

ON THE ALLOCATION OF FISHING OPPORTUNITIES FOR IOTC SPECIES

SUBMITTED BY: MALDIVES & SOUTH AFRICA; AUSTRALIA, INDONESIA, KENYA, MOZAMBIQUE, PAKISTAN, SEYCHELLES, SOMALIA, SRI LANKA, and TANZANIA (**PENDING:** Bangladesh, Comoros, India, Madagascar, Malaysia, Mauritius, Oman, I. R. Iran, Thailand)

Explanatory memorandum

This proposal aims to:

- 1) Ensure a fair, equitable, and transparent system of allocation of fishing opportunities is developed in accordance with 2 and 3 below, and as shown in Appendix II and Appendix III.
- 2) Take into account the sovereign rights of IOTC coastal States, in accordance with the United Nations Convention on the Law of the Sea.
- 3) Support the long-term sustainability of the following IOTC species: albacore, bigeye tuna, skipjack tuna, yellowfin tuna, and swordfish.
- 4) Ensure the special requirements of IOTC developing coastal States, including Small Island Developing States (SIDS), are accommodated including food security and development aspirations, thereby promoting opportunities for economic development and development aspirations.
- 5) Detail Allocation Criteria based on the Allocation Principles.

The following text outlines the rationale for several key elements being included or excluded from this proposal:

Allocation principles: The allocation principles contained within this proposal are based on those developed at previous Sessions of the Technical Committee on Allocation Criteria (TCAC). Where the proponents of this proposal deemed it necessary, the intent and application of the Allocation principles have been further clarified.

Eligibility: At this stage the proposal has not been amended to provide a specific allocation to Taiwan,China as a long term participant in the fishery. This means that allocations in respect of the historical fishing activity of vessels from Taiwan,China in the high seas would be attributed to China, as is the current practice within the FAO system. The G16 expects that China and Taiwan,China would enter into a suitable agreement about apportionment of China's allocation. The G16 is supportive of increased participation in the IOTC by Taiwan,China. If there is a clear resolution to this issue, either through the informal dialogue commenced at TCAC04, or through another mechanism, such as the IOTC Performance Review process, this Resolution shall be readily amended to directly accommodate Taiwan,China.

Biomass distribution: At this time, the IOTC is not in a position to determine the distribution of stock biomass for any IOTC species at a fine scale (i.e. by EEZ). However, there may be an opportunity for some IOTC species to be differentiated between coastal and high seas distribution in the near future. Where possible, efforts should be made to determine biomass distribution for potential incorporation into a system of allocation in the future when that information is available for consideration. Additionally, bio-ecological significance may also be considered with biomass distribution. The Coastal State Baseline component of the allocation system reflects Principle (c) from Annex VII of the TCAC3 report: Consistent with the sovereign rights of coastal States, their catch must be based on the level of resources and fishing opportunities of each relevant IOTC fish species in their EEZ. IOTC does not hold the data to easily determine where fishing opportunities and resources are more heavily concentrated. In the longer term a more sophisticated measure of relative abundance for each species may be considered.

Socio-Economic considerations: The proponents of this proposal strongly believe that the allocation scheme must accommodate the dependency of Coastal States, particularly, Developing Coastal States (including Small Island Developing States), on fisheries in the IOTC Area of Competence, measured by the contribution of those fisheries to social and economic needs. At this time we believe we are limited to the HDI, GNI and SIDS status of each CPC,

however, as the Commission completes the scoping study of socio-economic data and indicators of IOTC fisheries, as agreed at the 22nd Session of the Commission, other factors may replace the above generic indicators, such as:

- Fisheries employment as proportion of total workforce;
- Tuna exports as proportion of total exports;
- Fisheries contribution to GDP;
- Per capita fish consumption (kg/pers/yr).

Allocation compliance: Although the proponents of this proposal believe that the record of compliance and/or cooperation by eligible participants with the IOTC's Conservation and Management Measures should be an element of an allocation system, this should be limited to a penalty for over-catch of a CPCs allocation for a given species, made under this current Resolution.

Historical catches: The proponents of this proposal consider that, for the purpose of allocation of future fishing opportunities, all historical catches taken within an Exclusive Economic Zone, with in the IOTC Area of Competence, shall be attributed solely to the coastal State with jurisdiction over that area, regardless of the flag State of the vessel/s that took such catches. Therefore, any catches made during previous provision of access to fisheries resources within an area under national jurisdiction (e.g. via access agreements or other arrangement) shall be attributed solely to the coastal State with jurisdiction over that area rather than to any other State. In the current proposal, the incorporation of temporary quota transferability has been incorporated to ensure market access maintained.

RESOLUTION 19/XX

ON THE ALLOCATION OF FISHING OPPORTUNITIES FOR IOTC SPECIES

Keywords: Allocation principles; allocation criteria; sustainability; sovereign rights.

The Indian Ocean Tuna Commission (IOTC),

RECALLING the IOTC objective as stated in the IOTC Agreement, Article V, para 1: *“The Commission shall promote cooperation among its Members with a view to ensuring, through appropriate management, the conservation and optimum utilization of stocks covered by this Agreement and encouraging sustainable development of fisheries based on such stocks.”*

CONSIDERING that the IOTC has further clarified its objectives via IOTC Conservation and Management Measures, including the aim of maintaining 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, social and economic factors including the special requirements of developing States in the IOTC Area of Competence;

TAKING INTO ACCOUNT Parts V and VII of the UN Convention on the Law of the Sea (UNCLOS) and, inter alia, Articles 7 and 10(b) of the UN Fish Stocks Agreement (UNFSA);

TAKING INTO ACCOUNT Articles V and XVI of the IOTC Agreement;

RECALLING that Article 5(b) of the UNFSA requires the conservation and management of highly migratory fish stocks to be based on the best scientific evidence available;

FURTHER RECALLING that Article 6 of the UNFSA, and IOTC Resolution 12/01 *On the implementation of the precautionary approach*, requires States to apply the precautionary approach when information is uncertain, unreliable or inadequate and this should not be a reason for postponing or failing to take conservation and management measures;

CONSIDERING the recommendations adopted by the KOBE II, held in San Sebastian, Spain, June 23 – July 3 2009; including recommendation 5 which states that:

“Each tuna RFMO consider implementing where appropriate a freeze on fishing capacity on a fishery by fishery basis. Such a freeze should not constrain the access to, development of, and benefit from sustainable tuna fisheries by developing coastal States”;

FURTHER CONSIDERING the recommendations adopted by the KOBE III, held in La Jolla, California, 11-15 July 2011; including recommendation 7 which states that:

“Kobe III participants recommend that developed fishing members freeze large-scale purse seine capacity under their flag. Based on the status of the stocks, each tRFMO should consider a scheme for:

- *Reduction of over capacity in a way that does not constrain the access to, development of, and benefit from sustainable tuna fisheries, including on the high seas, by developing coastal States, in particular small island developing States, territories, and States with small and vulnerable economies; and*
- *Transfer of capacity from developed fishing members to developing coastal fishing members within its area of competence where appropriate.”;*

RECOGNIZING that the special requirements of developing States are recognized in both UNCLOS, in Articles 61(3) and 119(1)(a), and UNFSA, in Articles 5(b) and 24, and that, in particular, Article 24 of the UNFSA requires States to give full recognition to such requirements in relation to conservation and management of highly migratory fish stocks;

ALSO RECOGNIZING that developing States, in particular the least-developed among them, and Small Island Developing States (SIDS), are addressed in various ways in Article 25 of UNFSA, which is especially relevant to the IOTC;

FURTHER RECOGNIZING that similar language on the special requirements of developing States and Small Island Developing States can be found in Article 5 of the FAO Code of Conduct for Responsible Fisheries;

FURTHER RECOGNIZING that specific provisions for developing States can also be found in Article VII of the 1993 FAO Compliance Agreement, in paragraph 10 of the 1999 FAO International Plan of Action for the Management of Fishing Capacity, in Part V of the 2001 FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, and in Part 6 of the 2009 FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, and that recognition of the needs of developing States has also been included in several resolutions of the United Nations General Assembly on sustainable fisheries, such as A/68/L.19 (paragraph 89) and A/RES/71/123 (paragraphs 40 and 41);

CONSIDERING the call upon States by the United Nations General Assembly in A/RES/71/123 to increase the reliance on scientific advice in developing, adopting and implementing Conservation and Management Measures (paragraph 11);

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

I. Definitions

1. **Allocation period:** Period of time for which an allocation shall apply, and which may vary by species. The allocation period shall be aligned with the species stock assessment schedule and the resultant Global Total Allowable Catch (GTAC) set by the Commission. The default allocation period shall be one (1) calendar year, unless otherwise agreed by the Commission.
2. **Coastal fisheries:** means coastal fisheries as defined by the IOTC in Resolution 15/02, or any superseding Resolution.
3. **Contracting Party (CP):** Contracting Party to the IOTC Agreement.
4. **Cooperating Non-Contracting Party (CNCP):** Cooperating Non-Contracting Party to the IOTC Agreement, as defined in Rule IX of the IPHC Rules of Procedure (2014).
5. **CPC:** Collective of Contracting Parties, and Cooperating Non-Contracting Parties to the IOTC Agreement.
6. **Distant Water Fishing Nation (DWFN) CPC:** means a State, or regional economic integration organization, which is acting in the capacity of a flag State within the IOTC Area of Competence, as listed in Appendix I.
7. **Coastal State CPC:** means a State, which partly or wholly, occurs within the IOTC Area of Competence, as listed in Appendix I.
8. **Developing Coastal State (DCS) CPC:** means a Indian Ocean Coastal State whose development status is considered to be in the low, medium or high human development index (HDI) categories by the United Nations Development Programme (UNDP). Therefore, the term 'Developing Coastal State' excludes those Coastal States whose development status is considered to be in the very high HDI category (<http://hdr.undp.org/en/composite/HDI>).
9. **Small Island Developing States (SIDS) CPC:** means Indian Ocean Coastal States defined as SIDS by the United Nations Department of Economic and Social Affairs and the OECD (<https://sustainabledevelopment.un.org/topics/sids/list>) (listed in Appendix I).

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10. ***Global Total Allowable Catch (GTAC)***: means for an IOTC species, a catch limit set as an output control on fishing, in accordance with any relevant management procedure or other agreed management framework.
11. ***Conservation and Management Measure (CMM)***: means a Conservation and Management Measure adopted by the IOTC pursuant to Article IX(1) of the IOTC Agreement.

II. Allocation Principles

12. The following Allocation Principles shall form the basis for developing, and assessing the performance of, the IOTC's allocation scheme, thereby ensuring that the allocation is applied in a fair, equitable, and transparent manner, and with the goal of ensuring opportunities for all eligible participants:
- a) ***Eligibility***: The allocation of fishing opportunities by the IOTC shall be limited to IOTC Contracting Parties (CPs) and IOTC Cooperating Non-Contracting Parties (CNCs), collectively termed CPCs. The allocation criteria should be applied in a manner that encourages CNCs to become CPs, where they are eligible to do so.
 - b) ***Sustainability***: The allocation scheme will support the long-term sustainability of fishing for albacore, bigeye tuna, skipjack tuna, yellowfin tuna, and swordfish, and indirectly the status of non-targeted, associated and dependent species, by giving effect to allocations set in accordance with any relevant management procedure or other agreed management framework, and by complementing other CMMs to ensure sustainability of fishing. Gear sustainability ratios may be developed and applied in future revisions of this measure.
 - c) ***Coastal States' rights***: The allocation scheme shall not prejudice the exercise of the sovereign rights of a Coastal State in accordance with Article 56 of the UNCLOS for the purposes of exploring and exploiting, conserving and managing the living resources, including the highly migratory species, within a zone of up to 200 nautical miles under its jurisdiction.
 - d) ***Special requirements (aspirations) of Developing Coastal States (DCS), including those of Small Island Developing States (SIDS)***: The allocation scheme shall integrate the special requirements of DCSs, including those of SIDS, including their development aspirations.
 - e) ***Historical catches***: The allocation scheme shall recognise historical catches of bigeye tuna, skipjack tuna, yellowfin tuna, albacore, and swordfish, by eligible participants as an element in determining allocations. For the purpose of allocation of future fishing opportunities, all historical catches taken within an area under national jurisdiction shall be attributed solely to the Coastal State with jurisdiction over that area, regardless of the flag State of the vessels that took such catches, referred to as the 'baseline historical catch'. Therefore, any catches made during previous provision of access to fisheries resources within an area under national jurisdiction (e.g. via access agreements or other arrangement), shall be attributed solely to the coastal State with jurisdiction over that area rather than to any other State. This attribution will be given effect in a way that is without prejudice to the responsibilities of flag States to report catch under international law, including under UNFSA. Historical catches include those estimated by the IOTC Secretariat, approved by the IOTC Scientific Committee and endorsed by the IOTC. Where historical high seas catches are used they shall be attributed to the flag State that took the catches.
 - f) ***High seas***: The allocation scheme shall not prejudice the international legal framework for the high seas, including the rights and responsibilities of States in respect of fishing on the high seas under UNCLOS and UNFSA.

- g) **Temporary transfer of allocation:** means a transfer of an allocation that has been made under this measure from one CP to another CP, but does not include a coastal State chartering or licensing one or more vessels flagged to another CPC to fish in its EEZ using the Coastal State's allocation under a chartering or licensing arrangement.
- h) **Social and economic dependency:** The allocation scheme shall consider the dependency of Coastal States, particularly, DCSs and SIDS on fisheries in the IOTC Area of Competence (all IOTC species combined), measured by the contribution of those fisheries to social and economic needs.
- i) **Allocation compliance:** The allocation scheme shall take into account compliance by including a penalty for over-catch of a CPCs allocation for a given species, made under this current Resolution.

III. Allocation criteria

13. Scope:

- a) Any allocation, or part thereof, may be taken either within or beyond areas of national jurisdiction within the IOTC Area of Competence, without prejudice to the sovereign rights of Coastal States as referred to in paragraph 12(c) above. Fishing access to any area under the national jurisdiction of a CPC shall remain at the sole discretion of that CPC.

14. Eligibility:

- a) Eligibility to receive an allocation shall be limited to Contracting Parties (CPs) and Cooperating Non-Contracting Parties (CNCs), collectively termed CPCs.
- b) At the commencement of the allocation scheme, each CPC, subject to the provisions of this Resolution, shall receive a baseline allocation and may be eligible to receive a supplementary allocation.
 - i. The baseline allocation shall consist of two components: Baseline Coastal State allocation and Baseline historical catch allocation.
 - ii. The supplementary allocation shall consist of one component: Supplementary high seas allocation.

15. Stocks to which the allocation would apply:

- a) Allocations are to be applied to albacore, bigeye tuna, skipjack tuna, yellowfin tuna, and swordfish.

16. Global Total Allowable Catch:

- a) Allocations are to be made in relation to species-specific catch limits (species GTAC) set under relevant management procedures. Where no relevant management procedure exists, an allocation may be made in relation to a species-specific catch limit that has otherwise been determined by the IOTC on the advice of the IOTC Scientific Committee.

17. Baseline Coastal State allocation

- a) Each Coastal State CPC with a 'baseline historical catch' of the species being allocated within the IOTC Area of Competence, as detailed in [Table 1](#), and calculated using the method described in paragraph 18b, shall receive a Baseline Coastal State allocation. The Baseline Coastal State allocation shall be made in accordance with the following elements (reference Appendix I):

- i. **Coastal State CPCs:** Status weighting = 1 (an equal portion for each). 20-40% of the Baseline Coastal State allocation;
 - ii. **Developing Coastal State CPCs:** 30-70% of the Baseline Coastal State allocation;
 - **HDI status:** Status weighting = low (1), medium (0.75), high (0.50), Very high (not applicable). 30-40% of the Developing Coastal State CPC element;
 - **GNI status:** Status weighting = low (1), low-middle (0.75), upper-middle (0.5), high (0.25). 30-40% of the Developing Coastal State CPC element;
 - **SIDS status:** Status weighting = yes (1), no (0). 30-70% of the Developing Coastal State CPC element;
 - If a DCS does not intend to fish, or transfer (in accordance with paragraph 21), its Supplementary DCS allocation in a given allocation period, or does not respond to the allocation issuance by the designated time (to be determined by the Commission), its Supplementary DCS allocation shall automatically be reallocated to other DCS CPs based on the allocation formula adopted by the Commission and applied on an annual basis.
 - iii. **EEZ proportion:** The size of the area under national jurisdiction as a proportion of the overall IOTC Area of Competence. 10-20% of the Baseline Coastal State allocation; EEZ size weighting =
 - >0.0-≤1.0% of the IOTC Area of Competence (weighting = 1)
 - >1.0-≤2.0% of the IOTC Area of Competence (weighting = 2)
 - >2.0-≤3.0% of the IOTC Area of Competence (weighting = 3)
 - >3.0-≤4.0% of the IOTC Area of Competence (weighting = 4)
 - >4.0-≤5.0% of the IOTC Area of Competence (weighting = 5)
 - >5.0-≤6.0% of the IOTC Area of Competence (weighting = 6)
 - >6.0-≤7.0% of the IOTC Area of Competence (weighting = 7)
 - >7.0-≤8.0% of the IOTC Area of Competence (weighting = 8)
 - iv. the relative abundance of the species being allocated, within the area under national jurisdiction. The IOTC Scientific Committee is requested to provide advice as to how an index of relative abundance of each allocated species might be constructed.
- b) Coastal State CPCs who do not have a ‘baseline historical catch’ for a particular species, as detailed in [Table 1](#), may request in writing to the IOTC Secretariat, and shall receive a Baseline Coastal State allocation for the next allocation period for that species, in accordance with the administrative process described in paragraph 26.
 - c) The baseline Coastal State allocation for any Coastal State CNCP shall be no more than 50% of that of the lowest Baseline Coastal State allocation for any Coastal State CP.

18. **Baseline historical catch allocation (within the EEZ and on the high seas):**

- a) Historical catches of CPCs in a given reference period [3 options to be simulated: 5 year average (2012-16), 15 year average (2002-16), and best 5 years averaged from within the period 1950-2016], shall be used to calculate a baseline historical catch allocation for each CPC, calculated using the method described in paragraph 18b, for each IOTC species, as provided in [Table 1](#).

Table 1. IOTC species and their respective historical catch reference periods.

Common name	Scientific name	Code	Reference period
<i>Tropical tunas</i>			
Bigeye tuna	<i>Thunnus obesus</i>	BET	[TBD]*
Skipjack tuna	<i>Katsuwonus pelamis</i>	SKJ	[TBD]*
Yellowfin tuna	<i>Thunnus albacares</i>	YFT	[TBD]*
<i>Temperate tunas</i>			
Albacore	<i>Thunnus alalunga</i>	ALB	[TBD]*
<i>Billfish</i>			
Swordfish	<i>Xiphias gladius</i>	SWO	[TBD]*

*see 3 options to be simulated (paragraph 18a).

- b) All historical catches taken within an area under national jurisdiction shall be attributed solely to the Coastal State with jurisdiction over that area, regardless of the flag of the vessels that took such catches (baseline historical catch). The spatial separation of historical catches, by each CPC, as between areas within and beyond national jurisdiction shall be made on the following basis, excluding those taken by identified IUU vessels:
- i. Catches reported for 5x5 or 1x1 degree grid squares that:
 - wholly fall within areas under national jurisdiction are to be considered as being taken in areas under national jurisdiction;
 - wholly fall within the high seas are to be considered as being taken in the high seas;
 - overlap one or more EEZs and/or the high seas¹, with the exception of catches taken by a CPC fishing within its own EEZ, shall be distributed proportionately by area unless supporting evidence is presented by any CPC (e.g. spatial catch record by flag). In cases where there is disagreement by one or more participants, the supporting evidence shall be provided to, and considered by the IOTC Compliance Committee.
 - are taken by a CPC fishing within its own EEZ, shall be considered as being taken within that CPCs EEZ.
 - ii. Catches reported or estimated without associated spatial effort data (as required by IOTC Resolution 15/02, or any superseding Resolution), shall be considered as being taken on the high seas by that CPC. In cases where the flag State is in disagreement with another CPC, supporting evidence shall be provided for consideration by the IOTC Compliance Committee.
 - iii. Catches by coastal fisheries, will be assumed to have been taken within the area under the national jurisdiction of the coastal State, irrespective of whether spatial effort data is available.
- c) The baseline historical catch allocation for any CNCP shall be no more than 50% of that of the lowest Baseline historical catch allocation for any CP.

19. *Supplementary high seas allocation*

¹ See Appendix IV for a further description.

- a) Each CPC, with a ‘baseline historical catch’ for the species being allocated within the IOTC Area of Competence, as detailed in [Table 1](#), with the exception of new entrant DWFN as described in paragraph 20(b), shall be allocated a supplementary high seas allocation (in addition to any part of the baseline historical catch allocation that relates to the high seas).
- b) The supplementary high seas allocation shall be equal among each CP. CNCPs shall receive half of that which a CP receives. If a CPC does not intend to fish, or transfer (in accordance with paragraph 21), its supplementary high seas allocation in a given allocation period, or does not respond to the allocation issuance by the designated time (to be determined by the Commission), its supplementary high seas allocation shall automatically be reallocated to other Coastal State CPs based on the allocation formula adopted by the Commission and applied on an annual basis.
- c) A CPC that does not have a ‘baseline historical catch’ for a particular species, as detailed in [Table 1](#), may request in writing to the IOTC Secretariat, to receive a Supplementary high seas allocation for the next allocation period for that species, in accordance with the administrative process described in paragraph 26.
- d) Future fishing opportunities for DCSs and SIDS, whether CPs or CNCPs, shall be facilitated by a gradual transfer of the supplementary high seas allocation from DWFNs, commencing three (3) years after the commencement of the allocation scheme. The gradual transfer shall be completed over a five (5) year period, with 20% per year being transferred.

20. *New Entrants*

- a) **Coastal States.** Each Coastal State new entrant shall receive an allocation in the year following their acceptance of the IOTC Agreement for one or more species upon application to, and approval by, the Commission. If a new entrant Coastal State does not intend to fish its allocation, or transfer in accordance with paragraph 21, it shall notify the IOTC Secretariat, for potential reallocation to other Coastal States based on the allocation formula adopted by the IOTC and applied on an annual basis.
- b) **Distant Water Fishing Nations.** Any DWFN new entrant shall not be eligible for an allocation under this Resolution unless its request for eligibility has been approved by the Commission. If a new entrant DWFN does not intend to fish its allocation, or transfer in accordance with paragraph 21, it shall notify the IOTC Secretariat, for potential reallocation to Coastal States based on the allocation formula adopted by the IOTC and applied on an annual basis.

21. *Temporary transfer of allocation:*

- a) Any given CP allocation, or part thereof, shall be able to be temporarily transferred to another CP, at the sole discretion of the originating CP. Temporary transfers shall expire at the end of the calendar year in which the temporary transfer was made (i.e. at 23:59 hrs on 31 December).
- b) CNCPs shall not be eligible to temporarily transfer to, or receive a temporary transfer from, another CPC.

22. *Allocation compliance:*

- a) Mechanisms to reconcile reported catch against CPC allocations shall be developed by the IOTC no later than the Commission meeting in 2019.
- b) Over-catch by any CPC of its allocation for a given species, shall be deducted from that CPC’s allocation in the future. The default deduction shall be at a ratio of 1.2:1 for the following allocation period, or at the request of the CPC, increased to 1.5:1 for the deduction to be deferred to the subsequent

allocation period. A second or greater consecutive over-catch shall result in an allocation deduction of 2:1, and deferral shall not be permitted.

IV. Weighting of allocation criteria

23. A weighting scheme shall be simulated for the allocation categories for consideration at the TCAC05 meeting in March 2019, and shall accommodate the special requirements of DCS, including their development aspirations, as follows:
- a) Baseline allocations:
 - i. Baseline Coastal State: (Simulation range = 25-45)%
 - ii. Baseline historical catch (within the Exclusive Economic Zone and on the high seas): (Simulation range = 50-70)%
 - b) Supplementary allocation:
 - i. Supplementary high seas: (Simulation range 2.5-7.5)%

V. Allocation formula

24. $GTAC = CPC \text{ Baseline Coastal State Allocation} + CPC \text{ Baseline Historical Catch Allocation} + CPC \text{ Supplementary High Seas Allocation}$. *[To be updated based upon simulation code]*

VI. Implementation

25. When the Global Total Allowable Catch (GTAC) for an IOTC species decreases from the previous allocation period, DCS and SIDS shall receive a smaller proportional reduction in catches than other CPCs. The proportion of the allocation reduction for DCS and SIDS would be $[\frac{1}{4} - \frac{1}{3}]$ of that of other CPCs, consistent with principles enunciated in the Kobe process.
26. The IOTC Secretariat shall develop an administrative process for instances where a CPC, who does not have a 'baseline historical catch' for a particular species, may request an allocation in accordance with paragraph 17(b) Baseline coastal State allocation; and paragraph 19(c) Supplementary high seas allocation, and how that request would be evaluated against the provisions in this Resolution.
27. The IOTC Secretariat shall issue allocations for each species and CPC, once this Resolution takes effect. The first allocation period shall be 1 January to 31 December 2020.
28. This Resolution shall be reviewed and revised as necessary, no later than at the annual Session of the Commission occurring five (5) years after adoption of this Resolution, with the intent of incorporating the latest scientific information on areas including but not limited to species biological distribution and spawning grounds, as well as areas of biological-ecological significance, as indicated in paragraph 17(a)(iv).
29. This Resolution supersedes Resolution 14/02 *For the conservation and management of tropical tunas stocks in the IOTC area of competence*.

APPENDIX I
IOTC membership by category and other categories for simulation
(as of 15 December 2018)

CPC	CP	CNCP	Coastal State CPC	DWFN CPC	DCS	SIDS ¹	HDI ²	GNF ³	EEZ ⁴
Australia	Y		Y				very high	high	8
Bangladesh	Y		Y		Y		medium	low-middle	1
China (incl. Taiwan, Province of China)	Y			Y			high	upper-middle	N/A
Comoros	Y		Y		Y	Y	low	low	1
Eritrea	Y		Y		Y		low	low	1
European Union (FR, SP, IT)	Y			Y			very high	high	N/A
France (OT)	Y		Y				very high	high	3
Guinea	Y			Y			low	low	N/A
India	Y		Y		Y		medium	low-middle	4
Indonesia	Y		Y		Y		medium	low-middle	4
Iran, Islamic Republic of	Y		Y		Y		high	upper-middle	1
Japan	Y			Y			very high	high	N/A
Kenya	Y		Y		Y		medium	low-middle	1
Korea, Republic of	Y			Y			very high	high	N/A
Madagascar	Y		Y		Y		low	low	2
Malaysia	Y		Y		Y		high	upper-middle	1
Maldives	Y		Y		Y	Y	high	upper-middle	2
Mauritius	Y		Y		Y	Y	high	upper-middle	3
Mozambique	Y		Y		Y		low	low	1
Oman	Y		Y		Y		high	high	1
Pakistan	Y		Y		Y		medium	low-middle	1
Philippines	Y			Y			medium	low-middle	N/A
Seychelles	Y		Y		Y	Y	high	high	3
Sierra Leone	Y			Y			low	low	N/A
Somalia	Y		Y		Y		low*	low	2
South Africa	Y		Y		Y		medium	upper-middle	1

Sri Lanka	Y		Y		Y		high	low-middle	1
Sudan	Y		Y		Y		low	low-middle	1
Tanzania	Y		Y		Y		low	low	1
Thailand	Y		Y		Y		high	upper-middle	1
United Kingdom (OT)	Y		Y				very high	high	2
Yemen	Y		Y		Y		low	low-middle	1
Liberia		Y		Y			low	low	N/A
Senegal		Y		Y			low	low	0
TOTAL (34)	32	2	25	9	22	4	-	-	-

¹ **Small Island Developing State (SIDS)** status: <https://sustainabledevelopment.un.org/topics/sids/list>. United Nations Department of Economic and Social Affairs and the OECD.

² **Human Development Index (HDI)** status: <http://hdr.undp.org/en/composite/HDI>. *Somalia currently does not have an official Human Development Index (HDI) from the UNDP, which is based on 4 quantified factors. However, as 2 of the 4 factors have been quantified, and they measure within the 'low' HDI status, we have assigned Somalia to this category for the purposes of allocation of fishing opportunities.

³ **Gross national income (GNI)** status: <https://data.worldbank.org/indicator/NY.GNP.PCAP.CD>. Atlas method (current US\$).

⁴ **Exclusive Economic Zone (EEZ)** status: <http://www.marineregions.org/>.

APPENDIX II Allocation key

Species #1

Step 1: Eligibility:

- a) Flag State is not a Contracting Party or a Cooperating Non-Contracting Party (collectively CPC) at the Commencement date of this Resolution – Not eligible for allocation.
- b) Flag State is a Contracting Party or a Cooperating Non-Contracting Party at the Commencement date of this Resolution – Go to Step 2.
- c) Flag State is a new entrant Contracting Party or a Cooperating Non-Contracting Party after the Commencement date of this Resolution – Go to Step 5.

Step 2: Baseline Coastal State allocation

- a) Flag State is not a Coastal State – Go to Step 3.
- b) Flag State is a Coastal State – Go to Step 2(c).
- c) Receive a Baseline Coastal State allocation – Go to Step 2(d).
- d) Coastal State CPCs who do not have a catch history for a particular species, as detailed in [Table 1](#), may request in writing to the IOTC Secretariat, to receive a Baseline Coastal State allocation for the next allocation period for that species. – Go to Step 2(e).
- e) Coastal State is a Contracting Party – Go to Step 3.
- f) Coastal State is a Cooperating Non-Contracting Party – Go to Step 2(g).
- g) Reduce the Baseline Coastal State allocation to 50% of that of the lowest Baseline Coastal State Allocation for any Contracting Party – Go to Step 3.

Step 3: Baseline historical catch allocation (EEZ and the high seas):

- a) The historical catch (calculated using the method described in paragraph 18b) by the eligible CPC for the species reference period shall be applied as a proportion of the total Baseline Historical Catch Allocation of all CPCs – Go to Step 3(b).
- b) Flag State is a Contracting Party – Go to Step 4.
- c) Flag State is a Cooperating Non-Contracting Party – Go to Step 3(d).
- d) The baseline historical catch allocation for any CNCP shall be no more than 50% of that of the lowest Baseline historical catch allocation for any CP – Go to Step 4.

Step 4: Supplementary high seas allocation

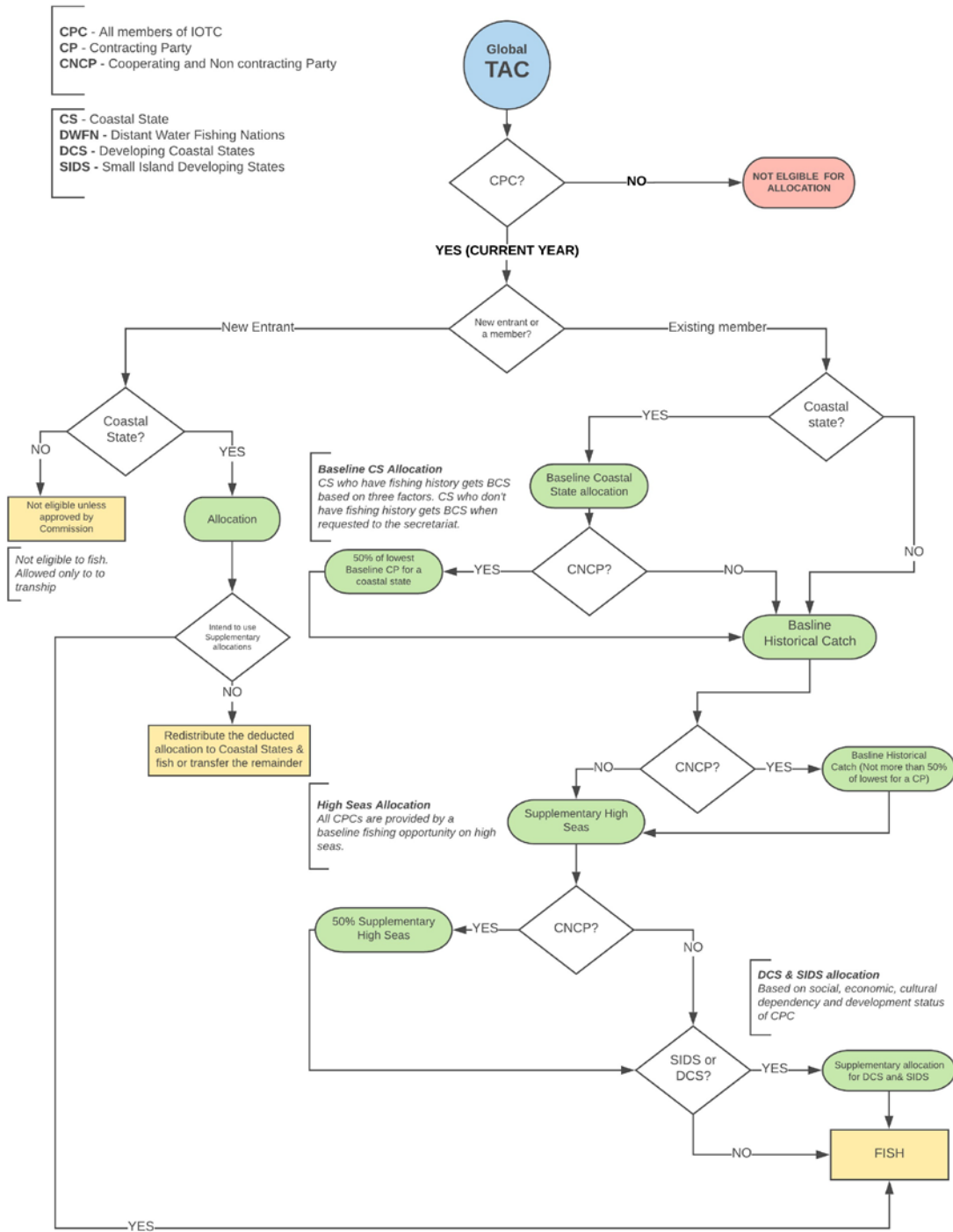
- a) Each CPC, with a history of catching the species being allocated within the IOTC Area of Competence, as detailed in [Table 1](#), with the exception of new entrant DWFN as described in paragraph 20(b), shall be allocated a supplementary high seas allocation (in addition to any part of the baseline historical catch allocation that relates to the high seas). – Go to Step 4(b).
- b) Flag State is a new entrant DWFN – Go to Step 5.

- c) Flag State is a Contracting Party – Go to Step 4(e).
- d) Flag State is a Cooperating Non-Contracting Party – Go to Step 4(f).
- e) Receive 100% of a Supplementary High Seas allocation – Commence fishing.
- f) Receive 50% of a Supplementary High Seas allocation – Commence fishing.

Step 5: New Entrants

- a) Flag State is not a Coastal State – Go to Step 5(d).
- b) Flag State is a Coastal State – Go to Step 5(c).
- c) Each Coastal State new entrant shall receive an allocation in the year following their acceptance of the IOTC Agreement for one or more species upon application to, and approval by, the Commission. If a new entrant Coastal State does not intend to fish its allocation, or transfer in accordance with paragraph 21, it shall notify the IOTC Secretariat, for potential reallocation to other Coastal States based on the allocation formula adopted by the IOTC and applied on an annual basis.
- d) Any DWFN new entrant shall not be eligible for an allocation under this Resolution unless its request for eligibility has been approved by the Commission. If a new entrant DWFN does not intend to fish its allocation, or transfer in accordance with paragraph 21, it shall notify the IOTC Secretariat, for potential reallocation to other Coastal States based on the allocation formula adopted by the IOTC and applied on an annual basis.

APPENDIX III
Allocation of fishing opportunities: Flow chart
DCS/SIDS box will be removed in the next version



APPENDIX IV

Example of how catches shall be separated on EEZ boundaries

Example without any supporting evidence

EEZ State A (30% by area)	High Seas (50% by area)
EEZ State B (20% by area)	

EEZ State A = 30% of the quota

EEZ State B = 20% of the quota

High Seas = 50% of the quota

Example with supporting evidence from verified logbook data

EEZ State A (30% by area) (50% of catch)	High Seas (50% by area) (10% of catch)
EEZ State B (20% by area) (40% of catch)	

EEZ State A = 50% of the quota

EEZ State B = 40% of the quota

High Seas = 10% of the quota

Example with limited supporting evidence

EEZ State A (30% by area) (No verifiable catch records)	High Seas (50% by area) (No verifiable catch records)
EEZ State B (20% by area) (40% of the catch verified by logbook data)	

EEZ State A = $0.3 / 0.8 * 60\% = 22.5\%$ of the quota

EEZ State B = 40% of the quota

High Seas = $0.5/0.8 * 60\% = 37.5\%$ of the quota