By-Product assessment report

BP074

Marine Biotechnology Products Ltd – Riche Terre

Document TEM-003 (prev. FISH-1) - Version 3.1

Issued April 2025 – Effective April 2025

Report code	BP074	Date of issue	April 2026

1. Application details		
Applicant	Marine Biotechnology Products Ltd – Riche Terre	
Applicant country	Mauritius	
2. Certification Body details		
Name of Certification Body (CB)	LRQA	
Contact information for CB	fisheries-ca@lrqa.com	
Assessor name	Blanca Gonzalez	
CB internal peer reviewer name	Ayana Sabu	
Internal peer review evaluation	Agree with evaluation	
Number of Assessment days	1.5	
Comments on the assessment	The byproduct species listed in this report are not considered ETP species under the Marin Trust definition, thereby fulfilling this requirement for the assessment. All of them are caught by flagged vessels from different countries, including Tanzania, the Maldives, and Taiwan, which are considered high risk; thus, all species and stocks require a Step 3 assessment. Additional information was requested from the applicant, and the provided data included the fishing areas, which were necessary for the Category C assessment. All the fisheries passed the Category C assessment, and traceability information allowed these fisheries to be downgraded to medium risk, approving all these byproducts, but they should be sourced with caution.	
3. Approval validity	Valid from 04/2026	Valid until 04/2027
4. Assessment cycle	Re-Approval	

5. By-product assessment outcomes			
By-product species name *Common and Latin names*	**Flag country(ies)**	**Fishing Areas** *Only applicable to Step 3 assessed species*	**MarinTrust approval status**
Albacore tuna - *Thunnus alalunga*	Indonesia, Mauritius, Seychelles, France, Spain, South Korea, Oman, Italy, Tanzania	FAO 71 - Western Central Pacific FAO 51 - Western Indian Ocean FAO 57 - Eastern Indian Ocean	Approved source with caution
Yellowfin tuna - *Thunnus albacares*	Indonesia, Mauritius, Seychelles, France, Spain, South Korea, Oman, Taiwan	FAO 71 - Western Central Pacific FAO 51 - Western Indian Ocean FAO 57 - Eastern Indian Ocean	Approved source with caution
Bigeye tuna - *Thunnus obesus*	Indonesia, Mauritius, Seychelles, France, Spain, South Korea, Oman, Italy, Taiwan	FAO 71 - Western Central Pacific FAO 57 - Eastern Indian Ocean	Approved source with caution
Skipjack tuna - *Katsuwonus pelamis*	Indonesia, Mauritius, Seychelles, France, Spain, South Korea, Italy, Oman, Tanzania, Maldives, Kenya	FAO 71 - Western Central Pacific FAO 51 - Western Indian Ocean FAO 57 - Eastern Indian Ocean	Approved source with caution

Guidance for on-site auditor

For the audit, the auditor will check how the facility manages by-products deemed medium risk. Any by-products downrated from high to medium risk will require additional due diligence checks.

It is important that facilities check all raw materials from and verify their suppliers especially if there is a perceived risk of sourcing from known or suspected IUU fishing activity. This requires checking supplier records or procedures in place to understand how the supplier can ensure there is no IUU in the raw material they provide. For raw materials risk rated medium, additional or

more frequent checks may be required until the facility is certain that the raw materials are not from IUU fishing activity.

The audit requirements are covered in clause 2.11.3 of the MarinTrust Global Standard for Responsible Supply of Marine Ingredients (the MarinTrust Standard) and associated interpretation guidance.

Approved by-products

- No further checks are required beyond those included in the MarinTrust Standard.

Additional checks of Approved Source with Caution by-products

- Review supplier records or procedures in place.

Additional checks of by-products Approved Source with Caution via Step 3 assessment

- In addition to checks for medium risk Approved Source with Caution by-products, by-products that have had risk downgraded from high to medium at Step 3 (use **Appendix 1** to identify these by-product species), confirm that the relevant traceability information continues to be collected for this by-product. During the audit, a traceability check on any by-products downgraded from high to medium risk shall be included as part of the required traceability checks (Section 4).

Guidance for the applicant/certificate holder

The applicant/certificate holder is responsible for ensuring the relevant actions are taken to comply with the MarinTrust Standard.

The certificate holder is responsible for communicating any changes to the by-products sourced by submitting a scope extension request through the MarinTrust online Application Portal.

Appendix 1 – assessment outcomes

Step 2 Assessment Outcomes

By-product species name *Common and Latin names*	**Flag country(ies)**	**IUCN Red List** *Select IUCN red list category from dropdown*	**CITES Appendices** *Select CITES appendix status from dropdown*	**Step 2 risk status** *Low risk/ Medium risk/ High risk*	**Step 3 required** *Yes / No*
Albacore tuna - *Thunnus alalunga*	Indonesia, Mauritius, Seychelles, France, Spain, South Korea, Oman, Italy, Tanzania, Oman	Least concern	Not listed	High risk	Yes
Yellowfin tuna - *Thunnus albacares*	Indonesia, Mauritius, Seychelles, France, Spain, South Korea, Oman, Taiwan	Least concern	Not listed	High risk	Yes

Bigeye tuna - *Thunnus obesus*	Indonesia, Mauritius, Seychelles, France, Spain, South Korea, Oman, Italy, Taiwan	Vulnerable	Not listed	High risk	Yes
Skipjack tuna - *Katsuwonus pelamis*	Indonesia, Mauritius, Seychelles, France, Spain, South Korea, Italy, Oman, Tanzania, Maldives, Kenya	Least Concern	Not listed	High risk	Yes

Step 3 Assessment Outcomes

By-product species name *Common and Latin names*	Flag country(ies)	Fishing Area	Stock name *(If applicable e.g. Eastern Pacific stock)*	Category C Assessment Outcome *Pass/Fail*	Traceability information *Path 1 – Yes OR* *Path 2 – Yes/No OR* *MT Approved Whole Fish*	Step 3 Risk Outcome *Risk downgraded to Medium Risk/ Remains High Risk*
Albacore tuna - *Thunnus alalunga*	Indonesia, Mauritius, Seychelles, France, Spain, South Korea, Oman, Italy, Tanzania, Oman	FAO 71 - Western Central Pacific FAO 51 - Western Indian Ocean FAO 57 - Eastern Indian Ocean	South Pacific and Indian Ocean	Pass	Path 2 - Yes	Risk downgraded to Medium Risk
Yellowfin tuna - *Thunnus albacares*	Indonesia, Mauritius, Seychelles, France, Spain, South Korea, Oman, Taiwan	FAO 71 - Western Central Pacific FAO 51 - Western Indian Ocean FAO 57 - Eastern Indian Ocean	Wester Central Pacific and Indian Ocean	Pass	Path 2 - Yes	Risk downgraded to Medium Risk

Bigeye tuna - *Thunnus obesus*	Indonesia, Mauritius, Seychelles, France, Spain, South Korea, Oman, Italy, Taiwan	FAO 71 - Western Central Pacific FAO 57 - Eastern Indian Ocean	Wester Central Pacific and Indian Ocean	Pass	Path 2 – Yes	Risk downgraded to Medium Risk
Skipjack tuna - *Katsuwonus pelamis*	Indonesia, Mauritius, Seychelles, France, Spain, South Korea, Italy, Oman, Tanzania, Maldives, Kenya	FAO 71 - Western Central Pacific FAO 51 - Western Indian Ocean FAO 57 - Eastern Indian Ocean	Wester Central Pacific and Indian Ocean	Pass	Path 2 - Yes	Risk downgraded to Medium Risk
Comments on Step 3 Assessment: *N/A*						

Appendix 2 – detailed assessment outcomes

(step 2 and step 3 if applicable)

Step 2 outcomes

Flag state	Risk rating	Flag score	Port score	General score	Flag State is contracting party or cooperating non-contracting party to all relevant RFMOs	'Carded' under EU Carding system	Flag state party to PSMA	Flag state mandatory vessel tracking for commercial seagoing fleet	WGI Governance rank
Mauritius	Medium	2.13	2.72	1.97	1	1	1	1	84.43%
Indonesia	Medium	3.33	2.56	2.47	1	1	1	1	59.43%
Seychelles	Medium	1.79	2.39	1.57	1	1	1	1	62.26%
France	Medium	3.17	2.39	1.67	1	1	1	1	85.38%
Spain	Medium	3.21	3.39	2.03	1	1	1	1	75.94%
Korea (Rep. South)	Medium	3.67	3.11	1.97	1	1	1	1	83.96%
Italy	Medium	2.54	2.17	1.73	1	1	1	1	68.87%
Oman	Medium	1.92	1.6	2.03	1	1	1	1	65.57%

Tanzania	High	1.83	2.78	2.3	2	1	5	1	30.19%
Maldives	High	2.25	1.67	2.13	1	1	1	1	26.89%
Kenya	Medium	1.63	1.83	2.63	1	1	1	1	39.15%
Taiwan	High	4.17	3.06	2.27	1	1	5	1	90.57%

Step 3 outcomes

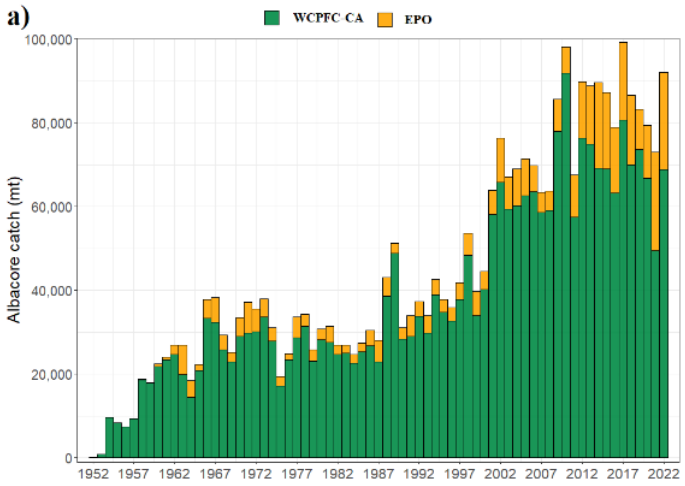
Category C assessment

Species name		Albacore tuna - *Thunnus alalunga*	
Fishing area and stock		FAO 71 – Southern Central Pacific South Pacific stock	
C1	**Category C Stock Status - Minimum Requirements**		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	Pass
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	Pass
		Clause outcome:	Pass

C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process OR are considered by scientific authorities to be negligible.

The clause is met considering that:

The South Pacific Commission (SPC), through the Western and Central Pacific Fisheries Commission (WCPFC), assesses the albacore tuna stock in the South Pacific, including both the WCPFC and the Inter-American Tropical Tuna Commission (IATTC). The last stock assessment occurred in 2024, using a MULTIFAN-CL model. Data include catch, effort, length & weight-frequency data for the fisheries included in the analysis, and tag-recapture data. Conditional age-at-length data are also used directly as data in the assessment model; thus, removals of the species are included in the stock assessment process (WCPFC 2024, WCPFC 2025).

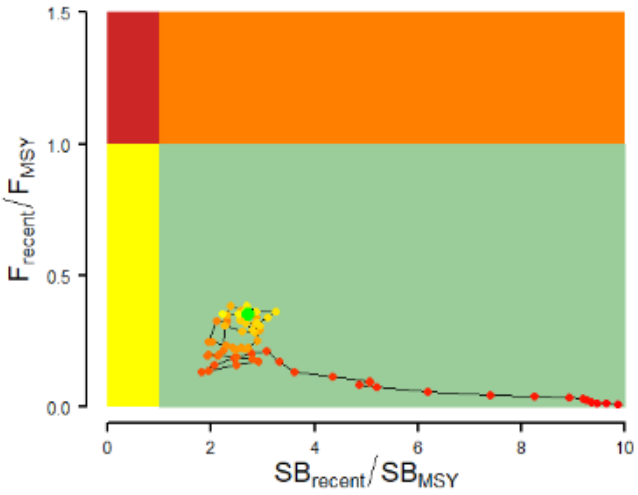


Annual catches of albacore tuna by the convention area covered by the stock assessment (WCPFC 2024).

C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

The clause is met considering that:

The 2024 South Pacific albacore tuna stock assessment indicates that current spawning biomass relative to unfished levels ($SB_{recent}/SB_{F=0}$) was 0.48 for the median, while F_{recent}/F_{MSY} showed a zero probability of exceeding 1 with estimates of 0.18 (median), which indicates that the stock is not overfished nor experiencing overfishing. Additionally, the ratio of $SB_{recent}/SB_{F=0}$ to the interim target reference point (iTRP) was approximately 1, with a median value of 0.952 and a narrow uncertainty range of 0.924–0.986, indicating the stock is close to the target biomass level (WCPFC 2024, WCPFC 2025).



Kobe plot summarising the results of the dynamic MSY analysis; colours go from red to green over time (WCPFC 2024).

References

WCPFC. 2024. Stock assessment of south Pacific albacore: 2024. https://meetings.wcpfc.int/node/23119

WCPFC. 2025. Western and Central Pacific Fisheries Commission. The western and central Pacific tuna fishery: 2024 overview and status of stocks. https://meetings.wcpfc.int/node/28825

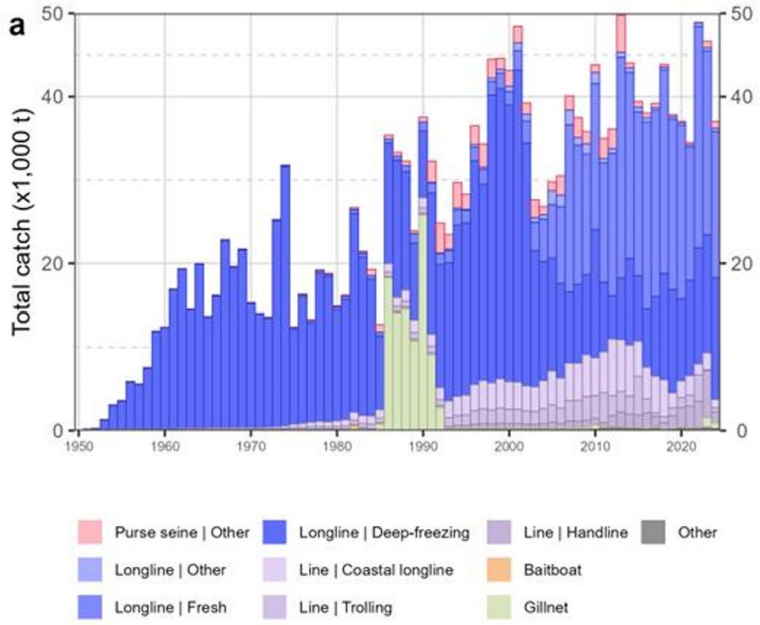
Species name	Albacore tuna - *Thunnus alalunga*
Fishing area and stock	FAO 51 – Western Indian Ocean FAO 57 – Eastern Indian Ocean

		Indian Ocean stock	
C1	**Category C Stock Status - Minimum Requirements**		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	Pass
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	Pass
		Clause outcome:	Pass

C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process OR are considered by scientific authorities to be negligible.

The clause is met considering that:

The most recent assessment was conducted in 2025 by the Indian Ocean Tuna Commission (IOTC) using a Stock Synthesis III (SS3) model, which uses four types of data: catch, size frequency, tagging, and CPUE indices (IOTC 2025); thus, the stock assessment process includes removals of the species.

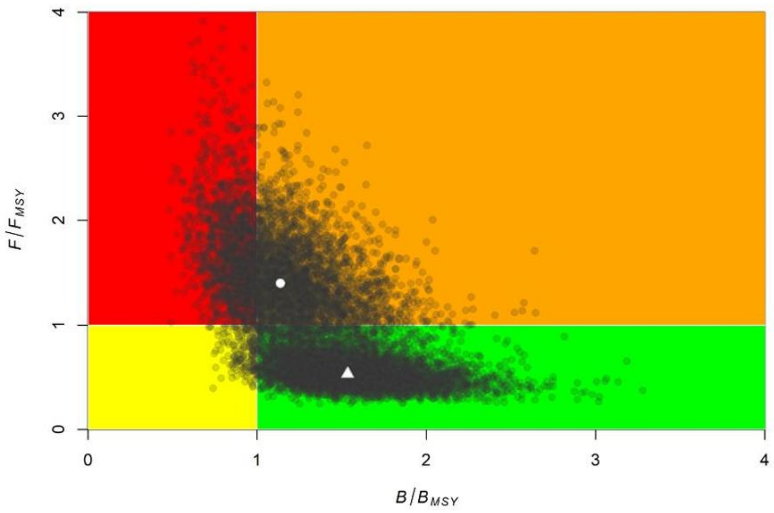


Albacore tuna annual time series of cumulative nominal catches (metric tonnes; t) by fishery in the Indian Ocean from 1950 to 2024 (IOTC 2025).

C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

The clause is met considering that:

The latest stock assessment states that spawning biomass is estimated to be above the SB_{MSY} level (1.33), and therefore above the limit reference point of $0.4*SB_{MSY}$, while the fishing mortality was considered to be below the interim target reference point of F_{MSY}, and therefore below the interim limit reference point of $1.4*F_{MSY}$. These results indicate that the stock is not overfished and is not subject to overfishing (IOTC 2025).



Albacore Indian Ocean stock assessment Kobe plot for the two model options considered plotted on the same figure. Black circles indicate the trajectory of the point estimates for the spawning biomass (SB) ratio and fishing mortality (F) ratio for each year 1950–2023. Target (F_{target} and SB_{target}) and limit (F_{lim} and SB_{lim}) reference points are shown (white triangle is southwest; white circle is northwest) (IOTC 2025).

References

IOTC (2025). Indian Ocean Albacore Tuna Stock Status. Executive summary: albacore (2025). https://iotc.org/sites/default/files/content/Stock_status/2025/English/IOTC-2025-SC28-ES01_ALBE.pdf

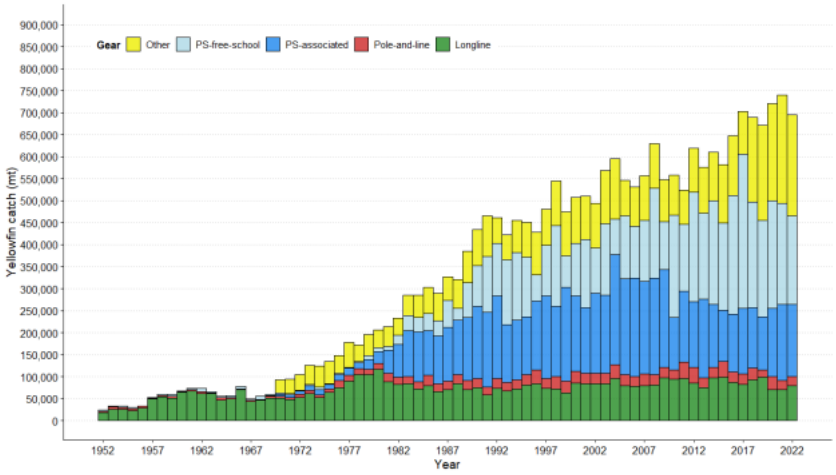
Species name		Yellowfin tuna - *Thunnus albacares*	
Fishing area and stock		FAO 71 - Western Central Pacific Western and Central Pacific stock	
C1	**Category C Stock Status - Minimum Requirements**		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	Pass

	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	Pass
		Clause outcome:	Pass

C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process OR are considered by scientific authorities to be negligible.

The clause is met considering that:

The Western and Central Pacific Fisheries Commission (WCPFC) assesses the yellowfin tuna stock in the Western and Central Pacific Ocean every three years. The last stock assessment occurred in 2023, where a MULTIFAN-CL model was used. Data include catch, effort, length & weight-frequency data for the fisheries included in the analysis, and tag-recapture data. Conditional age-at-length data are also used directly as data in the assessment model; thus, removals of the species are included in the stock assessment process (WCPFC 2023). The total WCPFC yellowfin catch in 2024 (741,473 t) was 3% less than the highest value (763,008 t) recorded in 2021 (WCPFC 2025).

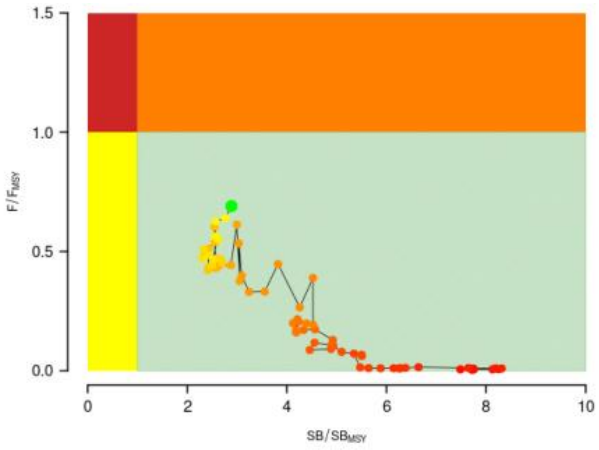


Annual catches of yellowfin tuna by gear in the WCPO area covered by the stock assessment (WCPFC 2023).

C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

The clause is met considering that:

The 2023 WCPO yellowfin tuna stock assessment estimated that the median recent spawning depletion is well above the limit reference point. The reference points calculated from the uncertainty grid results suggest that the median $SB_{recent}/SB_{F=0}$ is 0.47 and F/F_{MSY} is less than one, with a median value of 0.50; thus, the terminal spawning potential is well above both SB_{MSY} and $20\%SB_{F=0}$, and the fishing mortality is well below FMSY indicating that the yellowfin stock in the WCPO is not overfished or undergoing overfishing (WCPFC 2023, WCPFC 2025).



Kobe plot summarising the result for the diagnostic case model over the model period. The green point is the estimated 2021 status; the redder the point, the further back in time (WCPFC 2023).

References

WCPFC. 2023. Western and Central Pacific Fisheries Commission. Stock assessment of yellowfin tuna in the western and central Pacific Ocean: 2023 https://meetings.wcpfc.int/node/19352

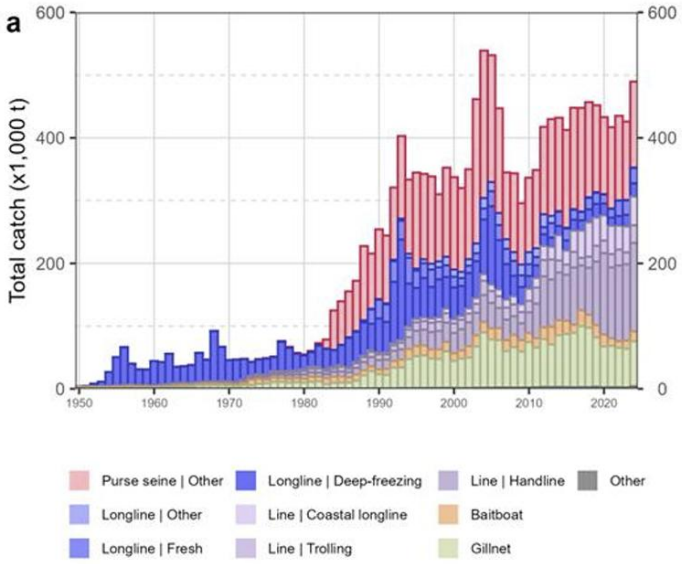
WCPFC. 2025. Western and Central Pacific Fisheries Commission. The western and central Pacific tuna fishery: 2024 overview and status of stocks. https://meetings.wcpfc.int/node/28825

Species name		Yellowfin tuna - *Thunnus albacares*	
Fishing area and stock		FAO 51 – Western Indian Ocean FAO 57 – Eastern Indian Ocean Indian Ocean stock	
C1	**Category C Stock Status - Minimum Requirements**		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	Pass
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	Pass
		Clause outcome:	Pass

C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process OR are considered by scientific authorities to be negligible.

The clause is met considering that:

The most recent assessment was conducted in 2024 by the Indian Ocean Tuna Commission (IOTC) using a Stock Synthesis III (SS3) model, which uses four types of data: catch, size frequency, tagging, and CPUE indices (IOTC 2025); thus, the stock assessment process includes removals of the species.

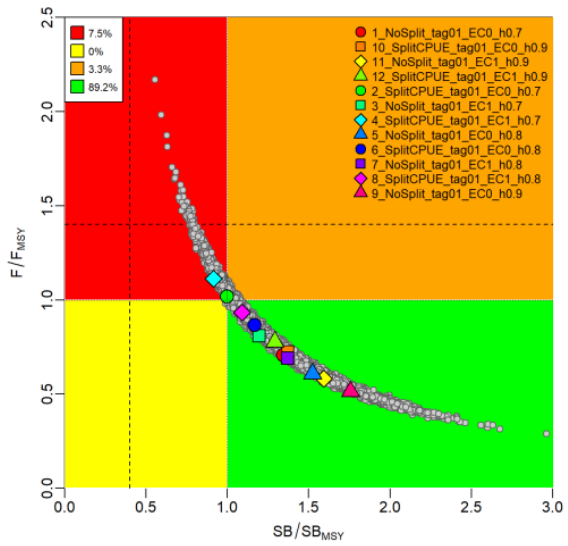


Yellowfin tuna annual time series of cumulative nominal catches (metric tonnes; t) by fishery in the Indian Ocean from 1950 to 2024 (IOTC 2025).

C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

The clause is met considering that:

The latest stock assessment indicates that spawning biomass in 2023 was 32% above the level that supports the maximum sustainable yield (SB_{2023}/SB_{MSY} = 1.32), and current fishing mortality is 25% below F_{MSY} (F2023/FMSY = 0.75). The stock is considered to be not overfished and not subject to overfishing, since the probability of the stock being in the green Kobe quadrant in 2023 is 89% (IOTC 2025).



Yellowfin tuna in the Indian Ocean assessment Kobe plot: current (2023) stock status, relative to SBMSY (x-axis) and FMSY (y-axis) reference points for the final model options. Coloured symbols represent Maximum posterior density (MPD) estimates from individual models Grey dots represent the statistical uncertainty from individual models (20,000 replicates from each). The dashed lines represent limit reference points for IO yellowfin tuna (SB_{lim} = 0.4 SB_{MSY} and F_{lim} = 1.4 F_{MSY})(IOTC 2025).

References

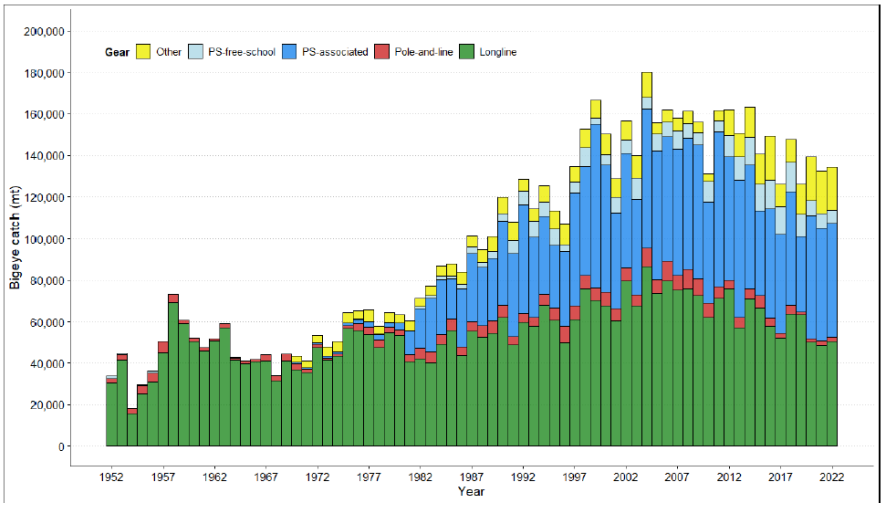
IOTC (2025). Indian Ocean Yellowfin Tuna Stock Status: Executive Summary. https://iotc.org/sites/default/files/content/Stock_status/2025/English/IOTC-2025-SC28-ES04_YFTE.pdf

Species name		Bigeye tuna - *Thunnus obesus*	
Fishing area and stock		FAO 71 - Western Central Pacific Western and Central Pacific stock	
C1	**Category C Stock Status - Minimum Requirements**		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	Pass
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	Pass
		Clause outcome:	Pass

C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process OR are considered by scientific authorities to be negligible.

The clause is met considering that:

The Western and Central Pacific Fisheries Commission (WCPFC) assesses the bigeye tuna stock in the Western and Central Pacific Ocean every three years. The last stock assessment occurred in 2023, where a MULTIFAN-CL model was used. Data consist of catch, effort, length & weight-frequency data for the fisheries defined in the analysis, and tag-recapture data. Conditional age-at-length data are also used directly as data in the assessment model; thus, removals of the species are included in the stock assessment process (WCPFC 2023). The 2024 WCPFC bigeye tuna catch was 151,611 t, which was well below the highest value (195,052 t) recorded in 2004 (WCPFC 2025). Next assessment should be published in 2026.

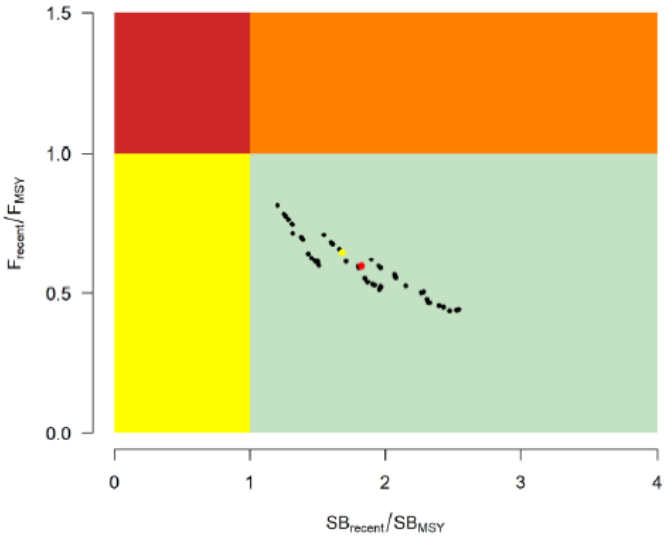


Annual catches of bigeye tuna by gear in the WCPO area covered by the stock assessment (WCPFC 2023).

C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

The clause is met considering that:

The 2023 WCPO bigeye tuna stock assessment estimated that the median recent spawning depletion is well above the limit reference point. The reference points calculated from the uncertainty grid results suggest that the median $SB_{recent}/SB_{F=0}$ is 0.35 and F/F_{MSY} is less than one, with a median value of 0.59; thus, the terminal spawning potential is well above both SB_{MSY} and $20\%SB_{F=0}$, and the fishing mortality is well below F_{MSY} indicating that the bigeye stock in the WCPO is not overfished nor undergoing overfishing (WCPFC 2023, WCPFC 2025).



Kobe plot summarizing the results for each of the models in the structural uncertainty grid. The plots represent estimates of stock status in terms of spawning biomass depletion and fishing mortality. The yellow point is the 2023 diagnostic model and red point is the median (WCPFC 2023).

References

WCPFC. 2023. Western and Central Pacific Fisheries Commission. Stock assessment of bigeye tuna in the western and central Pacific Ocean: 2023 https://meetings.wcpfc.int/node/19353

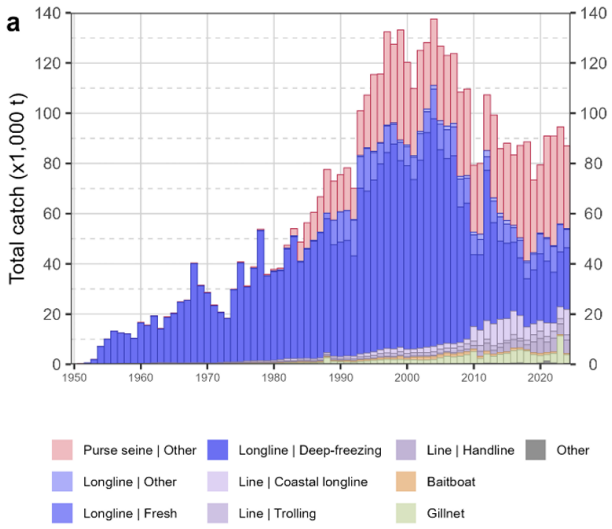
WCPFC. 2025. Western and Central Pacific Fisheries Commission. The western and central Pacific tuna fishery: 2024 overview and status of stocks. https://meetings.wcpfc.int/node/28825

Species name		Bigeye tuna - *Thunnus obesus*	
Fishing area and stock		FAO 57 – Eastern Indian Ocean Indian Ocean stock	
C1	**Category C Stock Status - Minimum Requirements**		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	Pass
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	Pass
		Clause outcome:	Pass

C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process OR are considered by scientific authorities to be negligible.

The clause is met considering that:

The most recent assessment was conducted in 2025 by the Indian Ocean Tuna Commission (IOTC), using a Stock Synthesis (SS3) to provide scientific advice. The reported stock status is based on a grid of 36 model configurations designed to capture the uncertainty on stock recruitment relationship, longline selectivity, natural mortality and catchability dynamics (IOTC 2025).

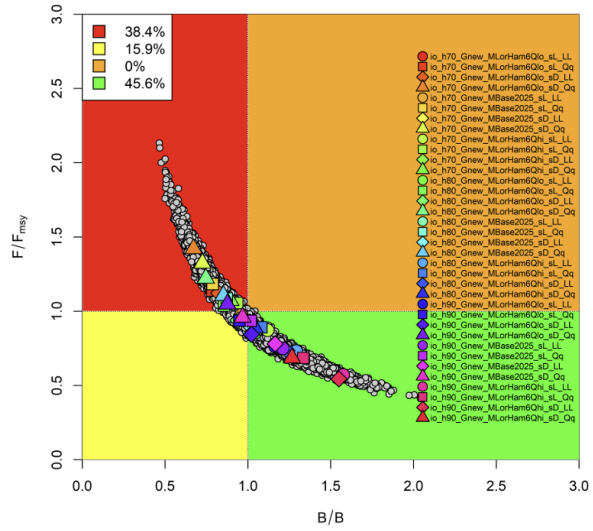


Skipjack tuna annual time series of cumulative nominal catches (metric tonnes; t) by fishery in the Indian Ocean from 1950 to 2024 (IOTC 2025).

C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

The clause is met considering that:

The most recent stock assessment indicates that the bigeye tuna spawning biomass is close to the maximum sustainable yield (SB_{MSY}), with a value of 0.98, with an uncertainty range of 0.71–1.25 SBMSY, indicating that the stock is near the target reference point. Although the stock is formally classified as overfished due to the probability that biomass may be slightly below SB_{MSY}, the estimated biomass remains well above the established limit reference ($SB_{lim} \approx 0.5\ SB_{MSY}$). Therefore, given that the current biomass is close to SBMSY, it can be inferred that the stock is above the limit reference point, indicating a low risk of the stock being in a severely depleted state. On the weight-of-evidence available in 2025, the bigeye tuna stock is determined to be overfished and not subject to overfishing.



Bigeye tuna: SS3 Aggregated Indian Ocean assessment Kobe plot. The coloured points represent stock status estimates from the 36 model options. Coloured symbols represent Maximum Posterior Density (MPD) estimates from individual models which varied in terms of steepness (h), natural mortality (M), selectivity on the LL2+LL3 fleets (sL vs sD), and gear creep applied to the LL CPUE indices (LL vs Qq, where Qq represents 0.5% of effort creep ajustment on the indices) (IOTC 2025).

References

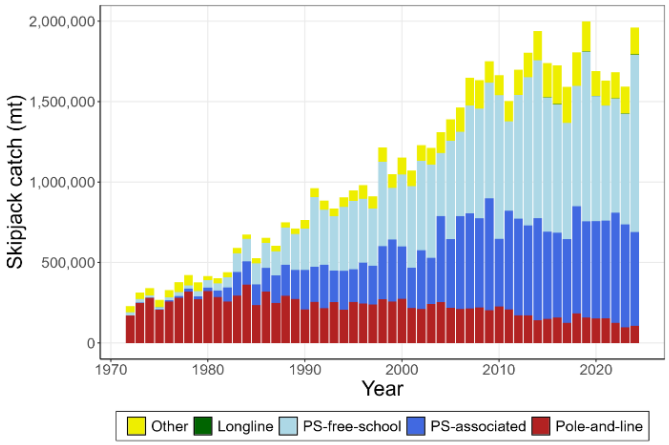
IOTC (2025). Indian Ocean Bigeye Tuna Stock Status: Executive Summary. https://iotc.org/sites/default/files/content/Stock_status/2025/English/IOTC-2025-SC28-ES02_BETE.pdf

Species name		Skipjack tuna - *Katsuwonus pelamis*	
Fishing area and stock		FAO 71 - Western Central Pacific Ocean Western and Central Pacific stock	
C1	**Category C Stock Status - Minimum Requirements**		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	Pass
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	Pass
		Clause outcome:	Pass

C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process OR are considered by scientific authorities to be negligible.

The clause is met considering that:

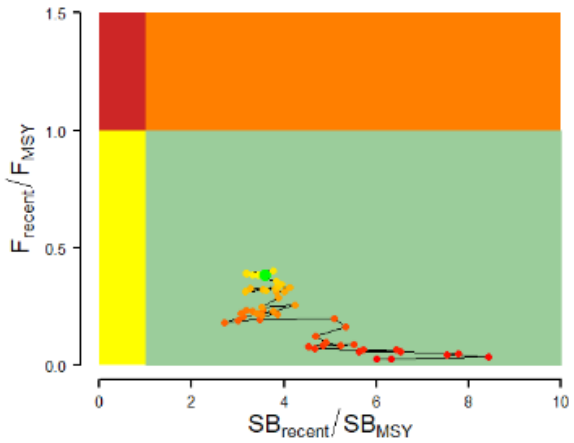
The Western and Central Pacific Fisheries Commission (WCPFC) assesses the skipjack tuna stock in the Western and Central Pacific Ocean every three years. The last stock assessment was conducted in 2025 using a MULTIFAN-CL model. Data consist of catch, effort, length & weight-frequency data for the fisheries defined in the analysis, and tag-recapture data (WCPFC 2025).



Annual catches of skipjack tuna by gear in the WCPO area covered by the stock assessment. (WCPFC 2025).

C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

The 2025 WCPO skipjack tuna stock assessment indicates that spawning potential has remained stable as have fishing mortality rates, with a spawning biomass is about 51% of unfished levels ($SB_{recent}/SB_{F=0}$ =0.51), a fishing pressure below F_{MSY} (F_{recent}/F_{MSY} =0.35), and spawning biomass is far above SB_{MSY} ($SB_{recent}/SB_{F=0}$ =3.90), with no model suggesting depletion below the 20% limit reference point. Therefore, the stock is not considered to be overfished nor undergoing overfishing (WCPFC 2025).



Kobe plot summarising the results for the dynamic MSY analysis, colours go from red to green over time (WCPFC 2025).

References

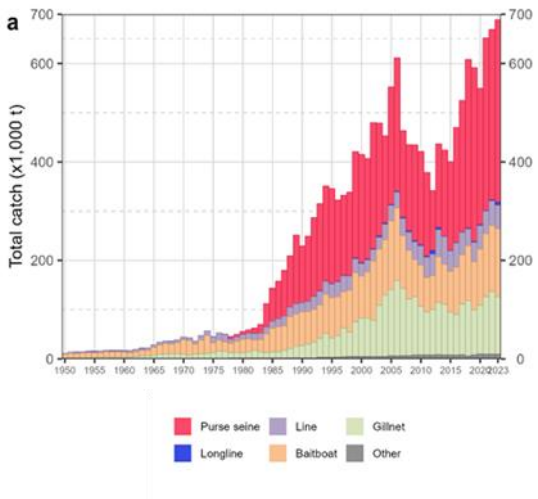
WCPFC. 2025. Stock assessment of skipjack tuna in the western and central Pacific Ocean: 2025. https://meetings.wcpfc.int/node/26679

Species name		Skipjack tuna - *Katsuwonus pelamis*	
Fishing area and stock		FAO 51 - Western Indian Ocean FAO 57 - Eastern Indian Ocean Indian Ocean Stock	
C1	**Category C Stock Status - Minimum Requirements**		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	Pass
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	Pass
		Clause outcome:	Pass

C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process OR are considered by scientific authorities to be negligible.

The clause is met considering that:

The most recent assessment was conducted in 2023 by the Indian Ocean Tuna Commission (IOTC) using a Stock Synthesis model, which uses four types of data: catch, size frequency, tagging, and CPUE indices (IOTC 2024); thus, the stock assessment process includes removals of the species.



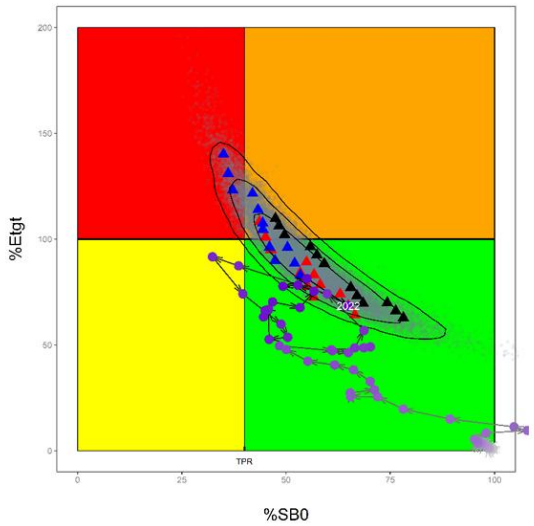
Skipjack tuna annual time series of cumulative nominal catches (metric tonnes; t) by fishery in the Indian Ocean from 1950 to 2023 (IOTC 2024).

C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

The clause is met considering that:

The latest stock assessment indicates that the skipjack tuna stock's current spawning biomass is estimated at 53% of unexploited levels, well above the adopted target reference point of 40% SB_o, and the current exploitation rate is below the target rate with a 70% probability. Spawning biomass remains above SB_{MSY}, and fishing mortality is below F_{MSY} with a 98.4% probability. Historically, biomass has remained well above the reference limit of 20% SB_o. Therefore, the stock is considered neither overfished nor subject to overfishing (IOTC 2024).

No new stock assessment was conducted for skipjack tuna in 2025; therefore, the current management advice is based on the 2023 assessment performed using Stock Synthesis, which incorporated data through 2022. Skipjack tuna is currently managed under a Total Allowable Catch (TAC) of 628,606 t for the 2024–2026 period (IOTC 2025).



Skipjack tuna Indian Ocean stock assessment Kobe plot of the 2023 uncertainty grid. Left - current stock status, relative to SB0 and F (x-axis) and F40%B0 (y-axis) reference points for the final model grid.. TPR indicates 40% B0; Triangles represent MPD estimates from individual models (black, models based on PL index; red, models based on PSLS index; blue, models based on both PSLS and ABBI index). Grey dots represent uncertainty from individual models. The arrowed line represents the historical stock trajectory for model PSLS. Contours represent 50, 80, and 90% confidence regions (IOTC 2024).

References

IOTC. 2024. Indian Ocean Tuna Commission. Indian Ocean Skipjack Tuna Stock Status: Executive Summary. https://iotc.org/sites/default/files/content/Stock_status/2024/English/IOTC-2024-SC27-ES03_SKJE.pdf

IOTC. 2025. Indian Ocean Tuna Commission. Appendix 3. Executive summary: skipjack tuna (2025). https://iotc.org/sites/default/files/content/Stock_status/2025/English/IOTC-2025-SC28-ES03_SKJE.pdf

Traceability information

Information provided for Step 3 Path 1 or Path 2

Species name	Albacore tuna - *Thunnus alalunga* South Pacific and Indian Ocean			
Path 1	Yes ☐ No ☒			
Confirm all KDEs are provided	Yes ☐ No ☐			
Path 2	Yes ☒ No ☐ *If yes for Path 2, complete the next section*			
Path 2 outcome	**Flag country**	**Coastal score**	**Port score**	**Risk outcome**

Countries may be different for Coastal State and Port State.	Mauritius	2.94	2.72	Downgraded to medium risk

Species name	Yellowfin tuna - *Thunnus albacares* Wester Central Pacific and Indian Ocean			
Path 1	Yes ☐ No ☒			
Confirm all KDEs are provided	Yes ☐ No ☐			
Path 2	Yes ☒ No ☐ *If yes for Path 2, complete the next section*			
Path 2 outcome *Countries may be different for Coastal State and Port State.*	**Flag country**	**Coastal score**	**Port score**	**Risk outcome**
	Mauritius	2.94	2.72	Downgraded to medium risk

Species name	Bigeye tuna - *Thunnus obesus* Wester Central Pacific and Indian Ocean			
Path 1	Yes ☐ No ☒			
Confirm all KDEs are provided	Yes ☐ No ☐			
Path 2	Yes ☒ No ☐ *If yes for Path 2, complete the next section*			
Path 2 outcome *Countries may be different for Coastal State and Port State.*	**Flag country**	**Coastal score**	**Port score**	**Risk outcome**
	Mauritius	2.94	2.72	Downgraded to medium risk

Species name	Skipjack tuna - *Katsuwonus pelamis* Wester Central Pacific and Indian Ocean			
Path 1	Yes ☐ No ☒			
Confirm all KDEs are provided	Yes ☐ No ☐			
Path 2	Yes ☒ No ☐ *If yes for Path 2, complete the next section*			
Path 2 outcome *Countries may be different for Coastal State and Port State.*	**Flag country**	**Coastal score**	**Port score**	**Risk outcome**
	Mauritius	2.94	2.72	Downgraded to medium risk