Food and Agriculture Organization of the United Nations

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REPORT OF THE 28TH SESSION OF IOTC SCIENTIFIC COMMITTEE DECEMBER 1-5, 2025, SHANGHAI (CHINA)

(EX-SC-CHAIR) TOSHIHIDE KITAKADO (JAPAN)

30TH IOTC COMMISSION MEETING, MAY 11-15, 2026 @MALDIVES

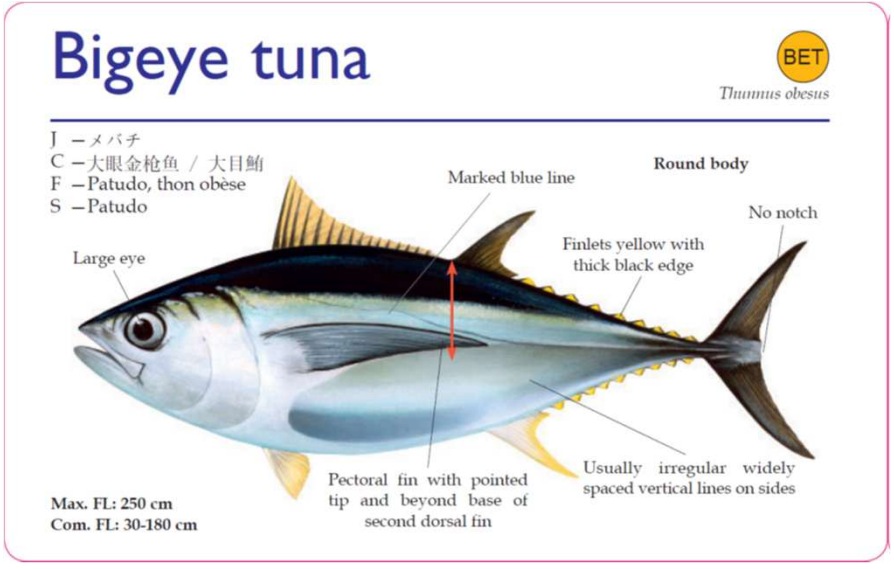
SCIENTIFIC COMMITTEE MEETING IN 2025

- The SC28 was held from 1-5 December 2025 in Shanghai (China)
- 150 delegates from 27 Contracting Parties (120 delegates from 24 in 2024)
- 22 participants from 10 observer organizations (21 from 15 in 2024) (including the invited experts)

CONTENTS OF SC REPORT

- Stock status and management advice for the following species for which a new stock assessment was carried out in 2025
  - Bigeye & Yellowfin (WPTT)
  - Albacore (WPTmT)
  - Blue marlin & Indo-Pacific Sailfish (WPB)
  - Shortfin mako shark stock assessment (WPEB)
- MP run for Skipjack
- Working Party and Working Group discussions other than stock assessment
- General recommendations from SC 2025
- Workplan and draft meeting schedule in 2026-2027

STOCK STATUS AND MANAGEMENT ADVICE



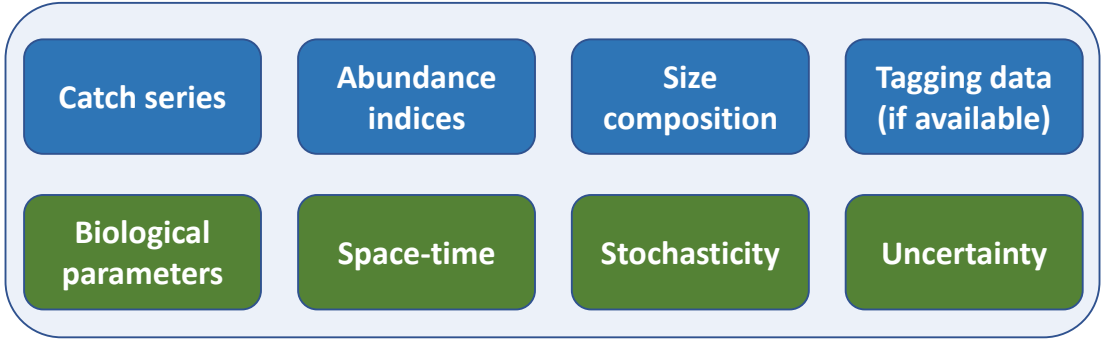
Meetings

- **Chair: Gorka Merino (EU, Spain); Vice-chair: Shiham Adam (IPNLF)**

- WPTT27 (DP): June 11-13, 2025 (virtual)
  - ✓ Data preparation
  - ✓ Model specification
- WPTT27 : October 21-25, 2025 @Seychelles
  - ✓ Stock assessment and model diagnostics
- SC 28: Dec 1-5, 2025 @China
  - ✓ Discussion of assessment results
  - ✓ Finalize the executive summary

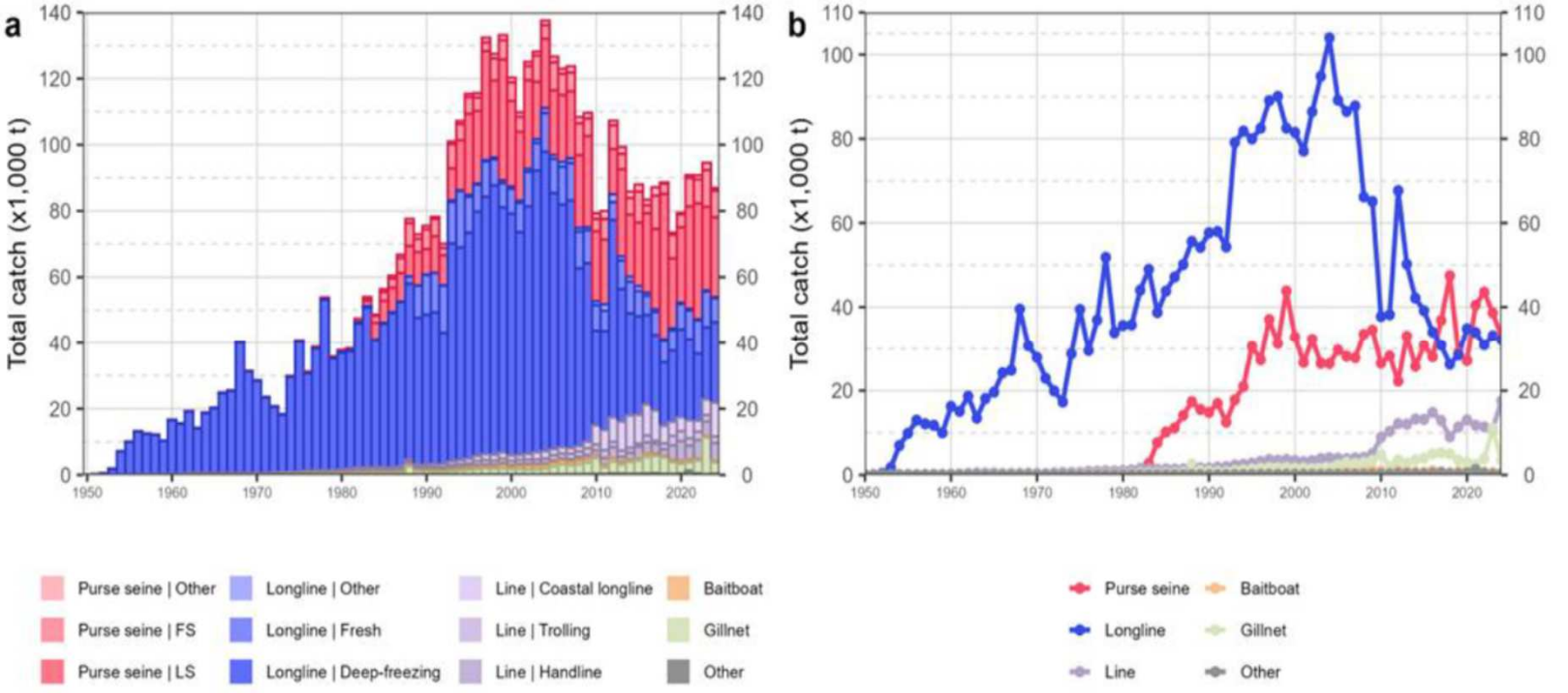
Stock assessment

- "Stock Synthesis 3" (SS3), an **integrated** stock assessment model
- Simultaneous use of different sources of data on catch, abundance indices, size and tagging
- Age-structured model with spatial and seasonal components
- High flexibility to account for different fisheries, biological assumptions and stochasticity



Let the data tell us about stock status through models

DATA (1) CATCH SERIES (~2024)



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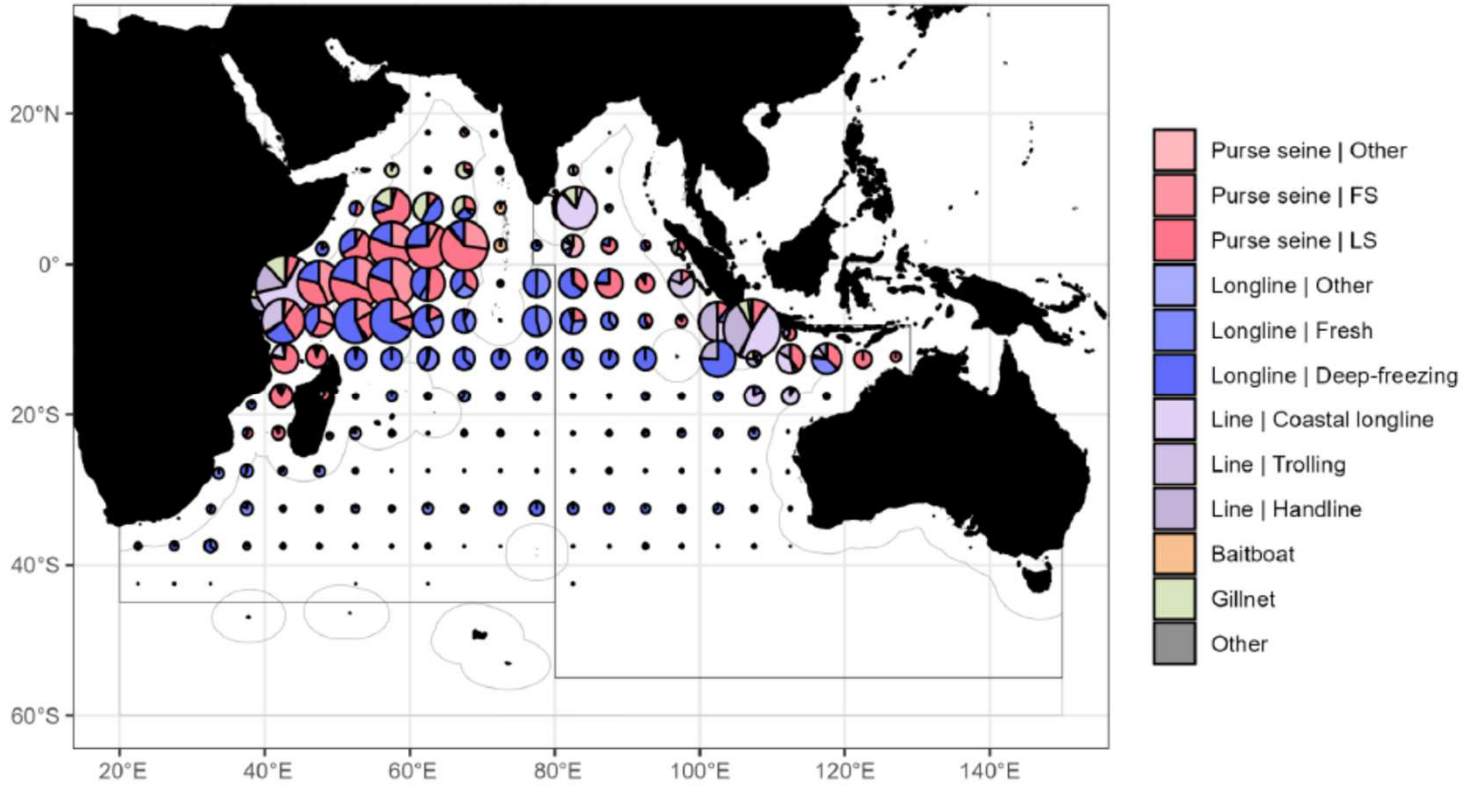
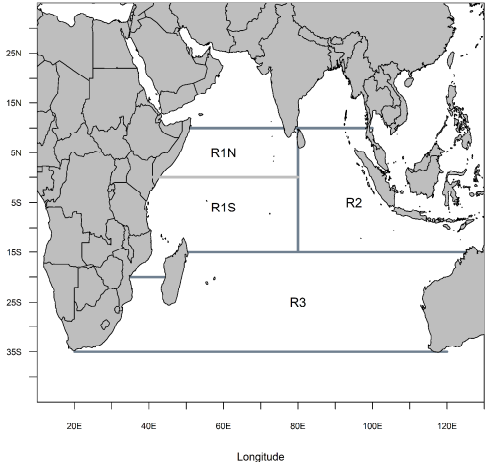
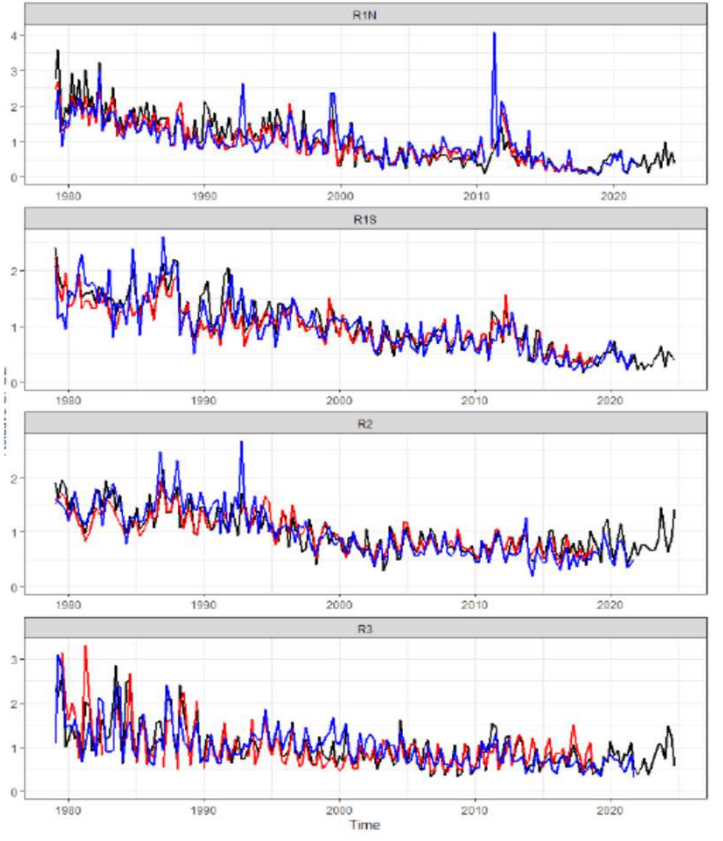


DATA (2) ABUNDANCE INDICES FROM LL (~2024)

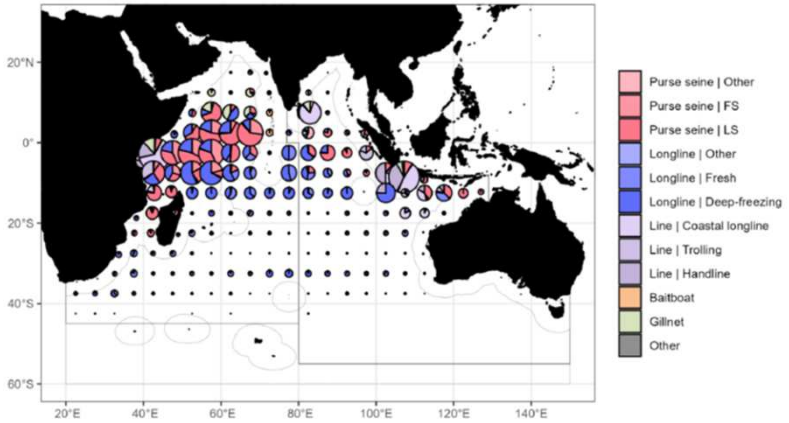
- Joint standardized CPUE from Japanese, Korean and Taiwanese longline fishery (Quarterly)
- Operational data
- Consistent with previous indices
- Recent increasing trends
- Drives abundance trend in stock assessment

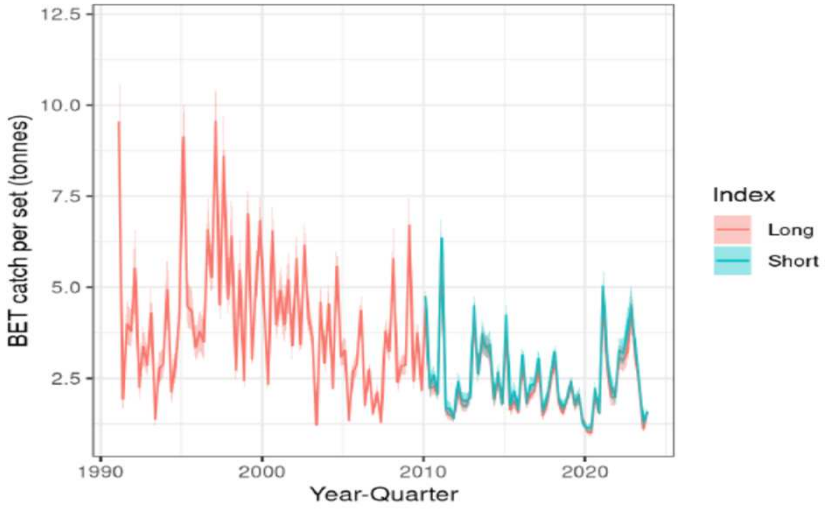




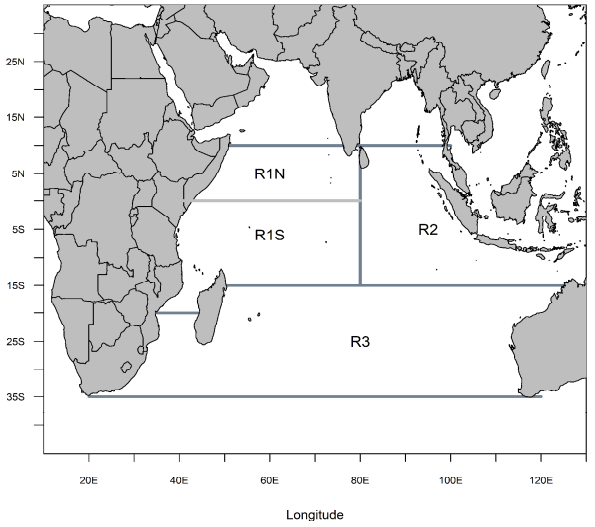
DATA (2) ABUNDANCE INDICES FROM PS (~2024)

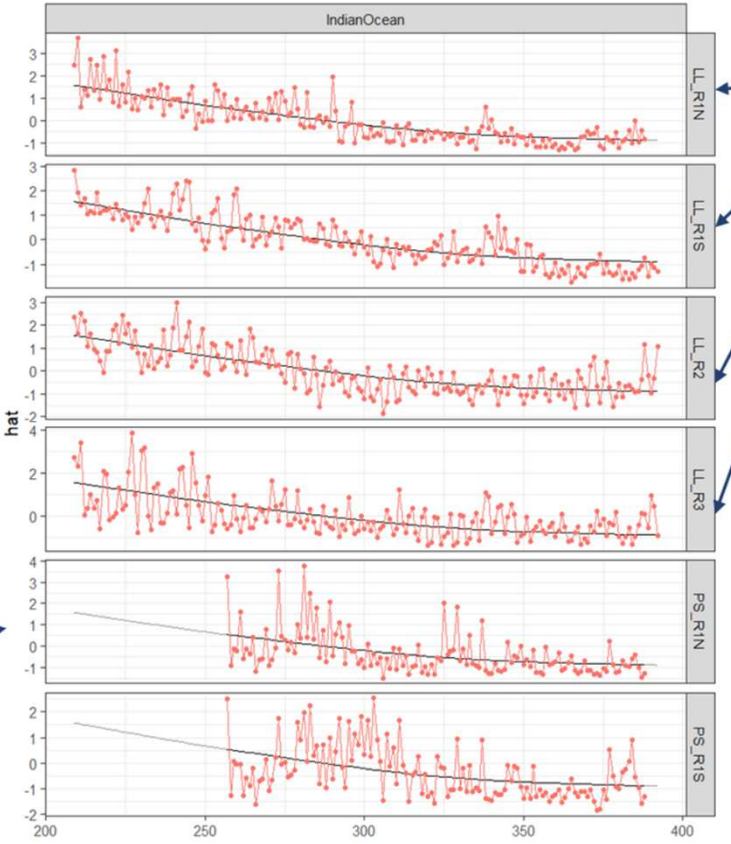
- Standardized CPUE for the European purse seine fleet operating on floating object (Quarterly)
- Recent increasing trends but drop in 2024.
- Drives biomass of small fish in W and NW.





DATA (2) ABUNDANCE INDICES

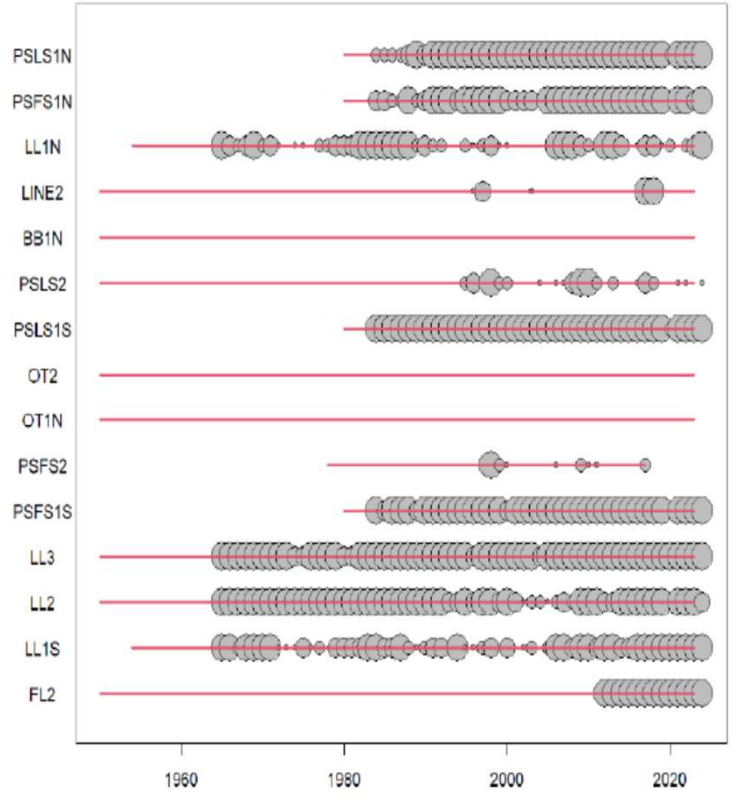


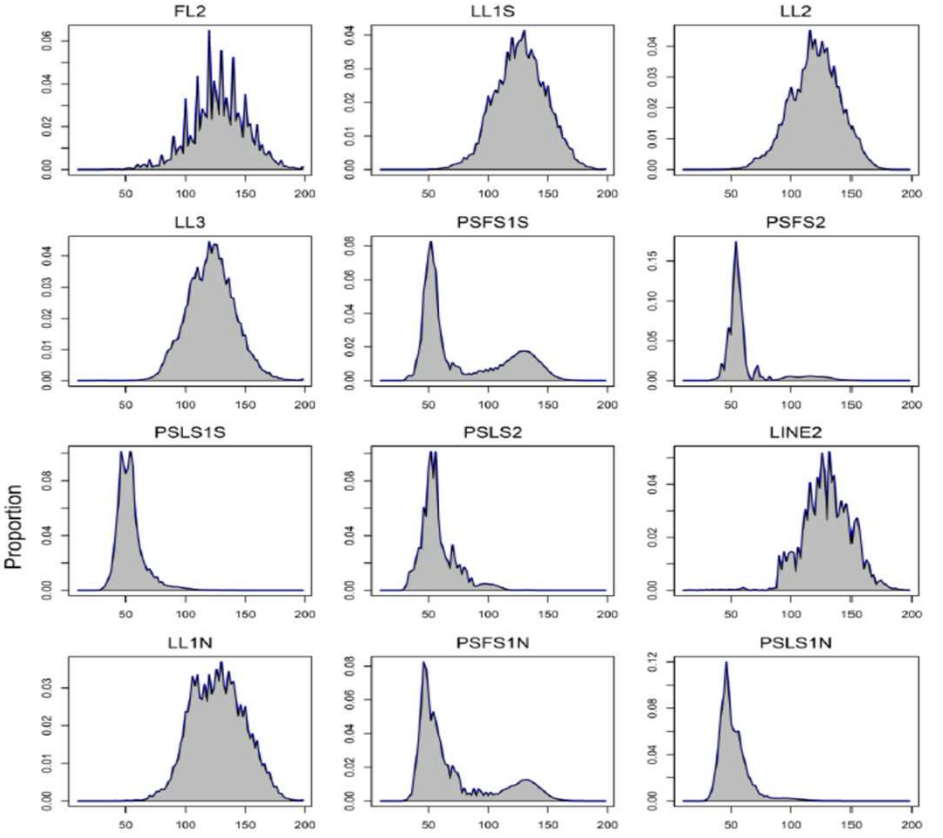


Longline

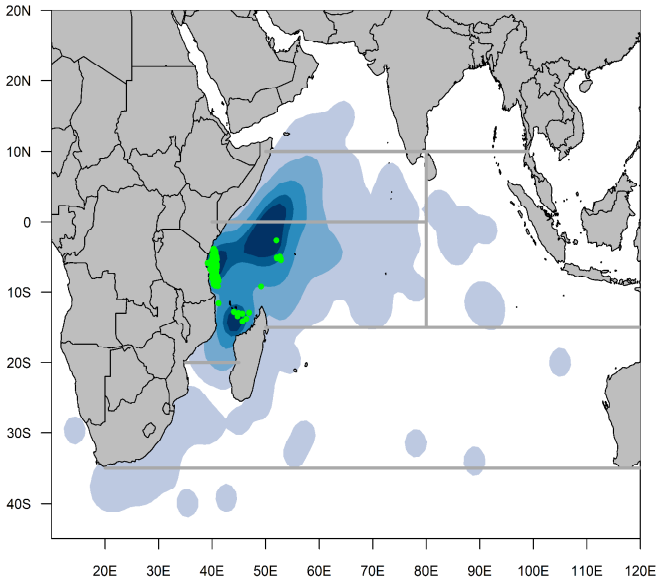
Purse seine

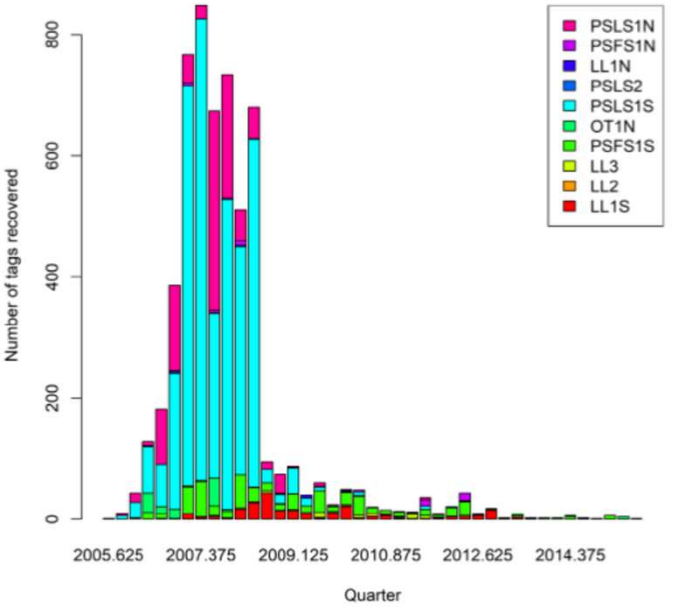
DATA (3) SIZE FREQUENCY





DATA (4) TAGGING DATA





- 34,478 BET releases 2005–07 (primarily R1)
- 5,674 recoveries 2005–14 (primarily by PS in R1 2006–08)

Characterization of uncertainty inherent to bigeye dynamics

- *Structural uncertainty: SS3, grid of 36 model configurations:*

Conducted by Phillips, Merino, Urtizberea, Correa and Fu

(i) stock recruitment relationship (3 levels → 0.7, 0.8 and 0.9)

(ii) natural mortality (3 levels → Low (0.3), Base (0.37) and High (0.45), all fixed).

(iii) selectivity (2 configurations → Logistic and double normal for LL in R2 and R3.

(iv) effort creep for LL (2 levels → 0% and 0.5% per year).

Statistical diagnostics

- Convergence
- Consistency (retrospectives)
- Predictionskill(hindcast)
- Trendin recruitmentdeviates

Overall good performance !

Ensemble for final outcomes

Food and Agriculture Organization of the United Nations

TRAJECTORIES OF CATCH, SSB, SSB-RATIO, F-RATIO

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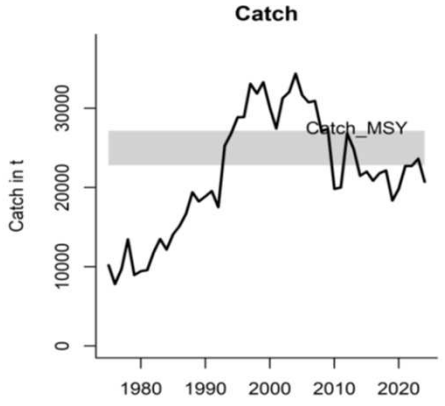
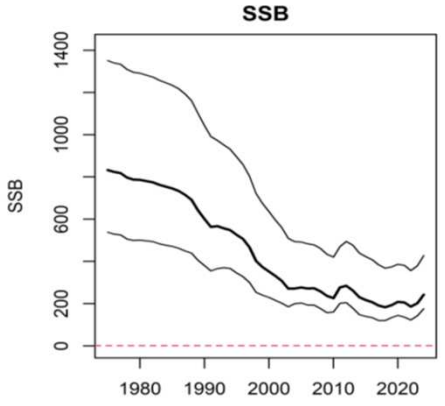
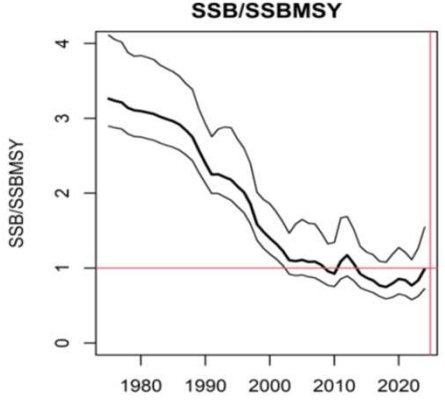
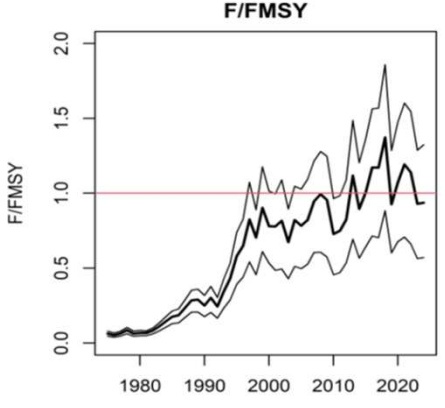
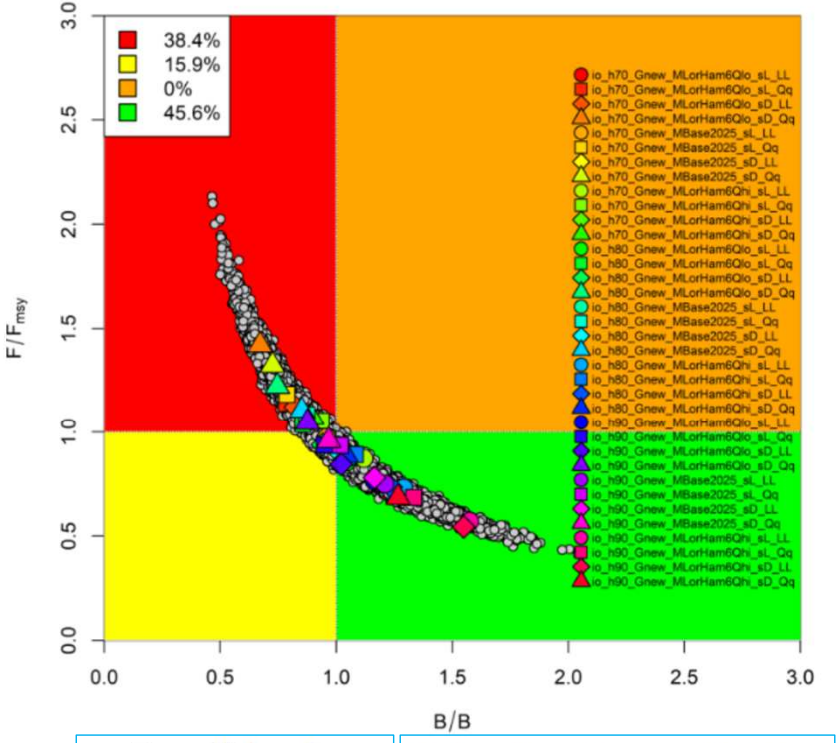




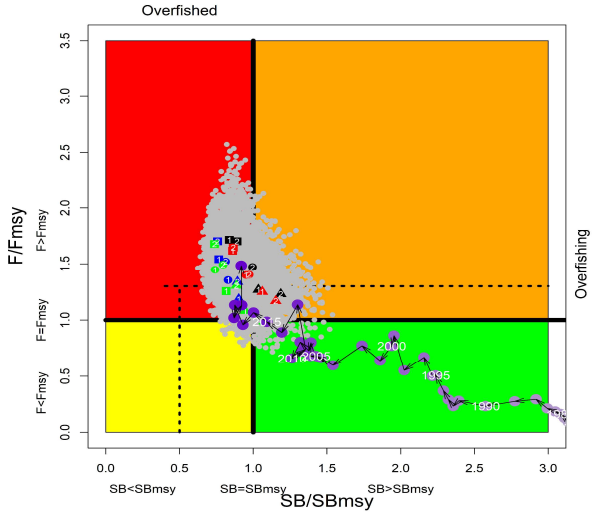






Overfished:	Not subject to overfishing:
38.4%+15.9% = 54.3%	15.9%+45.6%=61.5%

COMPARISON OF RESULTS BETWEEN 2022 AND 2025 ASSESSMENT



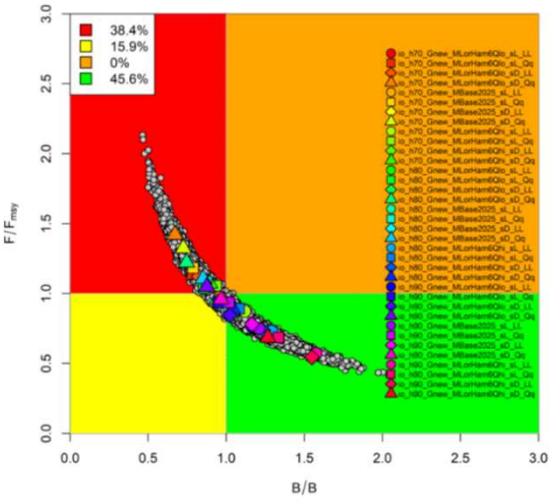


Table 1. Status of bigeye tuna (*Thunnus obesus*) in the Indian Ocean

Area[1]	Indicator	Value	Status[4]
Indian Ocean[1]	Catch in 2021 (t)[2]	94,803	79%*
	Average catch 2017-2021 (t)[3]	87,488	
	MSY (1,000 t) (80% CI)	96 (83 –108)	
	F_{MSY} (80% CI)	0.26 (0.18–0.34)	
	SB_{MSY} (1,000 t) (80% CI)	513 (332–694)	
	F_{2021} / F_{MSY} (80% CI)	1.43 (1.10–1.77)	
	SB_{2021} / SB_{MSY} (80% CI)	0.90 (0.75–1.05)	
	SB_{2021} / SB_0 (80% CI)	0.25 (0.23–0.27)	

Area[1]	Indicators		2025 stock status determination[4]
Indian Ocean	Catch 2024[2] (t)	82,874	15.9%
	Mean annual catch 2020-2024 (t)[3]	87,721	
	MSY (1,000 t) (80% CI)	100 (94 – 106)	
	F_{MSY} (80% CI)	0.27 (0.21 – 0.33)	
	SB_{MSY} (1,000 t) (80% CI)	276 (143 – 409)	
	F_{2024}/F_{MSY} (80% CI)	0.94 (0.69-1.18)	
	SB_{2024}/SB_{MSY} (80% CI)	0.98 (0.71 – 1.25)	

SUMMARIES OF BIGEYE STOCK ASSESSMENT IN 2025

- Spawning biomass in 2024 was estimated to be 98% of the level that supports the maximum sustainable yield ($SB_{2024}/ SB_{MSY} = 0.98$)
- Fishing mortality is estimated to be 43% higher than F_{MSY} ($F_{2024}/ F_{MSY} = 0.94$)
- p(B>Bmsy) = 45.6% < 50% (overfished)
- p(F<Fmsy) = 61.5% > 50% (not subject to overfishing)
- Stock status in 2024: Yellow

Area[1]	Indicators		2025 stock status determination[4]
Indian Ocean	Catch 2024[2] (t)	82,874	15.9%
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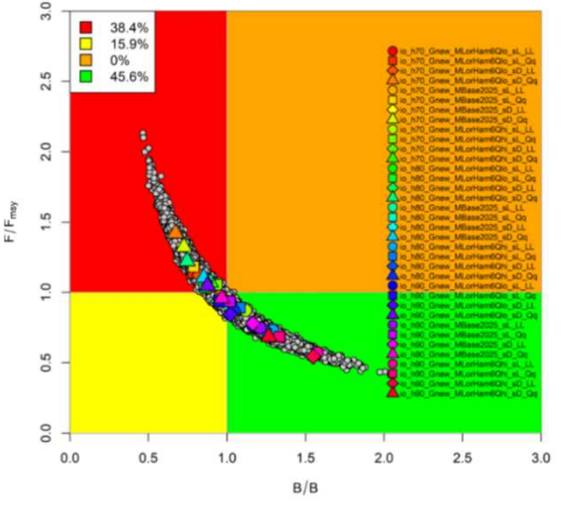
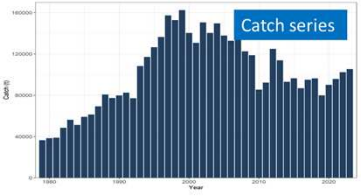
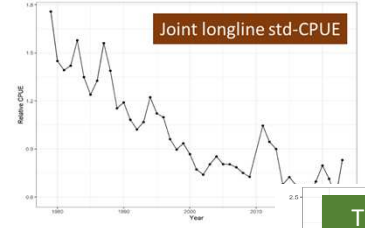
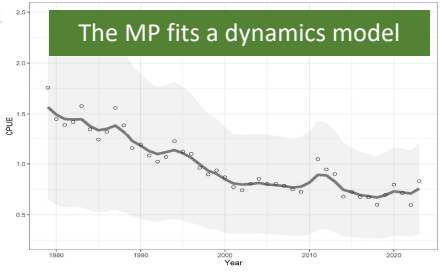


	2022	2023	2024	2025	2026	2027	2028	2029
BET	**MP adopted** •Assessment •MP run (EC check)	**Set TAC & CL 2024-25** (EC check)	**MP to be run (in Feb 2025)** (EC check)	**Set TAC & CL 2026-28** Assessment (EC check)	(EC check)	**MP to be run** (EC check)	**Set TAC & CL 2029-31** Assessment (EC check)	....





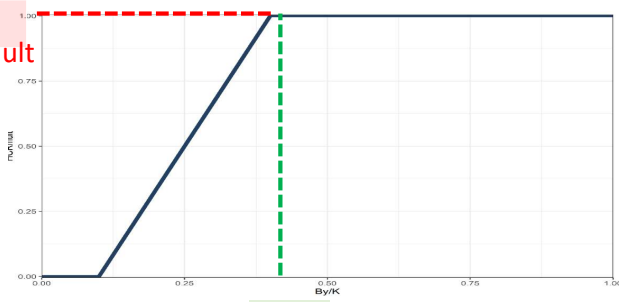


Input data
- Total catch
- Standardised longline CPUE

Estimation model
- Pella Tomlinson BDM

Harvest Control Rule
- Hockey stick shaped

TAC Calculation
- 15% maximum change



Unconstraint TAC **= 175,005 t**
(>15% high than 2024-25 TAC of 80,583 t)
Recommended TAC (endorsed by SC) **=**
92,670 t (15% above current TAC)

From the Executive Summary (MANAGEMENT ADVICE)

- A review of evidence for exceptional circumstances, was also conducted following the adopted guideline (ref SC 2021 report appendix 6A) as per the requirements of Resolution 22/03.
- The review covered information pertaining to i) new knowledge about the stock, population dynamics or biology, ii) changes in fisheries or fisheries operations, iii) changes to input data or missing data, and iv) inconsistent implementation of the MP advice.
- The evaluation concluded that there were no exceptional circumstances requiring either further research or management action on the TAC calculated by the MP.

RESOLUTION 25/04
ON ESTABLISHING CATCH LIMITS FOR BIGEYE TUNA IN THE IOTC AREA OF COMPETENCE

(Objection received from India and Somalia: does not apply to India and Somalia. Resolution 23/04 remains binding on India and Somalia.)

Scientific Work

19. The IOTC Scientific Committee shall conduct a comparative analysis of the contribution of all fishing gears to the mortality of bigeye tuna, which shall include both absolute and relative contributions to mortality and stock depletion.

20. The IOTC Scientific Committee shall develop a table as shown in the Annex that quantifies the expected impact on maximum sustainable yield (MSY) and SSBmsy for bigeye tuna resulting from replacing fishing mortality/catches of any major fishing gear/fishery (e.g., Longline, DFAD fisheries, AFAD fisheries, Purse seine on free school, other fisheries) for consideration by the Commission at its 2026 Session. The IOTC Scientific Committee shall also provide advice on FAD management options, including on, limits on FADs sets, that may be necessary to achieve a replacement of fishing mortality of FAD fisheries with free school fisheries. This analysis shall be conducted for DFADs and AFADs fleets separately.

21. The IOTC Scientific Committee shall provide advice to the Commission on the potential impacts of carrying forward the underage of catch limits under paragraph 7 on the effectiveness of the Management Procedure.

IOTC-2025-SSC01-03

IMPACT OF REPLACING PURSE SEINE FAD CATCHES ON BIGEYE TUNA MSY

IOTC SECRETARIAT, FEBRUARY 2024

PURPOSE

The purpose of this document is to update the Special Session of the Scientific Committee (SSC01) on an analysis assessing the impact of replacing catches from Purse seine FAD fishery on the Maximum Sustainable Yield (MSY) for bigeye tuna, in response to a request from the Commission. In accordance with Resolution 23/04, we estimated the percentage changes in MSY benchmarks using the Stock Synthesis model for bigeye tuna. This analysis involved scenarios in which a fixed proportion of catches from purse seine FAD fishery was transferred to either the purse seine free school fishery or the longline fishery.

THE ANNUAL BET CATCHES FOR 2017- 2021

Table 1: Recent bigeye tuna catches (mt) by fishery included in the 2022 stock assessment

Fishery	Year				
	2017	2018	2019	2020	2021
FL2	8 910	7 201	8 172	9 152	8 893
LL1N	3 050	2 488	2 680	5 578	2 653
LL1S	14 002	11 139	13 091	14 328	14 308
LL2	4 354	2 813	3 843	4 155	4 239
LL3	5 008	3 602	2 760	3 107	3 138
PSFS1N	4 376	2 292	2 211	2 117	6 733
PSFS1S	5 807	1 342	5 272	1 969	2 077
PSFS2	65	–	–	–	–
PSLS1N	9 381	13 855	10 601	10 425	21 011
PSLS1S	9 628	9 941	8 166	9 979	6 586
PSLS2	639	5 360	897	60	1 099
BB1N	6 961	5 295	6 293	8 678	7 180
LINE2	10 121	7 177	9 009	12 210	9 784
OT1	4 502	5 001	3 519	2 983	1 604
OT2	4 395	3 574	4 160	5 918	5 717
Total	91 199	81 080	80 674	90 659	95 022

Purse Seine Free School (PSFS)

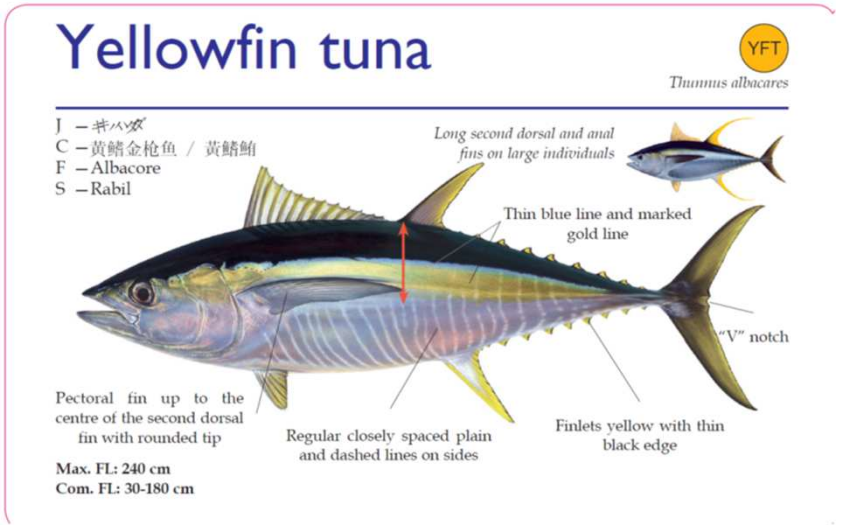
Purse Seine Log School (PSLS) Floating object associated purse seine fishery

RESULTS OF IMPACT ANALYSIS

Table 2: The impact on estimates of MSY and SSBMSY (measured as percentage changes) for bigeye tuna resulting from replacing catches DFADs or AFAD fisheries:

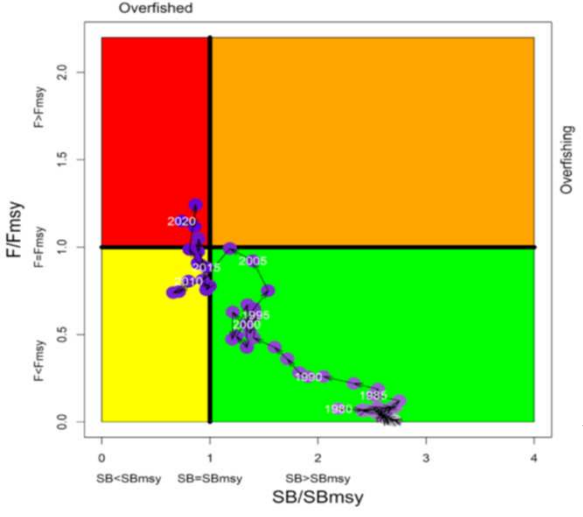
		Source fishery	Target fishery	Catch replacement	Percent change MSY	Percent change SSBMSY
transferring catches (1) PSLS => PSFS	(1)	PSLS (1N, 1S, 2)	PSFS (1N, 1S, 2)	10% (2 870 t)	+4%	+5%
		PSLS (1N, 1S, 2)	PSFS (1N, 1S, 2)	20% (5 739 t)	+8%	+8%
		PSLS (1N, 1S, 2)	PSFS (1N, 1S, 2)	50% (14 348 t)	+22%	+17%
		PSLS (1N, 1S, 2)	PSFS (1N, 1S, 2)	100% (22 957 t)	+53%	+21%
transferring catches (2) PSLS =>LL	(2)	PSLS (1N, 1S, 2)	LL (1N, 1S, 2)	10% (2 870 t)	+4%	+5%
		PSLS (1N, 1S, 2)	LL (1N, 1S, 2)	20% (5 739 t)	+9%	+10%
		PSLS (1N, 1S, 2)	LL (1N, 1S, 2)	50% (14 348 t)	+27%	+19%
		PSLS (1N, 1S, 2)	LL (1N, 1S, 2)	100% (22 957 t)	+75%	+16%
	(3)	BB (1N)	PSFS (1N)	10% (718 t)	+1%	+1%
		BB (1N)	PSFS (1N)	20% (1 436 t)	+2%	+1%
		BB(1N)	PSFS (1N)	30% (3 590 t)	+5%	+2%
		BB (1N)	PSFS (1N)	100% (7 180 t)	+11%	+1%
	(4)	BB (1N)	LL (1N)	10% (718 t)	+1%	+1%
		BB (1N)	LL (1N)	20% (1 436 t)	+2%	+1%
		BB (1N)	LL (1N)	30% (3 590 t)	+5%	+3%
		BB (1N)	LL (1N)	100% (7 180 t)	+11%	+3%

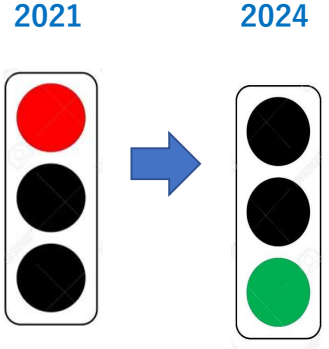
STOCK STATUS AND MANAGEMENT ADVICE



COMPARISON OF RESULTS BETWEEN 2021 AND 2024

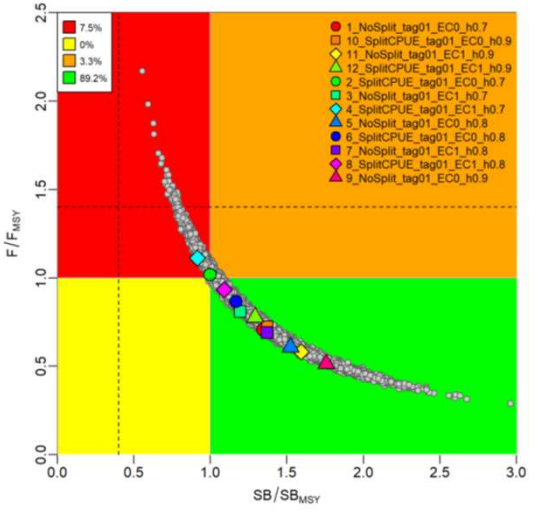
- In 2024, a new stock assessment was carried out estimating the stock as not overfished and not subject to overfishing
- Several concerns raised on the longline CPUE used and the SC requested a revision to address these concerns in 2025





SB_{2020}=0.87 B_{MSY}
F_{2020}=1.32 F_{MSY}

SB_{2023}=1.32 $B_{MSY, Rcent}$
F_{2023}=0.75 F_{MSY}

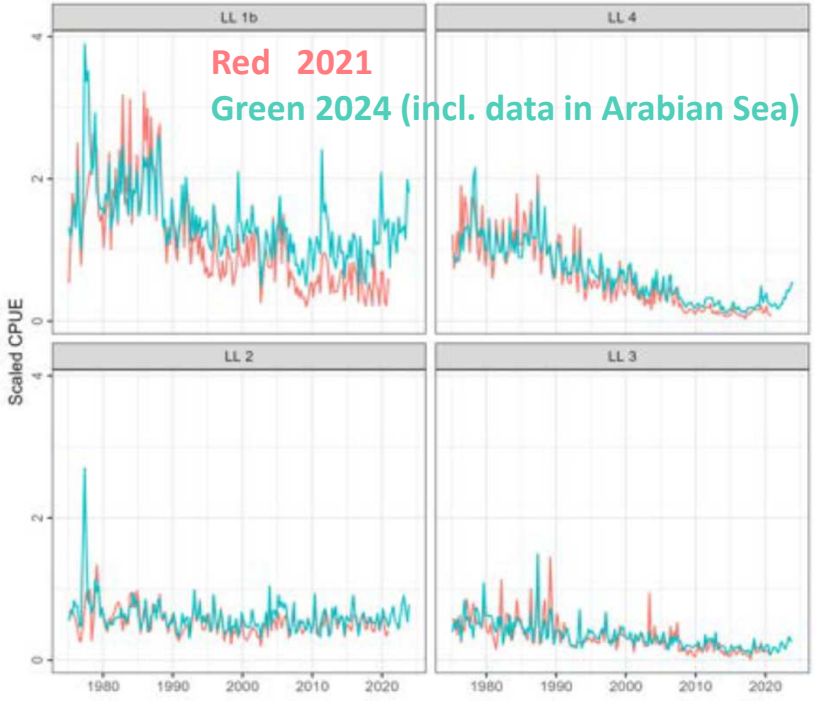


Colour key	Stock overfished (SB_{2020} / SB_{MSY}<1)	Stock not overfished (SB_{2020} / SB_{MSY}≥ 1)
Stock subject to overfishing (F_{2020} / F_{MSY}≥ 1)	67%	<1%
Stock not subject to overfishing (F_{2020} / F_{MSY}≤ 1)	23%	10%
Not assessed / Uncertain		

Colour key	Stock overfished (SB_{2023}/SB_{MSY}<1)	Stock not overfished (SB_{2023}/SB_{MSY}≥ 1)
Stock subject to overfishing (F_{2023} / F_{MSY}≥ 1)	7.9%	3.3%
Stock not subject to overfishing (F_{2023} / F_{MSY}≤ 1)	0%	88.8%
Not assessed / Uncertain / Unknown		

YFT ABUNDANCE INDICES (LL CPUE)

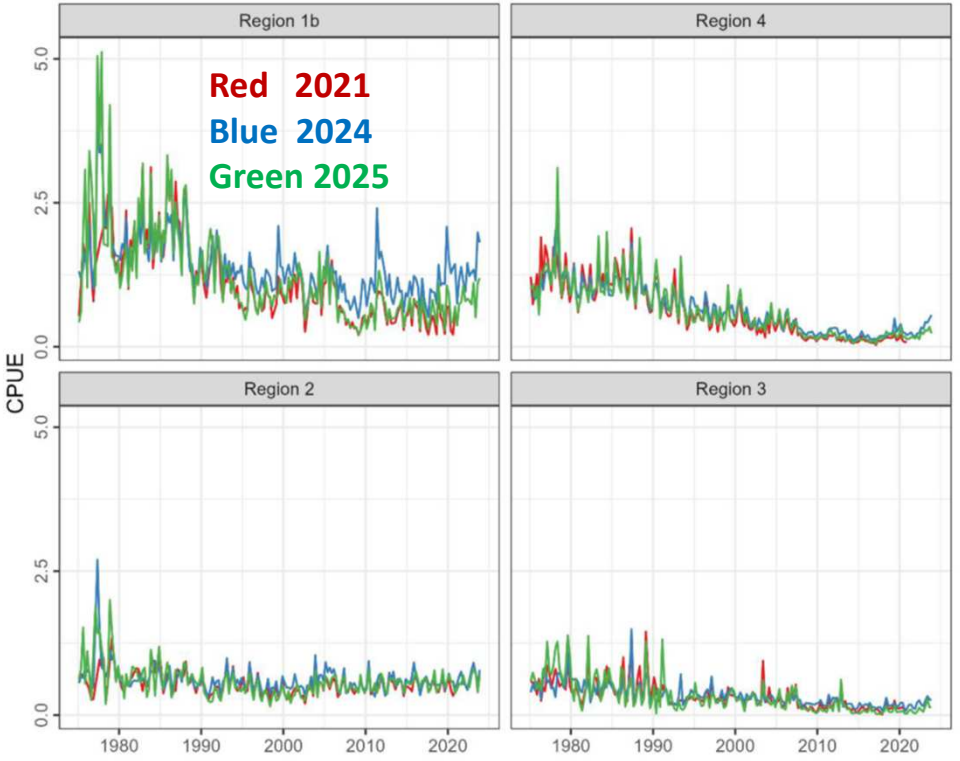
Joint longline CPUE indices (Japan, Korea and Taiwan,China)



- In 2025, the CPUE was reviewed by the group and reported in WPTT(DP)
  - ✓ 2024 CPUE included Arabian Sea data
  - ✓ Some methodological errors in R1b CPUE
- WPTT in Oct 2025, revised CPUE was reported and some further suggestions were made

YFT ABUNDANCE INDICES (LL CPUE)

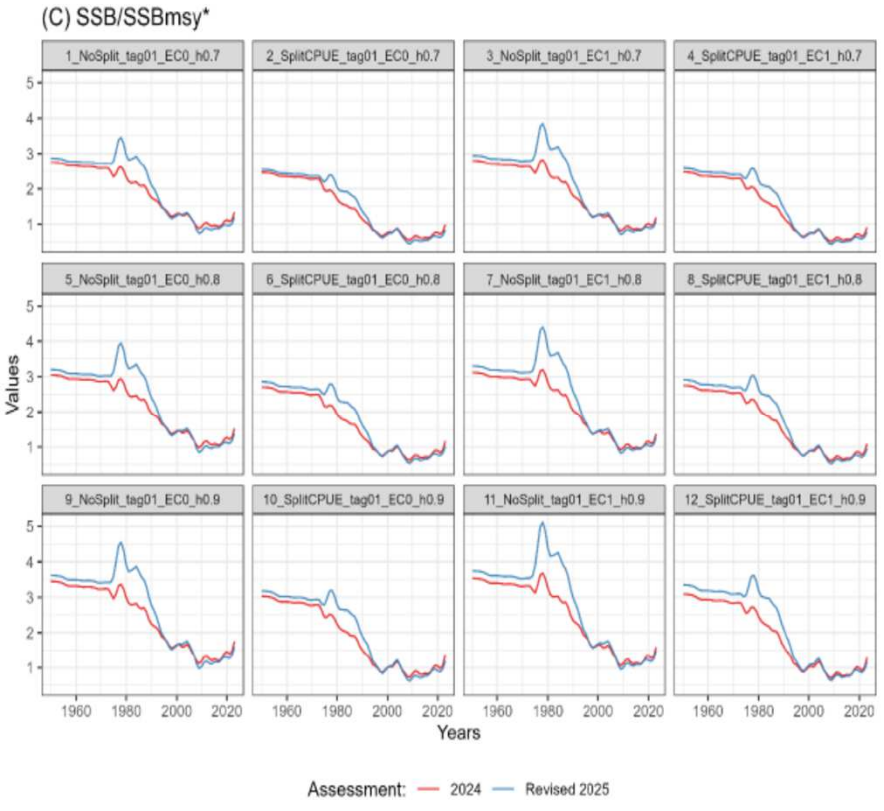
Joint longline CPUE indices (Japan, Korea and Taiwan,China)

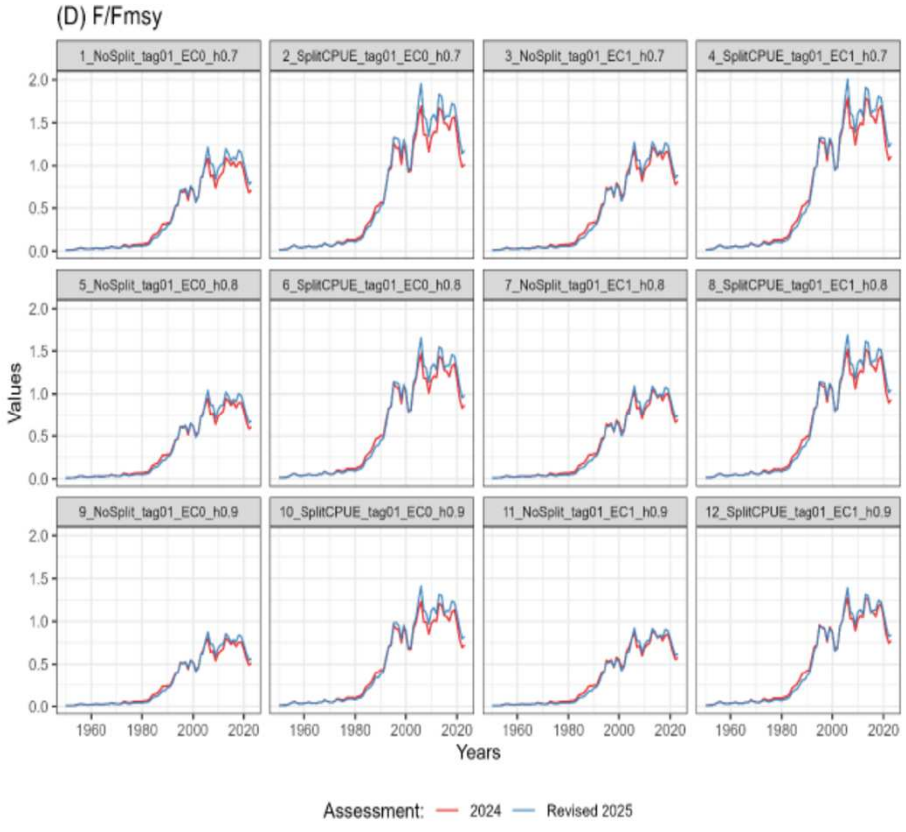


- Revised index follows previous indices better (NW, R1b)
- Revised index also suggests recovery

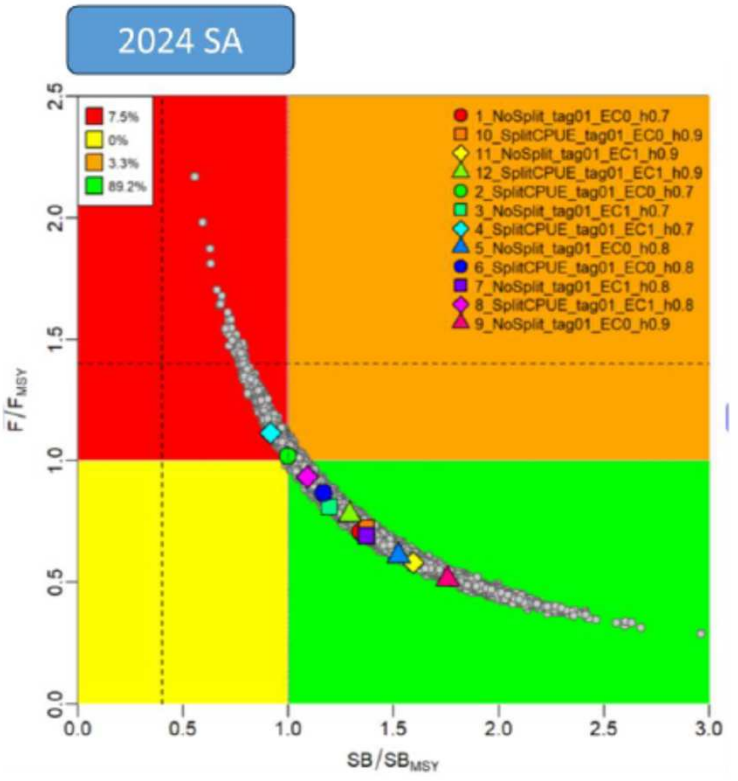
- Stock assessment was then reconducted and introduced in SC 2025

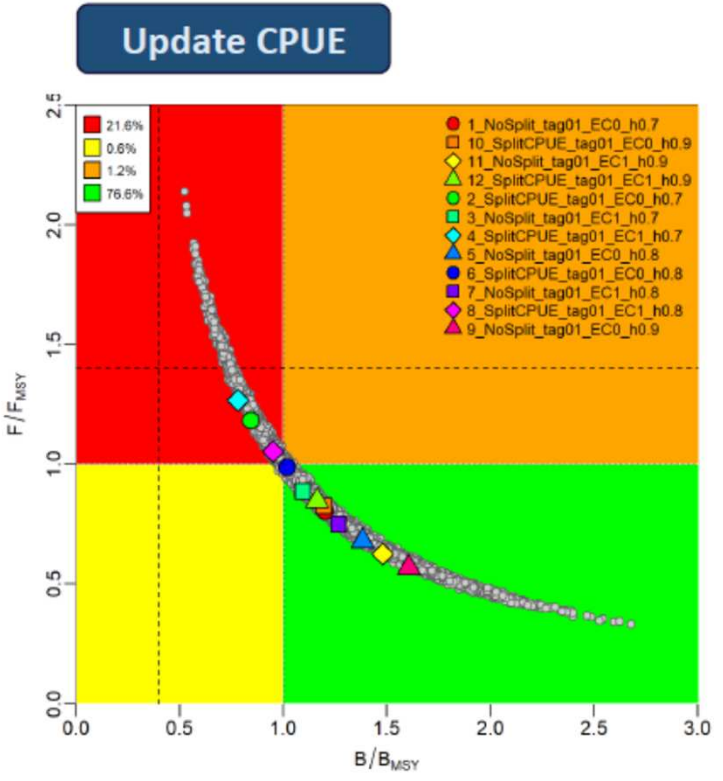
COMPARISON OF STOCK ASSESSMENT RESULTS (2024 & REVISED 2025)





COMPARISON OF STOCK ASSESSMENT RESULTS (2024 & REVISED 2025)





REVISED RESULTS AND MANAGEMENT ADVICE

- Results show impact of revised CPUE index on status and reference points, and advice.
- Management advice (2024): 421,000 tons for 2026 only, extend?
- Diagnostics don't suggest any major differences between 2024 and 2025 runs (some better for the revised (trends) other worse (prediction skill)), see paper for details.
- Summary (Impact on status and management advice)

Status

Indicator	SA2024	Revised2025
SSB2023/SSBmsy	1.32	1.18
SSB2023/SSB0	0.44	0.37
F2023/Fmsy	0.75	0.83
SSBmsy (t)	1063	1111
MSY (t)	421	420

Advice (421 th tons)

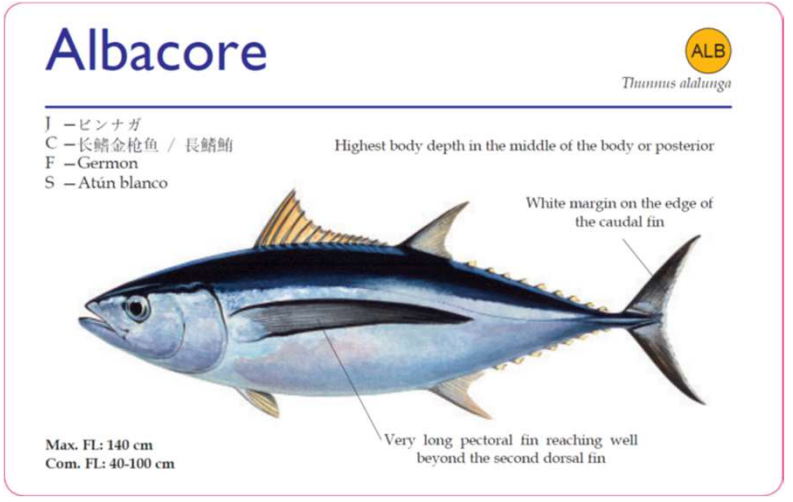
Type	RP	SA2024	Revised2025
Target	F2026>Fmsy	6.40%	22.50%
Target	F2033>Fmsy	10.70%	29%
Target	SB2026<SBmsy	0.70%	10.30%
Target	SB2033<SBmsy	1.20%	17%
Limit	F2026>Flim	0%	0.30%
Limit	F2033>Flim	0%	0.10%
Limit	SB2026<SBlim	0%	0%
Limit	SB2033<SBlim	0%	0%

NEW CHAIR AND VICE-CHAIR OF WPTT

Chair: Gorka Merino (EU,Spain)
Vice-Chair: Shiham Adam (Maldives)

⇒ New Chair: David Kaplan (EU,France)
New Vice-Chair: Mohamed Shimal (Maldives)

STOCK STATUS AND MANAGEMENT ADVICE



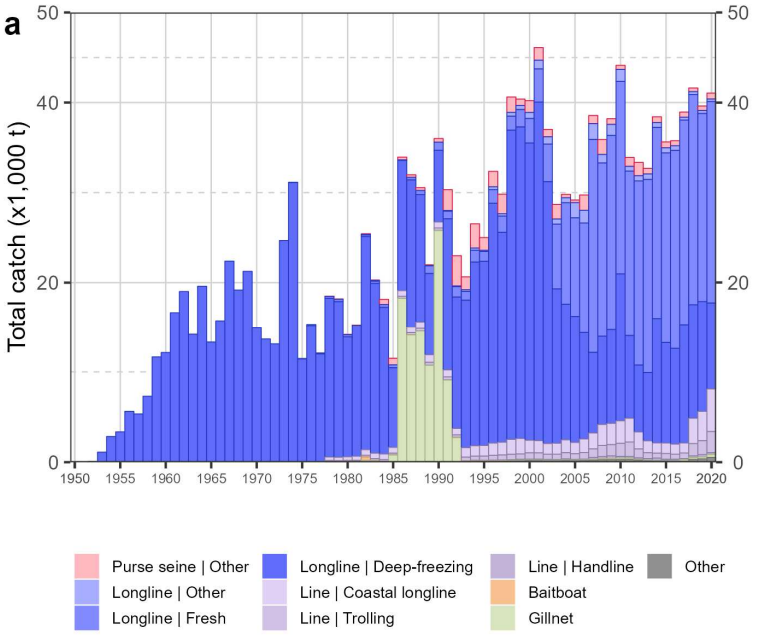
ALBACORE STOCK ASSESSMENT IN 2025

Meetings

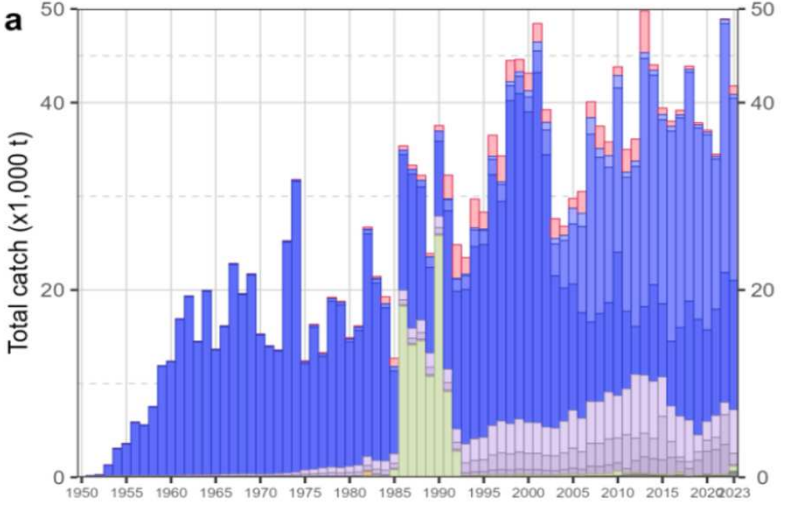
- Chair: Toshihide Kitakado (Japan); Vice-chair: Jiangfeng Zhu (China)
-
- WPTmT 09 (DP): February 27, 2025 (virtual)
  - ✓ Data preparation (Catch, CPUE, length)
    => Problems in shared data for std-CPUE (re-analysis needed before assessment:)
  - ✓ Model specification
- WPTmT 09: July 21-23, 2025 @Seychelles
  - ✓ Stock assessment and model diagnostics
  - ✓ Management advice
- SC 28: Dec 1-5, 2025 @Seychelles
  - ✓ Endorsement of assessment results and management advice

DATA (1) CATCH SERIES

Catch series used in 2022 Assessment



Catch series used in 2025 Assessment



DATA (1) CATCH SERIES

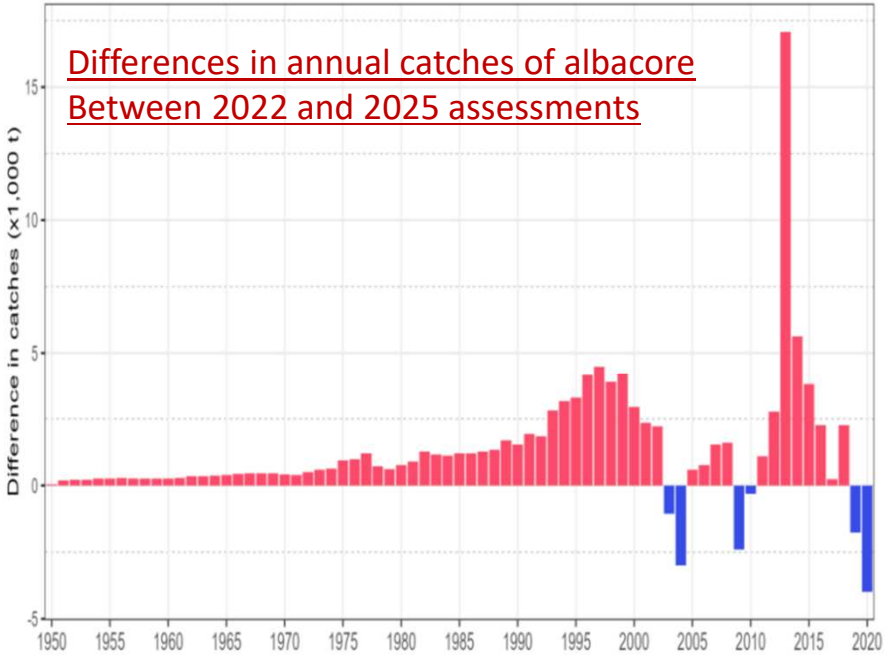
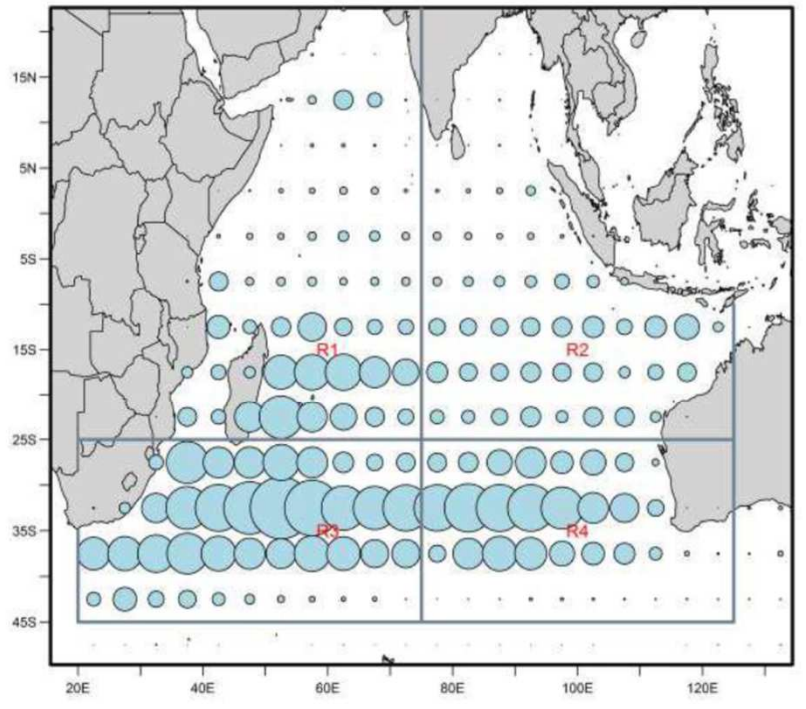


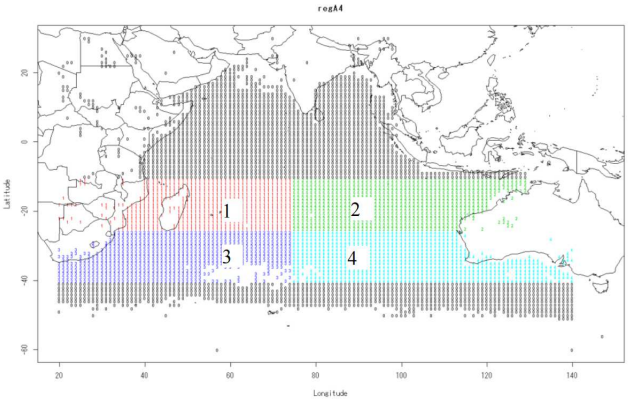
Fig. 7. Differences in annual retained catches of albacore (t) between the 8th and 9th sessions of the IOTC Working Party on Temperate Tuna

DEFINITION OF AREA AND FLEETS



ID Number	Fleet/ Survey Name	Gear(s)	Region	Quarter	Selectivty
1	F1_LL1_Q1	Longline	1	1	Estimated double normal
2	F2_LL1_Q2	Longline	1	2	Estimated double normal
3	F3_LL1_Q3	Longline	1	3	Estimated double normal
4	F4_LL1_Q4	Longline	1	4	Estimated double normal
5	F5_LL2_Q1	Longline	2	1	Estimated double normal
6	F6_LL2_Q2	Longline	2	2	Estimated double normal
7	F7_LL2_Q3	Longline	2	3	Estimated double normal
8	F8_LL2_Q4	Longline	2	4	Estimated double normal
9	F9_LL3_Q1	Longline	3	1	Estimated double normal[1]
10	F10_LL3_Q2	Longline	3	2	Estimated double normal[1]
11	F11_LL3_Q3	Longline	3	3	Estimated double normal[1]
12	F12_LL3_Q4	Longline	3	4	Estimated double normal[1]
13	F13_LL4_Q1	Longline	4	1	Estimated double normal[1]
14	F14_LL4_Q2	Longline	4	2	Estimated double normal[1]
15	F15_LL4_Q3	Longline	4	3	Estimated double normal[1]
16	F16_LL4_Q4	Longline	4	4	Mirrored to Fleet 15
17	F17_DN3	Driftnet	3	NA	Fixed Double normal
18	F18_DN4	Driftnet	4	NA	Mirrored to fleet 17
19	F19_PS1	Purse Seine	1	NA	Fixed Double normal
20	F20_Other1	Other*	1	NA	Mirrored to fleet 17
21	F21_Other2	Other*	2	NA	Mirrored to fleet 17
22	F22_Other3	Other*	3	NA	Mirrored to fleet 17
23	F23_Other4	Other*	4	NA	Mirrored to fleet 17

DATA (2) ABUNDANCE INDICES



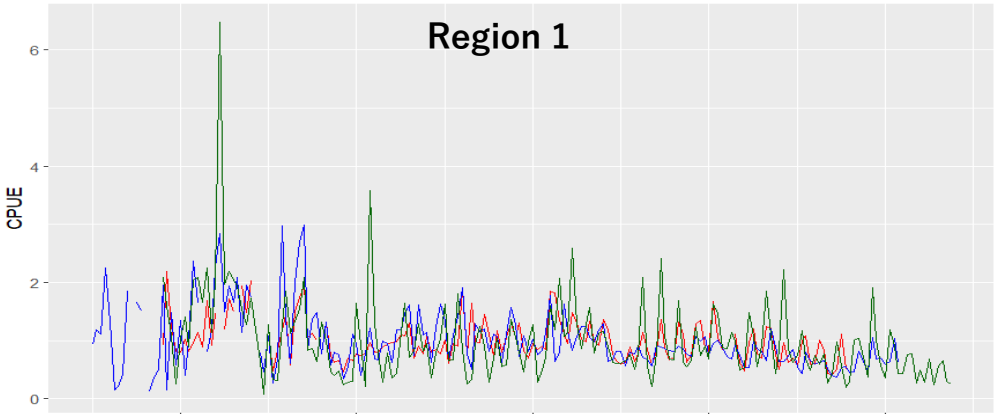
SS3 final set of configuration

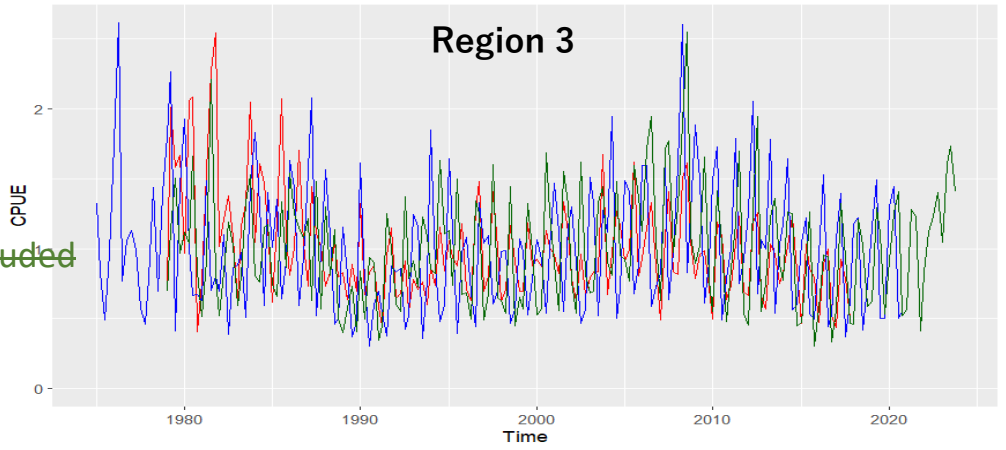
Model 1 - CPUE-R1, LL and PS LF included

Model 2 - CPUE-R3, LL and PS LF included

~~Model 3 - CPUE-R1, LL and PS LF excluded - (selectivity fixed at values from initial fit)~~

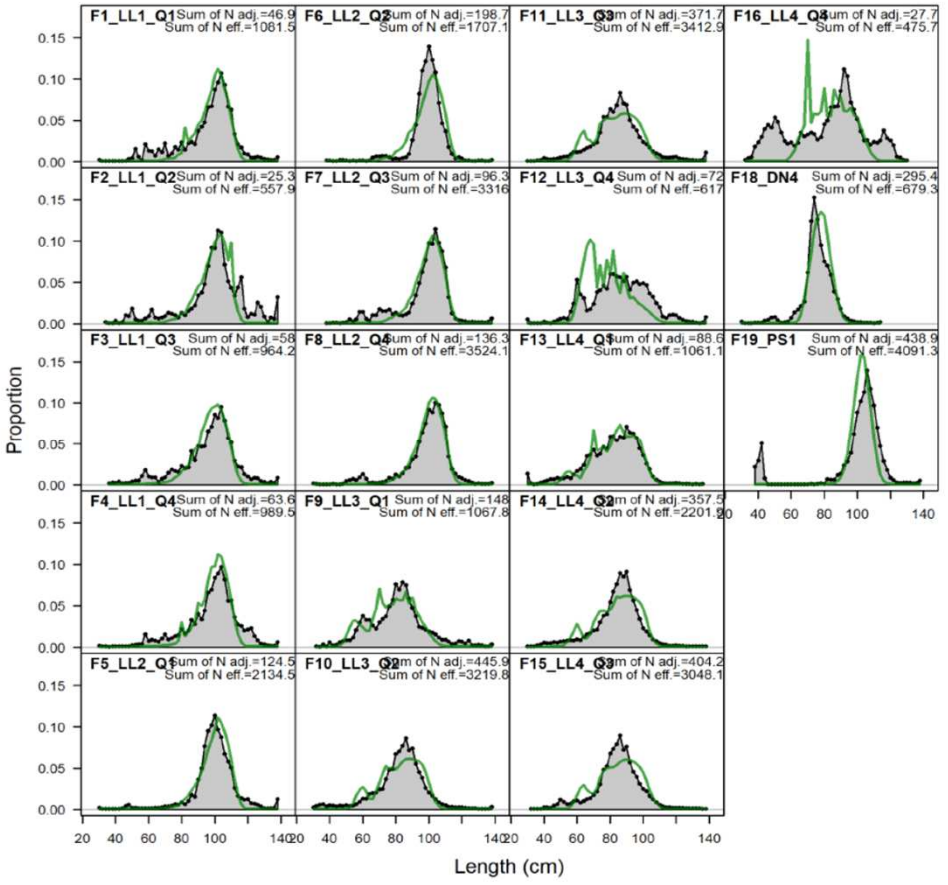
~~Model 4 - CPUE-Southwest, LL and PS LF excluded - (selectivity fixed at values from initial fit)~~



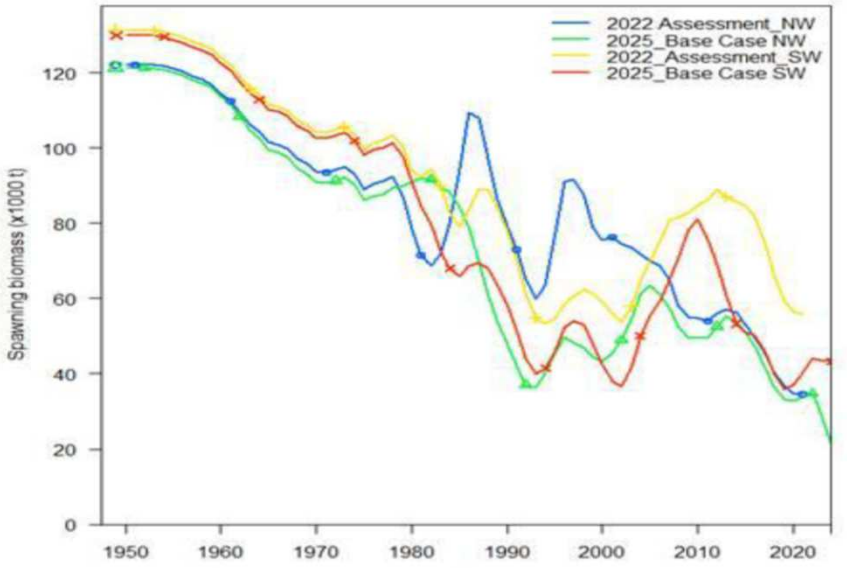


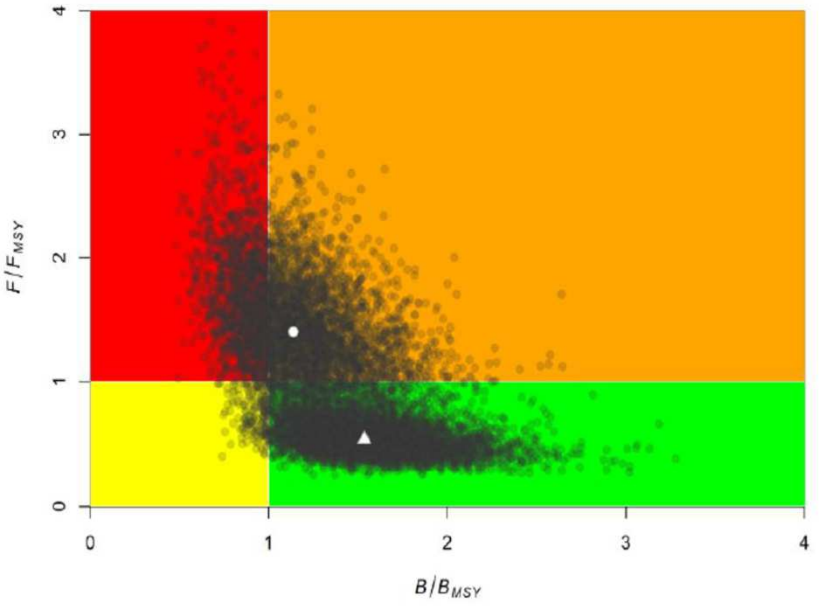
DATA (3) LENGTH COMPOSITIONS

ID Number	Fleet/ Survey Name	Gear(s)	Region	Quarter	Selectivty
1	F1_LL1_Q1	Longline	1	1	Estimated double normal
2	F2_LL1_Q2	Longline	1	2	Estimated double normal
3	F3_LL1_Q3	Longline	1	3	Estimated double normal
4	F4_LL1_Q4	Longline	1	4	Estimated double normal
5	F5_LL2_Q1	Longline	2	1	Estimated double normal
6	F6_LL2_Q2	Longline	2	2	Estimated double normal
7	F7_LL2_Q3	Longline	2	3	Estimated double normal
8	F8_LL2_Q4	Longline	2	4	Estimated double normal
9	F9_LL3_Q1	Longline	3	1	Estimated double normal
10	F10_LL3_Q2	Longline	3	2	Estimated double normal
11	F11_LL3_Q3	Longline	3	3	Estimated double normal
12	F12_LL3_Q4	Longline	3	4	Estimated double normal
13	F13_LL4_Q1	Longline	4	1	Estimated double normal
14	F14_LL4_Q2	Longline	4	2	Estimated double normal
15	F15_LL4_Q3	Longline	4	3	Estimated double normal
16	F16_LL4_Q4	Longline	4	4	Mirrored to Fleet 15
17	F17_DN3	Driftnet	3	NA	Fixed Double normal
18	F18_DN4	Driftnet	4	NA	Mirrored to fleet 17
19	F19_PS1	Purse Seine	1	NA	Fixed Double normal
20	F20_Other1	Other*	1	NA	Mirrored to fleet 17
21	F21_Other2	Other*	2	NA	Mirrored to fleet 17
22	F22_Other3	Other*	3	NA	Mirrored to fleet 17
23	F23_Other4	Other*	4	NA	Mirrored to fleet 17



STOCK ASSESSMENT RESULTS ON KOBE PLOT





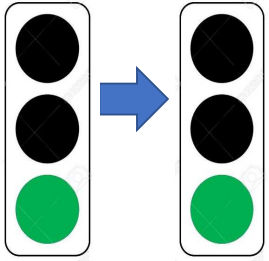
The SW model produced very high biomass estimates with large uncertainty when the selectivity for LL3 and LL4 was unconstrained (allowed to be domed-shaped), while the NW model showed bias in the predicted length composition for the LL1 fishery.

STOCK ASSESSMENT SUMMARY FOR ALBACORE

Change in assessment result from 2022 to 2025

Indicators – 2022 assessment		Status[3]
Catch (2021) (t)[2]	34,864	85%
Mean annual catch (2016-2020) (t)	39,218	
MSY (x1,000 t) (95% CI)	45 (35-55)	
F_{MSY} (80% CI)	0.18 (0.15-0.21)	
SB_{MSY} (x1,000 t) (80% CI)	27 (21-33)	
F_{2020} / F_{MSY} (80% CI)	0.68 (0.42-0.94)	
SB_{2020} / SB_{MSY} (80% CI)	1.56 (0.89-2.24)	
SB_{2020} / SB_0 (80% CI)	0.36 (0.26-0.45)	

2022 2025



Indicators – 2025 assessment		2025 stock status determination[3]
Catch (2023) (t)[2]	41,790	54%
Mean annual catch (2019-2023) (t)	40.027	
MSY (x1,000 t) (95% CI)	44.31 (37.15-51.64)	
F_{MSY} (95% CI)	0.16 (0.15-0.17)	
SB_{MSY} (x1,000 t) (95% CI)	26.75 (22.34-31.29)	
F_{2023} / F_{MSY} (95% CI)	0.97(0.52-1.42)	
SB_{2023} / SB_{MSY} (95% CI)	1.33 (0.90-1.78)	
SB_{2023} / SB_0 (95% CI)	0.285 (0.085-0.485)	

	Stock overfished (SB_{2020} / SB_{MSY}<1)	Stock not overfished (SB_{2020} / SB_{MSY}≥ 1)
Stock subject to overfishing (F_{2020} / F_{MSY}≥ 1)	1%	9%
Stock not subject to overfishing (F_{2020} / F_{MSY}≤ 1)	5%	85%
Not assessed / Uncertain		

	Stock overfished (SB_{2020} / SB_{MSY}<1)	Stock not overfished (SB_{2020} / SB_{MSY}≥ 1)
Stock subject to overfishing (F_{2020} / F_{MSY}≥ 1)	15.1 %	29.0 %
Stock not subject to overfishing (F_{2020} / F_{MSY}≤ 1)	1.76 %	54.1 %
Not assessed/Uncertain / Unknown		

MANAGEMENT ADVICE

- After extensive discussion, the WPTmT concluded that, although the updated assessment model can be used to estimate stock status, additional work is required to address the identified issues and provide robust management advice.

- Considerable uncertainty remains in the SS3 assessment conducted in 2025, however the trends in key model outputs align relatively well with the 2022 assessment. For this year, due to the uncertainty in the model outputs, the management advice from 2022 would be carried over for one year (1 year) to allow time to update the SS3 assessment to provide updated management advice in 2026.

STOCK STATUS AND MANAGEMENT ADVICE

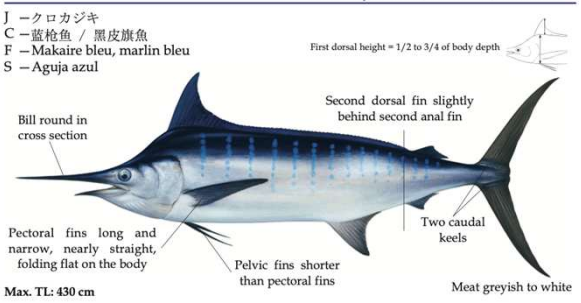
Blue marlin

BUM

Makaira nigricans

Also named Indo-Pacific blue marlin (Makaira mazara) in some taxonomies

J –クロカジキ
C –蓝枪鱼 / 黑皮旗鱼
F –Makaire bleu, marlin bleu
S –Aguja azul



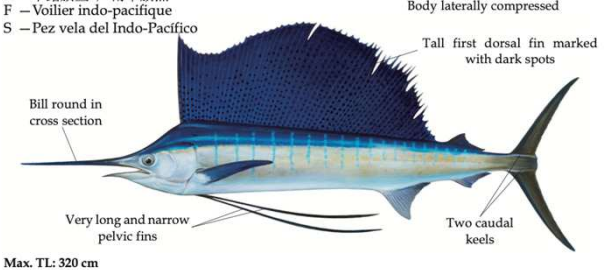
Max. TL: 430 cm

Indo-Pacific sailfish

SFA

Istiophorus platypterus

J –バショウカジキ
C –平鳍旗鱼 / 雨伞旗鱼
F –Voilier indo-pacifique
S –Pez vela del Indo-Pacífico



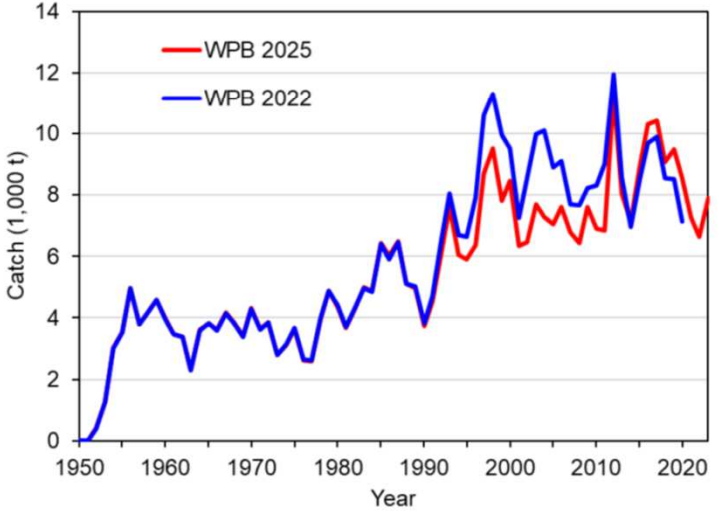
Max. TL: 320 cm

Meeting

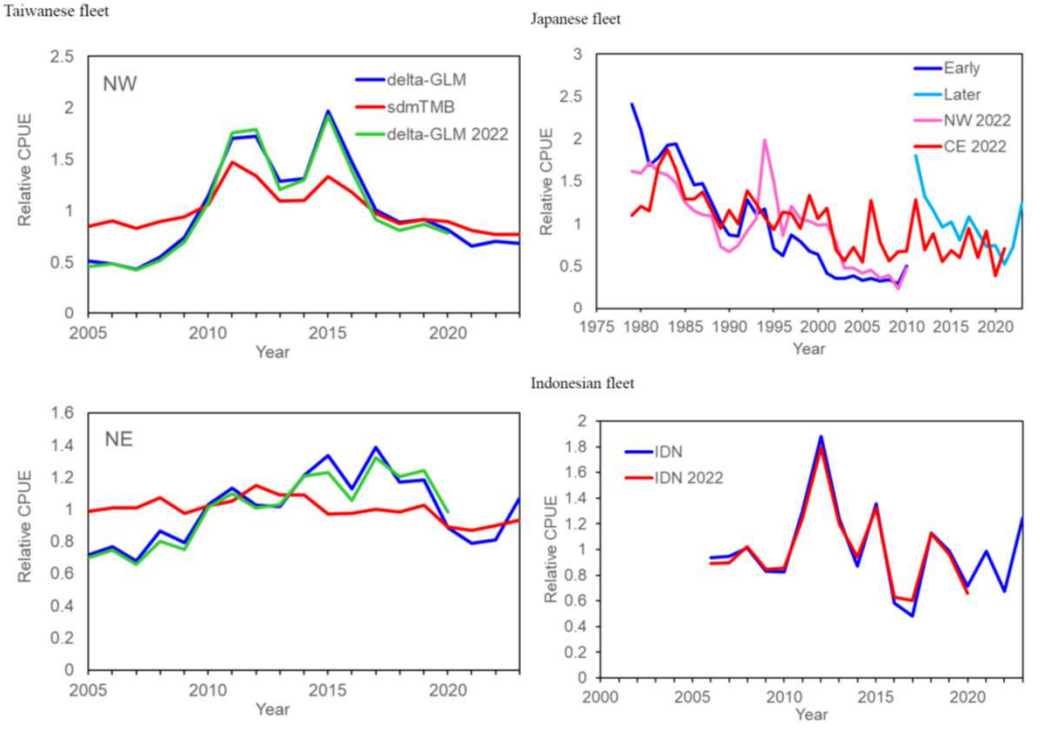
- Chair: Dr Jie Cao (China), Vice-chair Dr Sylvain Bonhommeau (EU, France)
- WPB: 15-18 September 2025 @Sete, France
  - ✓ Stock assessment for blue marlin
  - ✓ Stock assessment for Indo-Pacific sailfish

DATA USED FOR BLUE MARLIN STOCK ASSESSMENT

Catch series



Abundance index (CPUE)



SS3 (Age-structured, integrated stock assessment model)

- Uncertainty in the biological parameters

JABBA (Age-aggregated)

- Agreed to use as the base case and to use for projection
- B2023/BMSY = 0.62; F2023/FMSY = 1.54

Overall

- Both models were consistent with regards to stock status, although the SS3 model was less pessimistic.
- On the weight-of-evidence available in 2025, the stock is determined to be overfished and subject to overfishing

BLUE MARLIN STOCK STATUS

- The stock is ***overfished*** and ***subject to overfishing***.

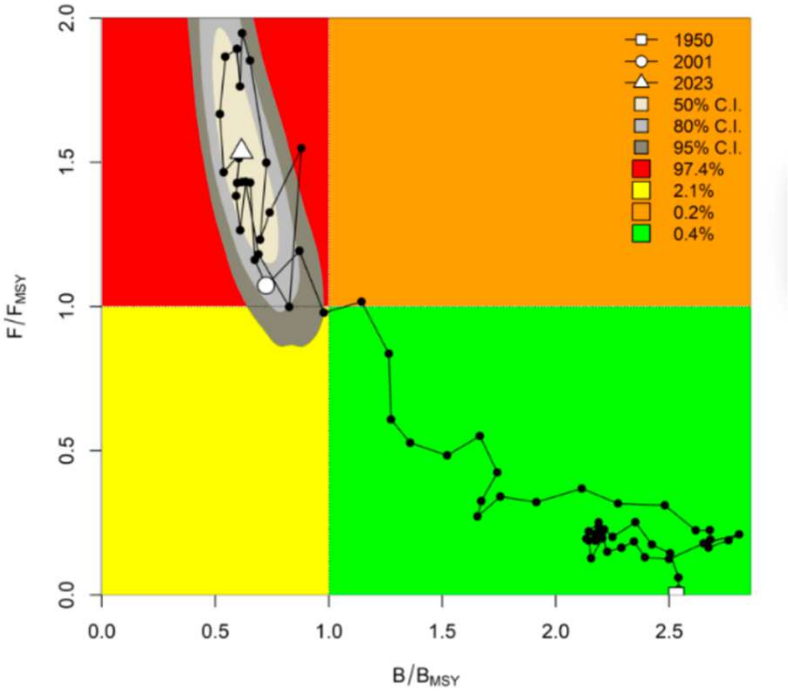
Table 1. Status of blue marlin (*Makaira nigricans*) in the Indian Ocean

Area[1]	Indicators		2025 stock status determination[3]
Indian Ocean	Catch 2023[2] (t)	7,905	97.4%*
	Average catch 2019-2023 (t)	7,964	
	Average catch 2021-2023 (t)	7,262	
	MSY (1,000 t) (80% CI)	8.35 (7.52 –9.23)	
	F_{MSY} (80% CI)	0.30 (0.21 – 0.38)	
	B_{MSY} (1,000 t) (80% CI)	27.92 (22.3 – 39.9)	
	F_{2023}/F_{MSY} (80% CI)	1.54 (1.16 – 2.06)	
	B_{2023}/B_{MSY} (80% CI)	0.62 (0.48 – 0.78)	
	B_{2023}/B_0 (80% CI)	0.23 (0.18 – 0.29)	

[1] Boundaries for the Indian Ocean are defined as the IOTC area of competence
[2] Proportion of 2023 catch estimated or partially estimated by IOTC Secretariat: 46%
[3] 2023 is the final year that data were available for this assessment
* Estimated probability that the stock is in the respective quadrant of the Kobe plot (shown below), derived from the confidence intervals associated with the current stock status

Colour key	Stock overfished (B_{2023}/B_{MSY}< 1)	Stock not overfished (B_{2023}/B_{MSY}≥ 1)
Stock subject to overfishing (F_{2023}/F_{MSY}> 1)	97.4%	0.2%
Stock not subject to overfishing (F_{2023}/F_{MSY}≤ 1)	2.1%	0.4%
Not assessed/Uncertain/Unknown		

The percentages are calculated as the proportion of model terminal values that fall within each quadrant with model weights accounted for



BLUE MARLINE MANAGEMENT ADVICE

- **A reduction of 20% of catches (5,809 t) would recover the stock to the green quadrant by 2035 with a probability of 64 %**
- **If the catches are reduced by 40 % (4,357 t) the probability would be 86%**

Table 2. Blue Marlin: Indian Ocean JABBA Kobe II Strategy Matrix. Probability (percentage) of achieving the green quadrant of the KOBE plot, for a range of constant catch projections (JABBA). Catch in 2024 and 2025 are fixed at 7,262 t

Catch (t)\Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
4,357 (60%)	10	22	35	48	59	67	74	80	83	86
5,083 (70%)	10	20	31	41	50	58	64	69	73	77
5,809 (80%)	10	18	26	34	41	47	53	57	61	64
6,536 (90%)	10	16	22	27	33	37	41	44	47	50
7,262 (100%)	10	14	18	22	25	27	30	32	34	35
7,988 (110%)	10	12	15	16	18	19	20	21	22	22
8,714 (120%)	8	9	11	11	12	12	12	13	12	12
9,440 (130%)	6	6	6	7	6	6	6	6	6	6
10,167 (140%)	4	4	4	4	3	3	3	3	3	2

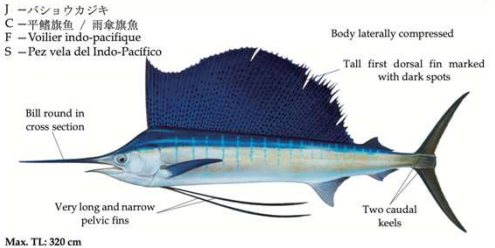
DATA USED FOR INDO-PACIFIC SAILFISH STOCK ASSESSMENT

Indo-Pacific sailfish

SFA

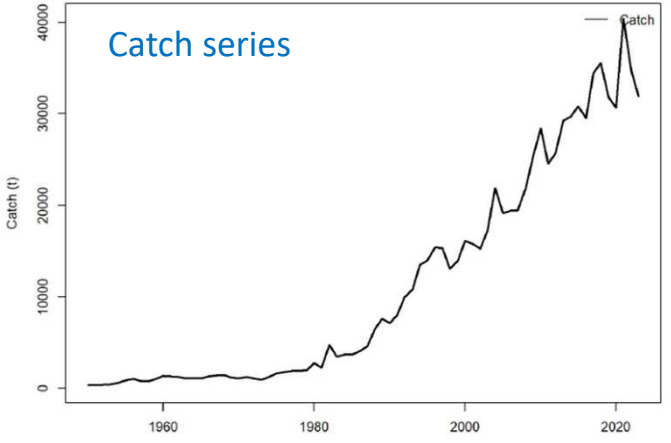
Istiophorus platypterus

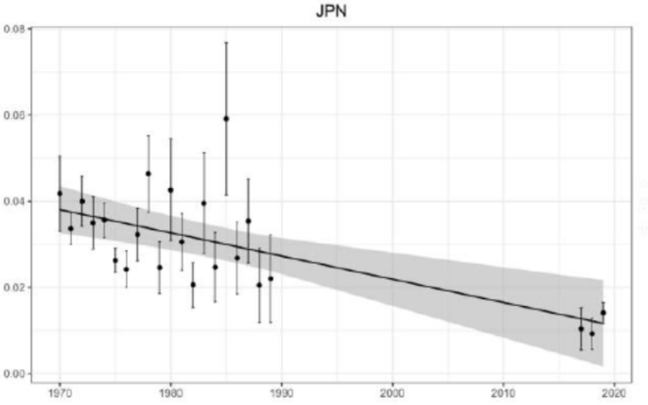
J —バショウカジキ
C —平鳍旗鱼 / 雨伞旗鱼
F —Voilier indo-pacifique
S —Pez vela del Indo-Pacífico

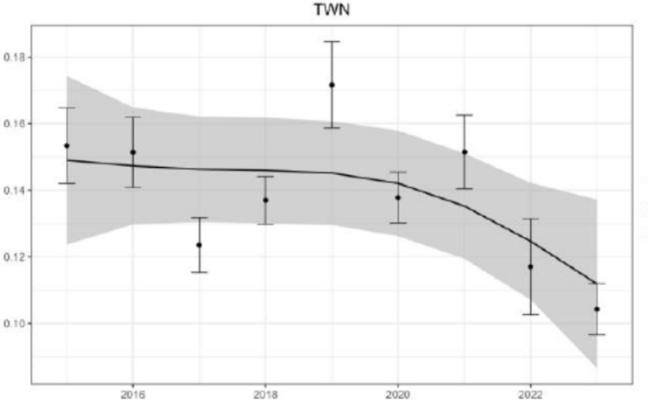


Max. TL: 320 cm

Catch series







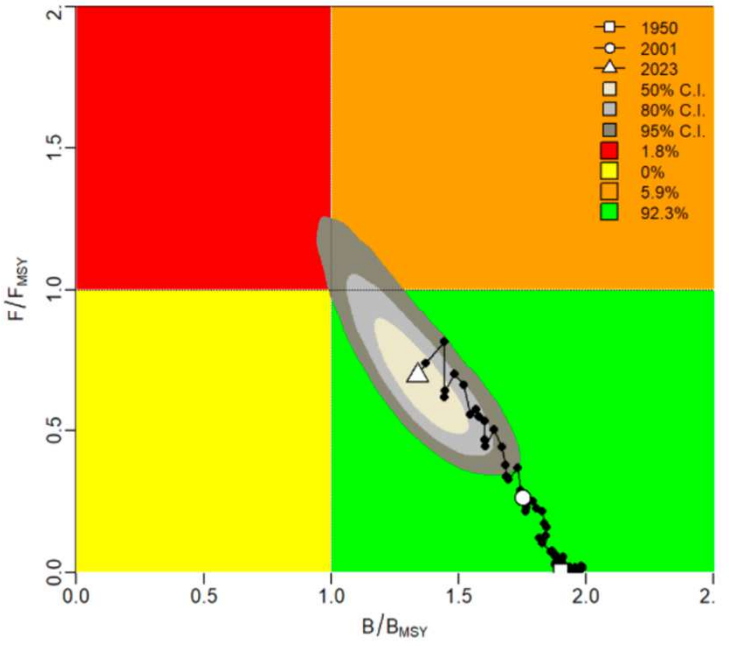
Abundance index from Spawning Potential Ratio (SPR)

Food and Agriculture Organization of the United Nations

INDO-PACIFIC SAILFISH STOCK STATUS

iotc ctoi

Indicators		2025 stock status determination[3,4]
Catch 2024 (t)	40,682[2]	92%
Average catch 2020-2024 (t)	36,390	
MSY (1,000 t) (80% CI)[4]	34.3 (28.7 - 42.2)	
F_{MSY} (80% CI)[4]	0.20 (0.17 - 0.23)	
SB_{MSY} (1,000 t) (80% CI)[4]	174 (145 - 212)	
F_{2023}/F_{MSY} (80% CI)[4]	0.69 (0.51 - 0.94)	
SB_{2023}/SB_{MSY} (80% CI)[4]	1.34 (1.15 - 1.53)	
SB_{2023}/SB_0 (80% CI)[4]	0.67 (0.58 - 0.76)	



Food and Agriculture Organization of the United Nations

STOCK STATUS FOR STRIPED MARLIN

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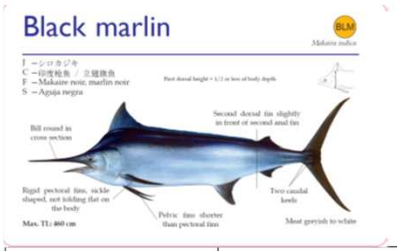
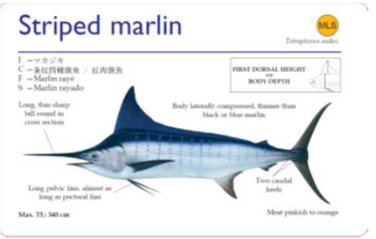


Area[1]	Indicators		2024 stock status determination[5]
Indian Ocean	Catch 2022[2] (t)	3,225	100%*
	Average catch 2018-2022 (t)	2,856	
	MSY (1,000 t) (JABBA)	4.73 (4.22 – 5.24)[3]	
	MSY (1,000 t) (SS3)	4.89 (4.48-5.30)	
	F_{MSY} (JABBA)	0.26 (0.20–0.35)	
	F_{MSY} (SS3)	0.22 (0.21–0.24)	
	F_{2022}/F_{MSY} (JABBA)	3.95 (2.54 - 6.14)	
	F_{2022}/F_{MSY} (SS3)	9.26 (5.38-13.14)	
	B_{2022}/B_{msy} (JABBA)	0.17 (0.11 - 0.27)	
	SB_{2022}/SB_{MSY} (SS3)[4]	0.27 (0.19-0.35)	
	B_{2022}/B_0 (JABBA)	0.06 (0.04 – 0.10)	
	SB_{2022}/SB_0 (SS3)	0.036 (0.03-0.04)	

[1] Boundaries for the Indian Ocean are defined as IOTC area of competence
[2] Proportion of 2022 catch estimated or partially estimated by IOTC Secretariat: 15.4%
[3] Range estimates in the table are 80% confidence interval
[4] SS3 is the only model that used SB/SB_{MSY}, all others used B/B_{MSY}
[5] 2022 is the final year that data were available for this assessment
* Estimated probability that the stock is in the respective quadrant of the Kobe plot (shown below), derived from the confiden intervals associated with the current stock status

Colour key	Stock overfished (B_{year}/B_{MSY}< 1)	Stock not overfished (B_{year}/B_{MSY}≥ 1)
Stock subject to overfishing (F_{year}/F_{MSY}> 1)	100%	0.0%
Stock not subject to overfishing (F_{year}/F_{MSY}≤ 1)	0.0%	0.0%
Not assessed/Uncertain/Unknown		



Area[1]	Indicators		2024 stock status determination[3]
Indian Ocean	Catch 2022 (t)[2]	26,320	62.2%
	Average catch 2018–2022 (t)	18,235	
	MSY (1,000 t) (80% CI)	13.90 (8.73 – 28.51)	
	F_{MSY} (80% CI)	0.21 (0.15 - 0.30)	
	B_{MSY} (1,000 t) (80% CI)	65.23 (46.43-101.84)	
	F_{2022}/F_{MSY} (80% CI)	1.39 (0.72 – 2.45)	
	B_{2022}/B_{MSY} (80% CI)	1.35 (0.96 – 1.79)	
	B_{2022}/B_0 (80% CI)	0.49 (0.35 – 0.66)	

[1] Boundaries for the Indian Ocean stock assessment are defined as the IOTC area of competence
[2] Proportion of 2022 catch fully or partially estimated by the IOTC Secretariat: 21.7%
[3] 2020 is the final year that data were available for this assessment

Colour key	Stock overfished (B_{year}/B_{MSY}< 1)	Stock not overfished (B_{year}/B_{MSY}≥ 1)
Stock subject to overfishing (F_{year}/F_{MSY}> 1)	12.5%	62.2%
Stock not subject to overfishing (F_{year}/F_{MSY}≤ 1)	0	25.3%
Not assessed/Uncertain/Unknown		

RECOMMENDATIONS FOR COMMISSSION'S CONSIDERATION : WPB

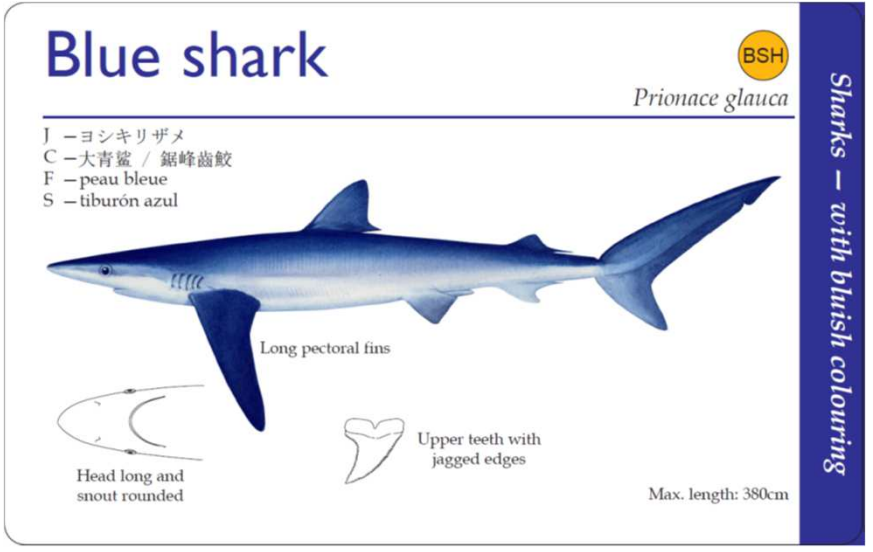
SC28.11 (para. 98) The SC **NOTED** that, for several years, joint analyses combining catch and effort data from major longline fleets have been proposed to improve the CPUE index for billfish species, and that the WPEB had previously recommended investigating methods to compare CPUE indices across fleets and to develop joint CPUE indices for bycatch species. The SC also **NOTED** that these joint analyses could harmonize standardization methods, reconcile conflicts between indices developed from different fleets, and potentially produce more robust indices with broader spatial and temporal coverage. The SC further **NOTED** that it is at the discretion of CPCs to determine the feasibility of such collaboration, considering data confidentiality agreements and other logistical arrangements. The SC **AGREED** on the importance of establishing a process to discuss how to move forward. **NOTING** that joint CPUE analysis arrangements already exist for the standardization of tropical and temperate tuna, the SC **RECOMMENDED** that the Commission urge CPCs to explore ways to extend joint analyses to non-targeted species, such as marlins.

RECOMMENDATIONS FOR COMMISSSION'S CONSIDERATION : WPB

SC28.12 (para. 112) The SC **RECOMMENDED** that the Commission to give consideration to how best to financially and logistically support an experimental fishing trial with gillnets to be conducted by CPCs which would:

- Aim to test different setting depths and times of setting/soaking (e.g. day/night), on catch rates and mortality of interacting species
- Collect data on all interacting species including billfish bycatch, target tuna and vulnerable species (e.g. cetaceans, turtles), in order to provide the Commission a quantified understanding of likely effects and possible trade-offs of various subsurface setting options, on each species
- Prioritise accurate species identification.

STOCK STATUS AND MANAGEMENT ADVICE



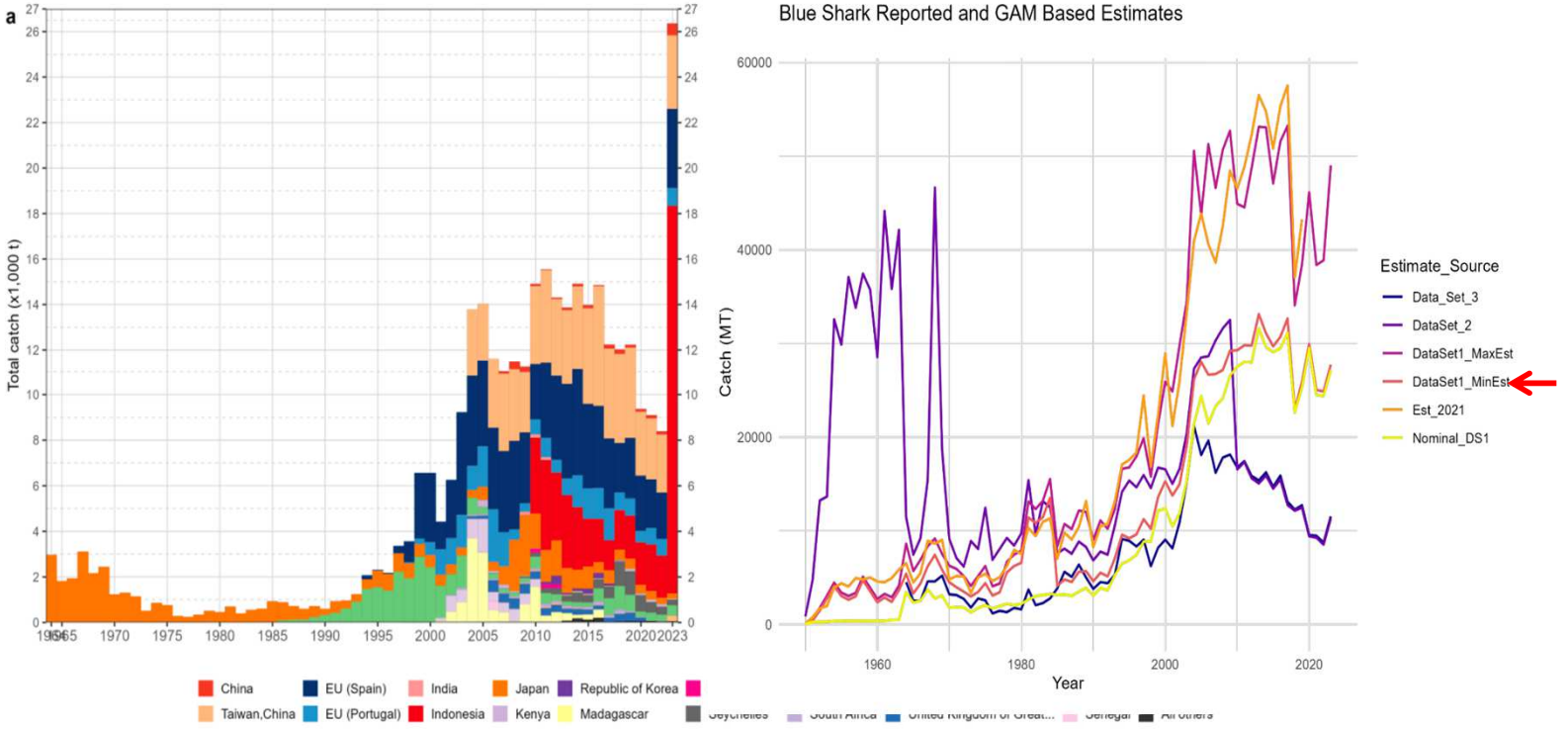
WORKING PARTY ON ECOSYSTEM AND BYCATCH (WPEB)

Chair: Mariana Tolotti (EU)

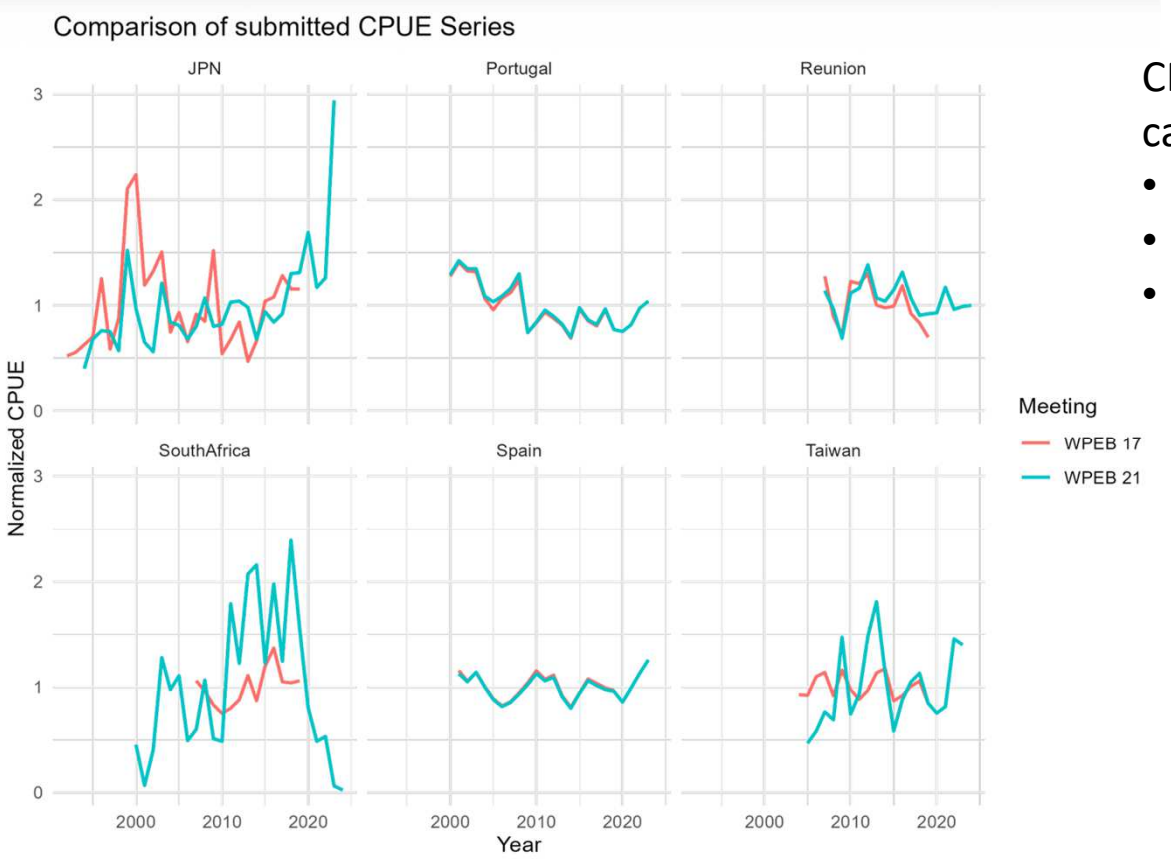
Vice-chair: Mohammed Koya (India), Charlene de Silva (South Africa)

- WPEB21(DP): 28-30 April 2025 (virtual)
- WPEB21: 9-13 September 2025 @Sete, France
  - ✓ Assessment for blue shark
  - ✓ Guideline
  - ✓ National Plans of Action
  - ✓ LL bycatch mitigation measure workshop

CATCH SERIES



CPUE



CPUE series used in the base-case assessment

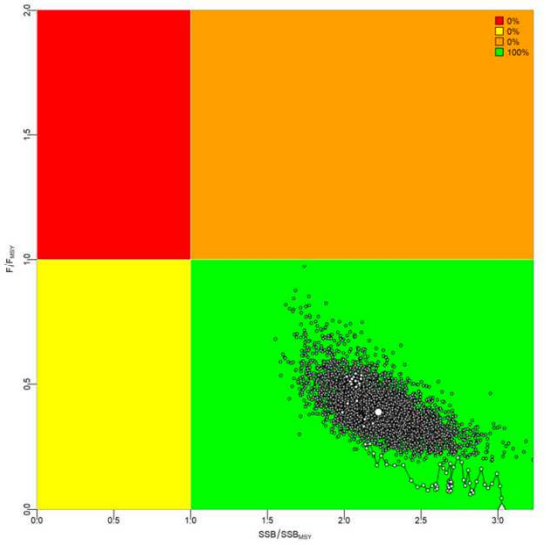
- JAPAN
- TAIWAN, CHINA
- SPAIN

STOCK STATUS

- Bayesian state-space surplus production model (JABBA) and
- **Integrated age-structured model (SS3)**

- With similar results, both models suggest the stock is currently **not overfished** and **not subject to overfishing** with respect to MSY related reference points (although the IOTC has not adopted reference points for this species).

Area	Indicators		2025 stock status determination
Indian Ocean	Nominal Reported catch 2023 (MT)	26,354	100%
	Estimated catch 2023 (MT)	27,722	
	Not elsewhere included (nei) sharks[2] 2023 (MT)	28,179 t	
	Average reported catch 2019-23 (MT)	13,072	
	Average estimated catch 2019-23 (MT)	26,690	
	Avg. not elsewhere included (nei) sharks[2] 2019-23 (MT)	27,279 t	
	MSY (1,000 t) (80% CI):	0.31 (0.22 - 0.40)	
	F_{MSY} (80% CI):	0.18 (0.18 - 0.18)	
	SSB_{MSY} (1,000 t) (80% CI):	52.87 (37.38 - 68.37)	
	F_{2015}/F_{MSY} (80% CI):	0.39 (0.21 - 0.57)	
	SSB_{2019}/SSB_{MSY} (80% CI):	2.22 (1.76 - 2.68)	
	SSB_{2019}/SSB_0 (80% CI):	0.73 (0.34 - 1.13)	



The SS3 assessment indicates current catches are near MSY, and significant increases could result in decreasing biomass and the stock becoming subject to overfishing in the future.

Kobe II Strategy Matrix: Probability (%) of violating MSY-based reference points

	Alternative TAC projections								
Reference point and projection timeframe	**60% (15,526 t)**	**70% (18,113 t)**	**80% (20,701 t)**	**90% (23289 t)**	**100% (25877 t)**	**110% (28464 t)**	**120% (31052 t)**	**130% (33640 t)**	**140% (36227 t)**
B2028<BMSY	0	0	0	0	0	0	0	0	0
F2028>FMSY	0	0	0	0	0	0	0	0	1
B2035<BMSY	0	0	0	0	0	0	0	0	1
F2035>FMSY	0	0	0	0	0	0	2	5	12

RECOMMENDATIONS FOR COMMISSSION'S CONSIDERATION : WPEB

REPORT OF THE 21TH SESSION OF THE WORKING PARTY ON ECOSYSTEMS AND BYCATCH (WPEB21)

SC28.13 (para. 116) **NOTING** that data for bycatch species in IOTC fisheries are severely lacking, the SC **RECOMMENDED** that the Commission and Compliance Committee **ENCOURAGE** CPCs to provide observer data and work to reach at least the 5% minimum coverage level as required by Resolution 25/06.

SC28.15 (para. 119) The SC **RECOMMENDED** that the Commission speak with CPCs to determine appropriate ways to improve data reporting from artisanal fisheries.

SC28.16 (para. 120) The SC **NOTED** that the WPEB had **REVIEWED** the minimum standards set out in Annex III of Resolution 25/08 and **ADOPTED** the revisions made by members of the group which can be found in Annex XVVII of the WPEB report. The SC **RECOMMENDED** that the Commission consider these standards for adoption in 2026. The SC further **NOTED** that work on best practice handling guidelines is ongoing and frequently evolves. The SC therefore **SUGGESTED** that the Commission consider adopting a master document containing handling guidelines for all taxa, rather than requiring Resolutions containing such guidelines to be updated when new information becomes available. Future Resolutions could then refer back to this master document adopted by the SC. The SC **AGREED** that a small working group will work on compiling these intersessionally for review by the SC.

RECOMMENDATIONS FOR COMMISSSION'S CONSIDERATION : WPEB

SC28.14 (para. 118) **NOTING** that Resolution 15/01 includes a list of species for which reporting catch data is mandatory/optional and that varies by gear and by fishery type (i.e. artisanal vs commercial fisheries), the SC **NOTED** that many species of interest to the WPEB are not mandatory for reporting for all gears or fishery type. The SC **NOTED** concerns from some CPCs that making these species mandatory for reporting for all gears and fleets (including artisanal fleets) could place additional burden on many CPCs. This is particularly the case for many coastal fleets which are not necessarily targeting only tuna but instead target a wide range of species, making data collection complex. The SC therefore **RECOMMENDED** that the Commission review the list of species that are mandatory for reporting to species level while considering the feasibility of such data collection for all CPCs. The SC included the following suggested changes:

- Silky sharks to be added also for gillnets fisheries
- Hammerhead sharks to be reported at species level at least for scalloped, smooth and great
- hammerhead sharks for all gear types (explicitly including purse seine fisheries)
- Mantas and devil rays to be reported at species level differentiating at least between manta ray (giant manta and reef manta) and other devil rays adding them for mandatory reporting at least for purse seine fisheries and for gillnet fisheries instead of optional
- Great white sharks as mandatory for all gear types
- Oceanic whitetip sharks as mandatory for all gear types

RECOMMENDATIONS FOR COMMISSSION'S CONSIDERATION : WPEB

SC28.17 (para. 121) The SC **NOTED** that in 2024, the WPEB recommended the adoption of a revised set of handling guidelines for mobulids while **NOTING** that work was required to further develop the guidelines for gillnets. The SC **NOTED** that the WPEB worked to further develop these guidelines which were revised and adopted. The SC **RECOMMENDED** that the Commission consider these revised handling guidelines for mobulids for consideration for adoption in 2026. The details of the suggested revisions to the handling procedures can be found in Appendix XVVI of the WPEB report.

RECOMMENDATIONS FOR COMMISSSION'S CONSIDERATION : WPEB

SC28.18 (para. 122) The SC **NOTED** that while evidence on post-release survival of whale sharks from purse seine interactions suggests low mortality when best-practices are followed, data on bycatch in other fisheries, particularly gillnets, remains scarce. Therefore, the SC **RECOMMENDED** that the Commission **ENCOURAGE** CPCs to improve data collection and reporting for interactions with whale sharks involving all gear types as well as purse seine.

SC28.19 (para. 123) The SC **ENCOURAGED** efforts to clarify the extent and nature of whale shark interactions with IOTC fisheries, and to assess the current stock status within the IOTC area of competence, **ACKNOWLEDGING** that the extent of the vulnerability of whale sharks to IOTC fisheries is unknown. Based on the available information presented by the WPEB, the SC classified whale sharks in the Indian Ocean as a "taxon of the greatest biological vulnerability and conservation concern for which there are very few data", as defined in Resolution 25/08 and **RECOMMENDED** that the Commission take appropriate action based on this classification. The SC **NOTED** that this classification supports the consideration of precautionary management measures and prioritization of future research and data collection efforts by the Commission.

RECOMMENDATIONS FOR COMMISSSION'S CONSIDERATION : WPEB

STATUS OF DEVELOPMENT AND IMPLEMENTATION OF NATIONAL PLANS OF ACTION FOR SEABIRDS AND SHARKS, AND IMPLEMENTATION OF THE FAO GUIDELINES TO REDUCE MARINE TURTLE MORTALITY IN FISHING OPERATIONS

SC28.20 (para. 125) The SC **RECOMMENDED** that the Commission note the current status of development and implementation of National Plans of Action (NPOAs) for sharks and seabirds, and the implementation of the FAO guidelines to reduce marine turtle mortality in fishing operations, by each CPC as provided in Appendix 6, recalling that the IPOA-Seabirds and IPOA-Sharks were adopted by the FAO in 1999 and 2000, respectively, and recommended the development of NPOAs.

OTHER MATTERS

SC28.21 (para. 145) The SC **RECOMMENDED** that the Commission **ENCOURAGE** ongoing trials with these gears (i.e., loop gears) to better understand their effect on target and bycatch species.

NEW CHAIR AND VICE-CHAIR OF WPEB

Chair: Mariana Tolotti (EU)

Vice-chair: Mohammed Koya (India)

Charlene de Silva (South Africa)

⇒ New Chair: Charlene de Silva (South Africa)

New 1st Vice-Chair: Philippe Sabarros (EU, France)

New 2nd Vice-Chair: Yanan Li (China)

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WORKING PARTY ON NERITIC TUNAS

Chair : Farhad Kaymaram (I.R. Iran)
Vice Chair: Bram Setyadji (Indonesia)

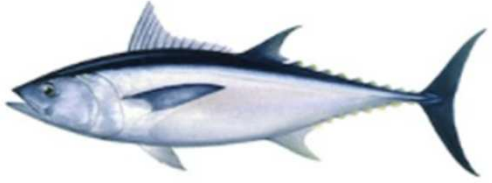
July 7-11, 2025 @Seychelles

STATUS SUMMARY FOR SPECIES OF NERITIC TUNA SPECIES

BLT
unknown
Bullet tuna
Auxis rochei

FRI
unknown
Frigate tuna
Auxis thazard

KAW 27%
Kawakawa
Euthynnus affinis



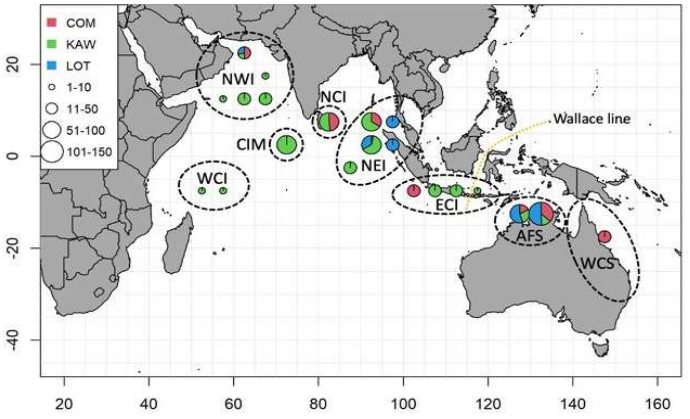
LOT 34.7%
Longtail tuna
Thunnus tonggol

GUT 27%
Indo-Pacific King Mackerel
Scomberomorus guttatus

COM 31%
Narrow-bared Spanish Mackerel
Scomberomorus commerson

GENOME ANALYSIS

- Little is known about neritic tuna population structure
- Next Generation Sequencing was used to investigate the genetic connectivity of three neritic (Longtail, Kawakawa & Narrow-bared Spanish Mackerel)
- Genetic data showed clear evidence of heterogeneity in all three species, and patterns of isolation-by-distance were detected in Kawakawa and narrow-barred Spanish mackerel



- The WPNT NOTED the results from the study, showing that there was likely population structure (e.g. stocks) within
  - longtail tuna (three hypothesised stocks);
  - kawakawa (two hypothesised stocks, showing a gradient across the Indian Ocean); and
  - narrow-barred Spanish mackerel (at least five hypothesised stocks).
- Further sampling is required to provide a comprehensive understanding of the number of populations present and the spatial extent of individual populations

RECOMMENDATIONS FOR COMMISSSION'S CONSIDERATION : WPNT

SC28.10 (para. 71) **ACKNOWLEDGING** the difficulties associated with deriving geo-referenced size-frequency data at the spatial resolution of 5° grids in most coastal longline and surface fisheries, and the fact that most analyses currently used in the assessments, do not require such fine resolution, the SC **RECOMMENDED** the Commission to align the spatial resolution of size-frequency data with that of geo-referenced catch and effort data. Consequently, the data may be provided using an alternative geographical area if it better represents the fishery concerned. The SC **NOTED** that this recommendation is relevant for many IOTC species and has been reiterated by other WPs.

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WORKING PARTY ON METHODS

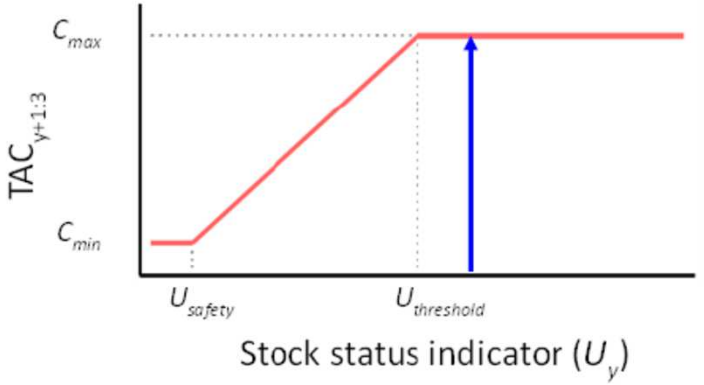
Meetings

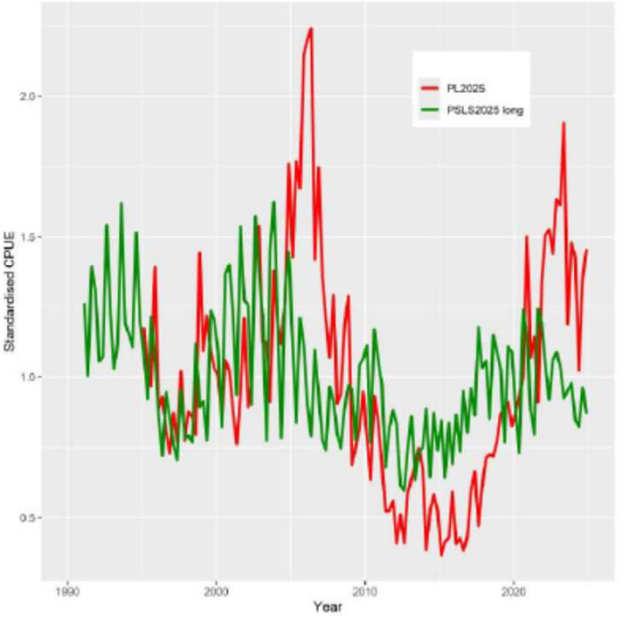
- Chair: Hilario Murua (ISSF); Vice-Chair: Ann Preece (AUS)
- WPM(MSE): 24-25 February 2025 (virtual)
  - ✓ Running Bigeye MP (to report an ad-hoc session of SC)
  - ✓ Technical discussion on MSE
- WPM16: 27-28 October 2025 (Seychelles)
  - ✓ MSE, joint CPUE, etc.
  - ✓ Consideration of the recommendations and discussions in TCMP09
  - ✓ Running of skipjack MP

MP RUN FOR SKIPJACK TUNA

IOTC-2025-WPTT27-17: Running the IOTC skipjack tuna management procedure for 2025

- Data inputs: the EU Purse Seine CPUE and the Maldives Pole and Line CPUE.

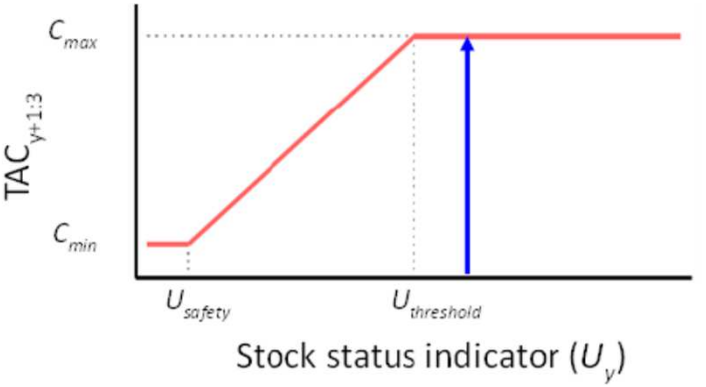




The MP calculates a stock indicator based on the current CPUE index and the index from the reference period 1995–2021.
The MP determines the TAC based on the relationship of the stock indicator to the limit (U_{safe}) and target($U_{threshhold}$)

MANAGEMENT ADVICE & EXCEPTIONAL CIRCUMSTANCES CHECK

- As the stock indicator is greater than Uthreshhold, the TAC is set to Cmax, which is 528,130 tons.
- However, this value is more than 15% lower than the current TAC (628,606 tons).
- According to Resolution 24/07, the maximum allowable decrease in TAC is 10% relative to the previous TAC. Therefore, the recommended TAC is 628,606 t × 90% = 565,745 tons



- Based on the available evidence reviewed, there are **no exceptional circumstances** regarding the application of the skipjack tuna Management Procedure.

RECOMMENDATIONS FOR COMMISSSION'S CONSIDERATION : WPM

Skipjack tuna MP (Resolution 24/07)

SC28.23 (para. 212) The SC **NOTED** the 2025 running of the SKJ MP **NOTING** that the this generated an unconstrained TAC of 528,130 t, which is >10% lower than the TAC set for 2024–2026. By applying the maximum 10% decrease in the TAC as per Resolution 24/07, the SC **RECOMMENDED** the Commission to adopt the TAC for skipjack tuna of 565,745 t. per year for 2027–2029.

Bigeye tuna MP (Resolution 22/03)

SC28.22 (para. 211) The SC **NOTED** that 2024 catch of bigeye tuna (82,874 t) has exceeded the 2024 TAC (80,583 t), which is an exceptional circumstance, and as such, the SC **RECOMMENDED** that the Commission should ensure that the appropriate provisions (e.g., in paragraphs 4, 5 and 8) of 23/04 are implemented to ensure catches remain inside the TAC, conditional on the allowances and requirements of those provisions.

Swordfish tuna MP (Resolution 24/08)

SC28.24 (para. 216) The SC **RECOMMENDED** that the Commission urgently propose and adopt the TAC for swordfish resulting from the MP (Resolution 24/08, now superseded by 25/07) in 2026.

RECOMMENDATIONS FOR COMMISSSION'S CONSIDERATION : WPM

General MSE issues

SC28.25 (para. 222) The SC **NOTED** that there are confidentiality agreements between longline countries and various tuna RFMO Secretariats regarding the use of operational data (such as those in place with the WCPFC and IATTC) and NOTING the provisions to ensure confidentiality of the operational data submitted to the Secretariat in IOTC Resolution 12/02, the SC **RECOMMENDED** that the Commission explore potential arrangements between longline-fleet CPCs and the IOTC Secretariat, under strict confidentiality rules (similar to those outlined in Resolution 12/02), so that the Secretariat can use operational data and participate in, as well as support, the development of the joint longline CPUE index. The SC further **RECOMMENDED** exploring similar arrangements for other fleets.

WORK PLAN

Year	Albacore	Skipjack	Yellowfin	Bigeye	Swordfish	Blueshark
2026	**TCMP**: Provide advice to Commission on elements of OMs and, if possible, candidate MPs, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.	**TCMP**: Provide advice to the Commission on SKJ TAC for 2027-2029	**TCMP**: Provide advice to Commission on elements of OMs and, if possible, candidate MPs, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.	**TCMP**: Consider outcomes of BET MSE review and provide advice Commission.	**TCMP**:	**TCMP**: Provide advice to Commission on elements of OMs and, if possible, candidate RPs and MPs, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.
	Commission: Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need to undertake further MSE of candidate or alternative MPs.	**Commission:** Adopt the TAC for 2027-2029	**Commission**: Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need to undertake further MSE.	**Commission**: Consider outcomes of BET MSE review	**Commission**:	**Commission**: Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need to undertake further MSE.
	WPs/SC: Consider recommendations from the Commission and undertake MSE to provide advice on the performance of candidate MPs.	**WPs/SC**: Stock Assessment to monitor MP implementation Review Exceptional Circumstances	**WPs/SC**: Consider recommendations from the Commission and undertake MSE to provide advice on the performance of candidate MPs.	**WPs/SC**: Review Exceptional Circumstances	**WPs/SC**: Stock Assessment to monitor MP implementation Review Exceptional Circumstances	**WPs/SC**: Consider recommendations from the Commission and undertake MSE to provide advice on the performance of candidate MPs.

NEW CHAIR AND VICE-CHAIR OF WPDCS

Chair: Hilario Murua (ISSF)

Vice-Chair: Ann Preece (AUS)

⇒ New Chair: Ann Preece (AUS)

New Vice-Chair: Giancarlo Correa (EU, Spain)

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WORKING PARTY OF DATA COLLECTION AND STATISTICS

- Chair: Julien Barde (EU, France)
- Vice-Chair: Nuwan Gunawardane (Sri Lanka)

- WPDCS21: Nov 25-29, 2025 @Shanghai, China
  - ✓ Data overview and quality by species groups
  - ✓ Data reporting:
  - ✓ Estimated yellowfin catch limits for 2026
  - ✓ Outcomes of the WGEMS05

227. The SC NOTED that while there have been rapid advances with emerging AI algorithms, AI methods are not yet sufficiently mature to produce reliable species-specific catch estimates. The SC **AGREED** that an important contribution from the IOTC will be the collection and annotation of images with verified species identifications to support algorithm training, as initiated under the IOTC-OFCF project.

228. The SC **NOTED** that quality scores estimated by the Secretariat for tropical tuna data have been very high in recent years, with more than 90% of retained catches fully or partially reported in line with IOTC standards. However, the SC also NOTED that some critical issues in the catch data were identified during the 2025 WPTT.

234. The SC **NOTED** that some funds have been allocated for the 2026 development of an **interactive oceanographic atlas** for the IOTC Area of Competence, intended to support studies on the impacts of climate change on tuna fisheries.

231. The SC RECALLED that Data Preparatory meetings for the WPTT take place before the data submission deadline (i.e., 30 June), and therefore the time series of catches used as inputs for tropical tuna stock assessments are updated after these meetings. The SC **NOTED** that the Secretariat will undertake work in the coming years to improve dataset version management, including through the use of Digital Object Identifiers (DOIs), to better track and describe changes in the data over time.

232. NOTING that certain catch data were submitted only days before the 2025 WPTT, thereby providing insufficient time for the Secretariat to update the assessment input datasets, the SC **QUERIED** what the most appropriate procedure would be for treating such late submissions.

233. The SC **AGREED** on the need for flexibility in accommodating late submissions, **ACKNOWLEDGING** that the best scientific information available should inform scientific advice. The SC NOTED that work will be conducted in 2026 to accelerate and improve the procedure for raising catch data.

RECOMMENDATIONS FOR COMMISSSION'S CONSIDERATION : WPDCS

REPORT OF THE 21TH SESSION OF THE WORKING PARTY ON DATA COLLECTION AND STATISTICS (WPDCS21)

SC28.26 (para. 236) The SC **RECOMMENDED** that the Commission ensures that the transition from the current website to the FAO one does not affect the operations of the Commission and set aside enough resources for this transition.

Yellowfin catch limits (SC report, Appendix 35)

- Every year, the SC produced tables for status of yellowfin tuna catch limits
- Updates for 2025 and 2026 pursuant to Resolutions 19/01 and 21/01 were circulated

NEW CHAIR AND VICE-CHAIR OF WPM

Chair: Julien Barde (EU, France)

Vice-Chair: Nuwan Gunawardane (Sri Lanka)

⇒ New Chair: Nuwan Gunawardane (Sri Lanka)

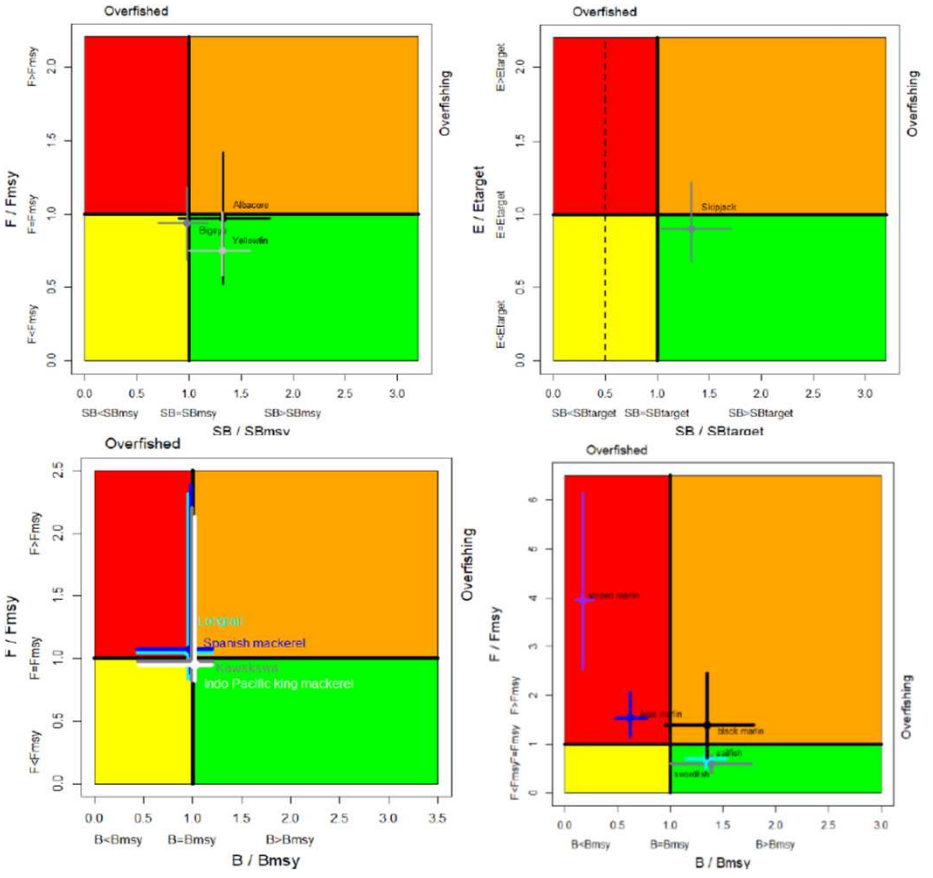
New Vice-Chair: Yang Wang (China)

OTHER RECOMMENDATIONS FOR COMMISSSION'S CONSIDERATION

RECOMMENDATIONS FOR COMMISSSION'S CONSIDERATION: STOCK STATUS

SC28.01 – SC28.03

The SC **RECOMMENDED** that the Commission note the management advice developed for each species under the IOTC mandate (tropical, temperate, billfish, neritic tuna and mackerel), as provided in the Executive Summary for each species, and combined Kobe plots.



RECOMMENDATIONS FOR COMMISSSION'S CONSIDERATION : STATUS

SC28.04 – SC28.08

The SC **RECOMMENDED** that the Commission note the management advice developed for

- Sharks
- Marine turtles
- Seabirds
- Marine mammals
- Mobulids

Sharks

SC28.04 (para. 271) The SC **RECOMMENDED** that the Commission note the management advice developed for a subset of shark species commonly caught in IOTC fisheries for tuna and tuna-like species:
Blue shark (*Prionace glauca*) - Appendix 23
Oceanic whitetip shark (*Carcharhinus longimanus*) - Appendix 24
Scalloped hammerhead shark (*Sphyrna lewini*) - Appendix 25
Shortfin mako shark (*Isurus oxyrinchus*) - Appendix 26
Silky shark (*Carcharhinus falciformis*) - Appendix 27
Bigeye thresher shark (*Alopias superciliosus*) - Appendix 28
Pelagic thresher shark (*Alopias pelagicus*) - Appendix 29
porbeagle shark (*Lamna nasus*) - Appendix 30

Marine turtles

SC28.05 (para. 272) The SC **RECOMMENDED** that the Commission note the management advice developed for marine turtles, as provided in the Executive Summary encompassing all six species found in the Indian Ocean:
Marine turtles - Appendix 31

Seabirds

SC28.06 (para. 273) The SC **RECOMMENDED** that the Commission note the management advice developed for seabirds, as provided in the Executive Summary encompassing all species commonly interacting with IOTC fisheries for tuna and tuna-like species:
Seabirds - Appendix 32

Marine Mammals

SC28.07 (para. 274) The SC **RECOMMENDED** that the Commission note the management advice developed for cetaceans, as provided in the newly developed Executive Summary encompassing all species commonly interacting with IOTC fisheries for tuna and tuna-like species:
Cetaceans - Appendix 33

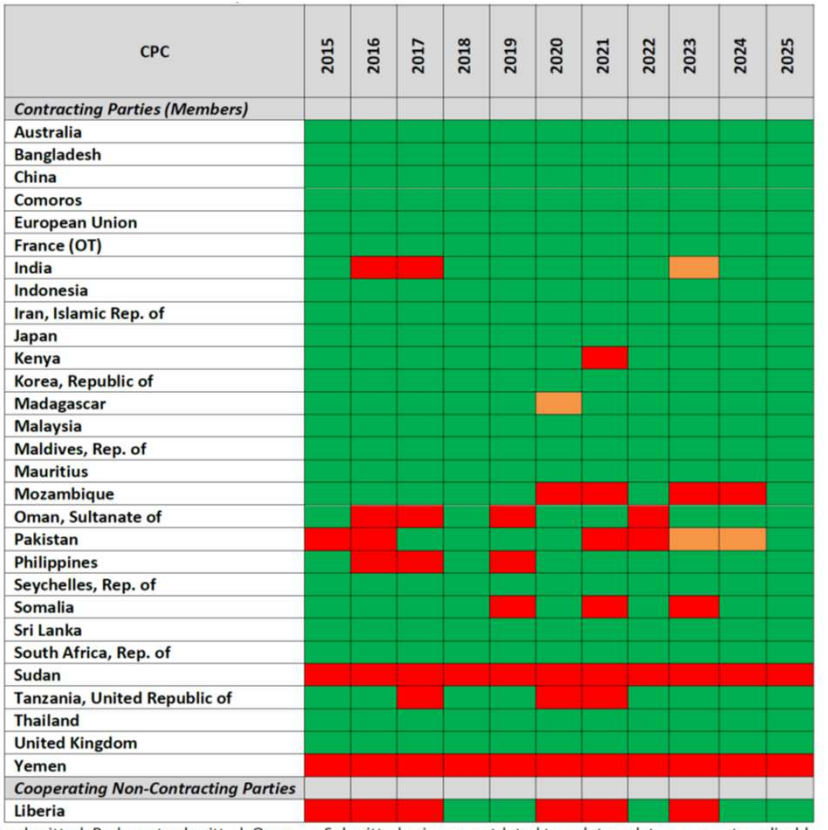
Mobulids

SC28.08 (para. 275) SC **RECOMMENDED** that the Commission note the management advice developed for Mobulids, as provided in the newly developed Executive Summary which encompasses all species commonly interacting with IOTC fisheries for tuna and tuna-like species:

Mobulids – Appendix 34

RECOMMENDATIONS FOR COMMISSSION'S CONSIDERATION : NR

The SC **RECOMMENDED** that the Compliance Committee and Commission note the lack of compliance by 2 Contracting Parties (Members) that did not submit a National Report to the Scientific Committee in 2025, **NOTING** that the Commission agreed that the submission of the annual reports to the Scientific Committee is mandatory**.**



Green = submitted. Red = not submitted. Orange = Submitted using an outdated template or late n.a. = not applicable (not a CPC in that year). **Note**: the deadline for submission was 16 November 2025.

RECOMMENDATIONS FOR COMMISSSION'S CONSIDERATION : WPB

SC28.11 (para. 98) The SC **NOTED** that, for several years, joint analyses combining catch and effort data from major longline fleets have been proposed to improve the CPUE index for billfish species, and that the WPEB had previously recommended investigating methods to compare CPUE indices across fleets and to develop joint CPUE indices for bycatch species. The SC also **NOTED** that these joint analyses could harmonize standardization methods, reconcile conflicts between indices developed from different fleets, and potentially produce more robust indices with broader spatial and temporal coverage. The SC further **NOTED** that it is at the discretion of CPCs to determine the feasibility of such collaboration, considering data confidentiality agreements and other logistical arrangements. The SC **AGREED** on the importance of establishing a process to discuss how to move forward. **NOTING** that joint CPUE analysis arrangements already exist for the standardization of tropical and temperate tuna, the SC **RECOMMENDED** that the Commission urge CPCs to explore ways to extend joint analyses to non-targeted species, such as marlins.

SC28.12 (para. 112) The SC **RECOMMENDED** that the Commission to give consideration to how best to financially and logistically support an experimental fishing trial with gillnets to be conducted by CPCs which would:

- Aim to test different setting depths and times of setting/soaking (e.g. day/night), on catch rates and mortality of interacting species
- Collect data on all interacting species including billfish bycatch, target tuna and vulnerable species (e.g. cetaceans, turtles), in order to provide the Commission a quantified understanding of likely effects and possible trade-offs of various subsurface setting options, on each species
- Prioritise accurate species identification.

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ASSESSMENT SCHEDULE IN 2026-2030: TROPICAL TUNAS

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Working Party on Tropical Tunas					
Species	**2026**	**2027**	**2028**	**2029**	**2030**
Bigeye tuna	Indicators	**Data Prep for MP**	Data preparatory meeting **Full assessment**	Indicators	**Data Prep for MP**
Skipjack tuna	Data preparatory meeting **Full assessment**	Indicators	**Data Prep for MP**	Data preparatory meeting **Full assessment**	Indicators
Yellowfin tuna	Indicators	Data preparatory meeting **Full assessment**	Indicators	Indicators	Data preparatory meeting **Full assessment**

ASSESSMENT SCHEDULE IN 2026-2030: WPB AND WPTmT

Working Party on Billfish					
Species	**2026**	**2027**	**2028**	**2029**	**2030**
Black marlin		Full assessment			Full assessment
Blue marlin			Full assessment		
Striped marlin		Full assessment			Full assessment
Swordfish	Full assessment	Run MP		Full assessment	Run MP
Indo-Pacific sailfish			Full assessment		

Working Party on Temperate Tunas					
Species	**2026**	**2027**	**2028**	**2029**	**2030**
Albacore	Stock assessment meeting (3days) (July)	–	A combined data and assessment meeting (5 days July)		–

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ASSESSMENT SCHEDULE IN 2026-2030: NERITIC TUNAS

iotc ctoi

Working Party on Neritic Tunas					
Species	**2026***	**2027***	**2028**	**2029***	**2030**
Bullet tuna	Data preparation	**Assessment**	Data preparation	Data preparation	**Assessment**
Frigate tuna	Data preparation	**Assessment**	Data preparation	Data preparation	**Assessment**
Indo-Pacific king mackerel	Data preparation	**Assessment**	Data preparation	Data preparation	**Assessment**
Kawakawa	**Assessment**	Data preparation	Data preparation	**Assessment**	Data preparation
Longtail tuna	**Assessment**	Data preparation	Data preparation	**Assessment**	Data preparation
Narrow-barred Spanish mackerel	**Assessment**	Data preparation	Data preparation	**Assessment**	Data preparation

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ASSESSMENT SCHEDULE IN 2026-2030: WPEB

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Working Party on Ecosystems and Bycatch					
Species	**2026**	**2027**	**2028**	**2029**	**2030**
	Data preparatory meeting	-	-	Data preparatory meeting	Data preparatory meeting
Blue shark	-	–	–	–	Full assessment
Oceanic whitetip shark	Indicator analysis*	-	–		Indicator analysis*
Scalloped hammerhead shark	Indicator analysis*	–	–	–	–
Shortfin mako shark	-			Full assessment	
Silky shark	Indicator analysis*	-	Indicator analysis*	-	–
Bigeye thresher shark	-	Indicator analysis*	-	–	–
Pelagic thresher shark	-	Indicator analysis*	-	–	–
Porbeagle shark	-	Indicator analysis*		–	–
Mobulid Rays	-	Interactions/ Indicators	-	Interactions/ Indicators	–
Marine turtles	-	–	Indicators	–	Indicators
Seabirds		Review of mitigation	–	Development of draft workplan	
Marine Mammals	-	–	–	Review of mitigation measures Review of handling guidelines	
Ecosystem Approach to Fisheries Management (EAFM)	Pilot ecosystem fisheries overviews for selected				
Series of multi-taxa bycatch mitigation workshops	Focus: tbd	Focus: tbd	Focus: tbd	Focus: gillnets	Focus: tbd

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SCHEDULE OF MEETINGS IN 2026

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Working Group on FADs (WGFAD)	8th	8-9 June (2d)	Virtual
Working Party on Tropical Tunas (Data Preparatory meeting) (WPTT-DP)	28th	10-12 June (3d)	Virtual
Working Party on Neritic Tunas (WPNT)	16th	6-9 July (4d)	TBC
Working Party on Temperate Tunas (WPTmT)	10th	20-22 July	Virtual
Working Party on Billfish (WPB)	24th	9-12 September (4d) (with WPEB)	Reunion
Working Party on Ecosystems and Bycatch (WPEB)	22nd	14-18 September (5d) (with WPB)	Reunion
Working Party on Tropical Tunas (Assessment meeting) (WPTT-AS)	28th	20 October – 24 October (5d) (with WPM)	Spain
Working Party on Methods (WPM)	17th	26-27 October (2d) (with WPTT)	Spain
Working Party on Data Collection and Statistics (WPDCS)	22nd	24 – 28 November (5d) (with SC)	Spain

WPTT (Data prep. for skipjack CPUE etc.)

WPNT in Seychelles (3 species assessment)

WPTmT (albacore assessment)

WPEB (3 species indicator analyses)

WPB (blue marline, Indo-Pacific sailfish)

WPTT in Tenerife (skipjack assessment)
WPM in Tenerife (blue shark, albacore, yellowfin MSE progress etc.)

SC in San Sebastian

RECOMMENDATIONS FOR COMMISSSION'S CONSIDERATION : GENERAL

Observed issues related to IOTC Working Party meetings

SC28.27 (para. 245) The SC **NOTED** the increasing utilisation of the Meeting Participation Fund (MPF) during working parties, observing that this is a positive development which aligns with the Commission's objectives and the original purpose of the MPF. However, the SC **NOTED** a few cases where applicants did not fully meet the MPF requirements, such as failing to submit a complete paper or submitting papers not sufficiently relevant to the meeting's agenda. The SC **NOTED** that there is currently no precedent requiring a recipient to return funds in such situations. Consequently, to ensure the effective use of MPF resources, the SC **RECOMMENDED** that the Commission and SCAF discuss further actions.

Invited Expert(s) at the WP meetings

SC28.28 (para. 260) Given the importance of external independent review for working party meetings, the SC **RECOMMENDED** the Commission continues to allocate sufficient budget for Invited Experts to be regularly invited to scientific working party meetings. The SC **NOTED** that there are generally funds to support 3 or 4 Invited Experts to attend IOTC's working parties.

NEW CHAIR AND VICE-CHAIR OF WPTT

Chair: Dr. Toshihide Kitakado (Japan)
Vice-Chair: Dr. Fayakun Satria (Indonesia)

⇒ New Chair: Dr Sylvain Bonhommeau (EU,France)
1st Vice-Chair: Dr Jiangfeng Zhu (China)
2nd Vice-Chair: Dr Charlene da Silva

The SC **NOTED** that, according to IOTC tradition, the Vice Chair typically assumes the role of Chair. However, this process has not always worked well for the SC, as several past Vice Chairs were unable to take on the Chair position due to personal reasons. To address this, the SC proposed appointing an additional Vice Chair to increase the SC's capacity and improve the likelihood of a smooth transition. The SC **AGREED** that having an extra Vice Chair would also enhance the diversity of the chairs and provide better representation for both coastal states and DWFNs.

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LIST OF SC-CHAIR AND VICE-CHAIRS

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Group	Chair/Vice-Chair	Chair	CPC/Affiliation	1st Term commencement date	Term expiration date (End date is until replacement is elected)	Comments
SC	Chair	Dr Sylvain Bonhommeau	EU,France	6-Dec-2025	End of SC in 2027	1st term
	1st Vice-Chair	Dr Jiangfeng Zhu	China	6-Dec-2025	End of SC in 2027	1st term
	2nd Vice-Chair	Dr Charlene da Silva	South Africa	6-Dec-2025	End of SC in 2027	1st term
WPB	Chair	Dr Jie Cao	China	08-Sep-23	End of WPB in 2027	2nd term
	Vice-Chair	Dr Sylvain Bonhommeau	EU,France	08-Sep-23	End of WPB in 2027	2nd term
WPTmT	Chair	Dr Toshihide Kitakado	Japan	29-Jul-22	End of WPTmT in 2028	1st term
	Vice-Chair	Dr Jiangfeng Zhu	China	29-Jul-22	End of WPTmT in 2028	1st term
WPTT	Chair	Dr David Kaplan	EU, France	26-Oct-25	End of WPTT in 2027	1st term
	Vice-Chair	Mr Mohamed Shimal	Maldives	26-Oct-25	End of WPTT in 2027	1st term
WPEB	Chair	Dr Charlene da Silva	South Africa	14-Sept-25	End of WPEB in 2027	1st term
	1st Vice-Chair	Dr Philippe Sabarros	EU,France	14-Sept-25	End of WPEB in 2027	1st term
	2nd Vice-Chair	Dr Yanan Li	China	14-Sept-25	End of WPEB in 2027	1st term
WPNT	Chair	Dr Farhad Kaymaram	I.R. Iran	7-Jul-23	End of WPNT in 2027	2nd term
	Vice-Chair	Mr Bram Setyadji	Indonesia	7-Jul-23	End of WPNT in 2027	2nd term
WPDCS	Chair	Mr Nuwan Gunawardane	Sri Lanka	30-Nov-25	End of WPDCS in 2027	1st term
	Vice-Chair	Dr Yang Wang	China	30-Nov-25	End of WPDCS in 2027	1st term
WPM	Chair	Dr Ann Preece	Australia	29-Oct-25	End of WPM in 2027	1st term
	Vice-Chair	Dr Giancarlo Correa	EU,Spain	29-Oct-25	End of WPM in 2027	1st term
WPSE	Chair	Dr Umi Muawanah	Indonesian	25-Oct-24	End of WPSE in 2026	1st term
	Vice-Chair	Ms Sheriffa Morel	Seychelles	25-Oct-24	End of WPSE in 2026	1st term
WGFAD	Chair	Dr Gorka Merino	EU,Spain	06-Oct-21	End of WGFAD in 2027	Ext2nd term
WGEMS	Chair	Dr Don Bromhead	Australia	6-May-25	End of WGEMS in 2027	1st term
	Vice-Chair	Dr Hilario Murua	ISSF	6-May-25	End of WGEMS in 2027	1st term

RECOMMENDATIONS FOR COMMISSSION'S CONSIDERATION : GENERAL

Chairpersons and Vice-Chairpersons of the SC and its subsidiary bodies

SC28.30 (para. 266) The SC **RECOMMENDED** that the Commission note and endorse the Chairpersons and Vice-Chairpersons for the SC and its subsidiary bodies for the coming years, as provided in Appendix 7.

REVIEW OF THE DRAFT, AND ADOPTION OF THE REPORT OF THE 28TH SESSION OF THE SCIENTIFIC COMMITTEE

SC28.33 (para. 303) The SC **RECOMMENDED** that the Commission consider the consolidated set of recommendations arising from SC25, provided at Appendix 40.

ACKNOWLEDGEMENTS

- All the participants of WPs and SC for dedicated and productive discussion
- CPCs that hosted the WPs and SC (China)
- Chairs, Vice-chairs of WPs and WGs
- IOTC secretariat team

THANK YOU SO MUCH FOR KIND ATTENTION