

## EXPLANATORY NOTE ON A PROPOSED METHODOLOGY FOR THE ALLOCATION OF FISHING OPPORTUNITIES FOR BIGEYE TUNA

*(Non-paper submitted by the European Union)*

### Introduction

In view of the upcoming ICCAT Annual Meeting, the European Union has produced a methodology and an allocation simulation table (see **Annex**) for the new distribution of fishing opportunities for the stock of bigeye tuna. The method described in the following seeks to “recover”, through various steps, fishing opportunities to be put in a common pot for redistribution in favour of developing coastal States.

Firstly, it would greatly facilitate the discussions on a new allocation and increase the chances of reaching an acceptable outcome at the 2022 Annual meeting if deliberations were more structured. What we therefore propose for consideration is a methodology and accompanying allocation simulation table bringing most CPCs into the allocation table and thus addressing a long-standing concern, namely, to move towards a system that would allow for a proper implementation of the established catch limits. The methodology further seeks to address the distribution of the TAC in a fair and more equitable way, taking multiple steps to reach a final figure. These steps are based on several factors, including but not limited to:

- Historical catches;
- Income levels (World Bank Classification)<sup>1</sup>;
- Utilization rate of existing fishing opportunities, and
- Coastal fishing States v. long distance fishing states.

Secondly, in addition to the equalization quota which we have taken on board from the COMHAFAT proposal, we have added a specific quota for artisanal vessels. This provision concerns all CPCs and seeks to address the case of artisanal, subsistence and small-scale coastal fishers and the needs of the coastal fishing communities.

Thirdly, we would ask that CPCs analyze the allocation simulation table in the first instance with a focus on the methodology. In terms of numbers, of course, nothing is agreed until everything is agreed, and figures are likely to shift during negotiations.

Finally, but importantly, we have based our methodology and allocation simulation table on a 75,000 t TAC scenario, which will greatly facilitate the distribution mechanism, in particular to developing coastal States. Anything below this figure would greatly hamper such an allocation process. Even with a cautious perspective, the EU believes that it is scientifically sound to increase the TAC to 75,000 t, which, according to the 2021 SCRS report, would keep the probability of the stock remaining in the green quadrant of the Kobe plot with more than 64% probability through 2034, but also, and crucially, with over 70% probability over the next 6 years. In parallel with the ongoing development of the multi-stock management strategy evaluation for tropical tuna the SCRS will have all the scientific elements, including indicator trends, to warn the Commission in the case of undesirable developments in the stock and schedule, where required, an updated stock assessment in 2025.

### Methodology for the allocation of bigeye tuna fishing opportunities

#### Step 1: *Setting the baseline and historical consumption*

- For CPCs with catch limits (allocation table from ICCAT Rec. 16-01) their quota share is set according to the allocation given, while for all other CPCs the quota allocation is set at the level of 2020 catches for the purposes of establishing a baseline.

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<sup>1</sup> <https://datatopics.worldbank.org/world-development-indicators/the-world-by-income-and-region.html>

**Step 2: First adjustment**

- The first adjustment is made by bringing the baseline quota determined in step 1 to the level of the average consumption during the period 2015-2020. In cases where average catches are greater or less than the baseline set in step 1, two situations may apply:
  - for CPCs with a catch limit set in Rec. 16-01, the adjustment is done by bringing the quota down to a percentage that takes into account overshooting or undershooting of the quota;
  - for CPCs without catch limits in Rec. 16-01, their quota share is adjusted to indicated “limits/trigger points” in 16-01 Article 4 (a) and (b) if these are exceeded;
- Amounts recovered are put in a common pot for redistribution.

**Step 3: Distant water fishing nations (DWFNs)**

- Downward adjustment by 1% (-1%) for big harvester DWFNs (quota allocation greater than 5% overall) to distinguish these from coastal States;
- Amounts recovered are put in in a common pot for redistribution.

**Step 4: Large to small harvesters**

- Downward adjustment from large harvesters (quota allocation greater than 5% overall) to small harvesters, except for high income countries; 2% in the case of high-income countries and 0.7% in the case of lower middle-income countries;
- Amounts recovered are put in a common pot for redistribution.

**Step 5: Redistribution to developing coastal States and equalization quota**

- An initial adjustment for coastal state CPCs that end up with a decrease larger than 30% as compared to 2020 catches (most recently available catches);
- First, the amount recovered in the common pot is redistributed to any CPC with a catch history, and up to 0.7%;
- Second, the amount recovered in the pot is redistributed to developing costal States with priority to lower middle-income countries and lower income countries and if possible, leaving a 5% equalization quota;
- There is also a 5% artisanal quota added.

ALLOCATION TABLE OF FISHING OPPORTUNITIES FOR BIGEYE TUNA

Open Parameters in **RED**:  
**STEP 1:** No open variables;  
**STEP 2:** Variable: **time period** to set average consumption;  
**STEP 3:** Two Variables: **Min Quota level** and **adjustment level**;  
**STEP 4:** **Minimum Quota level**; **adjustment** for each category;  
**STEP 5:** First re-calibrate CS CPC to a minimum of 30% decrease as compared to 2020 catches. POT 1- **minimum %** for CPCs with track record (of 525 t); POT 2 - equal allocation to all CS with < 5% allocation and either LMI or LIC.

Step 1 - setting a baseline for key allocation				Step 2 - adjusting the key resulting from step1 (Key 1) to the maximum catch within 2015 and 2020				Step 3 Redistribute from DWFN back to Coastal States		Step 4		Step 5 - Redistribution of the pot				TAC level								
If Rec06-01(3)<>0 then Key = Rec 16-01				If average catch=<=allocation; key 2=%avg quota*%avg.catcg				If DWFN and key allocation < 5,00%		If quota allocation > 5%		Minimum 1st pot 2nd pot												
Else Key=catch in 2020				average catch>quota; key2=quota				Non Coastal States adjustment -1%		HIC -0,02		0,007 14% 4%												
Brasil = 2013 catch				Reference year for catches: Average (15-20) Max (2015-2020)				Year?		UMI -0,007		10.558 2.777												
CPCs				Setting the baseline				Assessing historical consumption				Key 2		Key 3		Creating a pot		Key 4		Allocate pot		Key 5		75000
Flag name	Category **	Coastal state (CS)/DWFN	WB Income level*	Rec 16-01	Ceilings set by rec16-01	Reference Catch	Reference catch Rec. + Catches 2020	Percentage catch allocation (allocation key)	Average consumption (2015-2020)	Percentage of average consumption (2015-2020)	Under or over utilization of FO	Percentage after step 1 adjustment for allocation>x %	Step 2 (adjustment for DWFN status)	Percentage after step 2 adjustment	Step 3 (adjustment from large to small harvesters, except HICs)	Percentage after step 3 adjustment	Calibrate CS CPCs with more than 30% cut as compared to 2020 Catches	set minimum across CPCs	pot 2 beneficiary?	Percentage after pot allocation	TAC Simulation EU (in red where figure less than COMHAFAT proposal)			
Chinese Tainei	A	DWFN	HIC	11.679,00	11.679,00	9.226,00	11.679,00	15,63%	12259,5	104,97%	-581	14,85%	-1,00%	13,9%	-2,0%	11,85%	0,1185	0,1185	FALSE	11,85%	8.890			
UE	A	CS	HIC	16.989,00	16.989,00	11.172,73	16.989,00	22,74%	16365,3	96,33%	624	21,90%	0,00%	21,9%	-2,0%	19,90%	0,1990	0,1990	FALSE	19,90%	14.926			
Japan	A	DWFN	HIC	17.696,00	17.696,00	9.595,78	17.696,00	23,68%	10388,2	58,70%	7.308	13,90%	-1,00%	12,9%	-2,0%	10,90%	0,1090	0,1090	FALSE	10,90%	8.177			
Brazil	B	CS	UMI	3.500,00	3.500,00	6.283,92	3.623,47	4,85%	6716,2	185,35%	-3.093	4,85%	0,00%	4,85%	0,00%	0,0586	0,0586	TRUE	6,03%	4.525				
China	B	DWFN	UMI	5.376,00	5.376,00	3.613,58	5.376,00	7,19%	5077,3	94,44%	299	6,79%	-1,00%	5,8%	-0,7%	5,09%	0,0509	0,0509	FALSE	5,09%	3.821			
Ghana	B	CS	LMI	4.250,00	4.250,00	2.932,50	4.250,00	5,69%	4536,7	106,75%	-287	5,30%	0,00%	5,3%	0,00%	5,30%	0,0530	0,0530	FALSE	5,30%	3.978			
Belize	C	CS	LMI	3.500,00	3.500,00	991,42	991,42	1,33%	1839,3	185,52%	-848	1,33%	0,00%	1,3%	0,00%	1,33%	0,0133	0,0133	TRUE	1,50%	1.121			
Cabo Verde	C	CS	LMI	3.500,00	3.500,00	576,14	576,14	0,77%	1404,1	243,70%	-828	0,77%	0,00%	0,8%	0,00%	0,0077	0,0077	TRUE	0,94%	705				
Curaçao	C	CS	HIC	3.500,00	3.500,00	1.519,16	1.519,16	2,03%	2808,6	184,88%	-1.289	2,03%	0,00%	2,0%	0,00%	2,03%	0,0203	0,0203	FALSE	2,03%	1.525			
El Salvador	C	DWFN	LMI	1.575,00	1.575,00	1.518,43	1.518,43	2,03%	1669,5	109,95%	-151	2,03%	0,00%	2,0%	0,00%	2,03%	0,0203	0,0203	FALSE	2,03%	1.524			
Guatemala	C	CS	UMI	3.500,00	3.500,00	905,99	905,99	1,21%	1177,0	129,92%	-271	1,21%	0,00%	1,2%	0,00%	1,21%	0,0121	0,0121	TRUE	1,38%	1.036			
Guinea Rep.	C	CS	LIC	3.500,00	3.500,00	0,00	0,00	0,00%	0,1	0,00%	0	0,00%	0,00%	0,0%	0,00%	0,00%	0,0000	0,0070	TRUE	0,87%	651			
Korea	C	DWFN	HIC	1.486,00	1.486,00	587,15	1.486,00	1,99%	570,1	38,37%	916	0,76%	0,00%	0,8%	0,00%	0,0076	0,0076	FALSE	0,76%	572				
Panama	C	CS	HIC	3.500,00	3.500,00	1.612,44	1.612,44	2,16%	2003,7	124,27%	-391	2,16%	0,00%	2,2%	0,00%	0,0216	0,0216	FALSE	2,16%	1.618				
Senegal	C	CS	LMI	3.500,00	3.500,00	2.700,48	2.700,48	3,61%	2225,3	82,40%	475	2,98%	0,00%	3,0%	0,00%	0,0298	0,0298	TRUE	3,15%	2.360				
Angola	D	CS	LMI	3.500,00	3.500,00	0,00	0,00	0,00%	85,3	0,00%	-85	0,00%	0,00%	0,0%	0,00%	0,0000	0,0070	TRUE	0,87%	651				
Barbados	D	CS	HIC	3.500,00	3.500,00	20,37	20,37	0,03%	21,5	105,68%	-1	0,03%	0,00%	0,0%	0,00%	0,0003	0,0070	FALSE	0,70%	525				
Canada	D	CS	HIC	3.500,00	3.500,00	0,00	0,00	0,00%	214,4	0,00%	-214	0,00%	0,00%	0,0%	0,00%	0,0000%	0,0000	0,0070	FALSE	0,7000%	525			
Ivory Coast	D	CS	LMI	3.500,00	3.500,00	140,55	140,55	0,19%	775,6	551,87%	-635	0,19%	0,00%	0,2%	0,00%	0,019%	0,0019	0,0070	TRUE	0,87%	651			
Dominica	D	CS	UMI	3.500,00	3.500,00	#N/A	0,00	0,00%	0,0	0,00%	0	0,00%	0,00%	0,0%	0,00%	0,0000	0,0000	TRUE	0,17%	126				
Guinea	D	CS	UMI	3.500,00	3.500,00	5,94	5,94	0,01%	8,8	147,97%	-3	0,01%	0,00%	0,0%	0,00%	0,0001	0,0070	TRUE	0,87%	651				
Ecuadorial FR-St Pierre and Great Britain	D	CS	HIC	3.500,00	3.500,00	#N/A	0,00	0,00%	0,0	0,00%	0	0,00%	0,00%	0,0%	0,00%	0,0000	0,0000	FALSE	0,00%	-				
Grenada	D	CS	UMI	3.500,00	3.500,00	10,88	10,88	0,01%	21,8	200,07%	-11	0,01%	0,00%	0,0%	0,00%	0,0001	0,0070	TRUE	0,87%	651				
Guyana	D	CS	UMI	3.500,00	3.500,00	3,82	3,82	0,01%	20,5	536,35%	-17	0,01%	0,00%	0,0%	0,00%	0,0001	0,0070	TRUE	0,87%	651				
Liberia	D	CS	LIC	3.500,00	3.500,00	222,14	222,14	0,30%	70,2	31,61%	152	0,09%	0,00%	0,1%	0,00%	0,0009	0,0070	TRUE	0,87%	651				
Mauritania	D	CS	LMI	3.500,00	3.500,00	#N/A	0,00	0,00%	0,0	0,00%	0	0,00%	0,00%	0,0%	0,00%	0,0000	0,0000	TRUE	0,17%	126				
Mexico	D	CS	UMI	3.500,00	3.500,00	#N/A	0,00	0,00%	0,0	0,00%	0	0,00%	0,00%	0,0%	0,00%	0,0000	0,0000	TRUE	0,17%	126				
Marocco	D	CS	LMI	3.500,00	3.500,00	1.032,60	1.032,60	1,38%	575,2	55,70%	457	0,77%	0,00%	0,8%	0,00%	0,0077	0,0077	TRUE	0,94%	704				
Namibia	D	CS	UMI	3.500,00	3.500,00	567,62	567,62	0,76%	286,8	50,53%	281	0,38%	0,00%	0,4%	0,00%	0,0038	0,0070	TRUE	0,87%	651				
Philippines	D	DWFN	LMI	286,00	286,00	0,00	286,00	0,38%	0,0	0,00%	286	0,38%	0,00%	0,4%	0,00%	0,0038	0,0038	FALSE	0,38%	287				
Sao Tomé	D	CS	LMI	3.500,00	3.500,00	11,00	11,00	0,01%	244,3	2220,78%	-233	0,01%	0,00%	0,0%	0,00%	0,0001	0,0070	TRUE	0,87%	651				
South Africa	D	CS	UMI	3.500,00	3.500,00	356,61	356,61	0,48%	267,4	74,98%	89	0,36%	0,00%	0,4%	0,00%	0,0036	0,0070	TRUE	0,87%	651				
St Kitts and Nevis	D	CS	HIC	3.500,00	3.500,00	#N/A	0,00	0,00%	0,0	0,00%	0	0,00%	0,00%	0,0%	0,00%	0,0000	0,0000	FALSE	0,00%	-				
Sta Lucia	D	CS	UMI	3.500,00	3.500,00	16,91	16,91	0,02%	13,9	81,99%	3	0,02%	0,00%	0,0%	0,00%	0,0002	0,0070	TRUE	0,87%	651				
St. Vincent and Grenadines	D	CS	UMI	3.500,00	3.500,00	219,82	219,82	0,29%	526,5	239,52%	-307	0,29%	0,00%	0,3%	0,00%	0,0029	0,0070	TRUE	0,87%	651				

**ALLOCATION TABLE OF FISHING OPPORTUNITIES FOR BIGEYE TUNA**

Trinidad and Tobago	D	CS	HIC	3.500,00	10,23	10,23	0,01%	29,9	292,71%	-20	0,01%	0,00%	0,01%	0,0%	0,01%	0,0001	0,0070	FALSE	0,70%	525
UK-Bermuda	D	CS	HIC	3.500,00	#N/A	0,00	0,00%	0,0	0,00%	0	0,00%	0,00%	0,0%	0,0%	0,0000	0,0000	FALSE	0,00%	-	
UK-Sta Helena	D	CS	HIC	3.500,00	0,09	0,09	0,00%	40,1	44354,76%	-40	0,00%	0,00%	0,0%	0,0%	0,0000	0,0070	FALSE	0,70%	525	
UK-Turks and Caicos	D	CS	HIC	3.500,00	#N/A	0,00	0,00%	0,0	0,00%	0	0,00%	0,00%	0,0%	0,0%	0,0000	0,0000	FALSE	0,00%	-	
U.S.A.	D	CS	HIC	3.500,00	816,50	816,50	1,09%	785,1	96,15%	31	1,05%	0,00%	1,1%	0,0%	1,05%	0,0105	0,0105	FALSE	1,05%	788
Vanuatu	D	CS	LMI	3.500,00	#N/A	0,00	0,00%	0,0	0,00%	0	0,00%	0,00%	0,0%	0,0%	0,0000	0,0000	TRUE	0,17%	126	
Venezuela	D	CS		3.500,00	79,27	79,27	0,11%	146,4	184,71%	-67	0,11%	0,00%	0,1%	0,0%	0,11%	0,0011	0,0070	FALSE	0,70%	525
Equalisation quota											5,00%		5,0%	0,0%	5,00%	5,00%	0,0500	FALSE	5,00%	3.750
Artisanal Quota											5,00%		5,0%	0,0%	5,00%	5,00%	0,0500	FALSE	5,00%	3.750
<b>Total</b>					<b>74.723,87</b>	<b>1,00</b>	<b>73.174,59</b>		<b>1.549,2764</b>	<b>0,9461</b>	<b>-0,0300</b>	<b>0,9161</b>	<b>-0,0670</b>	<b>0,8491</b>	<b>0,8592</b>	<b>0,9630</b>	<b>0,0000</b>	<b>1,0000</b>	<b>75.000,00</b>	

\* <https://datatopics.worldbank.org/world-development-indicators/the-world-by-income-and-region.html>

**Pot for redistribution**

**\*\*Categories:**

**CPCS with catch limits**

China  
European Union  
Ghana  
Japan  
Philippines  
Korea  
Chinese Taipei

**Other limits/thresholds**

## Comparison Graph

