Council of the
European Union

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COVER NOTE

From:	Council General Secretariat
To:	Delegations
Subject:	IOTC Circular 2015-049 - Conservation and Management Measures adopted by the IOTC at its 19th Session

Delegations will find attached the IOTC Circular 2015-049 concerning the Conservation and Management Measures adopted by the IOTC at its 19th Session, held in Busan, Republic of Korea, from 27 April to 1 May 2015.

These Resolutions enter into force on 10 September 2015, provided no objections from the IOTC Contracting Parties are made.

Indian Ocean Tuna Commission
Commission des Thons de l'Ocean Indien
iotc ctoi

IOTC CIRCULAR 2015–049

13 May 2015

Dear Sir/Madam,

SUBJECT: CONSERVATION AND MANAGEMENT MEASURES ADOPTED BY THE IOTC AT ITS 19TH SESSION

I have the honour to transmit to you the texts of eleven (11) Conservation and Management Measures adopted by the Commission at its 19th Session, held in Busan, Rep. of Korea from 27 April to 1 May 2015.

Pursuant to Article IX.4 of the IOTC Agreement, these Conservation and Management Measures shall become binding on Members, 120 days from the date of this notification, i.e. 10 September 2015.

- Resolution 15/01 *On the recording of catch and effort data by fishing vessels in the IOTC area of competence*
- Resolution 15/02 *On mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties*
- Resolution 15/03 *On the vessel monitoring system (VMS) programme*
- Resolution 15/04 *Concerning the IOTC record of vessels authorised to operate in the IOTC area of competence*
- Resolution 15/05 *On conservation measures for striped marlin, black marlin and blue*
- Resolution 15/06 *On a ban on discards of bigeye tuna, skipjack tuna, yellowfin tuna, and a recommendation for non-targeted species caught by purse seine vessels in the*
- Resolution 15/07 *On the use of artificial lights to attract fish to drifting fish aggregating*
- Resolution 15/08 *Procedures on a fish aggregating devices (FADs) management plan, including a limitation on the number of FADs, more detailed specifications of catch reporting from FAD sets, and the development of improved FAD designs to*
- Resolution 15/09 *On a fish aggregating devices (FADs) working group*
- Resolution 15/10 *On target and limit reference points and a decision framework*
- Resolution 15/11 *On the implementation of a limitation of fishing capacity of Contracting Parties and Cooperating Non-Contracting Parties*

The texts of the Conservation and Management Measures adopted are attached herewith. Yours sincerely

ɔh Payet
Executive Secretary

Attachments:

- Conservation and Management Measures adopted in 2015

Distribution

RESOLUTION 15/01: ON THE RECORDING OF CATCH AND EFFORT DATA BY FISHING VESSELS IN THE IOTC AREA OF COMPETENCE

Keywords: Data recording; logbook; purse seine; longline; gillnet; pole and line; handline; trolling; fishing vessels.

The Indian Ocean Tuna Commission (IOTC),

RECALLING the commitment made by Contracting Parties under Article V of the IOTC Agreement to keep under review the conditions and trends of the stocks and to gather, analyse and disseminate scientific information, catch and effort statistics and other data relevant to the conservation and management of the stocks and to fisheries based on the stocks covered by the Agreement;

CONSIDERING the provisions set forth in Resolution 15/02 *Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs)* (or any subsequent superseding Resolution), and in particular paragraph 4, which sets out the catch and effort reporting requirements for surface fisheries, longline and coastal fisheries;

ACKNOWLEDGING that the IOTC Scientific Committee has repeatedly stressed the importance of the timeliness and accuracy of data submissions for Members;

ALSO RECALLING the outcomes of the 9th Session of the IOTC Scientific Committee held in Victoria, Seychelles from
6 to 10 November 2006 where it was agreed that a standardised logbook would be advantageous and agreed on the minimum requirements for all purse seine and bait boat fleets operating in the IOTC area of competence in order to harmonise data gathering and provide a common basis for scientific analysis for all IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs);

FURTHER RECALLING the recommendations adopted by the KOBE II Workshop on Bycatch, held in Brisbane, Australia, 23–25 June 2010; in particular that RFMOs should consider adopting standards for bycatch data collection which, at a minimum, allows the data to contribute to the assessment of bycatch species population status and evaluation of the effectiveness of bycatch measures, and that the data should allow the RFMOs to assess the level of interaction of the fisheries with bycatch species;

FURTHER CONSIDERING the work of the small task force created by the IOTC Scientific Committee during its 10th Session held in Seychelles in November 2007, to harmonise the various forms currently used by the fleets and the IOTC Scientific Committee agreement on the minimum standard requirements for all purse seine, longline and gillnet fleets as well as the produced logbook template;

FURTHER CONSIDERING the deliberations of the 13th Session of the IOTC Scientific Committee held in Victoria, Seychelles from 6 to 10 December 2010, that recommended three options, one of which is mandatory reporting of a revised list of shark species in logbooks to improve the data collection and statistics on sharks in the IOTC area of competence;

FURTHER CONSIDERING the deliberations of the 14th Session of the IOTC Scientific Committee held in Mahé, Seychelles from 12 to 17 December 2011, that proposed a list of shark species for all gears and recommended minimum recording requirements for handline and trolling gears in the IOTC area of competence;

FURTHER CONSIDERING the recommendations of the 17th Session of the IOTC Scientific Committee referring to bycatch;

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

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

1. Each flag CPC shall ensure that all purse seine, longline, gillnet, pole and line, handline and trolling fishing vessels flying its flag and authorised to fish species managed by IOTC be subject to a data recording system.

2. The measure shall apply to all purse seine, longline, gillnet, pole and line, handline and trolling fishing vessels over 24 metres length overall and those under 24 metres if they fish outside the EEZs of their flag States within the IOTC area of competence. The data recording systems for developing CPCs vessels less than 24 metres operating within the EEZ of coastal States are subject to Paragraphs 11 and 12. The vessels of less than 24 metres operating within the EEZ of developed CPCs shall apply this measure.

3. All vessels shall keep a bound paper or electronic logbook to record data that includes, as a minimum requirement, the information and data in the logbook set forth in **Annex I, II** and **III**.

4. Each flag CPC shall submit to the IOTC Executive Secretary by 15 February 2016 a template of its official logbooks to record data in accordance with **Annex I, II** and **III**, for publishing on the IOTC website to facilitate MCS activities. For CPCs that use electronic logbook systems, a copy of the applicable regulations implementing the electronic logbook system in that CPC, a set of screen captures and the name of the certified software may be provided. If changes are made to the template after 15 February 2016, an updated template shall be submitted.

5. Where the logbook is not in one of the two languages of the IOTC, CPCs shall provide a complete field description of the logbook in one of the two languages of the IOTC together with the submission of the sample of the logbook. The IOTC Executive Secretary shall publish the sample of the logbook and the field description on the IOTC website.

6. **Annex I** includes information on vessel, trip and gear configuration for purse seine, longline, gillnet and pole and line, and shall only be completed once for each trip, unless the gear configuration changes during the trip.

7. **Annex II** contains information for purse seine, longline, gillnet and pole and line operations and catch, which shall be completed for each set/shot/operation of the fishing gear.

8. **Annex III** contains specifications for handline and trolling gears.

9. The logbook shall be completed by the Master of the fishing vessel and submitted to the flag State administration, as well as to the coastal State administration where the vessel has fished in that coastal State's EEZ. Only the part of the logbook corresponding to the activity deployed in the coastal State EEZ shall be provided to the coastal State administration where the vessel has fished in that coastal State's EEZ.

10. The Flag State shall provide all the data for any given year to the IOTC Secretariat by June 30th of the following year on an aggregated basis. The confidentiality rules set out in Resolution 12/02 *Data Confidentiality Policy and Procedures* (or any subsequent superseding Resolution) for fine–scale data shall apply.

11. Noting the difficulty in implementing a data recording system on fishing vessels from developing CPCs, the data recording systems for vessels less than 24 metres of developing CPCs operating inside the EEZ shall be implemented progressively from 1 July 2016.

12. The Commission shall consider development of a special program to facilitate the implementation of this Resolution by developing CPCs. Furthermore, developed and developing CPCs are encouraged to work together to identify opportunities for capacity building to assist the long-term implementation of this Resolution.

13. This Resolution supersedes Resolution 13/03 *On the recording of catch and effort by fishing vessels in the IOTC area of competence*.

ANNEX 1: Record once per trip (unless gear configuration changes)

1.1 REPORT INFORMATION

1. Date of the submission of logbook
2. Name of reporting person

1.2 VESSEL INFORMATION

1. Vessel name and/or registration number
2. IMO number, where available
3. IOTC number
4. Call sign: if call sign is not available, other unique identifying code such as fishing licence number should be used
5. Vessel size: gross tonnage and overall length (meters)

1.3 CRUISE INFORMATION

For multiday fishing operations record the:

1. Departure date (at your location) and port
2. Arrival date (at your location) and port

1.4 OTHER REQUIRED INFORMATION

Longline (Gear Configuration):

1. Average branch line length (meters): straight length in meters between snap and hook (**Figure 1**)
2. Average float line length (meters): straight length in meters from the float to the snap
3. Average length between branch (meters): straight length of main line in meters between successive branch lines
4. Main line material classified into four categories:
   a) Thick rope (Cremona rope)
   b) Thin rope (Polyethylene or other materials)
   c) Nylon braided
   d) Nylon monofilament

5. Material of the terminal tackle of the branch line (leader/trace) classified into two categories:

   a) Nylon monofilament

   b) Other (such as wire)

Purse Seine:

(Gear configuration):

1. Length of the purse seine net

2. Height of the purse seine net

3. Total number of FADs deployed per trip: refer to the Resolution 15/08 *Procedures on a fish aggregating devices (FADs) management plan, including a limitation on the number of FADs, more detailed specification of catch reporting from FAD sets, and the development of improved FAD designs to reduce the incidence of entanglement of non-target species* (or any subsequent superseding Resolution)

(Search information):

1. Days searched

2. Spotter plane used (Yes/No)

3. Supply vessel used (Yes/No), if yes what is the name and registration number of the supply vessel

Gillnet (Gear Configuration):

1. Overall length of net (metres): record the total overall length of the net onboard

2. Mesh size of net (millimetres): record the mesh size (measured between opposite knots when fully stretched) used during the trip

3. Depth of assembled net (meters): height of assembled net in meters

4. Netting material: e.g. nylon braid, nylon monofilament, etc.

Pole and line (Gear Configuration):

1. Number of fishermen

ANNEX II: Record once per set/shot/operation

Note: for all gears in this annex use the follow format for date and time

For date: when recording date of the set/shot/operation: record the YYYY/MM/DD

For time: record 24hr time as either the local time, GMT or national time and clearly specify which time has been used.

2.1 OPERATION For longline:

1. Date of set
2. Position in latitude and longitude: either position at noon or position of start of gear or area code of operation (e.g. Seychelles EEZ, High seas, etc.) may be optionally used
3. Time of starting setting and, when possible, retrieving the gear
4. Number of hooks between floats: if there are different hooks counts between floats in a single set then record the most representative (average) number
5. Total number of hooks used in the set
6. Number of light–sticks used in the set
7. Type of bait used in the set: e.g. fish, squid, etc.
8. Optionally, sea surface temperature at noon with one decimal point (XX.X^{o}C)

For purse seine:

1. Date of set
2. Type of event: fishing set or deployment of a new FAD
3. Position in latitude and longitude and time of event, or if no event during the day, at noon
4. If fishing set: specify if the set was successful, nil, well; type of school (free swimming school or FAD associated. If FAD associated, specify the type (e.g. log or other natural object, drifting FAD, anchored FAD, etc.). Refer to the Resolution 15/08 *Procedures on a fish aggregating devices (FADs) management plan, including a limitation on the number of FADs, more detailed specification of catch reporting from FAD sets, and the development of improved FAD designs to reduce the incidence of entanglement of non-target species* (or any subsequent superseding Resolution)
5. Optionally, sea surface temperature at noon with one decimal point (XX.X^{o}C)

For gillnet:

1. Date of set: record the date for each set or day at sea (for days without sets)

2. Total length of net (meters): floatline length used for each set in meters

3. Start fishing time: record the time when starting each set and, when possible, gear retrieving

4. Start and end position in latitude and longitude: record start and end latitude and longitude that represent the area that your gear is set between or, if no set, record the latitude and longitude at noon for days without sets

5. Depth at which net is set (meters): approximate depth at which the gillnet is set

For Pole and Line:

Fishing effort information in logbooks shall be recorded by day. Catch information in logbooks shall be recorded by trip or, when possible, by fishing day.

1. Date of operation: record the day or date

2. Position in latitude and longitude at noon

3. Number of fishing poles used during that day

4. Start fishing time (record the time immediately after bait fishing is complete and the vessel heads to the ocean for fishing. For multiple days, the time at which search starts should be recorded) and end fishing time (record the time immediately after fishing is complete from the last school; on multiple days this is the time fishing stopped from the last school). For multiple days number of fishing days should be recorded.

5. Type of school: FAD associated and/or free school

2.2 CATCH

1. Catch weight (kg) or number by species per set/shot/fishing event for each of the species and form of processing in section 2.3:

   a) For longline by number and weight

   b) For purse seine by weight

   c) For gillnet by weight

   d) For pole and line by weight or number

2.3 SPECIES

For Longline:

Primary Species	**FAO code**	**Other Species**	**FAO code**
Southern bluefin tuna (*Thunnus maccoyii*)	SBF	Shortbill spearfish (*Tetrapturus angustirostris*)	SSP
Albacore (*Thunnus alalunga*)	ALB	Blue shark (*Prionace glauca*)	BSH
Bigeye tuna (*Thunnus obesus*)	BET	Mako sharks (*Isurus* spp.)	MAK
Yellowfin tuna (*Thunnus albacares*)	YFT	Porbeagle shark (*Lamna nasus*)	POR
Skipjack tuna (*Katsuwonus pelamis*)	SKJ	Hammerhead sharks (*Sphyrna* spp.)	SPN
Swordfish (*Xiphius gladius*)	SWO	Silky shark (*Carcharhinus falciformis*)	FAL
Striped marlin (*Tetrapturus audax*)	MLS	Other bony fishes	MZZ
Blue marlin (*Makaira nigricans*)	BUM	Other sharks	SKH
Black marlin (*Makaira indica*)	BLM	Seabirds (in number)[1]	
Indo–Pacific sailfish (*Istiophorus platypterus*)	SFA	Marine Mammals (in number)	MAM
		Marine turtles (in number)	TTX
		Thresher sharks (*Alopias* spp.)	THR
		Oceanic whitetip shark (*Carcharhinus longimanus*)	OCS
		Optional species to be recorded	
		Tiger shark (*Galeocerdo cuvier*)	TIG
		Crocodile shark (*Pseudocarcharias kamoharai*)	PSK
		Great white shark (*Carcharodon carcharias*)	WSH
		Mantas and devil rays (*Mobulidae*)	MAN
		Pelagic stingray (*Pteroplatytrygon violacea*)	PLS
		Other rays	

For Purse Seine:

Primary Species	**FAO code**	**Other species**	**FAO code**
Albacore (*Thunnus alalunga*)	ALB	Marine turtles (in number)	TTX
Bigeye tuna (*Thunnus obesus*)	BET	Marine mammals (in number)	MAM
Yellowfin tuna (*Thunnus albacares*)	YFT	Whale sharks (*Rhincodon typus*) (in number)	RHN
Skipjack tuna (*Katsuwonus pelamis*)	SKJ	Thresher sharks (*Alopias* spp.)	THR
Other IOTC species		Oceanic whitetip shark (*Carcharhinus longimanus*)	OCS
		Silky sharks (*Carcharhinus falciformis*)	FAL
		Optional species to be recorded	**FAO code**
		Mantas and devil rays (*Mobulidae*)	MAN
		Other sharks	SKH
		Other rays	
		Other bony fish	MZZ

For Gillnet:

Primary Species	**FAO code**	**Other Species**	**FAO code**
Albacore (*Thunnus alalunga*)	ALB	Shortbill spearfish (*Tetrapturus angustirostris*)	SSP
Bigeye tuna (*Thunnus obesus*)	BET	Blue shark (*Prionace glauca*)	BSH
Yellowfin tuna (*Thunnus albacares*)	YFT	Mako sharks (*Isurus* spp.)	MAK
Skipjack tuna (*Katsuwonus pelamis*)	SKJ	Porbeagle shark (*Lamna nasus*)	POR
Longtail tuna (*Thunnus tonggol*)	LOT	Hammerhead sharks (*Sphyrna* spp.)	SPN
Frigate tuna (*Auxis thazard*)	FRI	Other sharks	SKH
Bullet tuna (*Auxis rochei*)	BLT	Other bony fish	MZZ
Kawakawa (*Euthynnus affinis*)	KAW	Marine turtles (in number)	TTX
Narrow barred Spanish mackerel (*Scomberomorus commerson*)	COM	Marine mammals (in number)	MAM
Indo–Pacific king mackerel (*Scomberomorus guttatus*)	GUT	Whale sharks (*Rhincodon typus*) (in number)	RHN
Swordfish (*Xiphias gladius*)	SWO	Seabirds (in number)[2]	
Indo–Pacific sailfish (*Istiophorus platypterus*)	SFA	Thresher sharks (*Alopias* spp.)	THR
Marlins (*Tetrapturus* spp, *Makaira* spp.)	BIL	Oceanic whitetip shark (*Carcharhinus longimanus*)	OCS
Southern bluefin tuna (*Thunnus maccoyii*)	SBF	**Optional species to be recorded**	
		Tiger shark (*Galeocerdo cuvier*)	TIG
		Crocodile shark (*Pseudocarcharias kamoharai*)	PSK
		Mantas and devil rays (Mobulidae)	MAN
		Pelagic stingray (*Pteroplatytrygon violacea*)	PLS
		Other rays	

1 When a CPC is fully implementing the observer program the provision of seabird data is optional

For Pole and Line:

Primary Species	**FAO code**	**Other Species**	**FAO code**
Albacore (*Thunnus alalunga*)	ALB	Other bony fish	MZZ
Bigeye tuna (*Thunnus obesus*)	BET	Sharks	SKH
Yellowfin tuna (*Thunnus albacares*)	YFT	Rays	
Skipjack tuna (*Katsuwonus pelamis*)	SKJ	Marine turtles (in number)	TTX
Frigate and bullet tuna (*Auxis* spp.)	FRZ		
Kawakawa (*Euthynnus affinis*)	KAW		
Longtail tuna (*Thunnus tonggol*)	LOT		
Narrow barred Spanish mackerel (*Scomberomorus commerson*)	COM		
Other IOTC species			

[2] When a CPC is fully implementing the observer program the provision of seabird data is optional

2.4 REMARKS

1. Discard of tuna, tuna-like fish and sharks to be recorded by species in weight (kg) or number for all gears should be recorded in the remarks[3]

2. Any interactions with whale sharks (*Rhincodon typus*), marine mammals, and seabirds should be recorded in the remarks

3. Other information is also written in the remarks

Note: The species included in the logbooks are regarded as minimum requirement. Optionally other frequently caught shark and/or fish species should be added as required across different areas and fisheries.

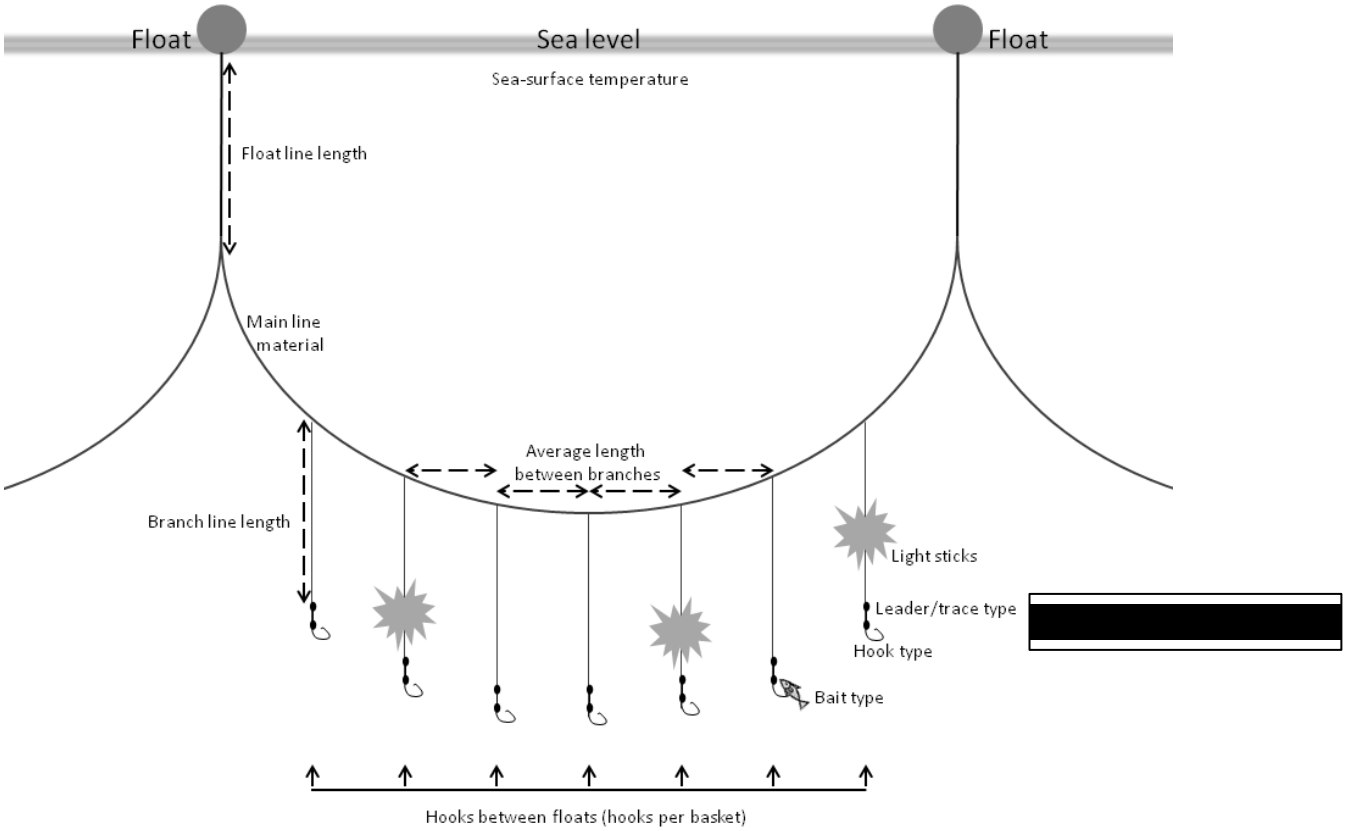

Figure 1. Longline (Gear Configuration): Average branch line length (meters): straight length in meters between snap and hook.

[3] Recall the Recommendation 10/13 *On the implementation of a ban on discards of skipjack tuna, yellowfin tuna, bigeye tuna and non-target species caught by purse seiners* [superseded by Resolution 13/11; then by Resolution 15/06]

ANNEX III: Specifications for handline and trolling

Note: for all gears in this annex use the follow format for date and time

For date: when recording date of the set/shot/operation: record the YYYY/MM/DD

For time: record 24hr time as either the local time, GMT or national time and clearly specify which time has been used.

I - HANDLINE

All logbook information shall be recorded by day; where more than one fishing event is recorded for the same day, it is advisable to record each fishing event separately

Record once in one cruise, or month where daily operation

1.1 REPORT INFORMATION

1. Fishing day (or Date of submission of the logbook, where multiple fishing days)
2. Name of reporting person

1.2 VESSEL INFORMATION

1. Vessel name and registration number and IMO number, where available
2. IOTC number, where available
3. Fishing License number
4. Vessel size: Gross tonnage and/or length overall (in metres)

1.3 CRUISE INFORMATION

1. Departure date and port
2. Arrival date and port

2.1 OPERATION

1. Date of fishing

   Record the date of fishing. Each fishing day should be recorded separately

2. Number of fishermen

   Record the number of fishermen on the boat by fishing day

3. Number of Fishing Gear

Record the number of fishing lines used during the fishing day. If the exact number is not available a range may be used i) 5 or less lines, ii) 6–10 lines; iii) 11 or more lines

4. Number and type of school (Anchored or drifting FAD, marine mammal, free, other) fished Record the number and type of school fished (i.e. anchored FAD, drifting FAD, marine mammal associated or free) fished during the day

5. Position of the catch

   Position in latitude and longitude: either position at noon or position of start of gear or area code of operation (e.g. Seychelles EEZ, High seas, etc.) may be optionally used. Record the latitude and longitude at noon for non-fishing days, where not in port

   Where information is recorded by day, record the 1° x 1° area(s) where fishing took place

6. Bait

   Record the type of bait used (e.g. fish, squid), where applicable

2.2 CATCH

Catch in number and/or weight (kg) by species

1. Catch number and/or Weight

   For each species shown in section 2.3 caught and retained, record the number and estimated live weight (kg), per fishing day

2. Discard number and/or Weight

   For each species shown in section 2.3 caught and not retained record the number and estimated live weight (kg) discarded, per fishing day

2.3 SPECIES

Primary Species	FAO code
Yellowfin tuna (*Thunnus albacares*)	YFT
Bigeye tuna (*Thunnus obesus*)	BET
Skipjack tuna (*Katsuwonus pelamis*)	SKJ
Indo-Pacific sailfish (*Istiophorus platypterus*)	SFA
Black marlin (*Makaira indica*)	BLM
Other billfish	
Longtail tuna (*Thunnus tonggol*)	LOT
Kawakawa (*Euthynnus affinis*)	KAW
Frigate tuna/Bullet tuna (*Auxis* spp.)	FRZ
Narrow barred Spanish mackerel (*Scomberomorus commerson*)	COM
Indo-Pacific king mackerel (*Scomberomorus guttatus*)	GUT
Sharks	
Other fishes	
Rays	
Marine turtles (by number)	

2.4 REMARKS

1. Other relevant information is also written in the remarks

Note: These species included in the logbook are regarded as minimum requirement. Optionally other species should be added as species may differ depending on the area fished and type of fishery

II - TROLLING VESSELS

All logbook information shall be recorded by day; where more than one fishing event is recorded for the same day, it is advisable to record each fishing event separately

Record once in one cruise

1.1 REPORT INFORMATION

1. Fishing day (or Date of submission of the logbook, where multiple fishing days)

2. Name of reporting person

1.2 VESSEL INFORMATION

1. Vessel name and registration number and IMO number, where available
2. IOTC number, where available
3. Fishing License number
4. Vessel size: Gross tonnage and/or length overall (in metres)

1.3 CRUISE INFORMATION

1. Departure date and port
2. Arrival date and port

2.1 OPERATION

1. Date of fishing

   Record the date of fishing. Each fishing day should be recorded separately

2. Number of fishermen

   Record the number of fishermen on the vessel by fishing day

3. Number of Fishing Gear

   Record the number of lines used during the fishing day. If the exact number is not available a range may be used i) 3 or less lines, ii) more than 3 lines

4. Number and type of school (Anchored or drifting FAD, marine mammal, free, other) fished

   Record the number and type of school fished (i.e. anchored FAD, drifting FAD, marine mammal associated or free) fished during the day

5. Position of the catch

   Position in latitude and longitude: either position at noon or position of start of gear or area code of
   operation (e.g. Seychelles EEZ, High seas, etc.) may be optionally used. Record the latitude and longitude at noon for non-fishing days, where not in port

   Where information is recorded by day, record the 1° x 1° area(s) where fishing took place

6. Bait

   Record the type of bait or indicate if lures are used

2.2 CATCH

Catch in number and/or weight (kg) by species

1. Number and/or Weight of fish retained

   For each species shown in section 2–3 caught and retained, record the number or estimated live weight
   (kg), per fishing day

2. Discard number and/or Weight

   For each species shown in section 2–3 caught and not retained record the number and estimated live weight (kg) discarded, per fishing day

2.3 SPECIES

Primary Species	**FAO code**
Yellowfin tuna (*Thunnus albacares*)	YFT
Bigeye tuna (*Thunnus obesus*)	BET
Skipjack tuna (*Katsuwonus pelamis*)	SKJ
Albacore (*Thunnus alalunga*)	ALB
Swordfish (*Xiphias gladius*)	SWO
Blue marlin (*Makaira nigricans*)	BUM
Black marlin (*Makaira indica*)	BLM
Striped marlin (*Tetrapturus audax*)	MLS
Indo-Pacific sailfish (*Istiophorus platypterus*)	SFA
Other billfish	
Longtail tuna (*Thunnus tonggol*)	LOT
Kawakawa (*Euthynnus affinis*)	KAW
Frigate tuna/Bullet tuna (*Auxis* spp.)	FRZ
Narrow barred Spanish mackerel (*Scomberomorus commerson*)	COM
Indo-Pacific king mackerel (*Scomberomorus guttatus*)	GUT
Sharks	
Other fishes	
Rays	
Marine turtles	

2.4 REMARKS

1. Other relevant information is also written in the remarks

Note: These species included in the logbook are regarded as minimum requirement. Optionally other species should be added as species may differ depending on the area fished and type of fishery.

RESOLUTION 15/02: MANDATORY STATISTICAL REPORTING REQUIREMENTS FOR IOTC CONTRACTING PARTIES AND COOPERATING NON-CONTRACTING PARTIES (CPCS)

Keywords: Data reporting; total catch; catch and effort; size data; fish aggregating devices (FAD); surface fisheries; longline fisheries; coastal fisheries

The Indian Ocean Tuna Commission (IOTC)

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

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

RECALLING the commitment made by Contracting Parties under Article V of the IOTC Agreement to keep under review the conditions and trends of the stocks and to gather, analyse and disseminate scientific information, catch and effort statistics and other data relevant to the conservation and management of the stocks and to fisheries based on the stocks covered by the Agreement;

COGNISANT that the above commitment can only be achieved when Contracting Parties meet the requirements of Article XI of the IOTC Agreement i.e. to provide statistical and other data and information to minimum specifications and in a timely manner;

ACKNOWLEDGING that the IOTC Scientific Committee has repeatedly stressed the importance of the timeliness of data submissions;

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

CONSIDERING the provisions set forth in Resolution 15/02 on *mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs)*, adopted by the Commission in 2015;

NOTING the Scientific Committee's concern that the lack of data from CPC fisheries under the mandate of the IOTC on the mortality of marine turtles and marine mammals undermines the ability to estimate levels of marine turtle and marine mammals bycatch and consequently the IOTC's capacity to respond and prevent adverse effects of fishing on these marine species;

FURTHER NOTING the Scientific Committee's concern about the impossibility to undertake assessments on the status of seabirds in the Indian Ocean, while acknowledging that some species are currently critically endangered, and that the lack of reporting of seabird interactions by CPCs seriously undermines the ability of IOTC to respond and prevent adverse effects of fishing on seabirds;

CONSIDERING the recommendations of the 17th Session of the IOTC Scientific Committee;

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

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

1. Contracting Parties and Cooperating Non-Contracting Parties (CPCs) shall provide the following information to the IOTC Secretariat according to the timelines specified in paragraph 7:

2. **Total catch data:**

   Estimates of the total catch by species and gear, if possible quarterly, that shall be submitted annually as referred in paragraph 7 (separated, whenever possible, by retained catches in live weight and by discards in live weight or numbers) for all species under the IOTC mandate as well as the most commonly caught elasmobranch species according to records of catches and incidents as established in Resolution 15/01 *on the recording of catch and effort data by fishing vessels in the IOTC area of competence* (or any subsequent superseding Resolution).

3. Concerning cetaceans, seabirds and marine turtles data should be provided as stated in Resolutions 13/04 *on Conservation of Cetaceans*, Resolution 12/06 *on reduction the incidental bycatch of seabirds in longline fisheries* and Resolution 12/04 *on the conservation of marine turtles* (or any subsequent superseding resolutions).

4. **Catch and effort data[1]:**

a) **For surface fisheries:** catch weight by species and fishing effort shall be provided by 1° grid area and month strata. Purse seine and pole and line fisheries data shall be stratified by fishing mode (e.g. free swimming schools or schools in association with floating objects). The data shall be extrapolated to the total national monthly catches for each gear. Documents describing the extrapolation procedures (including raising factors corresponding to the logbook coverage) shall also be submitted routinely. Effort units reported should be consistent with those effort requirements of Resolution 15/01 (or any subsequent superseding revision).

b) **Longline fisheries:** catch by species, in numbers or weight, and effort as the number of hooks deployed shall be provided by 5° grid area and month strata. Documents describing the extrapolation procedures (including raising factors corresponding to the logbook coverage) shall also be submitted routinely. For the work of relevant working parties under the IOTC Scientific Committee, longline data should be of a resolution of 1° grid area and month or finer. These data would be for the exclusive use of IOTC Scientific Committee and its Working Parties, subject to the approval of the data owners and IOTC Resolution 12/02 *Data confidentiality policy and procedures*, and should be provided for scientific use only in a timely fashion. Effort units reported should be consistent with those effort requirements of Resolution 15/01 or any subsequent revision of such resolution.

c) **For coastal fisheries:** catches by species that shall be submitted annually as referred in paragraph 7, fishing gear and fishing effort shall be submitted frequently and may be provided using an alternative geographical area if it better represents the fishery concerned. Effort units reported should be consistent with those effort requirements of Resolution 15/01 (or any subsequent superseding revision).

Provisions on catch and effort data, applicable to tuna and tuna-like species, shall also be applicable to the most commonly caught elasmobranch species according to records of catches and incidents as established in Resolution 15/01 *on the recording of catch and effort by fishing vessels in the IOTC area of competence* (or any subsequent superseding Resolution).

5. **Size data:**
Size data shall be provided for all gears and for all species according to paragraph 4 and following the guidelines set out by the procedures described in the *Guidelines for the reporting of fisheries statistics to the IOTC*. Size sampling shall be run under strict and well described random sampling schemes which are necessary to provide unbiased figures of the sizes taken. Sampling coverage shall be set to at least one fish measured by ton caught, by species and type of fishery, with samples being representative of all the periods and areas fished. Alternatively, size data for longline fleets may be provided as part of the Regional Observer Scheme where such fleets have at least 5% observer coverage of all fishing operations. Length data by species, including the total number of fish measured, shall be submitted by a 5° grid area by month, by gear and fishing mode (e.g. free swimming schools or schools in association with floating objects for the purse seiners). Documents covering sampling and raising procedures shall also be provided, by species and type of fishery.

6. Given that the activities of purse seine supply vessels and the use of **Fish Aggregating Devices** (FAD) are an integral part of the fishing effort exerted by the purse seine fleet, the following data shall be provided by CPCs:

a) The number and characteristics of purse seine supply vessels: (i) operating under their flag, (ii) assisting purse seine vessels operating under their flag, or (iii) licensed to operate in their exclusive economic zones, and that have been present in the IOTC area of competence;
b) Number of days at sea by purse seine and purse seine supply vessels by 1° grid area and month to be reported by the flag state of the supply vessel;
c) The total number set by the purse seine and purse seine supply vessels per quarter, as well as:

i. The positions, dates at the time of setting, FAD identifier and FAD type (i.e. drifting log or debris, drifting raft or fad with a net, drifting raft or FAD without a net, anchored FADs and other FADs e.g. Payao, dead animal etc.;

ii. The FAD design characteristics of each FAD (consistent with Annex 1 to Resolution 15/08 *Procedures on a fishing aggregating devices (FADs) management Plan, including a limitation on the number of FADS, more detailed specifications of catch reporting from FAD sets, and the development of improved FAD designs to reduce the incidence of entanglement of non-target species).*

These data would be for the exclusive use of IOTC Scientific Committee and its Working Parties, subject to the approval of the data owners and in accordance with Resolution 12/02 *Data confidentiality policy and procedures*, and should be provided in a timely fashion.

7. **Timeliness of data submission to the IOTC Secretariat:**

a) Longline fleets operating in the high seas shall provide provisional data for the previous year no later than 30 June. Final data shall be submitted no later than 30 December;

b) All other fleets (including supply vessels) shall submit their final data for the previous year no later than 30 June;

c) In case where the final statistics cannot be submitted by that date, at least preliminary statistics should be provided. Beyond a delay of two years, all revisions of historical data should be formally reported and duly justified. These reports should be made on forms provided by the IOTC Secretariat and reviewed by the IOTC Scientific Committee. The IOTC Scientific Committee will advise the IOTC Secretariat if revisions are then accepted for scientific use.

8. This Resolution supersedes Resolution 10/02 on *mandatory statistical requirements for IOTC Members and Cooperating Non-Contracting Parties (CPCs).*

[1] Longline fisheries: Fisheries undertaken by vessels in the IOTC Record of Authorized Vessels that use longline gear.
Surface fisheries: All fisheries undertaken by vessels in the IOTC Record of Authorized Vessels other than longline fisheries; in particular purse seine, pole-and-line, gillnet fisheries, handline and trolling vessels.
Coastal fisheries: Fisheries other than longline or surface, as defined above, also called artisanal fisheries.

RESOLUTION 15/03: ON THE VESSEL MONITORING SYSTEM (VMS) PROGRAMME

Keywords: Vessel Monitoring System (VMS).

The Indian Ocean Tuna Commission (IOTC),

TAKING NOTE of the results of the Intersessional Meeting on an Integrated Control and inspection scheme, held in Yaizu, Japan, from 27 to 29 March, 2001;

RECOGNISING the value of satellite-based Vessel Monitoring Systems (VMS) for the Commission's conservation and management programmes, including compliance;

RECOGNISING IOTC Resolution 02/02 [superseded by Resolution 06/03 and subsequently by Resolution 15/03] which called for the adoption of a pilot satellite-based vessel monitoring system (VMS) by 1st January 2004;

TAKING NOTE that the Resolution 02/02 [superseded by Resolution 06/03 and subsequently by Resolution 15/03] has allowed the progressive incorporation of these systems to accommodate Contracting Parties that lack sufficient capacity for immediate implementation at a national level;

RECOGNISING that this Resolution 02/02 [superseded by Resolution 06/03 and subsequently by Resolution 15/03]
provides a process for developing States of the region to build the capacity to implement this Resolution;

AWARE that many Parties have established VMS systems and programmes for their fleets and that their experience may be very helpful in supporting the conservation and management programmes of the Commission;

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

1. Each Contracting Party and Cooperating Non-Contracting Party (CPC) shall adopt a satellite-based vessel monitoring system (VMS) for all vessels flying its flag 24 metres in length overall or above or in case of vessels less than 24 meters, those operating in waters outside the Economic Exclusive Zone of the Flag State fishing for species covered by the IOTC Agreement within the IOTC area of competence.

2. Those CPCs currently without a VMS for any additional vessel now meeting the criteria for inclusion in the VMS obligation since Resolution 06/03 was superseded, as defined in paragraph 1 above, shall submit an implementation plan to the Compliance Committee in April 2016 that sets out a phased approach to full implementation of their national VMS obligation within a maximum of 3 years, i.e. by April 2019, with at least 50% of all qualifying vessels compliant by September 2017.

3. Any CPC with vessels not yet equipped with VMS as already required under Resolution 06/03 (or any subsequent superseding Resolution; Resolution 15/03) shall be required to fully implement its national VMS obligation within a maximum of 1 year, i.e. by April 2016 in respect of those vessels.

4. The Commission may establish guidelines for the registration, implementation and operation of VMS in the IOTC area of competence with a view to standardising VMS adopted by CPCs.

5. Information collected shall include:

   a) the vessel identification;

   b) the current geographical position of the vessel (longitude, latitude) with a position error which shall be less than 500 metres, at a confidence level of 99%; and

   c) the date and time (expressed in UTC) of the fixing of the said position of the vessel.

6. Each CPC shall take the necessary measures to ensure that their land-based national Fisheries Monitoring Center (FMC) receives through the VMS the information required in paragraph 5, and that the FMC is equipped with computer hardware and software enabling automatic data processing and electronic data transmission. Each CPC shall provide for backup and recovery procedures in case of system failures.

7. Each CPC shall ensure that the information in paragraph 5 is transmitted to the FMC at least once every 4 hours. Each CPC shall ensure the masters of fishing vessels flying its flag ensure that the satellite tracking device(s) are at all times fully operational.

8. Each CPC as a Flag State shall ensure that the vessel monitoring device(s) on board its vessels are tamper resistant, that is, are of a type and configuration that prevent the input or output of false positions, and that they are not capable of being over-ridden, whether manually, electronically or otherwise. To this end, the on-board satellite monitoring device must:

   a) be located within a sealed unit; and

   b) be protected by official seals (or mechanisms) of a type that will indicate whether the unit has been accessed or tampered with.

9. The responsibilities concerning the satellite-tracking devices and requirements in case of technical failure or non- functioning of the satellite-tracking devices are established in **Annex I**.

10. Fishing vessels referred to in paragraph 1 which are not yet equipped with VMS shall report to their FMC at least daily by email, facsimile, telex, telephone message or radio. Such reports must include, inter alia, information required in paragraph 5 when transmitting the report, to their competent authorities, as well as:

   a) the geographic position at the beginning of the fishing operation;

   b) the geographic position at the end of the fishing operation.

11. CPCs that cannot fulfil the obligations as outlined in this Resolution shall report to the IOTC Secretariat (i) the systems and infrastructure and capabilities existing with respect to the implementation this Resolution, and (ii) the hindrances for implementation of such a system and (iii) requirements for implementation.

12. Each CPC shall provide to the IOTC Secretariat, by 30 June each year, a report on the progress and implementation of its VMS programme in accordance with this Resolution. The IOTC Secretariat shall compile reports prior to the annual Session of the Commission and present a report to the IOTC Compliance Committee. Based on these reports, the Commission will discuss how best to proceed with future consideration of VMS to support its Conservation and Management Measures.

13. CPCs are encouraged to extend the application of this Resolution to their fishing vessels not provided for in paragraph 1 if they consider this to be appropriate to ensure the effectiveness of IOTC Conservation and Management Measures.

14. Resolution *06/03 On establishing a Vessel Monitoring System Programme* is superseded by this Resolution.

ANNEX I: RESPONSIBILITIES CONCERNING THE SATELLITE-TRACKING DEVICES AND REQUIREMENTS IN CASE OF TECHNICAL FAILURE OR NON-FUNCTIONING OF THE SATELLITE-TRACKING DEVICES

A) In the event that a CPC has information to suspect that on-board vessel monitoring device(s) do not meet the requirements of paragraph 4, or have been tampered with, it shall immediately notify the IOTC Executive Secretary and the vessel's Flag State.

B) Masters and owners/licensees of fishing vessels subject to VMS shall ensure that the vessel monitoring device(s) on board their vessels within the IOTC area of competence are at all times fully operational. Masters and owners/licensees shall in particular ensure that:

a) VMS reports and messages are not altered in any way;

b) the antennae connected to the satellite monitoring device(s) are not obstructed in any way;

c) the power supply of the satellite monitoring device(s) is not interrupted in any way;

and

d) the vessel monitoring device(s) are not removed from the vessel.

C) A vessel monitoring device shall be active within the IOTC area of competence. It may, however, be switched off when the fishing vessel is in port for a period of more than one week, subject to prior notification to, and approval of, the Flag State, and if the Flag State so desires also to the IOTC Secretariat, provided that the first position report generated following the re-powering (activating) shows that the fishing vessel has not changed position compared to the last report.

D) In the event of a technical failure or non-operation of the satellite tracking device fitted on board a fishing vessel, the device shall be repaired or replaced within one month. After this period, the master of a fishing vessel is not authorised to commence a fishing trip with a defective satellite tracking device. Furthermore, when a device stops functioning or has a technical failure during a fishing trip lasting more than one month, the repair or the replacement has to take place as soon as the vessel enters a port; the fishing vessel shall not be authorised to commence a fishing trip without the satellite tracking device having been repaired or replaced.

E) In the event of a technical failure or non-functioning of the vessel monitoring device on board the fishing vessel, the master or the owner of the vessel, or their representative, shall communicate immediately to the FMC of the Flag State, and if the Flag State so desires also to the IOTC Secretariat, stating the time that the failure or the non- functioning was detected or notified in accordance with paragraph F of this Annex. In the event of a technical failure or non-functioning of the vessel monitoring device on board the fishing vessel, the master or the owner of the vessel, or their representative, shall also communicate to the FMC of the Flag State the information required in paragraph 5 of the Resolution every four hours, by email, facsimile, telex, telephone message or radio.

F) When the Flag State has not received for 12 hours data transmissions referred to in paragraphs 7 of the Resolution and E of this Annex, or has reasons to doubt the correctness of the data transmissions under paragraphs 7 of the Resolution and E of this Annex, it shall as soon as possible notify the master or the owner or the representative thereof. If this situation occurs more than two times within a period of one year in respect of a particular vessel, the Flag State of the vessel shall investigate the matter, including having an authorised official check the device in question, in order to establish whether the equipment has been tampered with. The outcome of this investigation shall be forwarded to the IOTC Secretariat within 30 days of its completion.

G) With regard to paragraphs E and F of this Annex, each CPC shall, as soon as possible but no later than two working days following detection or notification of technical failure or non-functioning of the vessel monitoring device on board the fishing vessel, forward the geographical positions of the vessel to the IOTC Secretariat, or shall ensure that these positions are forwarded to the IOTC Secretariat by the master or the owner of the vessel, or their representative.

RESOLUTION 15/04. CONCERNING THE IOTC RECORD OF VESSELS AUTHORISED TO OPERATE IN THE IOTC AREA OF COMPETENCE

Keywords: Authorised vessels; active vessels; auxiliary, supply and support vessels; IMO number; IUU fishing vessels.

The Indian Ocean Tuna Commission (IOTC),

RECALLING that IOTC has been taking various measures to prevent, deter and eliminate the IUU fisheries conducted by large-scale tuna fishing vessels;

FURTHER RECALLING that IOTC adopted the Resolution 01/06 *Concerning the IOTC Bigeye Tuna Statistical Document Programme* at its 2001 meeting;

FURTHER RECALLING that IOTC adopted the Resolution 01/02 [superseded by Resolution 13/02, then Resolution 14/04] *Relating to control of fishing activities* at its 2001 meeting;

NOTING that large-scale fishing vessels are highly mobile and easily change fishing grounds from one ocean to another, and have high potential to operate in the IOTC area of competence without timely registration with the Commission;

NOTING that supply or support vessels can increase the fishing capacity of purse seine vessels in an uncontrolled manner by setting fish aggregating devices [in areas closed to fishing];

RECALLING that the FAO Council adopted on 23 June 2001 an International Plan of Action aiming to prevent, to deter and to eliminate illegal, unregulated and unreported fishing (IPOA), that this plan stipulates that the regional fisheries management organisations should take action to strengthen and develop innovative ways, in conformity with international law, to prevent, deter and eliminate IUU fishing and in particular to establish records of vessels authorised and records of vessels engaged in IUU fishing;

RECALLING that the IOTC Record of Active Vessels was established by the Commission on 1 July 2003, via Resolution 02/05 *Concerning the establishment of an IOTC record of vessels authorised to operate in the IOTC area of competence* [superseded by Resolution 05/02, then Resolution 07/02, then Resolution 13/02, then Resolution 14/04];

RECOGNISING the need to take further measures to effectively eliminate the IUU large scale tuna

fishing vessels; ADOPTS, in accordance with paragraph 1 of Article IX of the IOTC Agreement,

that:

1. The Commission shall maintain an IOTC Record of fishing vessels that are:

   a) 24 metres in length overall or above; or

   b) in case of vessels less than 24 meters, those operating in waters outside the Economic Exclusive Zone of the Flag State; and that are authorised to fish for tuna and tuna-like species in the IOTC area of competence (hereinafter referred to as ‘authorised fishing vessels’, or AFVs).

For the purpose of this Resolution, fishing vessels including auxiliary, supply and support vessels that are not entered in the IOTC Record are deemed not to be authorised to fish for, retain on board, tranship or land tuna and tuna-like species or supporting any fishing activity or set drifting fish aggregation devices (DFADs) in the IOTC area of competence. This provision shall not apply to vessels less than 24 m in length overall operating inside the EEZ of the flag state.

2. Each Contracting Party and Cooperating Non-Contracting Party (hereinafter referred to as "CPC") shall submit electronically, where possible, to the IOTC Executive Secretary for those vessels referred to 1.a) and for those list shall include the following information:

a) Name of vessel(s), register number(s);

b) IMO number (if eligible);

To allow the necessary time for CPCs to obtain an IMO number for eligible vessels that do not already have one, paragraph 2.b on IMO number is effective as of 1 January 2016. As of this date, CPCs shall ensure that all their fishing vessels that are registered on the IOTC Record of fishing vessels have IMO numbers issued to them. Paragraph 2.b on IMO number does not apply to vessels which are not eligible to receive IMO numbers.

c) Previous name(s) (if any);

d) Previous flag(s) (if any);

e) Previous details of deletion from other registries (if any);

f) International radio call sign(s) (if any);

g) Port of Registration;

h) Type of vessel(s), length and gross tonnage (GT);

i) Name and address of owner(s) and operator(s);

j) Gear(s) used;

k) Time period(s) authorised for fishing and/or transhipping.

In assessing compliance with the paragraph above, the Commission shall take into account exceptional circumstances in which a vessel owner is not able to obtain an IMO number despite following the appropriate procedures. Flag CPCs shall report any such exceptional situations to the IOTC Secretariat.

3. All CPCs which issue authorisations to fish to their flag vessels to fish for species managed by the IOTC shall submit to the IOTC Executive Secretary, an updated template of the official authorisation to fish outside National Jurisdictions, and update this information whenever this information changes. This information includes:

a) name of the Competent Authority;

b) name and contact of personnel of the Competent Authority;

c) signature of the personnel of the Competent Authority;

d) official stamp of the Competent Authority.

The IOTC Executive Secretary shall publish the above information in a secure part on the IOTC website for MCS purpose.

4. The template in paragraph 3 shall be used exclusively for monitoring, control and surveillance purposes and a difference between the template and the authorisation carried onboard the vessel does not constitute an infraction, but will prompt the controlling State to clarify the issue with the identified Competent Authority of the flag State of the vessel in question.

5. Secretary of any addition to, any deletion from and/or any modification of the IOTC Record at any time such changes occur.

6. The IOTC Executive Secretary shall maintain the IOTC Record, and take any measure to ensure publicity of the Record through electronic means, including placing it on the IOTC website, in a manner consistent with confidentiality requirements noted by CPCs.

7. The flag CPCs of the vessels on the record shall:

a) authorise their vessels to operate in the IOTC area of competence only if they are able to fulfil in respect of these vessels the requirements and responsibilities under the IOTC Agreement and its Conservation and Management Measures;

b) take necessary measures to ensure that their AFVs comply with all the relevant IOTC Conservation and Management Measures;

c) take necessary measures to ensure that their AFVs on the IOTC Record keep on board valid certificates of vessel registration and valid authorisation to fish and/or tranship;

d) ensure that their AFVs on the IOTC Record have no history of IUU fishing activities or that, if those vessels have such a history, the new owners have provided sufficient evidence demonstrating that the previous owners and operators have no legal, beneficial or financial interest in, or control over those vessels; the parties of the IUU incident have officially resolved the matter and sanctions have been completed; or that having taken into account all relevant facts, their AFVs are not engaged in or associated with IUU fishing;

e) ensure, to the extent possible under domestic law, that the owners and operators of their AFVs on the IOTC Record are not engaged in or associated with tuna fishing activities conducted by vessels not entered into the IOTC Record in the IOTC area of competence;

f) take necessary measures to ensure, to the extent possible under domestic law, that the owners of the AFVs on the IOTC Record are citizens or legal entities within the flag CPCs so that any control or punitive actions can be effectively taken against them.

8. CPCs shall review their own internal actions and measures taken pursuant to paragraph 7, including punitive actions and sanctions and, in a manner consistent with domestic law as regards disclosure, report the results of the review to the Commission annually. In consideration of the results of such review, the Commission shall, if appropriate, request the flag CPCs of AFVs on the IOTC Record to take further action to enhance compliance by those vessels with IOTC Conservation and Management Measures.

9. a) CPCs shall take measures, under their applicable legislation, to prohibit the fishing for, the retaining on board, the transhipment and landing of tuna and tuna-like species by the vessels which are not entered into the IOTC Record.

b) To ensure the effectiveness of the IOTC Conservation and Management Measures pertaining to species covered by Statistical Document Programs:

i. Flag CPCs shall validate statistical documents only for the vessels on the IOTC Record;

ii. CPCs shall require that the species covered by Statistical Document Programs caught by AFVs in the IOTC area of competence, when imported into the territory of a Contracting Party, be accompanied by statistical documents validated for the vessels on the IOTC Record; and

iii. shall cooperate to ensure that statistical documents are not forged or do not contain misinformation.

10. Each CPC shall notify the IOTC Executive Secretary of any factual information showing that there are reasonable grounds for suspecting vessels not on the IOTC Record to be engaged in fishing for and/or transhipment of tuna and tuna-like species in the IOTC area of competence.

11. a) If a vessel mentioned in paragraph 10 is flying the flag of a CPC, the IOTC Executive Secretary shall request that Party to take measures necessary to prevent the vessel from fishing for tuna and tuna-like species in the IOTC area of competence;

b) If the flag of a vessel mentioned in paragraph 10 cannot be determined or is of a non-Contracting Party without cooperating status, the IOTC Executive Secretary shall compile and circulate such information to all CPCs, without delay.

12. The Commission and the CPCs concerned shall communicate with each other, and make the best effort with FAO and other relevant regional fishery management bodies to develop and implement appropriate measures, where feasible, including the establishment of records of a similar nature in a timely manner so as to avoid adverse effects upon tuna resources in other oceans. Such adverse effects might consist of excessive fishing pressure resulting from a shift of the IUU fishing vessels from the Indian Ocean to other oceans.

13. Each Contracting Party and Cooperating Non-Contracting Party with the IOTC shall:

a) Ensure that each of its fishing vessels carry on board documents issued and certified by the competent authority of that Contracting Party or of that Cooperating Non-Contracting Party with IOTC, including, at a minimum, the following:

i. License, permit or authorisation to fish and terms and conditions attached to the licence, permit of authorisation;

ii. Vessel name;

iii. Port in which registered and the number(s) under which registered;

iv. International call sign;

v. Names and addresses of owner(s) and where relevant, the charterer;

vi. Overall length;

vii. Engine power, in KW/horsepower, where appropriate.

b) Verify above documents on a regular basis and at least every year;

c) Ensure that any modification to the documents and to the information referred to in 13.a) is certified by the competent authority of that Contracting Party or of that Cooperating Non-Contracting Party with the IOTC.

14. Each Contracting Party and Cooperating Non-Contracting Party with the IOTC shall ensure that its fishing vessels authorised to fish in the IOTC area of competence are marked in such a way that they can be readily identified with generally accepted standards such as the FAO Standard Specification for the Marking and Identification of Fishing vessels.

15. a) Each Contracting Party and Cooperating Non-Contracting Party with the IOTC shall ensure that each gear used by its fishing vessels authorised to fish in the IOTC area of competence is marked
appropriately, e.g., the ends of nets, lines and gear in the sea, shall be fitted with flag or radar reflector
buoys by day and light buoys by night sufficient to indicate their position and extent;

b) Marker buoys and similar objects floating and on the surface, and intended to indicate the location of fixed fishing gear, shall be clearly marked at all time with the letter(s) and/or number(s) of the vessel to which they belong;

c) Fish aggregating devices shall be clearly marked at all time with the letter(s) and / or number(s) of the vessel to which they belong.

16. Each Contracting Party and Cooperating Non-Contracting Party with the IOTC shall ensure that all their respective fishing vessels of 24 meters or above and vessels less than 24 meters if fishing outside their EEZ, and are registered on the IOTC Record of fishing vessels and authorised to fish in the IOTC area of competence, keep a bound fishing national logbook with consecutively numbered pages. The original recordings contained in the fishing logbooks shall be kept on board the fishing vessel for a period of at least 12 months.

17. This Resolution supersedes Resolution 14/04 *Concerning the establishment of an IOTC record of vessels authorised to operate in the IOTC area*.

RESOLUTION ON CONSERVATION MEASURES FOR STRIPED MARLIN, BLACK MARLIN AND BLUE MARLIN

Keywords: striped marlin; black marlin; blue marlin; catch trends; bycatch; discards

The Indian Ocean Tuna Commission (IOTC),

RECOGNISING Resolution 12/01 *On the implementation of the precautionary approach* calls on IOTC Contracting Parties (Members) and Cooperating Non-Contracting Parties (collectively CPCs) to apply the precautionary approach in accordance with Article V of the United Nations Fish Stocks Agreement;

CONCERNED by the continued failure of IOTC CPCs to submit complete, accurate and timely catch records in accordance with existing IOTC Resolutions;

CONSIDERING scientific advice provided by the IOTC Scientific Committee as the cornerstone for establishing an effective management framework for stocks and fisheries under the purview of the IOTC;

FURTHER CONSIDERING the recommendations made in the 2014 sessions of Working Party on Billfish and the
Scientific Committee on the status of some billfish stocks indicating that fishing pressure or catches should decrease;

RECALLING the recommendations adopted in accordance with the KOBE II workshop on bycatch in 2010 that regional fisheries management organisations should consider adopting binding measures or strengthen existing mitigation measures, including the development of mandatory reporting requirements;

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

1. Contracting Parties and Cooperating Non-Contracting Parties (CPCs) are encouraged to make any possible effort to reduce in 2016 the level of catches of their vessels for the following species: striped marlin (*Tetrapturus audax*), black marlin (*Makaira indica*), and blue marlin (*Makaira nigricans*). The baseline of the reduction of catches shall be the average catches for the period between 2009 and 2014. For the calculation of average catches, only the years for which data is available will be taken into consideration.

2. CPCs are encouraged to request their operators/fishing vessels to release any billfish which belongs to any of the three above mentioned marlin species brought alive onboard or alongside for taking onboard the vessel.

3. The IOTC Scientific Committee shall request that the Working Party on Billfish continue their work on assessing and monitoring the status of the above mentioned species until such time as comprehensive assessments are possible. The IOTC Scientific Committee shall also evaluate the catch trends of the mentioned species and recommend Conservation and Management Measures as appropriate.

4. CPCs, in particular those employing gillnet fisheries, for which very few data exists on catch and effort, length frequencies and bycatch/discards, shall collect and report such data to the IOTC Secretariat.

5. The Scientific Committee shall annually review the information reported by CPCs on these species and, as necessary, provide recommendations to the Commission on ways to strengthen the conservation and management of these species.

6. The Commission shall consider appropriate assistance to developing CPCs for the collection of data on the above mentioned species.

ON A BAN ON DISCARDS OF BIGEYE TUNA, SKIPJACK TUNA, YELLOWFIN TUNA, AND A RECOMMENDATION FOR NON-TARGETED SPECIES CAUGHT BY PURSE SEINE VESSELS IN THE IOTC AREA OF COMPETENCE

Keywords: Discards; bigeye tuna; yellowfin tuna; skipjack tuna; non-targeted species; purse seine; storage capacity.

The Indian Ocean Tuna Commission (IOTC),

RECOGNISING the need for action to ensure the achievement of IOTC objectives to conserve and manage bigeye tuna, skipjack tuna and yellowfin tuna in the IOTC area of competence;

RECOGNISING that the international community has recognised both ethical concerns and policy regarding discards of species in several international instruments and statements, including United Nations General Assembly resolutions (A/RES/49/118 (1994); A/RES/50/25 (1996); A/RES/51/36 (1996); A/RES/52/29 (1997); A/RES/53/33 (1998); A/RES/55/8 (2000); and A/RES/57/142 (2002)), United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea (UNCLOS) relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (United Nations Fish Stocks Agreement); The Rome Consensus on World Fisheries adopted by the FAO Ministerial Conference on Fisheries, Rome, 14–15 March 1995; the Code of Conduct for Responsible Fisheries, the FAO International Plan of Action (IPOA) on sharks; the Convention on Biological Diversity (CBD);

RECALLING that the United Nations Fish Stocks Agreement has underlined the importance of ensuring the conservation and optimum utilisation of highly migratory species through the action of regional fishery bodies such as the IOTC, and provides that *"States should minimize ... discards, ..., catch of non target species, both fish and non-fish species, and impacts on associated or dependent species, in particular endangered species ..."*;

RECALLING that The Rome Consensus on World Fisheries adopted by the FAO Ministerial Conference on Fisheries, Rome, 14–15 March 1995, provides that "*States should…reduce bycatches, fish discards…"*;

RECALLING that the FAO Code of Conduct for Responsible Fisheries provides that "*States should take appropriate measures to minimize waste, discards…collect information on discards ...; ... take account of discards (in the precautionary approach) ...; develop technologies that minimize discards ...; use of selective gear to minimize discards"*;

RECALLING that the Commission adopted Resolution 12/01 *on the implementation of the precautionary approach*;

CONCERNED about the morally unacceptable waste and the impact of unsustainable fishing practices upon the oceanic environment, represented by the discarding of tunas and non-target species in the purse seine fishery for tunas in the Indian Ocean;

CONSIDERING the important volume of tuna and non-targeted species discarded in the purse seine fishery for tunas in the Indian Ocean;

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

RETENTION OF TUNA SPECIES

1. Contracting Parties and Cooperating Non-Contracting Parties shall require all purse seine vessels to retain on board and then land all bigeye tuna, skipjack tuna, and yellowfin tuna caught, except fish considered unfit for human consumption.

2. Procedures for the implementation of full retention requirements include:

a) No bigeye tuna, skipjack tuna, and/or yellowfin tuna caught by purse seine vessels may be discarded after
the point in the set when the net is fully pursed and more than one half of the net has been retrieved. If
equipment malfunctions affect the process of pursing and retrieving the net in such a way that this rule cannot be complied with, the crew must make efforts to release the tuna as soon as possible.

b) The following two exceptions to the above rule shall apply:

i. Where it is determined by the captain of the vessel that tuna (bigeye tuna, skipjack tuna or yellowfin tuna) caught are unfit for human consumption, the following definitions shall be applied:

- "unfit for human consumption" are fish that:

  - is meshed or crushed in the purse seine; or

  - is damaged due to depredation; or

  - has died and spoiled in the net where a gear failure has prevented both the normal retrieval of the net and catch, and efforts to release the fish alive;

- "unfit for human consumption" does not include fish that:

  - is considered undesirable in terms of size, marketability, or species composition; or

  - is spoiled or contaminated as the result of an act or omission of the crew of the fishing vessel.

ii. Where the captain of a vessel determines that tuna (bigeye tuna, skipjack tuna or yellowfin tuna) was caught during the final set of a trip and there is insufficient storage capacity to accommodate all tuna (bigeye tuna, skipjack tuna or yellowfin tuna) caught in that set. This fish may only be discarded if:

- the captain and crew attempt to release the tuna (bigeye tuna, skipjack tuna or yellowfin tuna) alive as soon as possible; and

- no further fishing is undertaken after the discard until the tuna (bigeye tuna, skipjack tuna, and/or yellowfin tuna) on board the vessel has been landed or transhipped.

RETENTION OF SPECIES OTHER THAN THOSE SPECIFIED UNDER PARA 2, A)

3. Contracting Parties and Cooperating Non-Contracting Parties should encourage all purse seine vessels to retain on board and then land all non-targeted species as far as the vessel can ensure appropriate fishing operation (including but not limited to other tunas, rainbow runner, dolphinfish, triggerfish, billfish, wahoo, and barracuda) except fish considered unfit for human consumption (as defined in paragraph 2 b) i). A single exception shall be the final set of a trip, when there may be insufficient storage capacity remaining to accommodate all the non-targeted fish caught in that set.

IMPLEMENTATION

4. The IOTC Scientific Committee, the IOTC Working Party on Tropical Tunas, and the IOTC Working Party on Ecosystems and Bycatch shall annually:

a) review the information available on bycatch (retained and discarded) by purse seine vessels; and

b) provide advice to the Commission on options to sustainably manage discards in purse seine fisheries.

5. This Resolution shall enter into force on 1 November 2015 and will be revised, according to the advice of the IOTC Scientific Committee resulting from the review of the IOTC Working Party on Tropical Tunas (for bigeye tuna, skipjack tuna and yellowfin tuna) and of the IOTC Working Party on Ecosystems and Bycatch (for non-target species).

6. This Resolution supersedes Resolution 13/11 *On a ban on discards of bigeye tuna, skipjack tuna, yellowfin tuna and a recommendation for non-targeted species caught by purse seine vessels in the IOTC area of competence.*

ON THE USE OF ARTIFICIAL LIGHTS TO ATTRACT FISH TO DRIFTING FISH AGGREGATING DEVICES

Keywords: DFADs; purse seine; supply vessel; lights; non-target, associated or dependent species (NTADs).

The Indian Ocean Tuna Commission (IOTC),

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

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

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

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

RECALLING that The Rome Consensus on World Fisheries adopted by the FAO Ministerial Conference on Fisheries, Rome, 14–15 March 1995, provides that “States should...reduce bycatches, fish discards...”;

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

1. Fishing Vessels including support and supply vessels flying the flag of an IOTC Contracting Parties or Cooperating Non-Contracting Party (collectively CPCs) are prohibited from installing or operating surface or submerged artificial lights for the purpose of aggregating tuna and tuna-like species or non-target, associated or dependent species on drifting Fish Aggregating Devices (DFADs).

2. CPCs shall prohibit their flagged vessels from intentionally setting a purse seine net around a DFAD equipped with artificial light for the purpose of attracting fish under the mandate of IOTC and in the IOTC area of competence.

3. DFADs equipped with artificial lights, which are encountered by fishing vessels operating in the IOTC area of competence, should as far as possible be removed and brought back to port.

PROCEDURES ON A FISH AGGREGATING DEVICES (FADS) MANAGEMENT PLAN, INCLUDING A LIMITATION ON THE NUMBER OF FADS, MORE DETAILED SPECIFICATIONS OF CATCH REPORTING FROM FAD SETS, AND THE DEVELOPMENT OF IMPROVED FAD DESIGNS TO REDUCE THE INCIDENCE OF ENTANGLEMENT OF NON-TARGET SPECIES

Keywords: Fish aggregating device (FAD); Non-target species.

The Indian Ocean Tuna Commission (IOTC),

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

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

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

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

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

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

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

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

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

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

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

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

1. This Resolution shall apply to CPCs having purse seine vessels and fishing on Drifting Fish Aggregating Devices (DFADs), equipped with instrumented buoys for the purpose of aggregating tuna target species, in the IOTC area of competence.

2. This Resolution defines an instrumented buoy as a buoy with a clearly marked reference number allowing its identification and equipped with a satellite tracking system to monitor its position. Other buoys, such as radio buoys used on DFADs, not meeting this definition, shall be gradually phased out by the 1st January 2017.

3. This Resolution sets the maximum number of instrumented buoys active and followed by any purse seine vessels at 550 instrumented buoys at any one time, the active number being calculated as the number of active buoys operated by a purse seine vessel. The number of instrumented buoys that shall be acquired annually for each purse seine vessel is set at no more than 1100.

4. A CPC may adopt a lower limit than the one set out in paragraph 3 for vessels flying its flag. Further, any CPC may adopt a lower limit for DFADs deployed in its EEZ than that stated in paragraph 3. The CPC shall review the adopted limit to ensure that such limit is not more than the limit fixed by the Commission.

5. CPCs shall ensure that as from the effective date of this Resolution, each of its purse seiners already in operation does not exceed the maximum number of instrumented buoys set in paragraph 3.

6. Notwithstanding the completion of any study undertaken at the request of the Commission including the study to be undertaken by the Working Group adopted at Resolution 15/09 in relation to FADs, the Commission may review the maximum number of instrumented buoys set out in paragraph 3.

7. The flag State shall ensure that no more than:

   a) 550 instrumented buoys are active at sea at any one time in relation to each of its vessels through such measures as for example the verification of telecommunication bills; and

   b) 1100 instrumented buoys may be acquired annually by each of its fishing vessel.

8. CPCs shall require vessels flying their flag and fishing on DFADs to submit by 1 January 2016, the provisional purchase order for 2016 of instrumented buoys for their purse seine vessels under the confidentiality rules set by Resolution 12/02 (or any subsequent superseding Resolution).

9. CPCs shall require vessels flying their flag and fishing on DFADs to submit, by the end of 2016 the number of instrumented buoys activated, deactivated and active on each quarter during 2016 its purse seine vessel under the confidentiality rules set by Resolution 12/02 (or any subsequent superseding Resolution).

10. All CPCs shall ensure that all fishing vessels as referred to in paragraph 1 shall record fishing activities in association with FADs using the specific data elements found in **Annex I** (DFAD) and **Annex II** (AFAD) in the section of the "FAD-logbook".

11. CPCs having vessels fishing on FADs shall submit, to the Commission, on an annual basis, Management Plans for the use of FADs by each of their purse seine vessels covered at paragraph 1. Due to their specificity in terms of users, number deployed, type of boat/vessel involved, fishing method and gear used and materials used in their construction, the Management Plans and Reporting Requirements for Drifting FADs (DFAD) and Anchored FADs (AFAD) shall be addressed separately for the purposes of this Resolution. The Plans shall at a minimum meet the Suggested Guidelines for Preparation for FAD Management Plans by each CPC as provided for DFADs in **Annex I** and AFADs in **Annex II**. For the purpose of this Resolution, the term Fish Aggregating Device means drifting (DFAD) or anchored floating or submerged objects (AFAD) deployed for the purpose of aggregating target tuna species.

12. The Management Plans shall be analysed by the IOTC Compliance Committee.

13. All CPCs shall ensure that all fishing vessels as referred to in paragraph 1 shall record fishing activities in association with FADs using the specific data elements found in **Annex I** (DFAD) and **Annex II** (AFAD) in the section of the "FAD-logbook".

14. The Management Plans shall include initiatives or surveys to investigate, and to the extent possible minimise the capture of small bigeye tuna and yellowfin tuna and non-target species associated with fishing on FADs. Management Plans shall also include guidelines to prevent, to the extent possible, the loss or abandonment of FADs. To reduce the entanglement of sharks, marine turtles or any other species, the design and deployment of FADs shall be based on the principles set out in **Annex III**, which will be applied gradually from 2014. From 2015 on, CPCs shall submit to the Commission, 60 days before the Annual Meeting, a report on the progress of the management plans of FADs, including reviews of the initially submitted Management Plans, and including reviews of the application of the principles set out in **Annex III**.

15. Starting in 2016, CPCs shall submit the data elements prescribed in **Annex I** and **Annex II** to the Commission, consistent with the IOTC standards for the provision of catch and effort data, and these data shall be made available for analysis to the IOTC Scientific Committee on the aggregation level set by Resolution 15/02 (or any subsequent superseding Resolution), and under the confidentiality rules set by Resolution 12/02 (or any subsequent superseding Resolution). The IOTC Scientific Committee will analyse the information, when available, and provide scientific advice on additional FAD management options for consideration by the Commission in 2016, including recommendations on the number of FADs to be operated, the use of biodegradable materials in new and improved FADs and the phasing out of FAD designs that do not prevent the entanglement of sharks, marine turtles and other species. When assessing the impact of FADs on the dynamic and distribution of targeted fish stocks and associated species and on the ecosystem, the IOTC Scientific Committee will, where relevant, use all available data on abandoned FADs (i.e. FADs without a beacon or which have drifted outside the fishing zone).

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

    a) All artificial FADs shall be marked with a unique identification number, based on a specific numbering system and format to be adopted by the Commission;

    b) The marking should be easy to read before the vessel operator engages in any artificial FAD related activity (e.g. setting on the artificial FAD, retrieving the artificial FAD, servicing the artificial FAD, fishing on the artificial FAD), but if not visible for any reason, (time of day, weather, etc.), the vessel operator shall ensure to obtain the unique artificial FAD identifier as soon as feasible;

    c) The marking should be easy to apply to the artificial FAD, but should be applied in such a manner that it will not become unreadable or disassociated with the artificial FAD.

17. Resolution 13/08 *Procedures on a fish aggregating devices (FADs) management plan, including more detailed specification of catch reporting from FAD sets, and the development of improved FAD designs to reduce the incidence of entanglement of non-target species* is superseded by this Resolution.

ANNEX I - GUIDELINES FOR PREPARATION OF DRIFTING FISH AGGREGATING DEVICE (DFAD) MANAGEMENT PLANS

To support obligations in respect of the DFAD Management Plan (DFAD–MP) to be submitted to the IOTC Secretariat by CPCs with fleets fishing in the IOTC area of competence, associated to DFADs, DFAD–MP should include:

1. An objective
2. Scope:

   Description of its application with respect to:

   - vessel-types and support and tender vessels
   - DFAD numbers and DFADs beacon numbers to be deployed
   - reporting procedures for DFAD deployment
   - incidental bycatch reduction and utilisation policy
   - consideration of interaction with other gear types
   - plans for monitoring and retrieval of lost DFADs
   - statement or policy on "DFAD ownership"
3. Institutional arrangements for management of the DFAD Management Plans:
   - Institutional responsibilities
   - application processes for DFAD and /or DFAD beacons deployment approval
   - Obligations of vessel owners and masters in respect of DFAD and /or DFAD beacons deployment and use
   - DFAD and/or DFADs beacons replacement policy
   - reporting obligations
4. DFAD construction specifications and requirements
   - DFAD design characteristics (a description)
   - DFAD markings and identifiers, including DFADs beacons
   - Lighting requirements
   - radar reflectors
   - visible distance
   - radio buoys (requirement for serial numbers)
   - satellite transceivers (requirement for serial numbers)

5. Applicable areas

- Details of any closed areas or periods e.g. territorial waters, shipping lanes, proximity to artisanal fisheries, etc.

6. Applicable period for the DFAD–MP

7. Means for monitoring and reviewing implementation of the DFAD–MP

8. DFAD logbook

- catch reporting from DFAD sets (consistent with the Standards for the provision of Catch and Effort Data) set out in Resolution 15/03), including:

a) Any visit on a DFAD*

b) For each visit on a DFAD, whether followed or not by a set

i. position,

ii. date,

iii. DFAD identifier (i.e., DFAD Marking or beacon ID or any information allowing to identify the owner),

iv. DFAD type (drifting natural FAD, drifting artificial FAD),

v. DFAD design characteristics (dimension and material of the floating part and of the underwater hanging structure),

vi. type of the visit (deployment, hauling, retrieving, loss, intervention on electronic equipment).

c) If the visit is followed by a set, the results of the set in terms of catch and bycatch.

* Other FADs encountered at–sea should be monitored in accordance with each CPCs' domestic regulations.

ANNEX II: GUIDELINES FOR PREPARATION OF ANCHORED FISH AGGREGATING DEVICE (AFAD) MANAGEMENT PLANS

To support obligations in respect of the AFAD Management Plan (AFAD–MP) to be submitted to the IOTC Secretariat by CPCs with fleets fishing in the IOTC area of competence, associated to AFADs, AFAD– MP should include:

1. An objective 2.. Scope:

Description of its application with respect to:

a) Vessel types

b) AFAD numbers and/or AFADs beacons numbers to be deployed (per AFAD type)

c) reporting procedures for AFAD deployment

d) distances between AFADs

e) incidental bycatch reduction and utilisation policy

f) consideration of interaction with other gear types

g) the establishment of inventories of the AFADs deployed, detailing AFAD identifiers, characteristics and equipment of each AFAD as laid down in point 4 of the present Annex, coordinates of the AFAD's mooring sites, date of set, lost and reset

h) plans for monitoring and retrieval of lost FADs

i) statement or policy on “AFAD ownership”

3. Institutional arrangements for management of the AFAD Management Plans:

a) Institutional responsibilities

b) Regulations applicable to the setting and use of AFADs

c) AFAD repairs, maintenance rules and replacement policy

d) Data collection system

e) reporting obligations

4. AFAD construction specifications and requirements:

a) AFAD design characteristics (a description of both the floating structure and the underwater structure, with special emphasis on any netting materials used)

b) Anchorage used for mooring

c) AFAD markings and identifiers, including AFAD beacons if any

d) Lighting requirements if any

e) radar reflectors

f) visible distance

g) radio buoys if any (requirement for serial numbers)

h) satellite transceivers (requirement for serial numbers)

i) echo sounder

5. Applicable areas

a) Coordinates of mooring sites, if applicable

b) Details of any closed areas e.g., shipping lanes, Marine Protected Areas, reserves etc.

6. Means for monitoring and reviewing implementation of the AFAD–MP AFAD logbook

− Catch reporting from AFAD sets (consistent with the Standards for the provision of Catch and Effort Data) set out in Resolution 15/03), including:

a) Any visit in a AFAD.

b) For each visit on a AFAD, whether followed or not by a set or other fishing activities, the,

i. position; ii. date

iii. AFAD identifier (i.e., FAD Marking or beacon ID or any information allowing to identify the owner).

c) If the visit is followed by a set or other fishing activities, the results of the set in terms of catch and bycatch.

ANNEX III: PRINCIPLES FOR DESIGN AND DEPLOYMENT OF FADS

1. The surface structure of the FAD should not be covered, or only covered with non-meshed material.

2. If a sub-surface component is used, it should not be made from netting but from non-meshed materials such as ropes or canvas sheets.

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

RESOLUTION 15/09: ON A FISH AGGREGATING DEVICES (FADS) WORKING GROUP

Keywords: Fish aggregating device (FAD); working group on FADs; drifting FADs; anchored FADs; purse seine.

The Indian Ocean Tuna Commission (IOTC),

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

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

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

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

AWARE that the Commission is committed to adopt conservation measures to reduce juvenile bigeye tuna and yellowfin tuna mortalities from fishing effort on Fish Aggregating Devices (FADs);

AWARE that the availability of adequate information is fundamental to carrying out the objectives of the IOTC Agreement laid down in its Article V;

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

NOTING that the IOTC Scientific Committee recommended that an ad hoc working group on FADs, drifting and anchored, be created to assess the consequences of the increasing number and technological developments of FADs in tuna fisheries and their ecosystems, in order to inform and advise on future FAD-related management options;

NOTING that ICCAT and WCPFC have already approved at their 2014 sessions the establishment of FAD working groups, and that the SC agreed that at least the ICCAT and IOTC working groups on FADs work jointly whenever possible.

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

1. An ad hoc working group on FADs (**Annex I**), drifting and anchored, is created to assess the consequences of the increasing number and technological developments of FADs in tuna fisheries and their ecosystems, in order to inform and advise on future FAD-related management options. This ad hoc working group would be of multi- sectorial nature, involving various stakeholders such as scientists, fishery managers, fishing industry representatives, administrators and fishers. The working group shall deliver its findings in time for the 2017 IOTC Scientific Committee to examine them.

2. The IOTC S Secretariat should liaise with the ICCAT Secretariat to determine if their FAD working group could work in conjunction with the IOTC working group.

ANNEX I: Terms of reference for an ad hoc working group on fish aggregating devices (FADs)

1) The objectives of the ad hoc working group on Fish Aggregating devices (FADs) would be the following:

- To collect and compile information about past and present numbers of buoys and FADs, changes in FAD- related technology and activities of supply vessels;
- To review the requirements of collection of data on FADs established in Resolution 15/08 in order to assess the necessity for revision;
- To assess the effect of FAD's density and spatial distribution on the behaviour, distribution and species composition of the tuna schools;
- To assess the developments in FAD-related technology notably with regards to:
  - changes in catchability due to technological improvement;
  - using FAD and buoys marking and identification as a tool for monitoring, tracking and control of FADs;
  - reducing FAD's ecological impacts through improved design, such as non-entangling FADs and biodegradable material.
- To evaluate ways to improve the use of information related to FADs in the process of stock assessment, particularly in the standardisation of catch per unit effort, and in ecological risk assessment for non-target species;
- Through an active exchange of views, to identify management options, including the regulation of deployment limits and characteristics of FADs, and activities of support vessels;
- To assess the consequences of these management options, in conjunction with other fleets fishing mortality components, on IOTC-managed species and on the pelagic ecosystems.

2) All types of FADs, anchored or drifting, would be considered in the ad hoc working group.

3) As several coastal states with limited capacities are primarily concerned by anchored FADs, the IOTC Secretariat should ensure that special provisions be made for those countries in terms of compiling and assimilating the data as required for the ad hoc working group. This support could be included in the data collection tasks of the IOTC Secretariat.

4) The IOTC Secretariat should consider using the meeting participation fund (MPF) to facilitate the participation of scientists from IOTC coastal states who would contribute significantly in the FAD working group.

5) The access to data used for the FAD working group will follow the confidentiality policy and procedures presented in Resolution 12/02 (or any subsequent superseding Resolution).

6) The ad hoc Working Group should be composed by scientists, fisheries managers, fishing industry Representatives, administrators and other interested stakeholders.

7) The ad hoc Working Group on FAD would not happen more than once a year, and shall report on its work to the WPTT and WPEB annual sessions.

8) The IOTC, at its annual session, will review the progress and outcomes of the FAD working group and will decide on the necessity for its continuation.

RESOLUTION 15/10: ON TARGET AND LIMIT REFERENCE POINTS AND A DECISION FRAMEWORK

Keywords: Limit reference points, management strategy evaluation, kobe plot, maximum sustainable yield

The Indian Ocean Tuna Commission (IOTC),

CONSIDERING the objectives of the Commission are to maintain stocks in perpetuity and with high probability, at levels not less than those capable of producing their maximum sustainable yield as qualified by relevant environmental and economic factors including the special requirements of developing States in the IOTC area of competence;

BEING MINDFUL of Article XVI of the IOTC Agreement regarding the rights of Coastal States and of Article 87 and 116 of the UN Convention of the Law of the Sea regarding the right to fish on the high seas;

RECALLING that Article 6, paragraph 3, of the Agreement for the Implementation of the Provisions of the United Nations Convention of the Law of the Sea of December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA), establishes the application of precautionary reference points as a general principle for sound fisheries management;

FURTHER RECALLING that Annex II of UNFSA provides guidelines for the application of precautionary reference points in the conservation and management of straddling fish stocks and highly migratory fish stocks, including the adoption of provisional reference points when information for establishing reference points is absent or poor;

NOTING that the Scientific Committee noted that the interim limit reference points contained in Resolution 13/10 (superseded by Resolution 15/10) are not consistent with FAO and UNFSA guidelines;

NOTING that Article 7.5.3 of the FAO Code of Conduct for Responsible Fisheries also recommends the implementation of stock specific target and limit reference points, *inter alia*, on the basis of the precautionary approach;

NOTING that recommendations 37 and 38 of the Performance Review Panel, adopted by the Commission as Resolution 09/01, indicate that pending the amendment or replacement of the IOTC Agreement to incorporate modern fisheries management principles, the Commission should implement the precautionary approach including, *inter alia*, precautionary reference points, as set forth in the UNFSA;

NOTING Resolution 12/01 *On the implementation of the precautionary approach* that recommends adoption of provisional reference points, and that the IOTC Scientific Committee proposed provisional values at its 14th Session;

RECALLING ALSO that the IOTC Scientific Committee commenced a process leading to a management strategy evaluation (MSE) process to improve upon the provision of scientific advice on Harvest Control Rules (HCRs);

HIGHLIGHTING that the IOTC Scientific Committee is now in a position to provide advice on stock status relative to reference points for several stocks of tropical, temperate or neritic tunas and billfish;

FURTHER NOTING that the IOTC Scientific Committee at its 17th Session made recommendations on possible alternates to limit and target reference points derived from B_{MSY} and F_{MSY}, when those are considered as insufficiently robust, that are derived from proportions of B_0, being the estimated virgin biomass;

FURTHER NOTING the Scientific Committee also recommended that in cases where MSY-based reference points cannot be robustly estimated, biomass limit reference points be set at 20 % of the virgin biomass (B_{LIM}=0.2 B_0).

ACKNOWLEDGING that continuing dialog between scientists and managers is necessary to define appropriate HCRs for the IOTC tuna and tuna-like stocks;

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

Interim Target and Limit Reference Points (TRPs and LRPs)

1. When assessing stock status and providing recommendations to the Commission, the IOTC Scientific Committee should, where possible, apply MSY-based target and limit reference points for tuna and tuna-like species and in particular the interim reference points agreed by the Commission in 2013 for albacore, swordfish and the three (3) tropical tunas (bigeye tune, skipjack tuna, yellowfin tuna) (per Resolution 13/10 *On interim target and limit reference points and a decision framework*) (superseded by Resolution 15/10), as listed in **Table 1**. B_{MSY} refers to the biomass level for the stock that would produce the Maximum Sustainable Yield; F_{MSY} refers to the level of fishing mortality that produces the Maximum Sustainable Yield.

Alternate interim Target and Limit Reference Points

2. Where the IOTC Scientific Committee considers that MSY-based reference points cannot be robustly estimated, biomass limit reference points will be set at a rate of B_0. Unless the IOTC Scientific Committee advises the Commission of more suitable limit reference point for a particular species, by default, the interim B_{LIM} will be set at 0.2 B_0 and fishing mortality rate limit reference point at $F_{0.2\ Bo}$ (the value corresponding to this biomass limit reference point). These interim limit reference points will be reviewed no later than 2018.

3. Where the IOTC Scientific Committee considers that MSY-based reference points cannot be robustly estimated, target reference points based on the depletion proportion (i.e. reference points with respect to the ratio of current biomass to B_0, B_0 being the virgin biomass estimate) should be used as a basis for B_{TARGET} and F_{TARGET}, as follows:

a) the interim biomass target reference point B_{TARGET} could be set at a ratio ofB_0, the virgin biomass;

b) the interim fishing mortality rate target reference point F_{TARGET} could be set at a level consistent with the target biomass reference point, the fishing mortality rate corresponding then to the adopted ratio of B_0, the virgin biomass).

4. These target and limit reference points, referred to in paragraphs 1, 2 and 3, shall be further reviewed by the IOTC Scientific Committee according to the program of work at **Annex 1** and in accordance with paragraph 6. The results shall be presented to the Commission for adoption of species-specific reference points.

5. The IOTC Scientific Committee shall continue to provide advice on the status of stocks and on recommendations for management measures in relation to the reference points referred to in paragraphs 1, 2 and 3, where available, until the Commission adopts other reference points that achieve the IOTC's conservation and management objectives and are consistent with paragraph 6.

6. The IOTC Scientific Committee shall recommend to the Commission for its consideration options for harvest control rules for IOTC species in relation to agreed reference points and, in doing so, shall take into account:

a) the provisions set forth in the UNFSA and in Article V of the IOTC Agreement;

b) the following objectives and any other objective identified through the Science and Management Dialogue process designed in Resolution 14/03 (or any revision thereof) and agreed thereafter by the Commission:

i. Maintain the biomass at or above levels required to produce MSY or its proxy and maintain the fishing mortality rate at or below F_{MSY} or its proxy;

ii. Avoid the biomass being below B_{LIM} and the fishing mortality rate being above F_{LIM};

c) the following guidelines:

i. For a stock where the assessed status places it within the lower right (green) quadrant of the Kobe Plot, aim to maintain the stock with a high probability within this quadrant;

ii. For a stock where the assessed status places it within the upper right (orange) quadrant of the Kobe Plot, aim to end overfishing with a high probability in as short a period as possible;

iii. For a stock where the assessed status places it within the lower left (yellow) quadrant of the Kobe plot, aim to rebuild these stocks in as short a period as possible;

iv. For a stock where the assessed status places it within the upper left quadrant (red), aim to end overfishing with a high probability and to rebuild the biomass of the stock in as short a period as possible.

Final Clauses

7. Bearing in mind Article 64 of UNCLOS and Article 8 of UNFSA, the entirety of this Resolution is subject to Article XVI (Coastal States' Rights) of the IOTC Agreement for the Establishment of the Indian Ocean Tuna Commission, and Articles 87 and 116 of the UN Convention of the Law of the Sea regarding the right to fish on the high seas;

8. The IOTC Scientific Committee is requested to evaluate the performance of any harvest control rules with respect to the species specific target and limit reference points adopted for IOTC species, but not later than 10 years following their adoption, and the Commission will consider, as appropriate and consistent with the scientific advice, these harvest control rules.

9. As soon as advice from the IOTC Scientific Committee regarding the appropriateness of TRPs and LRPs, as required under **Annex 1**, is available to the Commission, and where possible no later than at the IOTC Commission meeting in 2020, this Resolution will be reviewed with the view to adopting revised TRPs and LRPs.

10. This Resolution supersedes Resolution 13/10 *On interim target and limit reference points and a decision framework*.

Annex 1

Development and Assessment of Target (TRPs) and Limit Reference Points (LRPs), Harvest Control Rules (HCRs) through Management Strategies Evaluation (MSE) – Program of Work

1. The IOTC Scientific Committee is requested to assess the appropriateness of the limit reference points (LRP) and target reference points (TRP) referred to in paragraphs 1, 2 and 3 of the Resolution 15/10, where relevant, and other reference points based on the guidelines of UNFSA taking into account:

   a) the nature of these reference points – target or limits,

   b) the best scientific knowledge on population dynamics and on life-history parameters,

   c) all fisheries exploiting the stock, and

   d) major sources of uncertainty.

2. The IOTC Scientific Committee is requested to develop and assess, through the management strategy evaluation (MSE) process, the performance of Harvest Control Rules (HCRs), to achieve Target Reference Points (TRPs) on average and avoid the Limit Reference Points (LRPs) with a high probability taking into account the levels of uncertainty in the stock assessments for the priority species listed in point 4. To that end the following activities shall be carried out:

   a) The IOTC Scientific Committee is requested to assess the robustness and the performance of the HCRs in relation to:

      i. the TRPs and LRPs specified in Resolution 15/10; and

      ii. alternative candidate TRPs and LRPs, as identified through Science and Management Dialogue processes as laid down in Resolution 14/03.

   b) The IOTC Scientific Committee is requested to provide a range of potential performance statistics to allow the Commission to evaluate the alternative candidate HCRs and alternative LRPs/TRPs.

3. When evaluating candidate HCRs for species identified in point 4a and 4b, the IOTC Scientific Committee will be requested to provide advice regarding the probability of the biomass being:

   a) at or below the biomass LRP;

   b) at or above the biomass TRP.

4. The initial assessment described in points 2 and 3 shall be completed, where possible, for:

a) Albacore and skipjack tuna by the Scientific Committee in 2015 for presentation to the Commission meeting in 2016.

b) Assessments for yellowfin tuna, bigeye tuna and swordfish to be completed by 2017 and presented to the Commission meeting in 2018.

RESOLUTION 15/11: ON THE IMPLEMENTATION OF A LIMITATION OF FISHING CAPACITY OF CONTRACTING PARTIES AND COOPERATING NON-CONTRACTING PARTIES

Keywords: Fishing capacity; tropical tunas, swordfish; albacore.

The Indian Ocean Tuna Commission (IOTC),

RECALLING the adoption by IOTC in 2003 of the Resolution 03/01 *on the limitation of fishing capacity of IOTC Contracting Parties and Cooperating Non-Contracting Parties*; the adoption in 2006 of Resolution 06/05 [superseded by Resolution 09/02, then Resolution 12/11, then Resolution 15/11] on limitation of fishing capacity, in terms of number of vessels, of IOTC Contracting Parties and Cooperating Non-Contracting Parties, and the adoption in 2007 of Resolution 07/05 [superseded by Resolution 09/02, then Resolution 12/11, then Resolution 15/11] *on limitation of fishing capacity of IOTC Contracting Parties and Cooperating Non-Contracting Parties in terms of number of vessels targeting swordfish and albacore*;

RECOGNISING that FAO International Plan of Action for the Management of the Fishing Capacity (IPOA) provides, in its Objectives and Principles that "States and Regional Fisheries Organisations confronted with an overcapacity problem, where capacity is undermining achievement of long-term sustainability outcomes, should endeavour initially to limit at present level and progressively reduce the fishing capacity applied to affected fisheries";

TAKING INTO ACCOUNT the need to have due regard for the interests of all Members concerned, in conformity with the rights and obligations of those Members under international law and in particular, to the rights and obligations of developing countries of the Indian Ocean rim with respect to entry into the high-seas fisheries in the IOTC area of competence;

RECOGNISING the need to ensure the proper implementation of the Resolutions 03/01 and Resolution 15/11, in order to allow the stabilisation of the level of fishing capacity active on the stocks of high commercial value under the IOTC responsibility, and to facilitate the work of the IOTC Scientific Committee to be able to provide the Commission with sound scientific advice;

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

1. Contracting Parties and Cooperating Non-Contracting Parties (CPCs) shall notify to the IOTC Secretariat, by 31 December 2009, the lists of vessels, by gear type, over 24 meters overall length and over, and under 24 meters if they fished outside their Exclusive Economic Zone (EEZ), and corresponding overall capacity in GT, which have actively fished in accordance with the provision of IOTC Resolution 10/08 and Resolution 14/05:

   - for tropical tunas during the year 2006[1]

   - for swordfish and albacore during the year 2007

   Both lists shall include the vessel at that time considered under administrative process of construction.

2. In notifying their vessels fishing for tropical tunas in the area in 2006, and for swordfish and albacore in 2007, the CPCs shall confirm that they have verified the effective presence and fishing activities of their vessels in the IOTC area of competence in 2006 and in 2007, through their VMS records, catch reports, port calls, or other means. The IOTC Secretariat shall have access to such information upon request.

3. This provision does not apply to those vessels included in the lists, but considered under administrative process of construction in 2006 and in 2007.

4. Within the period of application of this Resolution, CPCs may change the number of their vessels, by gear type, provided that they can either demonstrate to the Commission, under the advice of the IOTC Scientific Committee that the change in the number of vessels, by gear type, does not lead to an increase of fishing effort
on the fish stocks involved or where they are directly limiting catches using individual transferable quotas under a comprehensive national management plan which has been provided to the Commission.

5. CPCs shall ensure that where there is a proposed transfer of capacity to their fleet that the vessels to be transferred are on the IOTC Record of Vessels or on the Record of Vessels of other tuna Regional Fisheries Management Organisations. No vessels on the List of IUU Vessels of any Regional Fisheries Management Organisation may be transferred.

6. The other CPCs which had the objective of developing their fleets following the provisions of IOTC Resolution 03/01, through the introduction to the IOTC of a fleet development plan, shall confirm, by 31
December 2009, *inter alia*, the type, size, gear and origin of the vessels included in the Fleet Development
Plans and the programming (precise calendar for the forthcoming 10 years) of their introduction into the fisheries). All future fishing efforts shall be in accordance with such development Plans of the concerned CPCs.

7. The CPCs which have introduced a Fleet Development Plan, and have confirmed the information on the vessels included in those plans according to the provision of paragraph 3, shall implement their Plans according to their programming. Regarding CPCs which fail to introduce vessels in accordance with their Fleet Development Plans, the IOTC Compliance Committee and the Commission will give annual consideration to the problems related to the implementation of Fleet Development Plans.

8. The IOTC Compliance Committee shall verify, at any IOTC Plenary Session, the compliance of CPCs with the provisions of this Resolution, including the implementation, according to the notified programming, of the Fleet Development Plans.

9. In relation to the foregoing, the Commission will give due consideration to the interests of the developing coastal States, in particular small islands developing States and territories within the IOTC area of competence.

10. This Resolution is applicable during the years 2015 and 2016. The Commission shall review its implementation at the 2016 IOTC Session.

11. This Resolution supersedes Resolution 12/11 *on the implementation of a limitation of fishing capacity of*
Contracting Parties and Cooperating Non-Contracting Parties.

[1] Acknowledging that the catch levels and vessels presence in 2006 of certain Members is not representative of their historical presence, and consequently that these Members may increase the number of vessels present during the period of application of the Resolution to a maximum level operating in a season or year since 2000. These Members shall provide the Commission the identified number of vessels and corresponding capacity in GT by 31 December 2009.