

Original: English

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

(Proposal by the European Union and Gabon)

CONSIDERING that the further implementation of a multi-annual programme for the medium-term will contribute to the conservation and sustainable management of the tropical tunas fishery;

RECOGNIZING the necessity to adopt monitoring and control measures to ensure implementation of conservation and management measures and to improve the scientific assessment of those stocks;

EXPRESSING GRAVE CONCERN about the difficulties encountered by the Standing Committee on Research and Statistics (SCRS) in investigating the state of the stocks of tropical tunas from the Convention area and to fully evaluate options for area/time closures and propose precise relevant recommendations because of the lack of reliable data collection mechanisms by some CPCs;

RECOGNIZING that a pilot implementation of an area/time closure will contribute to the collection of such necessary data, and will enhance the reduction of the catches of juvenile tropical tunas;

NOTING that the SCRS does not have the data necessary to fully evaluate options for area/time options closure and to propose precise relevant recommendations;

RECOGNIZING the contribution that a reduction in the harvest of juvenile tunas in the Gulf of Guinea can contribute to the long-term sustainability of the stocks;

RENEWING the commitment to fully implement the existing mandatory reporting obligations, including those referred to in points 19 to 21 of the present Recommendation;

NOTING that Recommendation 14-01 brought the coverage of national observers for purse seiner fishing for tropical tunas during the area/time closure period from the minimum of 5% of the fishing effort established by Recommendation 10-10 to a 100% coverage of fishing;

CONSIDERING that it would be appropriate to gradually increase the coverage of observers to 100% also beyond the area/time closure and to extend it also to other gears;

FURTHER CONSIDERING that transshipment at sea cannot be subject to the same degree of controls as transshipment in port and that a level-playing field should be ensured among fleets belonging to different CPCs;

RECALLING recommendations by the Standing Committee on Research and Statistics (SCRS) to address the lack of reliable data collection mechanisms, particularly in tropical tuna fisheries carried on in association with objects that could affect fish aggregation, including FADs;

FURTHER RECALLING that as regards skipjack tunas SCRS stated in its 2014 report that the increasing use of FADs since the early 1990s has changed the species composition of free swimming schools, and that association with FADs may also have an impact on the biology and on the ecology of yellowfin and skipjack tunas;

NOTING that, according to the 2014 SCRS advice, increasing harvests and fishing effort for skipjack could lead to involuntary consequences for other species that are caught in combination with skipjack in certain fisheries;

RECOGNIZING the necessity to adopt data collection and transmission mechanisms to allow improvement of the monitoring and the scientific assessment of the related fisheries and associated stocks;

NOTING that in its 2013 report, SCRS recognized the effect of FADs on both sea-turtle and shark by-catch and the need to provide advice on the design of FADs that would lessen their impact on by-catch species. Therefore, information on dimension and material of the floating part and of the underwater hanging structure should be provided. More particularly the entangling or non-entangling feature of the underwater hanging structure should be reported;

FURTHER NOTING that the activities of supply vessels and the use of FADs are an integral part of the fishing effort exerted by the purse seine fleet;

RECALLING measures related to FAD management plans in other tuna RFMOs;

CONSIDERING that the multispecies characteristics of the tropical tuna fisheries makes it appropriate to extend to skipjack tuna the multi-annual management and conservation plan for yellowfin and bigeye tuna;

FURTHER RECALLING that in 2012 the SCRS developed a Port Sampling Plan aimed at collecting fishery data for bigeye, yellowfin and skipjack tunas that are caught in the geographical area of the area/time closure;

TAKING INTO ACCOUNT the discussions and the preliminary conclusions of the 2015 ICCAT ad-hoc Working Group on FADs;

ACKNOWLEDGING that the structure of *Recommendation by ICCAT on a Multi-Annual Conservation and Management Programme for Tropical Tunas* [Rec. 14-01] should be reviewed to improve clarity;

NOTING that further to the SCRS assessment conducted in 2015, the SCRS concluded that the Bigeye tuna stock is overfished and that overfishing is occurring;

CONSIDERING that the SCRS recommended taking measures to reduce the Bigeye TAC to levels that would allow a recovery with a high degree of probability and within a short timeframe and to find effective measures to reduce FAD-related and other fishing mortality of small Bigeye tunas.

RECOGNISING that, in view of the state of the stock, it would be appropriate to carry out the stock assessment of bigeye in 2018.

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

PART I
GENERAL PROVISIONS

Multi-annual Management and Conservation Programme

1. Contracting Parties and Cooperating non-Contracting Parties, Entities or Fishing Entities (CPCs) whose vessels fish bigeye and/or yellowfin tunas in the Convention area shall implement the Multi-annual Management and Conservation Programme initiated in 2012. As from 2015, such programme shall also apply to the eastern stock of skipjack tuna.

PART II
CATCH LIMITS

Catch limits for bigeye tuna

2. The annual Total Allowable Catch (TAC) for 2016 and subsequent years of the Multi-annual Programme is 65,000 t for bigeye tuna. The following shall apply:
 - a) If the total of catches exceeds the TAC in a given year, the excess amount shall be paid back by CPCs to which a catch limit has been granted for the species concerned. Excess quantities shall be deducted the following year on a *pro rata* basis from the adjusted quotas/catch limits of the CPC concerned, as per paragraphs 7 and 8.

- b) The TAC and catch limits for 2016 and subsequent years of the Multi-annual Programme shall be adjusted based on the latest scientific assessment available. Whatever the outcome, the relative shares used to establish the annual catch limits for the CPCs appearing in paragraph 3 shall remain unchanged.
3. The following catch limits shall be applied for 2016 and subsequent years of the Multi-annual Programme to the following CPCs:

<i>CPC</i>	<i>Annual catch limits for the period 2016-2018 (t)</i>
China	4,179
European Union	17,000
Ghana	3,542
Japan	17,708
Panama	2,480
Philippines	1,487
Korea	1,487
Chinese Taipei	11,687

4. For the other CPCs the following thresholds shall apply:
- a) CPCs which are not developing coastal States shall maintain their annual catch less than 1,550 t;
- b) CPCs which are developing coastal States shall maintain their annual catch less than 2,600 t.

Notwithstanding the above provision, CPCs shall endeavour not to exceed recent catches.

5. CPCs shall report monthly the amount of bigeye caught by vessels flying their flag to the Secretariat by the end of the following month. When 80% of the catch limit or threshold for a CPC is exceeded, the Secretariat shall notify that to all CPCs.
- 5bis. If the total catch exceeds in any year the TAC in paragraph 2, the Commission shall review these measures.

Quota transfers of bigeye tuna

6. *[Comment: Only quota transfers involving the same gears shall be allowed]*. The following annual transfer of bigeye tuna shall be authorized in 2016-2018:
- a) from *[CPC]* to *[CPC]*: xx t

Overage of catch of bigeye tuna

7. Overage of an annual catch limit threshold shall be deducted from the annual catch limit or threshold as follows:

<i>Year of catch</i>	<i>Adjustment Year</i>
2015	2016 and/or 2017
2016	2017 and/or 2018
2017	2018 and/or 2019
2018	2019 and/or 2020

However, for Ghana, the overage catch of bigeye tuna in the period 2006 to 2010 shall be repaid by reducing the catch limit of Ghana for bigeye tuna by a yearly amount of 337 t for the period 2012 to 2021.

8. Notwithstanding paragraph 7 if any CPC exceeds its catch limit or threshold during any two consecutive years, the Commission will recommend appropriate measures, which may include, but are not limited to, reduction in the catch limit equal to a minimum of 125% of the excess harvest, and, if necessary, trade restrictive measures. Any trade measures under this paragraph will be import restrictions on the subject species and consistent with each CPC's international obligations. The trade measures will be of such duration and under such conditions as the Commission may determine.

9. No carry over for any under-harvest shall be made.

TAC for yellowfin tuna

10. The annual TAC for 2012 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.

If the total catch exceeds the TAC for yellowfin tuna the Commission shall review the relevant conservation and management measures in place.

**PART III
CAPACITY MANAGEMENT MEASURES AND FISHING SEASONS**

Capacity limitation for bigeye tuna

11. A capacity limitation shall be applied for the duration of the Multi-annual Programme, in accordance with the following provisions:
- a) The capacity limitation shall apply to vessels 20 meters length overall (LOA) or greater fishing actively for bigeye tuna in the Convention area.
 - b) CPCs shall not increase the number of the purse seine vessels and pelagic longline vessels flying their flag and shall freeze capacity at current level based on the active vessels at end of 2015 as communicated to the Secretariat;
 - c) The concerned CPCs shall ensure that any new seine or pelagic longline vessel constructed or purchased to replace a previous vessel or vessels, shall have a carrying capacity or well volume no larger than the vessel(s) being replaced. In such case, the authorization of the replaced vessel shall be immediately revoked.

Closure of the fishing season in relation with the protection of bigeye tuna

12. Purse seine and pelagic longline vessels shall be prohibited to target bigeye, yellowfin and skipjack tunas during the period 1 to 31 May or 1 to 30 November each year. CPCs shall communicate to the Secretariat by 15 December each year the month of closure that will be applicable to their fleet for the succeeding year.
13. The efficacy of the closure referred to in paragraph 12 in relation to the protection of bigeye tuna shall be evaluated on an annual basis by the SCRS.

**PART IV
MANAGEMENT OF FADs**

Limitation of FADs

14. CPCs shall ensure that for purse seiners flying their flag and fishing for bigeye, yellowfin or skipjack tunas on FADs the following provisional limits are not exceeded:
- No more than 500 instrumental buoys are active at any one time in relation to each of its vessels through such measures as for example the verification of telecommunication bills; and
 - No more than 1000 instrumental buoys may be acquired annually by each of its vessels.
15. The Commission shall review the provisional limits laid down in point 14 at its 2016 Annual Meeting following the advice of SCRS and the conclusions of the FAD working group.

FAD Management Plans

16. CPCs with purse seine and baitboat vessels fishing for bigeye, yellowfin and skipjack tunas in association with objects that could affect fish aggregation, including FADs, shall submit to the Executive Secretary Management Plans for the use of such aggregating devices by vessels flying their flag at least one week in advance to the 2016 meeting of the FADs Working Group and subsequently by 31 January each year.
17. The objective of the FAD Management Plans shall be to:
 - i. improve the knowledge about FADs characteristics, FADs fishing, including fishing effort, and related impacts on targeted and non-targeted species;
 - ii. effectively manage the deployment and recovery of FADs and beacons and their potential loss;
 - iii. 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 FAD's set by purse seiners, fishing capacity, number of support vessels);
18. The Plans shall be drawn up by following the Guidelines for Preparation for FAD Management Plans as provided in **Annex 5**.

FAD logbook and list of deployed FADs

19. 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 fish aggregating devices (FADs), including objects that could affect fish aggregation, shall 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 following information and data:
 - a) Deployment of any FAD
 - i. Position
 - ii. Date
 - iii. FAD type (anchored FAD, drifting artificial FAD)
 - iv. FAD identifier (i.e., FAD Marking or beacon ID, type of buoy – e.g. simple buoy or associated with echosounder)
 - v. FAD design characteristics (dimension and material of the floating part and of the underwater hanging structure and the entangling or non-entangling feature of the underwater hanging structure)
 - b) Visit on any FAD
 - i. Type of the visit (hauling, retrieving, intervention on electronic equipment)
 - ii. Position
 - iii. Date
 - iv. FAD type (anchored FAD, drifting natural FAD, drifting artificial FAD)
 - v. FAD identifier (i.e., FAD Marking or beacon ID or any information allowing to identify the owner)
 - vi. If the visit is followed by a set, the results of the set in terms of catch and by-catch, whether retained or discarded dead or alive. If the visit is not followed by a set, note the reason (e.g. not enough fish, fish too small, etc.)
 - c) Loss of any FAD
 - i. Last registered position
 - ii. Date of the last registered position
 - iii. FAD identifier (i.e., FAD Marking or beacon ID)

For the purpose of the collection and the report 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, for harmonized formats.

20. CPCs shall also ensure that all vessels referred to in paragraph 23 keep updated on a quarterly basis a list of deployed FADs, containing at least the information as laid down in **Annex 3**.

Reporting obligations on FADs and on support vessels

21. CPCs shall ensure that the following information is submitted every year to the Executive Secretary, to be made available to the SCRS and to the ad-hoc working group on FADs:
- i. the number of FADs actually deployed on a quarterly basis, by FAD type, indicating the presence or absence of a beacon/buoy or of an echo-sounder associated to the FAD;
 - ii. the number and type of beacons/buoys (e.g. radio, with echo-sounder) actually deployed on a quarterly basis;
 - iii. the average numbers of active beacons/buoys on a quarterly basis that have been followed by each vessel;
 - iv. average numbers of active lost FADs on a quarterly basis;
 - v. for each support vessel, the number of days spent at sea, per 1° grid area, month and flag State.

Non-entangling and biodegradable FADs

22. 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:
- i. replace by 2016 existing FADs with non-entangling FADs in line with the guidelines under **Annex 6** of this Recommendation.
 - ii. undertake research to gradually replace existing FADs with fully biodegradable and non-entangling FADs, with a view to phase out non-biodegradable FADs by 2018 if possible.

CPCs shall 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

23. 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 to this fishing activity (hereafter referred to as "authorized vessels").

ICCAT Record of authorized tropical tuna vessels

24. The Commission shall establish and maintain an ICCAT record of authorized tropical tuna 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.
25. CPCs shall notify the list of authorized vessels 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.
26. 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 Secretariat. The Secretariat shall remove from the ICCAT Record of Vessels any vessel for which the periods of authorization have expired.
27. 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.

28. Conditions and procedures referred to in the *Recommendation by ICCAT Concerning the Establishment of an ICCAT Record of Vessels 20 meters in Length Overall or Greater Authorized to Operate in the Convention Area* [Rec. 13-13] shall apply *mutatis mutandis* to the ICCAT record of authorized tropical vessels.

Vessels actively fishing tropical tunas in a given year

29. 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 in the previous calendar year.

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

30. The provisions of paragraphs 23 to 29 do not apply to recreational vessels.

Recording of catch and fishing activities

31. 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 1** and in the *Recommendation by ICCAT Concerning the Recording of Catch by Fishing Vessels in the ICCAT Convention Area* [Rec. 03-13].

Identification IUU activity

32. 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 and not out of compliance with the provisions of paragraph 12. 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 with objects that could affect fish aggregation, including FADs, request the vessel to stop fishing and, if necessary, leave the area without delay. The flag CPC shall without delay report to the Executive Secretary the results of its investigation and the corresponding measures taken.
33. 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 by the flag CPCs concerned.
34. The Executive Secretary shall propose to include any vessels identified in accordance with paragraph 33, or vessels for which the flag CPC has not carried out the required investigation in accordance with paragraph 32, on the provisional IUU list.

Scientific Observers

35. CPCs shall take appropriate action to ensure that as from 1 July 2016 all purse seine and longline vessels flying their flag 20 meters length overall (LOA) or greater targeting bigeye, yellowfin and/or skipjack tunas in the Convention area have a scientific observer on board (100% coverage) in accordance with **Annex 4**.
36. Scientific observers shall automatically be recognized by all CPCs. Such recognition shall allow the scientific observer to continue the collection of data throughout the EEZ visited by the vessel observed.
37. CPCs that do not accept that their national scientific observer may collect data in the EEZ of another CPC, or that do not recognize as valid the data collected in their EEZ by a scientific observer of another CPC, must inform the Executive Secretary, for immediate transmission to the SCRS and the Compliance Committee, of their refusal within three months after the entry into force of this Recommendation or their accession to ICCAT. By such refusal, the CPC concerned shall refrain to require the deployment of its national scientific observer on vessels of another CPC.

Observers report

38. By 31 July each year CPCs shall submit the observers reports to the ICCAT Executive Secretary, who shall make them available to the SCRS.

Transshipment at sea

39. Transshipment at sea of tropical tunas in the ICCAT Convention Area shall be prohibited.

Port Sampling Programme

40. CPCs shall implement a Port Sampling Programme with the aim of collecting fishery data for purse seiners and longliners flying their flag and targeting bigeye, yellowfin, and skipjack tunas in the area between 20°S and 20° N.
41. The Port Sampling Programme shall comply with the requirements **laid down in Annex 7** and shall be implemented in landing or transshipment ports and applied to all vessels irrespective of their flag landing in each landing port.
42. CPCs shall ensure that:
- i. Sampling teams can access vessels flying their flag including carrier vessels.
 - ii. Vessel masters facilitate sampling and provide the sampling teams with all the information needed to accomplish the sampling plan, including logbooks.
43. Data and information collected from the sampling programme shall be reported to the Secretariat by 31 July each year, describing, at a minimum, the following by country of landing on a quarterly basis: species composition, landings by species, length composition, and weights. Biological samples suitable for determining life history should be collected as practicable.

**PART VI
FINAL PROVISIONS**

Availability of data to SCRS and to national scientists

44. CPCs shall ensure that:
- a) Both paper and electronic fishing logbooks referred to in paragraph 31 and the FAD-logbooks referred to in paragraph 21, where applicable, are promptly collected and made available to national scientists;
 - b) The Task II data include the information collected from the fishing or FAD logbooks, where applicable, and is submitted every year to the ICCAT Executive Secretariat, to be made available to the SCRS;
45. With the objective of providing information useful to estimate the fishing effort related to FAD-fishing each CPC should provide full access to VMS data of their fishing and support vessels and trajectories of FADs to its national scientists.
46. CPCs shall undertake historical data mining on the use and number of deployed FADs with a view to possibly submit the relevant information by 31 January 2017 to the ICCAT Executive Secretary, who shall make them available to the FAD working group and to the SCRS.

Stock assessment

47. The SCRS shall conduct the next stock assessment of bigeye in 2018.

Confidentiality

48. All data shall be treated in a confidential manner.

Repeals and review

49. This Recommendation replaces [Rec. 93-04], [Rec. 98-03], [Rec. 04-01], [Res. 05-03], [Rec. 08-01], [Rec. 09-01] [Rec. 10-01] Rec. [11-01], Rec [13-01] and Rec. [14-01] and shall be revised in 2016.

Annex 1

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) or 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

FAD logbook

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

- (1, 2) If FAD marking and associated beacon ID are absent or unreadable, report it in this section.
- (3) Anchored FAD, drifting natural FAD or drifting artificial FAD.
- (4) I.e., deployment, hauling, 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/mm/dd or °E/W/mm/dd.
- (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 neither associated beacon ID is available, report in this section all available information which may help to describe the FAD and to identify the owner of the FAD.

List of deployed FADs on a quarterly basis

<i>FAD Identifier</i>		<i>FAD & electronic equipment types</i>		<i>FAD Design characteristics</i>				<i>Observation</i>
<i>FAD Marking</i>	<i>Associated beacon ID</i>	<i>FAD Type</i>	<i>Type of the associated beacon and /or electronic devices</i>	<i>FAD floating part</i>		<i>FAD underwater hanging structure</i>		
				<i>Dimensions</i>	<i>Materials</i>	<i>Dimensions</i>	<i>Materials</i>	
(1)	(1)	(2)	(3)	(4)	(5)	(4)	(6)	(7)
...
...

- (1) If FAD marking and associated beacon ID are absent or unreadable, mention it and provide all available information which may help to identify the owner of the FAD.
- (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) E.g. width, length, high, depth, mesh sizes, etc.
- (5) Mention the material of the structure and of the cover and if biodegradable.
- (6) E.g. nets, ropes, palms, etc... and mention the entangling and/or biodegradable features of the material.
- (7) Lighting specifications, radar reflectors and visible distances shall be reported in this section.

Observer Programme

1. The observers referred to in paragraphs 35 to 37 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 observed and shall:
 - a) Be nationals of one of the CPCs;
 - b) Be capable of performing the duties set forth in point 4 below;
 - c) Not have current financial or beneficial interests in the tropical tuna fisheries.

Observer tasks

3. The observer tasks shall be in particular:
 - a) record and report upon the fishing activity, which shall include at least the following:
 - i. data collection, that includes quantifying total target catch and by-catch (including sharks, sea turtles, marine mammals, and seabirds), size composition, disposition status (i.e., retained, discarded dead, released alive), the collection of biological samples for life history studies (e.g., gonads, otoliths, spines, scales), and the collection of bands/tags markings;
 - ii. fishing operation information, including:
 - area of catch by latitude and longitude;
 - fishing effort information (e.g., number of sets, number of hooks, etc.);
 - date of each fishing operation, including, as appropriate, the start and stop times of the fishing activity;
 - use fish aggregation objects, including FADs
 - reasons for discarding, and general state of catch released animals;
 - iii. exercise any other scientific work as recommended by SCRS and agreed by the Commission;
 - b) observe and record the use of by-catch mitigation measures and other relevant information;
 - c) analyse images from on board cameras, in support of the data collection referred to in a and b above;
 - d) observe and report environmental-related elements.

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 paragraph 8.

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 paragraph 4:
 - i) satellite navigation equipment;
 - ii) radar display viewing screens when in use;
 - iii) electronic means of communication.
 - 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.

Guidelines for Preparation of FAD Management Plans

The FAD Management Plan for a CPC purse seine and bait boat 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
 - 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”
3. 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.
4. 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.
5. Applicable period for the FAD Management Plan
6. Means for monitoring and reviewing the implementation of the FAD Management Plan

Annex 6

Guidelines for reducing the ecological impact of FADs in ICCAT fisheries

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

Annex 7

Port sampling programme

The programme shall be multispecies, with the double objective of estimating size distribution and species composition of the catch, stratified by time and, where applicable, by area and fishing mode (FADs and free school).

1) Size and species composition

- Multi-species sampling: In this scheme, the sample is taken randomly from the entire catch without any sorting by species. Sample size should be 500 fish for small fish (<10 kg) and 50 fish large fish. As regards small fish, while all yellowfin tuna and bigeye tuna should be measured, skipjack tuna and other small tuna species should be measured until the mode in the size distribution appears and thereafter they will only be counted (for more details on the method see Annex 2 to Chapter 4 in ICCAT Manual).
- Stratified by:
 - Time (month)
 - Area (areas should be defined as homogeneous as possible regarding sizes and species composition); the area affected by the time/area closure should be considered as stratum.
 - Fishing mode (FADs vs. Free school)
 - Size category (<10 kg vs. ≥10 kg)
- Sampling coverage: 1 fish by t (minimum coverage)
- Type of measure: FL for small fish and LD1 for large fish

2) Weight and biological sampling

- Weight information can be obtained through the length/weight relationship adopted by the SCRS (see ICCAT *Manual*, Chapter 2).
- In addition weight information can be obtained as part of a biological sampling that includes genetic, maturity, sex ratio and other biological parameters. To reduce the cost, this biological sampling can be implemented through specific agreements with the canneries. Samples should be taken following the procedure defined in Chapter 4 of the ICCAT Manual for biological sampling.