-annual Programme is on the ICCAT record of authorized vessels. If a possible violation is detected, the Executive Secretary shall, without delay, notify the flag CPC. The flag CPC shall immediately investigate the situation and, if the vessel is fishing in relation to objects that could affect fish aggregation, including FADs, during the period of closure request the vessel to stop fishing and, if necessary, leave the area. The flag CPC shall, without delay, report to the Executive Secretary the results of its investigation and the corresponding measures taken.
57. The Executive Secretary shall report to the Compliance Committee at each annual meeting of the Commission on any issue related to identification of unauthorized vessels, the implementation of the VMS, the observer provisions, and the results of the relevant investigation made as well as any relevant measures taken by the flag CPCs concerned.
58. The Executive Secretary shall propose to include any vessels identified in accordance with paragraph 52, or vessels for which the flag CPC has not carried out the required investigation and taken, if necessary, adequate measures in accordance with paragraph 51, on the provisional IUU list.

Observers

59. For observers on board vessels targeting bigeye, yellowfin and/or skipjack tunas in the area east of meridian 20°/West longitude and North of parallel 28°/ South latitude, the following shall apply:
- Observers shall automatically be recognized by all CPCs. Such recognition shall allow the scientific observer to continue the collection of information throughout the EEZ visited by the vessel observed. The coastal CPCs concerned shall receive from the flag CPC which mandated the observer the information collected by the observer and related to fishing activities on ICCAT species in their EEZ.
60. For longline vessels flying their flag 20 meters length overall (LOA) or greater targeting bigeye, yellowfin and/or skipjack in the Convention area, CPCs shall ensure a minimum of 10% observer coverage of fishing effort by 2024, through the presence of a human observer on board in accordance with Annex 7 and/or an electronic monitoring system. For this purpose, the Working Group on Integrated Monitoring Measures (IMM WG), in cooperation with the SCRS, shall make a recommendation to the Commission for endorsement at its 2023 Annual meeting on the following:
- a) Minimum standards for an electronic monitoring system such as:
 - i) the minimum specifications of the recording equipment (e.g., resolution, recording time capacity), data storage type, data protection;
 - ii) the number of cameras to be installed at which points on board
 - b) What shall be recorded

- c) Data analysis standards, e.g., converting video footage into actionable data using of artificial intelligence
- d) Data to be analyzed, e.g., species, length, estimated weight, fishing operation details
- e) Reporting format to the ICCAT Secretariat

CPCs are encouraged to conduct trials on electronic monitoring and report the results back to the Commission's Working Group on Electronic Monitoring Systems (WG-EMS) and the SCRS for their review.

CPCs shall report the information collected by the observers or the electronic monitoring system from the previous year by 30 April to the ICCAT Secretariat and to SCRS taking into account CPC confidentiality requirements.

61. CPCs shall submit all relevant data and administer scientific observer programs for tropical tunas in accordance with Recommendation by ICCAT to Establish Minimum Standards for Fishing Vessel Scientific Observers (Rec. 16-14). In 2023, the SCRS shall provide advice on the improvements to observer programs including how coverage should be stratified across vessels, seasons and areas to achieve maximum effectiveness.
62. CPCs shall endeavour to further increase observer coverage rates for longline vessels, including through trials and implementation of electronic monitoring to supplement human observers. CPCs that trial electronic monitoring shall share technical specifications and standards with the Commission towards the development of agreed ICCAT standards.
63. For purse seine vessels flying their flag and targeting bigeye, yellowfin and/or skipjack in the Convention area, CPCs shall ensure 100% observer coverage of fishing effort, through the presence of an observer on board in accordance with **Annex 7** or through an electronic monitoring system whose specifications have been approved by ICCAT. CPCs shall report the information collected by the observers from the previous year by 30 April to the ICCAT Secretariat and to SCRS.
64. Each year, the ICCAT Secretariat shall compile the information collected under observer programs, including on the observer coverage for each tropical tuna fishery, and make it available to the Commission before the annual meeting for further deliberation, taking into account CPC confidentiality requirements.
65. [In 2020, IMM shall explore the possible scope and benefits of ICCAT adopting a regional Observer Program for tropical tuna fisheries taking into account the need for harmonization and coordination of national observer programs for tropical tuna fisheries.]
- 65alt. [Starting in 2023, an ICCAT Regional Observer Program shall be implemented in accordance with **Annex 10**, to ensure compliance with the conservation and management measures adopted by ICCAT and to carry out the scientific data collection and tasks required by the SCRS. Under this program, CPCs shall ensure 100% observer coverage of the activities by [purse seiners, supply/support vessels] carrying their flag, and by surface fishing vessels 35 meters LOA engaging in transshipment operations at sea]. The presence of an ICCAT Regional Observer onboard shall waive the requirements for the observers' coverage described under paragraphs 36, 56, and 58 to 64.]
- [65bis. In 2023, on the basis of the advice from IMM, the Commission shall consider how to use existing schemes of regional observers, deployed onboard vessels authorized to fish for tropical tunas in ICCAT, for CPCs to meet the obligations set within the scope of the ICCAT Regional Observer Program as set out in paragraph 65. For this purpose, the CPCs involved in already existing regional observers' programs should provide details about these schemes to the Secretariat by 31 March 2023, including the copy of the agreement concluded between the Flag State and the CPC of the observers.]

[65ter. In order for an existing observer program, as referred to in paragraph 65bis, to be accepted as a substitute to the ICCAT Regional Observer Program, and to be sufficient to waive the requirements for the observers' coverage described under paragraphs 36, 56, and 58 to 64, it shall satisfy the following conditions:

- i. the Flag State of the vessel shall comply with the obligations specified in paragraph 11 of **Annex 10**;
- ii the observer on board shall meet the requirements in **Annex 10** in terms of qualifications and shall comply with the obligations and tasks specified in paragraphs 5 to 11 of **Annex 10**.]

Port Sampling Programme

66. The port sampling programme developed by the SCRS in 2012 shall be continued for landing or transshipment ports [and CPCs shall include information on their implementation of this requirement in their fishery plans submitted pursuant to paragraphs 22 or 23]. Data and information collected from a CPC's sampling programme shall be reported to ICCAT each year for use by the SCRS, describing, at a minimum, the following by country of landing and quarter: species composition, landings by species, length composition, and weights. Biological samples suitable for determining life history should be collected as practicable.

PART VI MANAGEMENT PROCEDURES/MANAGEMENT STRATEGY EVALUATION

Management Strategy Evaluation (MSE) and Candidate Harvest Control Rules

67. The SCRS shall refine the MSE process in line with the SCRS roadmap and continue testing the candidate management procedures. On this basis, the Commission shall review the candidate management procedures, including pre-agreed management actions to be taken under various stock conditions. These shall take into account the differential impacts of fishing operations (e.g., purse seine, longline and baitboat) on juvenile mortality and the yield at MSY.

PART VII FINAL PROVISIONS

Availability of data to SCRS and to national scientists

68. CPCs shall ensure that:
- a) Both paper and electronic fishing logbooks and the FAD-logbooks referred to in paragraph 37, where applicable, are promptly collected and made available to national scientists;
 - b) The Task 2 data include the information collected from the fishing or FAD logbooks, where applicable, and is submitted every year to the ICCAT Executive Secretary, to be made available to the SCRS.
69. CPCs should encourage their national scientists to undertake collaborative work with their national industry to analyse data related to FADs (e.g., logbooks, buoy data) and to present the outcomes of that analysis to the SCRS. CPCs should take steps to facilitate making the data available for such collaborative work, subject to relevant confidentiality constraints.

Confidentiality

70. All data submitted in accordance with this Recommendation shall be treated in a manner consistent with ICCAT's data confidentiality guidelines and solely for the purposes of this Recommendation and in accordance with the requirements and procedures developed by the Commission.

71. Actions required from the SCRS and the Secretariat:

- a) The SCRS shall the efficacy that full fishery closures along the lines of those proposed in PA1-505A/2019¹ might have to reduce the catches of tropical tunas to the agreed levels; and the potential of such scheme to reduce the catches of juvenile bigeye and yellowfin tunas, in line with recommendations from the SCRS;
- b) The SCRS shall endeavor to establish a definition for FAD sets;
- c) The ICCAT Secretariat shall work with the SCRS in preparing an estimate of capacity in the Convention area, to include at least all the fishing units that are large-scale or operate outside the EEZ of the CPC they are registered in. All CPCs shall cooperate with this work, providing estimates of the number of fishing units fishing for tuna and tuna-like species under their flag, and the species or species groups each fishing unit targets (e.g., tropical tunas, temperate tunas, swordfish, other billfish, small tunas, sharks, etc.); this work shall be presented to the next meeting of the SCRS in 2020 and forwarded to the Commission for consideration;
- d) The ICCAT Secretariat shall identify a Consultant to carry out an evaluation of the monitoring, control and surveillance mechanisms in place in ICCAT CPCs. This work shall primarily focus on the evaluation of data collection and processing systems in each CPC, and the ability to produce estimates of catch and effort, and length frequency for all stocks under ICCAT management, with a focus on stocks for which input and/or output measures are in place; in preparing this work the Consultant shall evaluate how efficient the catch monitoring systems that each CPC has implemented are to achieve robust estimates of catches for the stocks subject to a TAC; the ICCAT Secretariat shall work with SCRS scientists to prepare a TOR for this work as soon as possible.

72. [An intersessional meeting of Panel 1 will be held in 2023 to review existing measures and inter alia develop catch limits and associated catch verification mechanisms for 2024.]

73. This Recommendation replaces Rec. 21-01.

¹ Available upon request from the ICCAT Secretariat or on the 2019 Commission meeting documents webpage (<https://www.iccat.int/com2019/index.htm#en>).

Working group on FADs registry

1. The Working Group shall provide recommendations to the Commission on how to establish an ICCAT FADs registry for the purpose of establishing FADs' ownership and improving control measures of fishing activities on FADs.
2. The Working Group shall in particular:
 - a) Explore and report on how a FAD registry could contribute to solving the issue of lack of ownership of FADs, contribute to improving the recovery of FADs and reducing beaching events, and provide a scope for improving MSC measures in relation to fishing activities on FADs.
 - b) Identify the feasibility and most effective approach(es) to establish a FAD registry in ICCAT, including by identifying the responsibilities of the CPCs, their operators and the Secretariat, and providing estimates of possible costs.
 - c) Report to, and as appropriate, submit recommendations to the Commission.
3. The Working Group shall be assisted by the ICCAT Secretariat in its works. It shall appoint a Chair and Vice-Chair and establish a calendar for its discussions. Starting in 2023, the Working Group shall hold at least one meeting per year back to back with the inter-sessional meeting of Panel 1, before the ICCAT Annual Commission meeting in November.
4. The interested CPCs shall notify the ICCAT Secretariat of their interest to participate in the Working Group by 20 December 2022 at the latest, and designate participants to the Working Group.

Guidelines for Preparation of FAD Management Plans

The FAD Management Plan for a CPC purse seine and baitboat fleets must include the following:

1. Description
 - a) FAD types: AFAD = anchored; DFAD = drifting
 - b) Type of beacon/buoy
 - c) Maximum number of FAD to be deployed per purse seine and per FAD type and active at any one time per vessel
 - d) Minimum distance between AFADs
 - e) Incidental by-catch reduction and utilization policy
 - f) Consideration of interaction with other gear types
 - g) Statement or policy on "FAD ownership"
 - h) Use of support vessels, including from other flag CPCs
2. Institutional arrangements
 - a) Institutional responsibilities for the FAD Management plan
 - b) Application processes for FAD deployment approval
 - c) Obligations of vessel owners and masters in respect of FAD deployment and use
 - d) FAD replacement policy
 - e) Additional reporting obligations beyond this Recommendation
 - f) Conflict resolution policy in respect of FADs
 - g) Details of any closed areas or periods e.g. territorial waters, shipping lanes, proximity to artisanal fisheries, etc.
3. FAD construction specifications and requirements
 - a) FAD design characteristics (a description)
 - b) Lighting requirements
 - c) Radar reflectors
 - d) Visible distance
 - e) FAD markings and identifier
 - f) Radio buoys markings and identifier (requirement for serial numbers)
 - g) Echo-sounder buoys markings and identifier (requirement for serial numbers)
 - h) Satellite transceivers
 - i) Research undertaken on biodegradable FADs
 - j) Prevention of loss or abandonment of FADs
 - k) Management of FADs recovery.
4. Applicable period for the FAD Management Plan
5. Means for monitoring and reviewing the implementation of the FAD Management Plan

FAD information for each deployment or visit

- a) Deployment of any FAD
- Position
 - Date
 - FAD type (anchored FAD, drifting artificial FAD)
 - FAD identifier (i.e., FAD marking and buoy ID, type of buoy – e.g., simple buoy or associated with echosounder)
 - 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
- Type of the visit (deployment of a FAD and/or buoy, 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 FAD)
 - Position
 - Date
 - FAD type (anchored FAD, drifting natural FAD, drifting artificial FAD)
 - Log description or FAD identifier (i.e., FAD Marking and buoy ID or any information allowing to identify the owner)
 - Buoy ID
 - 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
- Last registered position
 - Date of the last registered position
 - FAD identifier (i.e., FAD Marking and buoy ID)

FAD logbook

FAD marking	Buoys ID	FAD type	Type of visit	Date	Time	Position		Estimated catches			By-catch			Observations	
						Latitude	Longitude	SKJ	YFT	BET	Taxonomic group	Estimated catches	Unit		Specimen released alive
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(7)	(8)	(8)	(8)	(9)	(10)	(11)	(12)	(13)
...
...

- (1,2) If FAD marking and associated beacon/buoy ID are absent or unreadable, report it in this section. However, if FAD marking and associated beacon/buoy ID are absent or unreadable, the FAD shall not be deployed.
- (3) Anchored FAD, drifting natural FAD or drifting artificial FAD.
- (4) i.e., deployment, hauling, strengthening/consolidation, removing/retrieving, changing the beacon, loss and mention if the visit has been followed by a set.
- (5) dd/mm/yy
- (6) hh:mm
- (7) N/S/(in degrees and minutes) or E/W/(in degrees and minutes).
- (8) Estimated catches expressed in metric tons.
- (9) Use a line per taxonomic group.
- (10) Estimated catches expressed in weight or in number.
- (11) Unit used.
- (12) Expressed as number of specimen.
- (13) If no FAD marking or associated beacon ID is available, report all available information in this section which may help to describe the FAD and to identify the owner of the FAD.

Table 1. Codes, names and examples of different types of floating object that should be collected in the fishing logbook as a minimum data requirement. Table from 2016 SCRS report (section 18.2, Table 7).

<i>Code</i>	<i>Name</i>	<i>Example</i>
DFAD	Drifting FAD	Bamboo or metal raft
AFAD	Anchored FAD	Very large buoy
FALOG	Artificial log resulting from human activity (and related to fishing activities)	Nets, wreck, ropes
HALOG	Artificial log resulting from human activity (not related to fishing activities)	Washing machine, oil tank
ANLOG	Natural log of animal origin	Carcasses, whale shark
VNLOG	Natural log of plant origin	Branches, trunk, palm leaf

Table 2. Names and description of the activities related to floating objects and buoys that should be collected in the fishing logbook as a minimum data requirement (codes are not listed here). Table from 2016 SCRS report (section 18.2, Table 8).

	<i>Name</i>	<i>Description</i>
FOB	Encounter	Random encounter (without fishing) of a log or a FAD belonging to another vessel (unknown position)
	Visit	Visit (without fishing) of a FOB (known position)
	Deployment	FAD deployed at sea
	Strengthening	Consolidation of a FOB
	Remove FAD	FAD retrieval
	Fishing	Fishing set on a FOB ¹
Buoy	Tagging	Deployment of a buoy on FOB ²
	Remove BUOY	Retrieval of the buoy equipping the FOB
	Loss	Loss of the buoy/End of transmission of the buoy

¹ A fishing set on a Fishing Object (FOB) includes two aspects: fishing after a visit to a vessel's own FOB (targeted) or fishing after a random encounter of a FOB (opportunistic).

² Deploying a buoy on a FOB includes three aspects: deploying a buoy on a foreign FOB, transferring a buoy (which changes the FOB owner) and changing the buoy on the same FOB (which does not change the FOB owner).

List of deployed FADs and buoys on a monthly basis

Month:

<i>FAD Identifier</i>		<i>FAD & electronic equipment types</i>		<i>FAD</i>				<i>Observation</i>
<i>FAD Marking</i>	<i>Associated buoy ID</i>	<i>FAD Type</i>	<i>Type of the associated buoy and/or electronic devices</i>	<i>FAD floating part</i>	<i>FAD underwater hanging structure</i>			
(1)	(1)	(2)	(3)	(4)	(5)			(6)
...
...

- (1) If FAD marking and associated beacon/buoy ID are absent or unreadable, the FAD shall not be deployed.
- (2) Anchored FAD, drifting natural FAD or drifting artificial FAD.
- (3) E.g. GPS, sounder, etc. If no electronic device is associated to the FAD, note this absence of equipment.
- (4) Mention the material of the structure and of the cover and if biodegradable.
- (5) E.g. nets, ropes, palms, etc., and mention the entangling and/or biodegradable features of the material.
- (6) Lighting specifications, radar reflectors and visible distances shall be reported in this section.

Guidelines for reducing the ecological impact of FADs in ICCAT fisheries

1. The surface structure of the FAD shall not be covered or only covered with material implying minimum risk of entangling by-catch species.
2. The sub-surface components shall be exclusively composed of non-entangling material (e.g., ropes or canvas).
3. When designing FADs the use of biodegradable materials shall be prioritized.

Requirements for Catch Recording Minimum specification for paper or electronic logbooks:

1. The logbook must be numbered by sheets
2. The logbook must be filled in every day (midnight) and before port arrival
3. One copy of the sheets must remain attached to the logbook
4. Logbooks must be kept on board to cover a period of one-trip operation

Minimum standard information for logbooks:

1. Master name and address
2. Dates and ports of departure, Dates and ports of arrival
3. Vessel name, registry number, ICCAT number and IMO number (if available)
4. Fishing gear:
 - a) Type FAO code
 - b) Dimension (length, mesh size, number of hooks...)
5. Operations at sea with one line (minimum) per day of trip, providing:
 - a) Activity (fishing, steaming...)
 - b) Position: Exact daily positions (in degree and minutes), recorded for each fishing operation or at noon when no fishing has been conducted during this day
 - c) Record of catches
6. Species identification:
 - a) By FAO code
 - b) Round (RWT) weight in t per set
 - c) Fishing mode (FAD, free school, etc.)
7. Master signature
8. Observer signature, if applicable
9. Means of weight measure: estimation, weighing on board and counting
10. The logbook is kept in equivalent live weight of fish and mentions the conversion factors used in the evaluation.

Minimum information in case of landing, transhipments:

1. Dates and port of landing/transhipments
2. Products: number of fish and quantity in kg
3. Signature of the Master or Vessel Agent

Observer Programme

1. The observers referred to in paragraph 60-66 of this Recommendation shall have the following qualifications to accomplish their tasks:
 - Sufficient experience to identify species and fishing gear;
 - Satisfactory knowledge of the ICCAT conservation and management measures assessed by a certificate provided by the CPCs and based on ICCAT training guidelines;
 - The ability to observe and record accurately;
 - The ability to collect biological samples;
 - A satisfactory knowledge of the language of the flag of the vessel observed.
2. The observers shall not be a crew member of the fishing vessel being observer and shall:
 - a) Be nationals of one of the CPCs;
 - b) Be capable of performing the duties set forth in point 3 below;
 - c) Not have current financial or beneficial interests in the tropical tuna fisheries.
3. The observer tasks shall be in particular:
 - a) To monitor the fishing vessels' compliance with the relevant conservation and management measures adopted by the Commission.

In particular the observers shall:

- i. Record and report upon the fishing activities carried out;
 - ii. Observe and estimate catches and verify entries made in the logbook;
 - iii. Sight and record vessels which may be fishing in contravention to ICCAT conservation and management measures;
 - iv. Verify the position of the vessel when engaged in catching activity;
 - v. Verify the number of instrumental buoys active at any one time;
 - vi. Carry out scientific work such as collecting Task 2 data when required by the Commission, based on the directives from the SCRS, observing and recording data on FAD properties in accordance with **Table 1** below.
- b) Establish general reports compiling the information collected in accordance with this paragraph and provide the master the opportunity to include therein any relevant information.

Obligations of the observer

4. Observers shall treat as confidential all information with respect to the fishing and transshipment operations of the fishing vessels and accept this requirement in writing as a condition of appointment as an observer.
5. Observers shall comply with requirements established in the laws and regulations of the flag State which exercises jurisdiction over the vessel to which the observer is assigned.
6. Observers shall respect the hierarchy and general rules of behaviour which apply to all vessel personnel, provided such rules do not interfere with the duties of the observer under this programme, and with the obligations of vessel personnel set forth in point 7 of this Annex.

Obligations of the flag States of fishing vessels

7. The responsibilities regarding observers of the flag States of the fishing vessels and their masters shall include the following, notably:
 - a) Observers shall be allowed to access to the vessel personnel and to the gear and equipment;
 - b) Upon request, observers shall also be allowed access to the following equipment, if present on the vessels to which they are assigned, in order to facilitate the carrying out of their duties set forth in point 3 of this Annex:
 - i) satellite navigation equipment;
 - ii) radar display viewing screens when in use;
 - iii) electronic means of communication, including FAD/buoys signals.
 - c) Observers shall be provided accommodations, including lodging, food and adequate sanitary facilities, equal to those of officers;
 - d) Observers shall be provided with adequate space on the bridge or pilot house for clerical work, as well as space on deck adequate for carrying out observer duties; and
 - e) The flag States shall ensure that masters, crew and vessel owners do not obstruct, intimidate, interfere with, influence, bribe or attempt to bribe an observer in the performance of his/her duties.

Table 1. FOB/FAD information added to observer onboard form to comply with RFMOs recommendations. Table from 2016 SCRS report (section 18.2, Table 9).

<i>Properties</i>	<i>DFAD</i>	<i>AFAD</i>	<i>HALOG</i>	<i>FALOG</i>	<i>ANLOG</i>	<i>VNLOG</i>
FOB built using biodegradable materials (true/false/undefined)	X	X	X	X		
FOB is non-entangling (true/false/undefined)	X	X	X	X		
Meshed material (true/false/undefined) in FOB	X	X		X		
Size of largest mesh (in millimeters)	X	X		X		
Distance between the surface and the deepest part of the FOB (in meters)	X	X	X	X		
Approximate surface area of the FOB	X	X	X	X		
Specifies the FOB's ID whenever present	X	X	X	X		
Fleet owning the tracking device/echo sounder buoy	X	X	X	X	X	X
Vessel owning the tracking device/echosounder buoy	X	X	X	X	X	X
Anchorage type used for mooring (AFAD registry)		X				
Radar reflectors (presence or not) (AFAD registry)		X				
Lighting (presence or not) (AFAD registry)		X				
Visual range (in nautical miles) (AFAD registry)		X				
Materials used for the floating part of the FOB (list to be defined)	X	X	X	X		
Materials making up the FOB underwater structure (list to be defined)	X	X	X	X		
Tracking device TYPE+ID if possible, otherwise no or undefined.	X	X	X	X	X	X

ICCAT Regional Observer Program

1. Each CPC shall require its purse seiners, support/supply vessels, [and surface fishing vessels 35 meters LOA engaging in transshipment operations at sea], involved in tropical tunas fisheries to carry an ICCAT regional observer.
2. By 1 November each year, CPCs shall notify to the ICCAT Executive Secretariat a list of its observers.
3. The Secretariat of the Commission shall appoint the observers before 15 November each year and shall place them on board the fishing vessels flying the flag of Contracting Parties and of non-Contracting Cooperating Parties, Entities or Fishing Entities that implement the ICCAT observer program. An ICCAT observer card shall be issued for each observer.
4. The Secretariat shall issue a contract listing the rights and duties of the observer and the master of the vessel. This contract shall be signed by both parties involved.

Designation of the observers

5. The designated observers shall have the following qualifications to accomplish their tasks:
 - Sufficient experience to identify species and check compliance of the fishing gear with the established technical specifications;
 - Satisfactory knowledge of the ICCAT conservation and management measures assessed by a certificate provided by the CPCs and based on ICCAT training guidelines;
 - The ability to evaluate and verify the data and records reported by the master and write reports in accordance with the established requirements;
 - A satisfactory knowledge of the language of the flag of the vessel observed.

Obligations of the observer

6. Observers shall:
 - a) Have completed the technical training required by the guidelines established by ICCAT;
 - b) To the extent possible, not be a nationals of the flag State of the fishing vessel;
 - c) Be capable of performing the duties set forth in point 7 below;
 - d) Be included in the list of observers maintained by the Secretariat of the Commission;
 - e) Not have current financial or beneficial interests in the tropical tuna fisheries or direct relation with any operator operating in the fishery. An affidavit shall be required to ensure the absence of conflict of interest.

Observer tasks

7. The observer tasks shall be to:
 - a) Monitor the fishing vessels' compliance with the relevant conservation and management measures adopted by the Commission.

In particular the observers shall:

- i. Record and report upon the fishing activities carried out;
- ii. Observe and estimate catches and verify entries made in the logbook or any other document required by ICCAT;
- iii. Sight and record vessels which may be fishing in contravention to ICCAT conservation and management measures;
- iv. Verify the position of the vessel when engaged in catching or transshipping activities;
- v. Carry out scientific work such as collecting Task 2 data when required by the Commission, based on the directives from the SCRS.

In cases where the observer detect what may constitute non-compliance with ICCAT Recommendations, he/she shall submit this information without delay to the observer implementing company/flag CPC authorities of the catching vessel.

In addition, when deployed on a purse seine or supply/support vessels, the observers shall record:

- i. the number of operations related to the deployment, retrieval, or maintenance of FADs,
- ii. the number and characteristics of fishing sets, on FOBs, and on free school,
- iii. for each fishing set, the estimated quantities caught per species and the average length per species, including for non-target species, and the quantities and/or number released alive or discarded dead,
- iv. possible fishing sets on marine mammals or large sharks/rays species, as well as natural logs,
- v. the fixing of satellite buoys on logs,
- vi. the activation and de-activation events of buoys on FADs,
- vii. the number of FADs being monitored by the vessel.

When deployed on longline vessels, the observers shall:

- i. record, for each fishing set, the quantities of both target and non-target species caught, the average length per species, and the quantities and/or number released alive or discarded dead.
 - ii. record possible transshipment operations.
- b) Report without delay, with due regard to the safety of the observer, any fishing activity associated with FOBs made by the vessel during the period referred to in paragraph 31 of this Recommendation.
 - c) Obtain, as much as possible, evidence (i.e., photos or videos) of possible non-compliance detected and attach them to his/her report.
 - d) Establish general reports compiling the information collected in accordance with this paragraph and provide the master the opportunity to include therein any relevant information.
 - e) Submit to the Secretariat the aforementioned general report within 20 days from the end of the period of observation.
 - f) Exercise any other functions as defined by the Commission.
8. Observers shall treat as confidential all information with respect to the fishing and transshipment operations of the fishing vessels and accept this requirement in writing as a condition of appointment as an observer;
9. Observers shall comply with requirements established in the laws and regulations of the flag State which exercises jurisdiction over the vessel to which the observer is assigned.
10. Observers shall respect the hierarchy and general rules of behaviour which apply to all vessel personnel, provided such rules do not interfere with the duties of the observer under this program, and with the obligations of vessel personnel set forth in paragraph 11 of this program.

Obligations of the flag States of fishing vessels

11. The responsibilities regarding observers of the flag States of the fishing vessels and their masters shall include the following, notably:
- a) Observers shall be allowed to access to the vessel personnel and to the gear and equipment;
 - b) Upon request, observers shall also be allowed access to the following equipment, if present on the vessels to which they are assigned, in order to facilitate the carrying out of their duties set forth in paragraph 7 of this program:
 - i. satellite navigation equipment;
 - ii. radar display viewing screens when in use;

- iii. electronic means of communication;
 - iv. data recorded by the master in the logbook or any other document required by ICCAT.
- c) Observers shall be provided accommodations, including lodging, food and adequate sanitary facilities, equal to those of officers;
- d) Observers shall be provided with adequate space on the bridge or pilot house for clerical work, as well as space on deck adequate for carrying out observer duties; and
- i. The flag States shall ensure that masters, crew and vessel owners do not obstruct, intimidate, interfere with, influence, bribe or attempt to bribe an observer in the performance of his/her duties.
 - ii. Cases involving vessels eligible to embark an observer on-board, but who fail to do so, should be assessed by the Compliance Committee.

The Secretariat, in a manner consistent with any applicable confidentiality requirements, is requested to provide to the flag State of the fishing vessel, copies of all raw data, summaries, and reports pertaining to the trip. The Secretariat shall submit the observer reports to the Compliance Committee and to the SCRS.

Costs of the program

12. The costs of implementing this Program shall be evaluated by the ICCAT Secretariat in 2023 and presented to IMM WG meeting in 2023. The Commission shall adopt a framework for the financing of this program during its annual meeting in 2023.