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Review of Conservation and Management Measure to mitigate the impact of fishing for highly migratory fish stocks on seabirds (CMM 2018-03)

WCPFC21-2024-21 7 November 2024

Submitted by New Zealand

Executive summary

Over 2023 and 2024, New Zealand led a comprehensive participatory process to review CMM 2018-03 Conservation and Management Measure to mitigate the impact of fishing for highly migratory fish stocks on seabirds.

There was strong participation from CCMs in two informal intersessional meetings, and robust discussions at SC20 and TCC. SC20 noted a clear set of scientific findings to underpin improvements to the seabird measure. Review of the best available science found that the populations of seabirds of the Western Central Pacific Ocean are declining, with some species at risk of extinction. This science confirms that minimising bycatch in commercial pelagic longline fisheries is important to secure the future of the seabirds of the WCPO.

TCC considered the technical, practical, and safety aspects of the proposed changes to the seabird CMM. Since TCC New Zealand sought feedback on the proposed CMM and has addressed the feedback from three CCMs in the attached A3 document.

Background

- SC18 recommended a review of CMM 2018-03.
- WCPFC19 agreed that CMM 2018-03 would be reviewed over 2023 and 2024 and evaluated with respect to new studies and the best practice advice on mitigation from the Agreement on the Conservation of Albatross and Petrels (ACAP).¹

¹ See paragraphs 328 and 329 of the Summary Report: <u>WCPFC19 Summary Report - Issued 29 March 2023 | WCPFC Meetings</u>

- SC19 noted New Zealand's proposed purpose and scope of the review of CMM 2018-03 "to ensure that effective mitigation methods are required and applied across the Convention Area where there is bycatch risk to vulnerable seabirds from longline fishing."
- WCPFC20 noted that New Zealand would lead informal intersessional meetings with CCMs to review the latest scientific evidence on seabird bycatch mitigation and discussion of CMM 2018-03 with the aim to provide a draft new measure for submission to the 21st Regular Session of the Commission (WCPFC21), following consideration by the Scientific Committee (SC20) and the Technical Compliance Committee (TCC20).³
- The Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (the Convention) provides the legal framework for improving CMM2018-03. This includes Article 5 'Principles and measures for conservation and management', article 6 'Application of the precautionary approach', and Article 30 'Recognition of the special requirements of developing States'.

The informal intersessional review process

- The participatory review process included the collation of all relevant scientific papers, two
 informal virtual meetings with WCPFC Members and Participating Territories, their industry
 representatives, and WCPFC Observers, and several follow-up bilateral meetings with Members.
- Documents from meetings can be found here: <u>Informal Intersessional Meetings on the Review of</u>
 WCPFC's Seabird Measure Led by New Zealand | WCPFC Meetings
- The meetings thoroughly reviewed the best available scientific evidence on mitigating seabird bycatch in commercial pelagic longline fisheries in the Western and Central Pacific Ocean (WCPO) and compared the current requirements under CMM 2018-03 with best practice advice from the Agreement for the Conservation of Albatross and Petrels (ACAP), and other best available information.
- Key findings and recommendations for the revision of CMM 2018-03 were set out for SC20 in SC20-EB-WP-06, and for TCC20 in WCPFC-TCC20-2024-DP01 and WCPFC-TCC20-2024-DP05 rev1.

SC20 outcomes related to the review of CMM 2018-03

 SC20 noted that at least eight albatross species that breed in New Zealand show significant, longterm, and ongoing population declines which, for some, are most likely caused by bycatch in commercial pelagic longline fisheries.

² See <u>SC19 Outcomes Document (28Nov2023) | WCPFC Meetings</u> and WCPFC-SC19-2023/EB-IP-16, <u>Proposed purpose</u>, <u>scope</u>, <u>and process for the seabird CMM 2018-03 review | WCPFC Meetings</u>

³ Paragraph 88. WCPFC20 Outcomes and Attachments (19Dec2023) - Rev.01 | WCPFC Meetings

- SC20 noted key areas of importance for albatrosses and petrels vulnerable to bycatch in the Southern Hemisphere, including in areas with reduced (25°-30°S) or no bycatch mitigation requirements (20°-25°S).
- SC20 noted substantial spatio-temporal overlap of Antipodean and Gibson's albatross with pelagic longline fishing effort and that overlap probability increases at lower latitudes.
- SC20 noted that studies (SC20-EB-IP-26) suggest that the Antipodean Albatross is at risk of extinction if the current rate of decline continues and is predicted to become extinct around 2070.
- SC20 thanked New Zealand for leading a comprehensive intersessional review of CMM 2018-03.
- SC20 noted the summary of the informal intersessional review process of CMM-2018-03 in SC20-EB-WP-06, highlighting:
 - The relatively high effectiveness of combining tori lines, branch line weighting, and night setting.
 - The high effectiveness of hook-shielding devices as a stand-alone seabird bycatch mitigation option.
 - The effectiveness of underwater bait setters (which set hooks at a predetermined depth) as a stand-alone seabird bycatch mitigation option.
 - The limited evidence for the effectiveness of deep-setting line shooters, blue-dyed bait, and offal discharge management.
 - The effectiveness of branch line weighting may be improved through modification of the current specifications in CMM 2018-03.
- Some CCMs supported, but other CCMs expressed concern about, the suggested recommendations 1-16 in paper SC20-EB-WP-06 for the revision of CMM 2018-03.
- SC20 highlighted the importance of technical, practical, and human safety considerations for the implementation of bycatch mitigation methods. SC20 noted the Commission could make special considerations for fisheries that demonstrate low interaction rates.
- SC20 recommended that TCC20 further consider the suggested recommendations in SC20-EB-WP-06 in terms of technical, practical, and safety aspects and that TCC20 provide advice to the Commission to improve the effectiveness of CMM 2018-03.

TCC20 outcomes related to the review of CMM 2018-034

- TCC20 commended New Zealand's work in leading the review of the seabird mitigation measure (CMM 2018-03) as mandated by WCPFC19 (2022) (para 328-329).
- TCC20 noted that, based on science and ACAP best practice, SC20 had discussed 16 recommendations in SC20-EB-WP06 to improve the mitigation methods to reduce seabird bycatch from the longline fishery.
- TCC20 noted that New Zealand has advised these 16 recommendations had been considered in the preparation of the draft CMM for consideration at WCPFC21.
- TCC20 noted that there would be an opportunity for CCMs to provide written feedback on the draft CMM by 1 November and further discussion of the draft CMM at WCPFC21.

Summary of feedback on the draft CMM text revision post TCC

• Following TCC, the updated proposal was circulated to members and observers for feedback. Comments were received from three members and one observer. New Zealand has detailed the revised CMM A3 document with CCM comments and New Zealand's responses.

Attachments for consideration at WCPFC21

- 1. Updated A3 version of the text including comments from CCMs and NZ's responses
- 2. CMM 2013-06 assessment
- 3. Audit Points Checklist

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⁴ WCPFC-TCC20-2024-outcomes rev1 TCC20 Outcomes Document (1).pdf see paras 40-42.

Proposed changes to the Conservation and Management Measure to mitigate the impact of fishing for highly migratory fish stocks on seabirds (CMM 2018-03)

NZ comment based on the intersessional review Practical, technical, and CCM comments NZ response to CCM

Key to Text column only:

Para Text

Blue text: Proposed changes from NZ, following consideration of outcomes from SC20, and practical, technical, and safety considerations raised at TCC20.

Blue text with yellow highlight: Proposed changes from NZ following feedback from CCMs post-TCC20.

Black text: Text where there is no proposal for change.

NOTE: Paragraph numbers reflect CMM2018-03 and will need to be updated if paragraphs are deleted or removed.

no		process, including additional consideration of SC20	safety considerations raised	(01 Nov 2024)	comments
		outcomes	at TCC20		(06 Nov 2024)
PREAME	BULAR PARAGRAPHS				
	Adopts, in accordance with Article 5(e) and 10 (1)(c) of the Convention on the Conservation and				
	Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean the				
	following measures methods to address seabird bycatch:				
SOUTHE	RN HEMISPHERE				
1	South of 30 25° South	WCPO seabird distribution analyses show that waters south	Short periods of night during	JP does not support these	Both seabird population
	,	of 25°S are a hotspot for 11 species of seabirds studied	Austral summer at high latitudes	changes with the following	status and distributions
	CCMs shall	WCPFC-SC20-EB-WP10, which are vulnerable to bycatch in	may create practical challenges	reasons:	of seabird interactions
	Collis Silan	pelagic longline fisheries and have declining populations	to implementing night setting.		have been factored into
	either require their longline vessels fishing south of 30 25°S, to use either:	trends. Waters around New Zealand, the Tasman Sea, and the		As JP expressed during the	the proposed spatial
	require their longime vessels listing south of 5025 5, to use either.	South Pacific east of New Zealand are of particular	Some CCMs highlighted the	TCC, population status must be	delineations which are
	a) at least two of these three measures methods in combination:	importance.	practical challenges of	considered species by species	based on long-term
	,		implementing three out of	when we consider the	monitoring and tracking
	i). weighted branch lines;	Additional research has highlighted that even though	three. However, others	amendment of the by-catch	data (SC Outcomes DOC
	ii). night setting;	vulnerable seabirds spend most of their time south of 30°S,	highlighted that they are already	mitigation measures.	paragraph 143-144,
	iii). tori lines; or	when they venture further north, i.e., between 30°S25°S or	successfully employing three out		SC20-EB-WP06, SC20-EB
	b) hook-shielding devices; or	25°S-20°S, the bycatch risk increases. This is because	of three. It was also noted that	To extend the areas subject to	WP10, SC20-EB-IP26,
	c) an underwater bait setting device ¹ ,	increased fishing effort north of 30°S means a greater	simplifying the spatial	this paragraph, not only sea	SC20-EB-IP30).
		probability of birds overlapping with pelagic longline fishing	application of the mitigation	birds' distribution but also	
	[unless longline fishing vessels are fishing south of 40°S in the time between 1 Nov and 31 Jan,	effort (see WCPFC-SC20-EB-WP10 for Antipodean and	methods would facilitate	actual interaction between	NZ recognises the
	during which setting across nautical dusk could be permitted due to the short nighttime period.]	Gibson's Albatross analyses and WCPFC-SC20-EB-IP30 for Black Petrel analyses). The bycatch risk is also higher in this	assessment of compliance.	fishing vessels and seabirds should be considered.	practical challenges of night setting at high
		area because CMM 2018-03 requires only one out of three	The practicability of	snould be considered.	latitudes during summer
	for, when a fishing vessel has 100% monitoring (either human or electronic) and maintains a	mitigation methods between 30°-25°S and none north of	underwater bait setters is yet	Mandatory night setting has	For example, when
	bycatch rate of less than 0.05 birds per 1,000 hooks, require their longline vessels fishing south	25°S.	to be demonstrated for >35m	practical difficulty due to the	nighttime is less than 7h
	of 25°S, to use either:	25 5.	vessels, and this is now	short period of night at high	night setting could be
		Change to 25°S reflects SC20 outcome noting importance of	clarified in a footnote. Some	latitudes in summer.	impractical. However,
	a) two of these three methods in combination:	the area 25-30°S for albatrosses and petrels vulnerable to	CCMs indicated unfamiliarity		this occurs only in areas
), weighted branch lines:	bycatch (SC Outcomes DOC paragraph 143-144, SC20-EB-	with underwater bait setters.	As for the underwater bait	south of 40° S during the
	ii). night setting:	WP06, SC20-EB-WP10).		setting device, JP would like to	months Nov-Jan.
	ii) terilines es			reserve its position since we	Therefore, NZ has

b) hook-shielding devices; or	Requiring three out of three reflects SC20 outcome noting	are still learning about this	developed a time/area
c) an underwater bait setting device ¹ .	the relatively high effectiveness of combining the use of these	device.	exemption for where a
c) an anachroter bart setting device 1)	measures-methods (SC Outcomes Doc paragraph 147, SC20-		when the duration of
Table 1 does not apply south of 2025° South See Anney 1 for specifications of those managers	EB-WP06, SC20-EB-WP11) and the reported mitigation use in	AUS could support the	nighttime (time betwee
Table 1 does not apply south of 3025° South. See Annex 1 for specifications of these measures	WPCFC showing that 25% of effort South of 30°S already uses	principle of using three	nautical dusk and
methods.	three out of three (SC20-EB-IP27).	measures in combination for	nautical dawn) is too
	,	vessels that don't have e-	short to allow the setti
¹ The suitability of underwater bait setting devices for vessels >35m is yet to be demonstrated.	ACAP recommends that the most effective way to reduce	monitoring systems or for trips	of longlines ("unless
	seabird bycatch in pelagic longline fisheries is to use the	without an observer on board.	longline fishing vessels
	following three best practice methods simultaneously: branch		are fishing south of 40°
	line weighting, night setting and bird scaring lines (i.e. tori	AUS has implemented 100% e-	in the time between 1
	lines).	monitoring on longline vessels	Nov and 31 Jan, during
		which use two of out of the	which setting across
	The addition of underwater bait setters reflects SC20	three mitigation measures.	nautical dusk could be
	outcome noting their effectiveness (SC Outcomes Doc	These vessels have	permitted due to the
	paragraph 147, SC20-EB-WP06).	demonstrated they can achieve	short nighttime period
		zero or near zero seabird	
	Alternatively, the use of an assessed hook shielding	bycatch while using two out of	In addition, NZ would
	device or underwater bait setting device is recommended	three mitigation measures.	like to point out that t
	(ACAP, 2023). Bycatch may be reduced to close to zero by		stand-alone options of
	using these ACAP recommended methods if they are	If a vessel exceeds a seabird	hook-shielding devices
	implemented to ACAP specifications (Pierre, 2023).	bycatch rate of 0.05 seabirds	c) underwater bait
		per 1,000 hooks, that vessels	setting devices allow f
	Analysis of relative effectiveness of different specification	may be required to implement	the option of setting
	scenarios shows that adopting ACAP best practice	additional mitigation	outside of nighttime.
	combinations and specifications in high-risk areas 12 could	measures. This includes night	Mr. barre to de de de co
	reduce bycatch (measured by relative standardised	setting or moving fishing	We have included an
	interaction rates) of 61% for the area south of 30°S, 81% for	operations northwards).	option to maintain tw
	the area 25°-30°S.		out of three provided monitoring and
		AUS supports increased	sufficiently low bycato
		monitoring in areas where	rates are maintained.
		seabirds are encountered. This	However, we note the
		could be through e-monitoring	this approach will
		or onboard coverage, and could include mandatory	provide recording an
		independent monitoring (EM	reporting challenges.
		or observers) in areas where	.,
		there is a high risk of	At least one underwa
		encountering seabirds.	bait setting device ha
		Chebuntering Scabillas.	been proven an effec
		AUS supports the area shift	stand-alone seabird
		from 30 to 25 degrees South.	bycatch mitigation
			method with no
			decrease in target ca
			rates (Robertson et a
			2018)
25° South 20° South		ID Assessment of the state	Discount of the test
25" SOUTH 30" SOUTH	Unnecessary given proposed changes to para 1.	JP: As mentioned above, this	Please refer to NZ's
		paragraph should be	response under
CCMs shall require their longline vessels fishing in the area 25°S 30°S to use one of the following		maintained.	paragraph 1.
mitigation measures: i) weighted branch lines; ii) tori lines; or iii) hook shielding devices. Table 1			
		AUS: Agree	
does not apply in the area 25°S 30°S. See Annex 1 for specifications of these measures.			

3	The extension of the scope of application of seabird mitigation measures from 30°5 to 25°S shall not come into effect until 1 January 2020.	A new implementation timeline could be considered.	JP: As mentioned above, this paragraph should be maintained. AUS: Agree	If changes are made to paragraph 1, this paragraph needs revisiting.
4	The requirements of paragraph 12 shall not apply in the EEZs of French Polynesia, New Caledonia, Tonga, Cook Islands and Fiji due to the low risk to seabirds. Those SIDS and Territories that have vessels operating south of 25° South are encouraged to collect data on seabird interactions, increase observer coverage rate as appropriate, and implement seabird mitigation measures methods.	Will require update to paragraph reference. The relative fishing effort within the exempt EEZs of the CCMs and Territories within the area of 30°-25°S equated to a mean of 0.22% or 2019-2023, which mirrors the 2010-2016 mean calculated by McKechnie (2016): 0.25%. SC20-EB-IP27.	AUS: Agree	
5	The provisions in this section shall be reviewed no later than 3 years from the implementation date by the SC, based on the best available scentific information. The review shall consider both the efficacy of the mitigation provides methods being used and the risk to vulnerable seabirds in areas where mitigation provides are not required and make recommendations to the Commission if needed.	Future review process to be considered in the light of the rotational prioritisation to the SC EB theme.	AUS: No change – Agree	
NORTHE	RN HEMISPERE			
6	North of 23° North CCMs shall require their large-scale longline vessels of 24 meters or more in overall length fishing north of 23°N, to use at least two of the mitigation measures methods in Table 1 from Column A, or one mitigation method from Column B, including at least one from Column A. CCMs also shall require their small-scale longline vessels less than 24 meters in overall length fishing north of 23°N, to use at least one of the mitigation method from Column A in Table 1 or one mitigation method from Column B. See Annex 1 for specifications of these measurements.	In the Northern Hemisphere, vulnerable sea birds range in the waters around the Japanese and Hawaiian seabird colonies, east of Japan and the Kuril Islands, the Bering Sea, south of the Aleutians and some core areas in the central North Pacific. If less effective methods are removed from Table 1, the table can be reshuffled to list effective methods that require combinations in column A and stand-alone methods in column B. Analysis of relative effectiveness of different specification scenarios shows that adopting ACAP best practice combinations and specifications in high-risk areas could reduce bycatch (measured by relative standardised interaction rates) of 73% for the area north of 23*N.	JP does not support the proposed changes, including table 1 as stipulated in CMM2018-03. Black footed albatross and Laysan albatross are main species by-caught by longliners in the area of North of 23N. Given the population status of these species are stable, the mitigation measures do not need to be changed. In addition, JP does not support the highlighted part (in the SC20 column). Although this is based on the SC20 document (EB-WP-11), as JP delegation pointed out during the SC, this research results should not be used as a reference since the analytical procedure does not address possible errors derived from Simpson's paradox. If NZ uses this analysis as a reference, it should be re-analyzed and rereviewed by SC. AUS: The document interchanges measures and methods - suggest use one for clarity and consistency? As this	Process of CMM2018- 03, a presentation highlighted the status of Black-footed Albatross was uncertain and projected to decline if recent elevated bycatch rates were consistent across the wider North Pacific fisheries. Finally, SC20 noted "The limited evidence for the effectiveness of deep-setting line

					is an overall CM 'Measure' perhaps we specify the individual 'methods' in the document.	bait, and offal discharge management." (SC Outcomes Doc paragraph 147) which are consequently removed. We have adjusted the CMM throughout to replace "measure" with "method" in line with the comment from CCM3 which improves clarity of the CMM throughout.
Table 1: Mitigation measures-methods Column A	Column B]	The reorganization of Table 1 reflects the SC20 outcomes and provides more transparent and effective options (SC Outcomes Doc paragraph 147, SC20-EB-WP06, SC20-EB-	The practicability of underwater bait setters is yet to be demonstrated for >35m	JP: Please see our comments to paragraph 6 above.	The proposal of including night setting as a stand-alone
Side setting with a bird curtain and weighted branch lines [‡]	Side setting with a bird curtain and weighted branch lines -Tori line ²		WP11). The addition of underwater bait setters reflects SC20 outcome noting their effectiveness (SC Outcomes Doc	vessels, and this is now clarified in a footnote.	US: With the proposed removal of blue dyed bait and offal discards from the suite of mitigation methods, US would	mitigation method is not supported by evidence reviewed during the
Night setting with minimum deck lighting	Hook-shielding devices Blue-dyed bait		paragraph 147, SC20-EB-WP06). Removal of deep-setting line shooters, blue-dyed bait, and	discharge is challenging to assess compliance with and the removal of this option	like to propose inclusion of night setting as a stand alone measure (in Column B of	intersessional review process (e.g., Duckworth 1995,
Tori line ¹²	Underwater bait setting device ² Deep setting line shooter		offal discharge management based on SC20 outcome noting the limited evidence for their effectiveness (<u>SC Outcomes Doc paragraph 147</u> , <u>SC20-EB-WP06</u> , <u>SC20-EB-WP11</u>).	would simplify compliance monitoring and transparency.	Table 1) for vessels fishing N of 23N (regardless of size). Research has indicated that	Peterson et al. 2008, Jiminez et al. 2009,
Weighted branch lines Hook shielding devices ³	Management of offal discharge		Consequently, the original Column B has been restructured to capture stand-alone methods.		night setting is an effective mitigation strategy when adhered to.	Jiminez et al. 2020, Pierre 2023, this presentation, as
The use of two (i.e., paired) tori lines is encour The suitability of underwater bait setting devic Husing side setting with a bird curtain and weigi mitigation measures. The stori line is selected from both Column A and paired) tori lines. Hook shielding devices can be used as a stand	ces for vessels >35m is yet to be demonstrate hted branch lines from Column A, this will be d Column B, this equates to simultaneously us	counted as two			Numerous studies in the North Pacific confirm the efficacy of night setting on seabird bycatch, either as a stand alone method, or in combination with other methods. Additionally, over 20 years of data have indicated that the paired use of night-setting, blue dyed bait and offal discards has been highly effective at deterring seabird interactions in the Hawai'i shallow-set longline fishery. Seabird bycatch in the shallow-set fishery represents <5% of overall catches from the Hawaii longline fishery (deep-set and shallow-set) and a majority of the birds caught in the shallow-set fishery are released alive (780%). Hawaii's shallow set	summarized in SC20- EB-WP06) highlighting that night setting effectiveness decreases drastically during full moon periods, and that additional mitigation methods are needed to address this limitation and minimise interactions. The comment that interaction rates are low and survival rates are high is not supported by evidence presented during the Intersessional Informal Review process of CMM2018-03. While seabird bycatch has

OTHER AL	REAS			fishery currently requires 100% (human) observer coverage, thereby facilitating a highly accurate understanding of species-specific seabird catch rates and conditions that interact with the fleet. The low interaction and high survival rates confirm that the methods currently used in this fishery are highly effective.	significantly reduced in some fisheries recent modelling, projected that the Black-footed Albatross will decline if recent elevated bycatch rates are consistent across the wider North Pacific fisheries. Finally, SC20 noted "The limited evidence for the effectiveness of deep-setting line shooters, blue-dyed bait, and offal discharge management." (SC Outcomes Doc Daragraph 147) which are consequently removed.
7	In other the areas (between 25°S and 23°N), particularly in the area between 25°S and 20°S, where necessary. CCMs are encouraged to have their longline vessels employ one or more of the seabird mitigation areas are thous listed in Paragraph Table 1.	Strengthening of encouragement based on SC20 outcome noting that the representation of the strength of the str	The word "strongly" was previously included but has been removed to ensure consistency with terminology in other CMMs. Some CCMs saw no need for the amendments to this paragraph, while others noted that they supported encouraging the use of mitigation methods across a broader spatial range.	JP does not support the proposed changes. Since the area is recognized as low sea birds interaction area, we don't need to request fishing vessels to take most stringent mitigation measures. JP may go along with the revision of this paragraph if the "Table1" is retained on this paragraph and table 1 of paragraph 6 is maintained without change. AUS: Suggest remove particularly in the area between 25°S and 20°S to simplify and to support para 4. AUS: Suggest if 20°S and 25°S is an area of interest – we could review the shift of the overall CMM to 25°S in the following period of review? Note that the current requirements under the Seabird Threat Abatement Plan apply to vessels fishing south 25S.	The area between 25°S and 20°S has been shown to be an area in which seabird-fisheries interactions are of concern as per 5C Outcomes DOC paragraph 143 and SC20-EB-WP10. In addition, it should be noted that the proposed text does not stipulate the most stringent mitigation measures, and the text states "encourage" not "request". Consequently, the mention of the area between 25°S and 20°S has been retained.

GENERAL	PRINCIPLES				
New para	CCMs shall ensure their flagged vessels maintain their selected mitigation methods to the specifications described in Annex 1 when operating in the areas as defined in Paragraph 1, 2, and 1.		This additional general principle reflects discussions at TCC20	JP suggests following the changes: CCMs shall ensure their flagged vessels maintain their selected mitigation methods to the specifications described in Annex 1 while the mitigation methods are used at sea. AUS: Support the addition of this new paragraph Consider inclusion of tori line constructions/material comment re marine pollution CMM as a general principle?	We are grateful for the suggested improvement of the wording and have built on the suggestion to improve clarity further. However, as little evidence currently exists on the efficacy, durability, and practicality of biodegradable tori lines, we have not added an additional general principle. This topic should be considered a research priority, but a CMM is not the right place to list research priorities.
New para	All longline vessels throughout the WCPFC Convention Area are encouraged to adopt effective offal management in addition to the mandated bycatch mitigation requirements. See Annex 1 for specifications of this measures method.	Reflects recommendation 12 in SC20-EB-WP06, which encouraged all vessels to adopt effective offal management, such that offal and discards should not be discharged during line setting. During line hauling, offal and used baits should preferably be retained or discharged on the opposite side of the vessel from that on which the line is hauled. All hooks should be removed and retained on board before discards are discharged from the vessel.	Some CCMs wanted to retain offal management as a mitigation method. Other CCMs noted that there was evidence it was not an effective mitigation, suggesting that it was more appropriate to have appropriate offal management as a principle applying across the Convention Area.	JP does not support this paragraph. Offal management should be retained as one of the mitigation measures on the table 1 of Paragraph 6. Since offal management is maintained in this proposal, we understand effectiveness of offal management is recognized.	Offal management is not as effective as other mitigation methods. Offal management generally acts to decrease attractiveness of the vessel rather than protecting baited hooks from being accessed by seabirds and as such, we've retained this general principle.
New	All longline vessels throughout the WCPFC Convention Area are encouraged to keep deck lighting to a minimum at night (i.e., between nautical dusk and dawn). Minimum deck lighting shall not breach minimum standards for safety and navigation.	Moved a General Principle contained within paragraph 4 of Annex 1 to a more appropriate place within the CMM.	"Should" replaced with "shall" to ensure consistency throughout the CMM. The link with night setting and the need for safety was noted.	JP suggests this paragraph be returned to the original position, in paragraph 4 of Annex 1 Since this is a condition of night setting. AUS: Should it specify that this would apply between Nautical Dusk and Dawn (ie Night setting time).	We've adjusted this paragraph to improve consistency among General Principles paragraphs. The aim of the paragraph is to encourage reducing vessel attractiveness to seabirds. In addition, we have followed the guidance to improve the specificity.

RESEAR	CII				
KESEAR	Cn Commonwealth Commonwealth Commonwealth Commonwealth Commonwealth Commonwealth Commonwealth Commonwealth Com				
8	For research and reporting purposes, each CCM with longline vessels that fish in the Convention Area south of 25°S or north of 23°N shall submit to the Commission in part 2 of its annual report information describing which of the mitigation pressures are flood, they required their vessels to use par geographical areas as defined in Paragraph 1, 2, and 6, as well as the technical specifications for each of those mitigation measures—methods, and advise on any energy from previous years, each such CCA shall also include a rise annual reports for subsequent years any changes it is made to its required mitigation measures or technical specifications for those measures.			AUS: Annual Reports are for the previous year of implementation, the paragraph then goes on to mention subsequent years. How does this fit in with which methods they require their vessels to use? AUS: For compliance purposes, it would be helpful for individual vessels to have on-board (paper/e-logbooks) that specify what mitigation methods they use and the specifications for them SPREP: To make it more clear in paragraph 8 it would be helpful if CCMs can describe which mitigation measures they require their vessels to use for the operational area	
				that they will be in and specify which areas their vessels will operate in.	
9	CCMs are encouraged to undertake research to further develop and refine encouraged to undertake research to further develop and refine encouraged to mitigate seabird bycatch including mitigation encouragement of the use during the setting and hauling process and should submit to the Secretariat for the use by the SC and the TCC any information derived from such efforts. Research should be undertaken in the fisheries and areas to which the encouragement of will be used.				
GUIDEL	INES FOR SAFE RELEASE OF SEABIRDS				·
10	CCMs are encouraged to adopt-follow the guidelines¹ in Annex 2 measures aimed at ensuring that seabirds captured alive during longlining are released alive and in as good condition as possible and that wherever possible hooks are removed without jeopardizing the life of the seabird concerned. Research into the survival of released seabirds is encouraged. ¹ Recommended by SC15 and adopted by WCPFC16.	Updated to include the adopted guidelines, currently in a supplement, directly within the CMM. Note that Annex numbers may need adjusting throughout with the introduction of additional Annexes.	It was noted that it is useful to have the CMM as a "one-stop shop" to bring together all relevant requirements and guidance.	AUS: Concern for including these documents within the CMM largely for the ability to keep the document update friendly without a CMM review process being activated. Suggest referencing the latest best practice guidelines as stand-alone documents in order to make it easier to keep them updated.	Similar to for approved hook-shielding and underwater bait setting devices, a specific page on the WCPFC website could be maintained to host approved Safe Handling and Release Guidelines.

REVIEW	OBSERVERS, INSPECTION AND REPORTING				
11	The SC and TCC will annually biennially review any new information on new or existing mitigation measures—methods or on seabird interactions from observer or other monitoring programmes. Where necessary, an updated suite of mitigation measures—methods, specifications for mitigation measures—methods, or recommendations for areas of application will then be provided to the Commission for its consideration and review as appropriate.				
12	The intersessional working group for the regional observer programme (IWG-ROP) and the intersessional working group on Electronic Reporting and Electronic Monitoring (ERandEM-WG)] will take into account the need to obtain detailed information on seabird interactions to allow analysis of the effects of fisheries on seabirds and evaluation of the effectiveness of bycatch mitigation account mitigation accounts.	This may need updating. The IWG-ROP in its 2023 workplan has been looking at ROP minimum standard data fields for seabirds to allow for use of ROP data in the compliance case file system – if the work is complete, then this para may not be needed – given para 10 where SC/TCC can review information, including from observer programmes.		AUS: Agree. Could be worded to include any EM and Observer details if introduced into the measure in Para 1. The IWG-ROP can include or be updated to include this.	We have included a mention to the ERandEM-IWG as suggested, which will need to develop minimum data standards for seabirds in due course.
New Para	CCMs are encouraged to use the inspection guidelines for port inspectors and high seas boarding inspectors for seabird mitigation according in Annex 4, complementary to observer minimum standards, to ensure that vessels comply with the requirements of Paragraphs 1 and 6 and related specifications (Annex 1).	Inspection guidelines for use by port inspectors and high seas boarding inspectors included in the Annexes to ensure the revised CMM is as complete and transparent as possible.	A CCM welcomed the proposed inspection guidelines — which are useful for both fishers and inspectors.	JP is not sure if this type of detailed inspection guidelines of a CMM is appropriate means to facilitate the inspection. The ways of inspections should be considered on not CMM by CMM but overall inspection practices. WCPFC may consider the voluntary guides for HSB1 taking into account the discussion during the TCC. This proposed guidelines may be considered through the development of the voluntary guides. AUS: Support the intent. Concern for including these documents within the CMM largely for the ability to keep the document update friendly without a CMM review process being activated. CMM needs further clarity on how potential non-compliance is dealt with. For example, what are the consequences if a vessel doesn't have compliant mitigation measures onboard when inspected during HSBI?	The inspection guidelines are incorporated as a non-binding element. The intent of incorporating inspection guidelines into the CMM (not only seabirds but could also be considered for other technical CMMs) is to improve inspection rates and consistency, and provide inspectors with an immediate reference. Including such guidelines into a measure will substantially increase the content of the measure, however inspection guidelines should only need to be updated when the provisions of the CMM (and not the guidelines) are reviewed. NZ acknowledges that development of guidelines may require further technical consultation which could be considered as part of the other proposed intersessional

					processes (HSBI IIP if
					approved).
					Non-compliance with
					obligations are
					addressed, as usual, through the annual
					Compliance Monitorin
					Scheme process.
13	CCMs shall record information on seabird interactions and report annually provide to the	Annex numbering needs adjusting.		AUS: Suggest interaction	We note the
13	Commission, in Part 1 of their annual reports, all available information on interactions with	runer nambering needs dajasting.		information is recorded on all	requirement in para 2
	seabirds, including from electronic daily logs from fishing operations (as set out in paragraph 2 (iii)			vessels as per CMM 2022-06	(iii) of CMM 2022-06
	of CMM 2022-06), reported or collected by observers, or recorded by electronic monitoring, to			(or subsequent renditions).	for CCMs to require
	enable the estimation of seabird mortality in all fisheries to which the Convention applies. (see			This information may not be	vessel masters to
	Annex 23 for Part 1 reporting template guideline). These reports shall include information on:			collected to species level if an	record, as part of the
	a) the proportion of observed effort with specific mitigation measures methods used; and			Observer or EM on board.	daily e-log, information
	, , , ,			However, this CMM shouldn't	about interactions with
	b) observed and reported species specific seabird bycatch rates and numbers or statistically			preclude the required	other species such as
	rigorous estimates of species-specific seabird interaction rates (for longline, interactions			information to be recorded	seabirds – and that this
	per 1,000 hooks) and total numbers.			through other CMMs.	information is
					submitted electronically to the
					Commission as part of
					the annual SciData by
					30 April. It is useful to
					refer to this
					requirement as well as
					the Annual Part 1
					Reporting requirement
14	This Conservation and Management measure replaces CMM 20178-063, which is hereby	CMM numbering will need updating.			
	repealed.				
ANNEX	1. SPECIFICATIONS				
	Table of Control Control	Taxi linea datas cashirda frans annocashina hagin ta faod an	Consesses with the leaf, of	ID. to subscation i of to) "with	The small shapes to
1	Tori lines (South of 25° South)	Tori lines deter seabirds from approaching hooks to feed on baits during setting. It is a line towed from a high point at the	Concerns with the lack of clarity on tori line	JP: In subsection i of 1a), "with a minimum length of 120m" is	The small changes to the minimum tori line
		stern of the vessel. As the vessel moves forward the section	specifications, which may	added without track change. JP	length as well as the
	1a) For vessels >=35 m total length	of the line closest to the vessel in lifted off the water. This	cause challenges for	suggests deleting this part as	swivels were a result o
		lifted section (referred to as aerial extent) has flapping	compliance monitoring, are	this was not included with SC	discussions at TCC20.
	i. Deploy at least 1 (single) tori line with a minimum length of 120 m before the first set hook	streamers that scare seabirds away from sinking baited	now adjusted.	document (EB-WP-06) nor	TCC20 discussed that
	enters the water until the last hook has been set. The tori line shall be deployed windward of	hooks. Tori lines are generally attached to a strong, purpose-		reviewed by SC and could be in	this change would
	sinking baits. Where practical, vessels are encouraged to use a second tori line at times of	built pole (tori pole).	Specifically, a minimum length	conflict with subsection iii.	assist the practical
	high bird abundance or activity; both tori lines shall be deployed simultaneously , one on		has now been defined (120m)		implementation of
	each side of the line being set. If two (paired) tori lines are used baited hooks shall be	Analysis of relative effectiveness of tori lines at reducing	that should allow for the	In subsection ii a, JP suggests	100m aerial extent.
	deployed within the area bounded by the two tori lines.	bycatch shows this method can reduce seabird bycatch by	required aerial extent (100m)	deleting "unweighted" before	
	ii. A tori line using long and short streamers shall be used. Streamers shall be: brightly	approximately 54% over no mitigation at all (WCPFCSC20-EB-	to be achieved through a range	"swivels" as this insertion was	Similarly, discussions
	coloured, a mix of long and short streamers.	WP11). Evidence from around the world illustrates the	of different potential options	not included with SC document	during TCC20
	a. Long streamers shall be placed at intervals of no more than 5 m, and long streamers	efficacy of tori lines at reducing seabird bycatch with no	to create sufficient drag.	(EB-WP-06) nor reviewed by	highlighted that tori
	must be attached to the line with swivels in a way that prevents streamers from	negative effect on target catch rate. In fact, some studies		SC.	line extent is scalable,
	wrapping around the line (e.g. using unweighted swivels). Long streamers of sufficient	show increased target catch with tori line use (Pierre, 2023).	CCMs have flexibility in how	In subsection iii of 1a), JP has	as it depends on the
	length to reach the sea surface in calm conditions must be used.	Mineral Market State of the Sta	they achieve the aerial extent	the following comments:	drag objects used and
	b. Short streamers shall be {greater than 1m in length} and shall be placed no more	Minor practicality changes based on feedback from CCMs	of 100m through a range of	- "desired" should be	the attachment height.
	than 1m apart.	during the intersessional review process and contained in recommendations 3 and 4 of SC20-EB-WP06.	different potential options to create sufficient drag.	maintained because the actual aerial extent cannot be scaled,	The same discussions also underscored that
		recommendations 3 and 4 or SC20-EB-WP00.	create sufficient drag.	aeriai exterit caririot de Scaled,	also underscored that
	iii. Vessels shall deploy the tori line to achieve with an desired aerial extent greater than or			and could be changed by	

equal to 100 m. To achieve this aerial extent the tori line shall have a minimum length¹ of at least 200m, or if a drag object is used, the tori line shall have a minimum length¹ of 120m. which The tori line shall be attached to a tori pole >7m above the sea surface located as close to the stern as oractical.

v. If vessels use only one tori line, the tori line shall be deployed windward of sinking baits.

1b) For vessels <35 m total length

- i. Deploy at least 1 (single) A single tori line before the first set hook enters the water until the last hook has been set. The tori line shall be deployed windward of sinking baits. If two (paired) tori lines are used, baited hooks shall be deployed within the area bounded by the two tori lines. A tori line using with either long and short streamers, or short streamers only shall be used.
- ii. Streamers shall be: brightly coloured long and/or short (but greater than 1m in length) streamers must be used and placed at intervals as follows:
- a. Long streamers placed at intervals of no more than 5m for the first 75 m of tori line.b. Short streamers placed at intervals of no more than 1m.
- ii. Long streamers should be attached to the line in a way that prevents streamers from wrapping around the line. All long streamers shall reach the sea-surface in calm conditions. Streamers may be modified over the first 15 m to avoid tangling.
- iv. Vessels shall deploy the tori line to achieve a minimum aerial extent of 75 m. To achieve this aerial extent the tori line shall be at least 100m in length¹ and shall be attached to a tori pole >6m above the sea surface located as close to the stern as practical. Sufficient drag must be created to maximise aerial extent and maintain the line directly behind the vessel during crosswinds. To avoid tangling, this is best achieved using a long in-water section of rope or monofilament.
- v. If two tori lines are used, the two lines must be deployed on opposing sides of the main line.
- Tori line length refers to LOA.

weather conditions such as wind.

- "or by using a tori line of 120m with drag objects" is added without track change. JP suggests deleting this part since this was not included with SC document (EB-WP-06) nor reviewed by SC.

AUS Comments: For vessel application of specifications and compliance purposes: what is considered total length: LOA, RL or BETWEENPP?

Suggested text: highlighted wording is new, otherwise the wording has rearranged or repeated to aim for regularity.

6.

The key issues here is to ensure that the length of a Toril line is clearly defined as binding obligation that is measurable and enforceable. The previous wording stated that a tori line shall be at least 200m in length. This is clear and enforceable and we want to stay as close to that as possible.

.

1a) For vessels >=35 m total length
i. Deploy at least 1 (single)

tori line with a n

length of 120 m- before the first set hook enters the water and retrieved after the last hook has been set. The tori line shall be deployed windward of sinking balts. Where practical, vessels are encouraged to use a second tori line at times of high bird abundance or activity; both tori lines shall be

set. If two tori lines

the term "desired" was unclear.

We are grateful for the extensive comments on how the wording of the specifications can be made clearer and more consistent and we have followed the advice accordingly, but note that the length of long streamers for SH small vessel tori lines were already specified under sub-paragraph iii.

Providing information on the construction of robust and effective mitigation methods (including tori poles) is important, but the CMM is not necessarily the right place for such information.

A footnote has been added to specify that total length = LOA.

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che long and about streamers only halfs be used.

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Coloured, long and/or short that go the used of the used

			may be beneficial to provide	
			guidance for properly designed	
			tori poles and/or attachment	
			points.	
Tori lines (North of 23° North)	Changes to Northern Hemisphere tori lines are based on the	Concerns with the lack of	JP does not support the	As mentioned under
	recommendations in <u>SC20-EB-WP06</u> , which show that there	clarity on tori line	proposed changes.	Paragraph 6, The
a) Long Streamer	is no compelling evidence to consider streamerless tori lines	specifications, which may	District of all stress and	statement that Black-
	and tori lines with an insufficient aerial extent an effective	cause challenges for compliance monitoring, are	Black footed albatross and Laysan albatross are main	footed and Laysan Albatrosses are stable
i. Minimum length¹: 1200 m.	seabird bycatch mitigation method.	now adjusted.	species by-caught by longliners	and that further
ii. Vessels shall deploy the tori line with an aerial extent greater than or equal to 100 m (e		now adjusted.	in the area of North of 23N.	improvements to
using a tori line with a length of at least 200m or by using a tori line of 120m with drag obje	cts). be removed as well.	Specifically, a minimum length	Given the population status of	bycatch mitigation
ii. Must be attached to the vessel such that it is suspended from a point a minimum of 5		has now been defined (120m)	these species are stable, the	methods are not
above the water at the stern on the windward side of the point where the hookline ente	s the Some minor practicality changes on tori line length included	that should allow for the	mitigation measures do not	required does not align
water.	as well based on feedback from CCMs during the	required aerial extent (100m)	need to be changed.	with the WCPFC
v. Must be attached so that the aerial extent is maintained over the sinking baited hooks.	intersessional review process.	to be achieved through a range		Convention Text
v. Streamers must be less than 5m apart, attached in a way that prevents them from		of different potential options	US feedback on streamerless	requirement to
wrapping around the line (e.g., bye using unweighted swivels), and long enough so the	t 8.	to create sufficient drag.	tori lines:	minimise bycatch and a
they are as close to the water as possible.		CCNA have floribility in how	Until such time that sufficient	presentation during the Intersessional Informal
vi. If two (i.e. paired) tori lines are used, the two lines must be deployed on opposing side	of	CCMs have flexibility in how they achieve the aerial extent	evidence of the effectiveness	Review Process of
the main line.		of 100m through a range of	of streamerless tori lines can be provided, this should be	CMM2018-03
		different potential options to	removed as a mitigation	highlighted uncertainty
2b) Short Streamer (For vessels >=24 m total length)		create sufficient drag.	option. We strongly support	around the status of
			the proposal to remove this	Black-footed Albatross.
i. Minimum length¹: 12 0 0 m.		It was suggested that it may be	option from the measure.	
 Vessels shall deploy the tori line with an aerial extent greater than or equal to 100 m (e 	g. by	beneficial to provide guidance		The referenced
using a tori line with a length ¹ of at least 200m or by using a tori line of 120m length ¹ with	lrag	for properly designed tori	US feedback on tori line aerial	research (SC18-EB-IP-
objects).		poles.	extent:	14) does not compare
 Must be attached to the vessel such that it is suspended from a point a minimum of 5 			Research in the Hawai'i	different aerial extents and SC18 did not
above the water at the stern on the windward side of a point where the hookline enters	the		longline fishery (as presented	endorse the
water.			in <u>SC18-EB-IP-14</u>) has indicated that a 50m aerial extent is	effectiveness of tori
v. Must be attached so that the aerial extent is maintained over the sinking baited hooks.			sufficient to deter seabird	lines with only 50m of
v. Streamers must be less than 1m apart and be 30 cm minimum length.			interactions. This finding was	aerial extent. In
vi. If two (i.e. paired) tori lines are used, the two lines must be deployed on opposing side	s of		likely due to the specific	addition, recent
the main line.			behaviors of BFAL and LAAL,	evidence as
			which are not deep diving birds	summarized in SC20-
c) Short Streamer (For vessels <24 m total length)			(relative to those in the S.	EB-IP20 highlighted
			Hemisphere). This means that	that Northern
This design shall be reviewed no later than 3 years from the implementation date based on			the hook only needs to get to	Hemisphere species can dive considerably
scientific data.			2m depth from the surface to	deeper than 2m.
i. Minimum length¹: 100 m.			get out of the bird attack range, and we have very little	deeper than 2111.
i. Vessels shall deploy the tori line with an aerial extent greater than or equal to 75m.			concerns for secondary	If the suggested
iii. Must be attached to the vessel such that it is suspended from a point a minimum of 5n			interactions once hook sinks	restructuring of
above the water at the stern on the windward side of a point where the hookline enters	the		beyond 2m depth. Recent	wording for tori line
water.			research determined that 50m	specifications in the
iv. Must be attached so that the aerial extent is maintained over the sinking baited hooks.			aerial extent was sufficient for	Southern Hemisphere
v. If streamers are used, it is encouraged to use the streamers designed to be less than 1m :	part		that purpose. Based upon our	are accepted, the
and be 30cm minimum length.			species' dive depths/behavior	Northern Hemisphere
Streamers must be less than 1m apart and be 30 cm minimum length.			and our weighted branch line	tori line specifications could be restructured
vi. If two (i.e. paired) tori lines are used, the two lines must be deployed on opposing sides of	f the		scheme, US does not view the	as well.
mainline.			additional extension of the tori	03cm.
mannine.			lines as having a	

	¹ Tori line length refers to LOA.			commensurate benefit to the conservation of seabirds in the Northern Hemisphere.	
				US feedback on tori line minimum length: Similar to the requirement for aerial extent, research trials in the Hawai'i longline fishery (as presented in SC18-EB-IP-14) have confirmed that tori line lengths of 100m are sufficient	
				AUS: Use the same language to above to ensure there is clear obligation on tori line length.	
				Vessels shall deploy the tori line with an aerial extent greater than or equal to 100 m. To achieve this aerial extent, the [eg. by using a tori line with a length of shall	
				be at least 200m in length, or if a drag object is used, the Tori line shall be at least 120m in length. by using a tori line of 120m with drag objects), which The Tori line	
				shall be attached to a tori pole >7m above the sea surface located as close to the stern as practical	
3	i. Mainline deployed from port or starboard side as far from stern as practicable (at least 1m), and if mainline shooter is used, must be mounted at least 1m forward of the stern. ii. When seabirds are present the gear must ensure mainline is deployed slack so that baited hooks remain submerged. iii. Bird curtain must be employed: • Pole aft of line shooter at least 3m long; • Minimum of 3 main streamers attached to upper 2m of pole; • Main streamer diameter minimum 20mm; • Branch streamers attached to end of each main streamer long enough to drag on water (no wind) – minimum diameter 10mm.				
4	Night setting i. No setting between during the period after nautical dawn and before nautical dusk.	Many seabirds are less active at night, so setting lines when it is dark means birds are less likely to attack baits and become hooked. Night setting means that there is no setting after	Some CCMs noted that it was currently unclear who should be recording sets across	JP suggests the following changes:	We've reinstated sub- paragraph iii as requested under a new
	No setting services during the period after laditical dawn and before laditical dusk. Nautical dusk and nautical dawn are defined as set out in the Nautical Almanac tables for relevant latitude, local time and date.	nautical dawn and before nautical dusk. 19 The night setting specification of CMM 2018-03 aligns with ACAP advice. Analysis of relative effectiveness of night setting at reducing	nautical dawn as referred to in iii.	"If setting occurs across nautical dawn, or nautical dusk, the settings only before	General Principle. We've adapted the
	 Deck lighting to be kept to a minimum. Minimum deck lighting should not breach minimum standards for safety and navigation 	bycatch shows this method provides a 54% improvement over no mitigation at all (WCPFC-SC20-EBWP11).		nautical down or after nautical dusk this does not qualify as	we ve adapted the wording in sub- paragraph iv to

	If setting occurs across nautical dawn, or nautical dusk, only hooks set before nautical dawn or after nautical dusk quality as night setting, and this should be recorded ecordingly by observers and compliance inspectors (e.g., in the templates provided in Annex 3 and 4).	Moved the General Principle contained in this paragraph under the General Principle header of the CMM. Clarification provided on what should count as a night set provided to assist with recording.	This has now been adjusted to refer specifically to observers and compliance inspectors.	night setting for the whole set and this should be recorded accordingly by observers and compliance inspectors (e.g., by providing the number of hooks set at night and at day in the templates provided in Annex 3 and 41." US: We support the proposed changes to the definition of night setting as written. Current US regulations require that vessels begin the deployment of longline gear at least 1 hour after local sunset and complete the deployment no later than local sunrise, using only the minimum vessel lights to conform with navigation rules and best human safety practices. AUS: Strongly consider for compliance purposes with this measure and night setting method by, requiring the 'set end time' to be reported at the Set level. The Scientific Data to be provided to the commission Annex 1. Standards for the Provision of Operational Level Catch and Effort Data (1.3) currently only requires the 'set start time'. If the method was considered impractical in certain conditions. Consider if the night setting time window could begin prior to nautical dusk, which would target for majority of the set to occur at dusk/night and to avoid the dawn time. The vessel would be found non-compliant if it couldn't complete the set pre	improve clarity as suggested, but retained the recording section to clarify that recording (e.g., as stipulated under Paragraph 13) should match gear changes. We agree that 'set end time' would be useful data to be recorded on a set level and we suggest that this is raised with the IWG-ROP. Night setting can be impractical in high latitudes during summer and as such, we have included a potential special consideration under Paragraph 1.
				couldn't complete the set pre dawn.	
5	Weighted branch lines i. Following minimum weight specifications are required: a. one weight greater than or equal to 40g within 50cm of the hook¹; or b. greater than or equal to a total of 4560g attached to within 1 m of the hook¹; or	Branch line weighting helps to rapidly sink hooks beyond the reach of seabirds. A faster sink rate reduces the time that baited hooks are available to seabirds which reduces bait loss and bycatch. Branch line weighting is the most commonly reported seabird mitigation method in the WCPO (WCPFC-SC20-EB-IP27).	Some CCMs highlighted safety concerns with weighted branch lines, but simultaneously safe weighting options and guidelines are available and weighted branch lines remain	i JP does not support the proposed changes. "ACAP advice on Improving safety when hauling branch lined during pelagic longline fishing operations" mentions that	SC20 noted that the effectiveness of branch line weighting may be improved through modification of the current specifications

- c. greater than or equal to a total of 680 g attached to within 3.52 m of the hook1; or
- weight of 50 g (i.e., including the hook) is sufficient.
- The use of lighting devices or other fishing accessories as weights is not recomi they are proven to achieve a sink rate of 0.5 m/s to 5 m depth.
- When applying weighted branch lines as a seabird bycatch mitigation method, all branch line must be weighted. When setting occurs across nautical dawn or nautical dusk and the fishing vessel switches between weighted branch lines and night setting, only the hooks with reighted branch lines qualify as this mitigation method, not the whole set, and this should be recorded accordingly by observers and compliance inspectors (e.g., in the templates provided Annex 3 and 4)
- Distance from the hook is measured from the point of branch line attachment.

Branch line weighting is highly effective at reducing seabird bycatch as lines are being set and it is one of the only mitigation methods that can reduce bycatch during the period when hooks are soaking. Weights help to keep the hooks below the depth of diving birds.

The relative effectiveness of branch line weighting at reducing bycatch is a 69% improvement over no mitigation at all (WCPEC-SC20-EB-WP11). However, this method is only effective to this level if all branch lines are weighted to certain specifications.

There are some significant differences between the line weighting specifications in CMM 2018-03 and those recommended by ACAP (Fig. 5). The current specifications for line weighting do not achieve sufficient sink rate to protect seabirds, particularly in areas where deep and fast diving large petrels range, because the weights are not heavy enough and they can be attached too far from the hook.

There is no scientific evidence to suggest branch line weights at greater than 2m from the hook are sufficient to adequately reduce bycatch.

ACAP recommends heavier weights and reduced distance from hooks to achieve sink rates of >0.5 m/s, which is faster than most diving birds. The ACAP specifications would also allow the lines to sink to greater depths (e.g. 20 m).

Adopting the ACAP specifications for branch line weighting could result in 52% improvement in relative bycatch reduction (WCPFC-SC20-EB-WP11), with no or little effect on target catch (Pierre, 2023).

Changes to the branch line weighting specifications in section i are based on the SC20 outcome noting the effectiveness of branch line weighting may be improved through modification of the current specifications in CMM 2018-03 (SC Outcomes oc paragraph 147, SC20-EB-WP06, SC20-EB-WP11).

Section ii gives effect to ACAP best practice advice relevant to weighted hooks as a novel branch line weighting option, which provides a balanced option between practicality and efficacy.

Section iii reflects ACAP best practice advice relating to the type of material used as weights.

Section iv improves clarity on the use of branch line weighting.

the most commonly used bycatch mitigation method in WCPFC (SC20-EB-IP27).

The relative safety of the ACAP's recommended branch line weighing configuration of 80g or greater attached withir 2m of the hook should be assessed." ACAP recognized the need for further research to confirm the safety of this configuration, especially subparagraph c.

ii JP suggests deleting this paragraph since this was not included with SC document (EB-WP-06) nor reviewed by SC

iii JP suggests deleting this since this was not included with SC document (EB-WP-06) nor reviewed by SC

iv JP suggests following addition to clarify the intent of this paragraph.

branch lines as a seabird bycatch mitigation method, all branch lines must be weighted. In case that setting occurs across nautical dawn r nautical dusk and the fishing vessel switch between weighted branch line and night setting, this requirement does not apply to the branch lines set during

US: Current US regulations for the Hawai'i longline fishery require the use of ≥45 g within 1 m of the hook. This is consistent with the current CMM and with previous ACAP best practices. A further analysis of branch line weighting in SC20-EB-IP-08 indicates no significant difference in seabird risk between ≥40 g within 0.5 m of hook and ≥50 g within 1 m of hook. The JP appreciates the extensive research that has been conducted by ACAP and

in CMM 2018-03 (see paragraph 147)

Safety considerations should be assessed on a vessel by vessel and gear by gear basis. If there are concerns around option C for a certain vessel or gear, option A and option B remain as alternatives, which is why multiple options have been provided.

The additions of subparagraph ii and iii were a product of discussions at TCC20. Sub-paragraph ii provides a weighting alternative that addresses some safety concerns including bite-offs (which are impossible with this option). Sub-paragraph iii addresses a potential practical issue where a weighted object such as a lighting device may not achieve the intent of this bycatch mitigation method.

We have further improved the wording of sub-paragraph and included the reference to the recording templates that should be used as per Paragraph 13.

The analysis in SC20-EB-IP-08 does not have a sufficiently high enough resolution to differentiate between these fine-scale categories. In addition, Barrington et al. 2016, as discussed during the Intersessional Informal Review Process, have

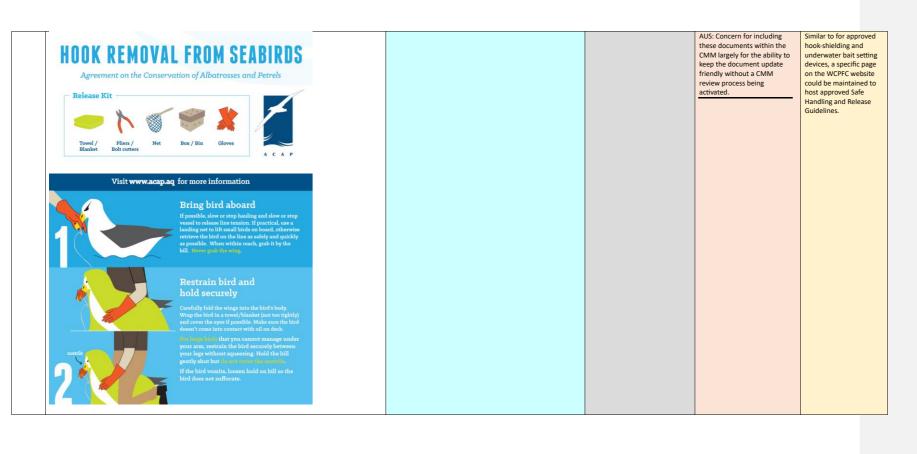
				others that has identified the value of heavier line weights and a specific distance from the hook with regards to seabird bycatch risk. While there is a minimal modeled increased effectiveness, this is not significant and the move of weight towards the hook increases the human safety concern that we believe outweighs the slightly added conservation value. Weighted branch lines in the shallow set fishery are a particular safety concern (see ACAP 2024) due to the angle and depth of haul and would increase the likelihood of flyback and potential injury. We are also aware that the value added for this modification is highly dependent on the region and species, so there may be limited conservation value in the north. Taken together, we are not prepared to modify the branch line weighting requirements in the northern hemisphere at this time. AUS: Provide more detail on distance 'of the hook' ie. consider how the observers measure it, is it from the base curve of the hook, or where the hook attaches to line. Updates to Annex 4 follows any changes here.	highlighted that the proposed line weighting regime has higher efficacy than the previous ACAP best practice advice. Further detail on how the distance of the hook is measured has been provided in a footnote.
6	Hook-shielding devices	Hook-shielding devices cover the point and barb of the hook to protect seabirds from becoming caught during line setting.	Naming of commercial entities directly within the CMM was		
	Hook-shielding devices encase the point and barb of baited hooks to prevent seabird attacks during line setting. The following devices have been approved for use in WCPFC fisheries:	to protect seabins from becoming caught during line setting. Once the hook sinks, the device opens and releases the hook. Hook-shielding devices can be used without other mitigation options.	considered inappropriate, and as such, a link to the <u>ACAP best</u> <u>practice advice</u> , listing		
	Hook-shielding devices must meet the following requirements for use in WCPFC fisheries: Hookpads, which comply with the following performance characteristics a. the device encases the point and barb of the hook until it reaches a depth of at least 10 metres or has been immersed for at least 10 minutes; b. the device meets current minimum standards for branch line weighting as specified in this Annex; and c. the device is designed to be retained on the fishing gear rather than being lost.	Hook-shielding devices can achieve lower bycatch rates than any other single bycatch mitigation method (WCPFC-SC20-EB-WP11). An analysis of relative effectiveness of reducing bycatch shows that hook-shielding devices provide a 96% improvement over no mitigation at all (WCPFC-SC20-EB-WP11). These devices do not decrease target catch rates (Pierre 2023).	approved devices, has now been provided. Alternatively, a link within the WCPFC website could be incorporated.		
	ii. Devices approved for use in WCPFC fisheries are those assessed as having met these performance requirements and listed by the Agreement on the Conservation of Albatrosses	Adjusted the paragraph to first define what a hook-shielding device is and which requirements it needs to meet, and then			

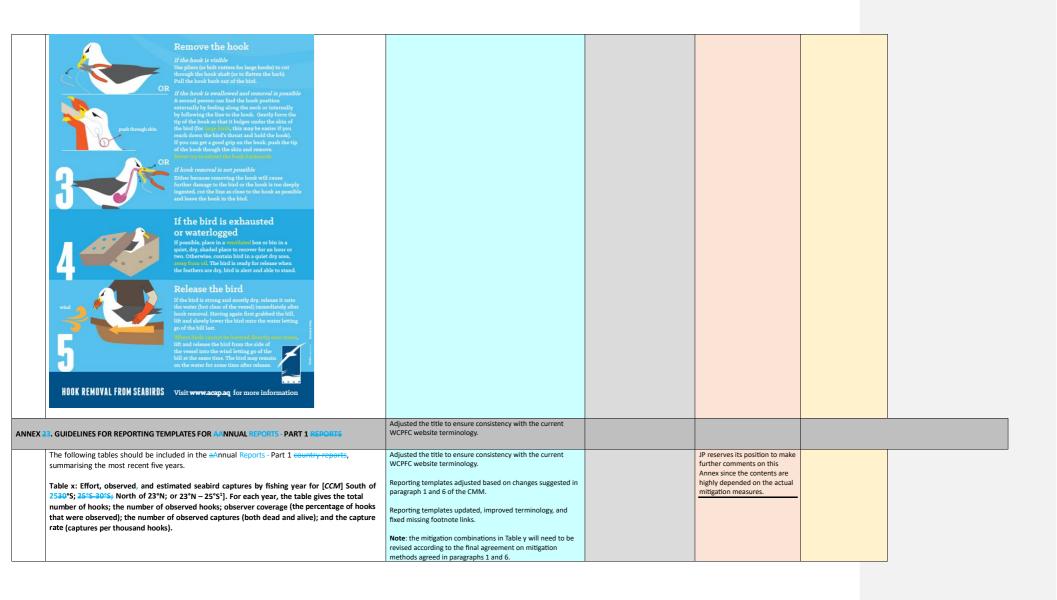
	and Petrels in their advice document which can be found <u>here</u> .	list what approved devices are, rather than conflating the two.			
New	Underwater bait setting devices Underwater bait setting devices set baited hooks at a predefined depth using a capsule mechanism and are proven to be practical on vessels <35m in length. Suitability for vessels >35m is yet to be determined. i. Underwater bait setting devices must meet the following performance requirements for use in WCPFC fisheries: a. the device deploys encapsulated hooks in a vertical manner at the stern of the vessel until a minimum prescribed depth of 5 m is reached; and b. branch lines meet current recommended minimum standards for branch line weighting; and c. experimental research has been undertaken to allow assessment of the effectiveness, efficiency, practicality, and safety of the technology. 10. ii. Devices approved for use in WCPFC fisheries are those assessed as having met these performance requirements and listed by the Agreement on the Conservation of Albatrosses and Petrels in their advice document which can be found here.	Underwater bait setters set bait automatically below the dive depth of seabirds. They substantially reduce seabird bycatch and have no effect on target catch rates or bait loss (Robertson et al. 2015, 2018). An analysis of relative effectiveness of reducing bycatch shows that underwater bait setters provide an 85% improvement over no mitigation at all (WCPFC-SC20-EB-WP11). Underwater bait setters are considered practical and easy to use by fishers, but expensive. They are currently not listed as an accepted bycatch mitigation method under CMM 2018-03. Underwater bait setters could provide another standalone mitigation alternative when the use of other mitigation methods may be challenging. The inclusion of underwater baitsetters as a mitigation option would allow for even more choice and flexibility for fishing operators. Provides necessary definition to include as an option under Paragraph 1 and Table 1 (see above and SC Outcomes Doc paragraph 147, SC20-EB-WP06, SC20-EB-WP11). Performance requirements and approved devices are based on ACAP best practice advice. Noting that such devices have been demonstrated on vessels <35m in length is based on feedback from CCMs.	Naming of commercial entities directly within the CMM was considered inappropriate, and as such, a link to the ACAP best practice advice, listing approved devices, has now been provided. Alternatively, a link within the WCPFC website could be incorporated. Some CCMs noted the need to incorporate the need to evaluate the safety of devices under i.c., which has now been included.	JP would like to reserve its position since we are still learning about this device. US: We support this addition as a stand alone measure. However, we note that underwater bait setters are a fairly new type of technology that are currently under development and undergoing sea trials. We hope the use of this mitigation method will help us to better understand its impacts and potential benefits. Similar to hook shielding devices, we do also believe implementation may be cost prohibitive.	At least one underwater bait setting device has been proven an effective standalone seabird bycatch mitigation method with no decrease in target catch rates (Robertson et al. 2018). While this device is currently indeed prohibitively expensive, inclusion as an option would provide further incentive for innovation to reduce costs and provide alternatives for night setting, which comes with practical challenges at high latitudes during summer as highlighted during TCC20.
7	Management of offal discharge i. Either nNo offal and discard discharge during setting or hauling; and ii. Or strategic Any offal or discard discharge during hauling is from the opposite side of the boat to setting/hauling to actively encourage birds away from baited hooks.	Recent studies show that fish waste (offal) discharge is not an effective primary mitigation method during setting. In fact, evidence suggests offal discharge attracts birds to vessels and can cause higher bycatch rates (e.g., Rexer-Huber & Parker 2019). To protect birds, the safest practice is to hold fish waste on board and release it outside of the time of setting or hauling. However, if it cannot be held during hauling, strategically discharging offal on the opposite side of the haul (i.e. batch discharging) can be useful to reduce the risk of seabird interactions with hooks, particularly when offal is mealed. Changes to generalize this practice for inclusion as a General Principle (see above and SC Outcomes Doc paragraph 147, SC20-EB-WP06).		JP suggests the management of offal discharge be maintained as one of the mitigation measures on table 1. JP understands that the management of offal discharge is maintained on this CMM since the effectiveness of this measures is recognized. Then, this measure must be retain as one of the mitigation measures. If management of offal discharge is maintained as one of the mitigation measures on the table 1, JP can go along with proposed wording amendment. US: Previous research (McNamara et al 1999) has shown that strategic offal discharge in the Hawai'i	Offal management is not as effective as other mitigation methods. Offal management generally acts to decrease the attractiveness of the vessel rather than protecting baited hooks from being accessed by seabirds and as pointed out, it is one of the few mitigation options to reduce bycatch during hauling, and consequently, we've retained this general principle.

8	Blue-dyed bait i. If using blue-dyed bait it must be fully thawed when dyed- ii. The Commission Secretariat shall distribute a standardized colour placard. iii. All bait must be dyed to the shade shown in the placard.	Blue-dyed bait is hypothesised to make bait less visible to seabirds. Some studies show that blue dyed bait can result in some levels of seabird bycatch reduction (e.g., Ochi et al. 2011), particularly when squid bait is used. However, the overwhelming body of evidence suggests that blue dyed bait is usually ineffective, weather dependent, and that any positive effect, if present, is far smaller than mitigation methods recognised by ACAP as best practice – including tori lines, branch line weighting, night setting and hook shielding devices (WCPFC-SC2O-EB-WP11). Additionally, some studies have found blue dyed bait may decrease target catch rate Not required if removed as an option from Table 1 (see above and SC Outcomes Doc paragraph 147, SC2O-EB-WP06, SC2O-EB-WP11).	shallow-set fishery (where large swordfish heads retaine from haul was discarded strategically during setting to distract birds away from longline gear) reduced albatross contact with the shallow-set longline vessels by 51%. This is also the only current mitigation strategy the is available for vessels during the haul. This could continue to be a useful mitigation strategy for the shallow-set longline fishery if used properly. Please see additional comments above regarding the options available in Table 1. JP suggests maintaining the original paragraph in CMM2018-03. Black footed albatross and Laysan albatross are main species by-caught by longlines in the area of North of 23N. Given the population status of these species are stable, the mitigation measures are not needed to change. US: Blue dyed bait has been proven to be effective when combined with other strategies. Over 25 years of data have indicated that the paired use of night-setting, blue dyed bait and offal discards has been highly effective at deterring seabird interactions in the Hawai' is shallow-set fishery. Seabird bycatch in Hawaii's shallow-set fishery. Seabird bycatch in Hawaii's shallow-set fishery. Seabird bycatch in Hawaii's shallow-set fishery. The low interaction rates confirm that the methods currently in use are highly effective.	As mentioned under Paragraph 6, the statement that Black-footed and Laysan Albatrosses have low interaction rates, high survival, and are apparently stable and that thus improvements to bycatch mitigation methods are not required is in contradiction with the WCPFC Convention Text. Also, a presentation during the Intersessional Informal Review Process of CMM2018-03 highlighted uncertainty around the apparently stable status of Black-footed Albatross.
			interaction rates confirm that the methods currently in use	2022) has indicated the limited effectiveness of blue-dyed bait (summarized in this presentation during the latersessional informal

				WP06) and that other mitigation methods, such as night setting, are more effective to reduce seabird bycatch. Furthermore, several references (Gilman et al. 2007, 2008, Ochi et al. 2011) and a presentation during the Informal Intersessional review process have highlighted that bluedyed bait is perceived
				as impractical, costly, and even may decrease target catch rate. This was recognized by SC20 as SC20 noted "The limited evidence for the effectiveness of deep-setting line shooters, blue-dyed bait, and offal discharge management." (SC Outcomes Doc paragraph 147) which
9	Deep setting line shooter Line shooters must be deployed in a manner such that the hooks are set substantially deeper than they would be lacking the use of the line shooter, and such that the majority of hooks reach depths of at least 100 m.	Line shooters deploy mainlines faster than the vessel speed, removing tension and allowing mainlines to enter the water immediately astern of the vessel. A single study (Lokkeborg 2003) suggested that this method could be effective in reducing seabird bycatch, but this study took place in the North Atlantic which is not representative of the WCPO. Follow-up studies have highlighted that line shooters slow down the sink rates of hooks and increase bycatch risk (Robertson et al. 2010). There is no strong evidence for the effectiveness of line shooters in reducing seabird bycatch. Not required if removed as an option from Table 1 (see above and SC Outcomes Doc paragraph 147, SC20-EB-WP06, SC20-EB-WP11).	JP requests to maintain original paragraph in CMM2018-03. Black footed albatross and Laysan albatross are main species by-caught by longliners in the area of North of 23N. Given the population status of these species are stable, the mitigation measures are not needed to change. US: We support the proposal to remove line shooters from the suite of mitigation measures.	are consequently removed. As mentioned under Paragraph 6, the statement that Black-footed and Laysan Albatrosses are stable and that further improvements to bycatch mitigation methods are not required does not align with the WCPFC Convention Text requirement to minimise bycatch and a presentation during the Intersessional Informal
			The second state of the se	Review Process of CMM2018-03 highlighted uncertainty around the status of Black-footed Albatross. Furthermore, there is only evidence that deep setting line

				_
			shooters increase	
			bycatch risk, not	
			decrease it (Robertson	
			et al. 2010 as discussed	
			in SC20-EB-WP06) and	
			thus there is no reason	
			to consider this	
			method a suitable	
			bycatch mitigation	
			method. This was	
			recognized by SC20 as	
			SC20 noted "The	
			limited evidence for	
			the effectiveness of	
			deep-setting line	
			shooters, blue-dyed	
			bait, and offal	
			discharge	
			management." (SC	
			Outcomes Doc	
			paragraph 147) which	
			are consequently	
			removed.	
	Included here to ensure that the Supplement to CMM 2018-			
ANNEX 2. SAFE HANDLING AND RELEASE GUIDELINES FOR SEABIRDS	03, approved by WCPFC16, is readily available and accessible			
	within the updated CMM			





	Fish	ing effort ¹		Observed se	eabird
	mber of Number		% hooks observed	Number	Rate ²
[year] [year]					
[year] [previous					
year e.g.					
[current year e.g. 20 1824]					
s, provide separ vide data as cap	N', 'South of 2530° ate tables for each tures per one thou of mitigation metal	area. sand hooks. nods- types used b	y the fleet in		
	Combination of Mitigation		measures m	nethods	
	Measures Method	South of 3025°S	25°S 30°S	25°S to 23	North of
	No mitigation				23°N
	measures method	s			
0.11	TL + NS				
Options required south of 25°S	TL+WB NS+WB				
	TL + WB + NS HSD				
Other options	WB UBS				
Other options	SS/BC/WB/DSLS SS/BC/WB/(MOD				
north of 23°N	or BDB)				
5					
Provide any other combination of					
mitigation neasures methods					
here					
	Totals (must equa	1			
	100%)				

 1 TL = tori line, NS = night setting, WB = weighted branch lines, SS = side setting, BC = bird curtain,

Table z: Number of observed seabird captures in [CCM] longline fisheries, 2012by year, by species, and by area.

Species	South of 2530°S	25°S-30°S	North of 23°N	23°N -25°S	Total
E.g. Antipodean albatross					
[species name]					
[species name]					
[species name]					
[species name]					
[species name]					
[species name]					
Total					

nnex 4.	Inspection	Guidelines f	for Seabird	Mitigation I	Measures

INSPECTION DETAILS				
Date of Inspection:	Officer(s):		Identification I	Number(s):
Time:	Inspecting Auth	ority:		
Vessel name:	Call sign:		In Port □	At Sea □
Location of inspection:	·	Length of Vessel: m	•	

between 25° South and 23° North)	
What mitigation methods where present during inspection:	
Tori line (Annex 1.1a or 1b), Night setting (Annex 1.3), and Weighted Branch Lines (Annex	(1.5) □, or Hook Shielding Devices
(Annex 1.6) □, or Underwater Water Bait Setting Device (Annex 1.7) □	
Other (please specify):	
Specifications for Tori Lines on vessels greater than 35m (Annex 1.1a)
Does the vessel deploy at least one tori line during fishing?	Yes □
Comment:	No □
	NA 🗆
Does the tori line(s) use both long and short streamers?	Yes □
Comment:	No □
Are all long streamers on the tori line placed at an interval of no more than 5m? Comment:	Yes □

Will need to be revisited once it's clear what the CMM amendment will look like

as possible. Note that paragraph references will need updating.

JP reserves its position to make further comments on this Annex since the contents are highly depended on the actual mitigation measures.

AUS: Consideration for the HSBLIIP work going forward if Inspection guidelines for use by port inspectors and high seas boarding inspectors included in the Annexes to ensure the revised CMM is as complete and transparent AUS: Consideration for the HSBI IIP work going forward if approved at WCPFC21

HSBI IIP work going forward if approved at WCPFC21

Suggest not all these fields can be collected during an inspection

2.

Specifications for Night Setting (Annex 1.4)
Compliance inspectors would need to record the number of hooks set in daylight hours – what are the practicalities and calculations required to enable this? Currently 'set end time' is

	=		and considered to be recorded by	manage will be	1
	No □	4	not required to be recorded by	measures will be	
Are long streamers of sufficient length to reach the surface of the sea?	Yes □		vessels.	considered during an	
Comment:	No □		Compliance in vieta	inspection (setting the	I
Are all long streamers brightly coloured?	Yes □		Compliance in night setting	expectation).	ommented [JO1]: Consider addition
Comment:	No □		analysis often occurs after the	N7	
Are all short streamers at least 1m in length?	Yes □	1	inspection and cannot be	NZ supports these to	
Comment:	No □		decided at time of inspection.	be included as part of	
		-	However, noting that this	the HSBI IIP.	
Are all short streamers brightly coloured?	Yes □		analysis could occur outside of		
Comment:	No □		an Inspection, either before (if	Further changes to	
Are all short streamers placed at intervals no more than 1m?	Yes □		NS is required) or after.	these will be	
Comment:	No □			dependent on the	
What is the length of the tori line:	Yes 🗆	1	Specifications for Weight	changes in the CMM	
s the tori line able to achieve a minimum aerial extent of 100m?	No □		Branch Lines (Annex 1.5)	that are agreed to.	
Comment:	NO L		Provide more detail on		
Do streamers cover the aerial extent of the tori line (at least 100m):	V П	-	distance from hook ie. in line	Further details on how	
Comment:	Yes 🗆		with how the observers	to report straddling	
	No □		measure it: is it from the base	sets and how to	
s the attachment point at least 7m from the surface of the sea and as close to the stern as	Yes □		curve of the hook, or where	measure distance from	
practical?	No □		the hook attaches to line.	the hook have been	
Comment:			Include here or in Para 5.	provided in the	
Does the tori line meet the specifications of Annex 1.1a?	Yes □			relevant Paragraphs of	
Comment:	No □			the CMM and the	
	NA 🗆			Annex 1.	
Specifications for Tori Lines on vessels less than 35m (Annex 1.1		1			
		4			
Does the vessel deploy at least one tori line?	Yes □				
Comment:	No □				
	NA 🗆				
Does the tori line(s) use both long and short streamers or only short streamers?	Long and Short Streamers □				
Comment:	Short Streamers Only □				
Are all long streamers placed at intervals no more than 5m?	Yes □				
Comment:	No □				
Are long streamers of sufficient length to reach the surface of the sea? (may be modified the					
first 15m)	Yes □				
Comment:	No □				
Are all long streamers brightly coloured?					
	Yes □				
Comment:	No □				
Are all short streamers at least 1m in length?					
	Yes □				
Comment:	Yes □ No □				
Are all short streamers brightly coloured?	No □ Yes □				
Are all short streamers brightly coloured? Comment:	No □ Yes □ No □				
Comment: Are all short streamers placed at intervals no more than 1m?	No				
Are all short streamers brightly coloured? Comment: Are all short streamers placed at intervals no more than 1m? Comment:	No □ Yes □ No □ Yes □ No □ Yes □ No □				
Are all short streamers brightly coloured? Comment: Are all short streamers placed at intervals no more than 1m? Comment: What is the length of the tori line:	No Yes No Yes Ye				
Are all short streamers brightly coloured? Comment: Are all short streamers placed at intervals no more than 1m? Comment: What is the length of the tori line: Is the tori line able to achieve a minimum aerial extent of 75m?	No □ Yes □ No □ Yes □ No □ Yes □ No □				
Are all short streamers brightly coloured? Comment: Are all short streamers placed at intervals no more than 1m? Comment: What is the length of the tori line: Is the tori line able to achieve a minimum aerial extent of 75m? Comment:	No Yes No Yes No Yes No No Yes No Yes No Yes No No No No No No No N				
Are all short streamers brightly coloured? Comment: Are all short streamers placed at intervals no more than 1m? Comment: What is the length of the tori line: Is the tori line able to achieve a minimum aerial extent of 75m? Comment: Do streamers cover the aerial extent of the tori line (at least 75m):	No Yes No Yes Ye				
Are all short streamers brightly coloured? Comment: Are all short streamers placed at intervals no more than 1m? Comment: What is the length of the tori line: Is the tori line able to achieve a minimum aerial extent of 75m? Comment: Do streamers cover the aerial extent of the tori line (at least 75m):	No Yes No Yes No Yes No No Yes No Yes No Yes No No No No No No No N				
Are all short streamers brightly coloured? Comment: Are all short streamers placed at intervals no more than 1m? Comment: What is the length of the tori line: Is the tori line able to achieve a minimum aerial extent of 75m? Comment: Do streamers cover the aerial extent of the tori line (at least 75m): Comment:	No Yes Yes No Yes Yes				
Are all short streamers brightly coloured? Comment: Are all short streamers placed at intervals no more than 1m? Comment: What is the length of the tori line: Is the tori line able to achieve a minimum aerial extent of 75m? Comment: Do streamers cover the aerial extent of the tori line (at least 75m): Comment: Is the attachment point at least 6m from the surface of the sea and as close to the stern as	No Yes Y				
Are all short streamers brightly coloured? Comment: Are all short streamers placed at intervals no more than 1m? Comment: What is the length of the tori line: Is the tori line able to achieve a minimum aerial extent of 75m? Comment: Do streamers cover the aerial extent of the tori line (at least 75m): Comment: Is the attachment point at least 6m from the surface of the sea and as close to the stern as practical?	No Yes Yes No Yes Yes				
Are all short streamers brightly coloured? Comment: Are all short streamers placed at intervals no more than 1m? Comment: What is the length of the tori line: Is the tori line able to achieve a minimum aerial extent of 75m? Comment: Do streamers cover the aerial extent of the tori line (at least 75m): Comment: Is the attachment point at least 6m from the surface of the sea and as close to the stern as practical? Comment:	No Yes Yes				
Are all short streamers brightly coloured? Comment: Are all short streamers placed at intervals no more than 1m? Comment:	No Yes Y				

I N	IA 🗆		
Specifications for Night Setting (Annex 1.4)			
loes the vessel only set fishing lines before nautical dawn and after nautical dusk?	es 🗆		
mment:	lo 🗆		
nes are set across nautical dawn, what is the proportion of hooks set before nautical dawn?		7	
omment:			
pes the vessel comply with night setting specifications	es 🗆	71	
omment:	lo 🗆		
	IA 🗆		
Specifications for Weight Branch Lines (Annex 1.5)		1	
	'es □	1	
	lo 🗆		
	. 🗆		
and the contract of the contra	. 🗆		
greater than or equal to a total of 80 g attached to within 2 m of the hook.	. 🗆		
Comment:			
	'es □	1	
	lo 🗆		
eminus.			
The state of the s	IA 🗆	41	
	es 🗆		
	lo 🗆	<u> </u>	
	'es □		
Comment:	lo 🗆		
N N	IA 🗆		
Specifications for Hook Shielding Devices (Annex 1.6)		7	
e hook-shielding devices used?	es 🗆		
mment:	lo 🗆		
	'es □		
	lo 🗆		
	IA 🗆		
	es 🗆		
· ·	lo 🗆		
IN IN	IA 🗆		
	es 🗆		
	lo 🗆		
	IA 🗆		
Specifications for Underwater Bait Setters (Annex 1.7)			
	es 🗆		
mment:	lo 🗆		
	es 🗆		
	lo 🗆		
· ·	IA 🗆		
TV TV		-	
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· ·	lo 🗆		
	IA 🗆		
	es 🗆		
mment:	lo 🗆		
I IN			
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What mitigation methods where present during inspection:					
Where vessel is greater than 24m in length, at least two:		an 24m in length, at least one:			
Tori Line (Annex 1.2a & 2b) □	Tori line (Annex 1.2c)]			
Night Setting □	Night Setting_□				
Side Setting with Bird Curtain and Weighted Branch Lines	Side Setting with Bird (Curtain and Weighted Branch Lines			
Weighted Branch Lines □	Weighted Branch Lines				
Or as stand-alone method:	Hook Shielding Device				
Hook Shielding Device	Underwater Bait Sette	r 🗆			
Jnderwater Bait Setter □					
Specifications for Side Setting with		ed Branch Lines			
Applicable where mainline is deployed from the port or starbox	ard side				
Is the mainline deployment from as far from the stern as prac-	ticable? (at least 1m)	Yes □			
Comment:		No □			
		NA 🗆			
If a mainline shooter is used, is this mounted at 1m forward o	f the stern?	Yes □	711		
Comment:		No □			
Bird curtain must be employed:					
 Pole aft of line shooter at least 3m long 					
 Minimum of 3 main streamers attached to upper 2m 	of pole				
 Main streamer diameter minimum of 20mm 					
 Branch streamers attached to end of each main streamers. 	amer long enough to drag				
on water – minimum diameter 10mm.			_		
Does the vessel use weighted branch lines in accordance with Annex 1.5?		Yes □			
Comment:		No □			
Does the tori line meet the specifications of Annex 1.2b?		Yes □			
Comment:		No □			
		NA □			
Specifications for Tori Lines for ves	sels >= 24m in length (An	nex 1.2a & 2.b)			
Does the vessel deploy at least one tori line?		Yes □			
Comment:		No □			
		NA 🗆			
Is the minimum length of the tori line at least 100m?		Yes □			
Comment:		No □			
Is the tori line able to achieve a minimum aerial extent of 100m?		Yes □	7		
Comment:		No □			
Is the attachment point of the tori line at least 5m from the si	urface of the sea and	Yes □	7		
maintained over the sinking baited hooks?		No □			
Comment:			_		
What streamers are being used:					
 Long streamers at least 5m apart, attached in a way 					
around the line, and long enough so that they are as	close to the water as				
possible?					
Short streamers at intervals less than 1m apart and a	at least 30 cm long?				
Comment: Does the tori line meet the specifications of Annex 1.2a/2.b?		W. D	-		
Does the tori line meet the specifications of Annex 1.2a/2.b? Comment:		Yes □			
Comment.		No 🗆			
		NA 🗆			
Specifications for Tori Lines fo	r vessels <24 m (Annex 1	2c Vessel)			

Does the vessel deploy at least one tori line?	Yes □			
Comment:	No □			
	NA 🗆			
Is the minimum length of the tori line at least 100m?	Yes □			
Comment:	No □			
Is the tori line able to achieve a minimum aerial extent of 75m?	Yes □			
Comment:	No □			1 .
Are short streamers spaced at intervals less than 1m apart and are 30cm minimum	Yes □			1
length?	No □			1
Comment:				1
Does the tori line meet the specifications of Annex 1.2c?	Yes □			4
Comment:	No □			1
	NA □			4
Specifications for Night Setting (Annex 1.4)				4
Does the vessel only set fishing lines before nautical dawn and after nautical dusk?	Yes □	11		1
Comment:	No □			1
If lines are set across nautical dawn, what is the proportion of hooks set before nautical d	lawn?			
Comment:				
Does the vessel comply with night setting specifications Comment:	Yes □	11		1
Comment:	No □	11		1
	NA 🗆			4
Specifications for Weight Branch Lines (Annex 1.5				1
Are weighted branch lines used? Comment:	Yes □	11		1
	No 🗆			4
If yes, which weighted branch line specification is used?	a. 🗆	11		1
 a. one weight greater than or equal to 40g within 50cm of the hook; or b. greater than or equal to a total of 60g attached to within 1 m of the hor 	b. 🗆	11		1
c. greater than or equal to a total of 80 g attached to within 1 m of the ho		11		1
Comment:		11		4
If weight is integrated into the hook, is the total weight (i.e., including the hook) greater to	han Yes □			4
or equal to 50 g?	No □	11		4
Comment:	NA 🗆	11		4
Are all branch lines weighted?	Yes □			4
Comment:	No □	11		1
Does the vessel comply with weighted branch line specifications?	Yes □			
Comment:	No 🗆			
	NA 🗆			
Specifications for Hook Shielding Devices (Annex 1.				
Are hook-shielding devices used?	Yes □			
Comment:	No □			
If yes, are hook-shielding devices used every set and present on all gear?	Yes 🗆			
Comment:	No 🗆			
	NA 🗆			
Does the device meet the current minimum standard for weighted branch line specifications				
Annex 1.5.	No 🗆			
Comment:	NA 🗆			
Does the vessel comply with the specifications of WCPFC approved Hook Shielding Devices?				
Comment:	No □			
	NA 🗆			
Specifications for Underwater Bait Setters (Annex 1				

Comment:	No □]		
Does the device deploy encapsulated hooks in a vertical manner at the stern of the vessel until a	Yes □			
minimum prescribed depth of 5m is reached?	No □			
Comment:	NA 🗆			
Are weighted branch lines (in accordance with Annex 1.5) also used?	Yes □			
Comment:	No □			
	NA 🗆			
Does the vessel comply with the specifications of WCPFC approved underwater bait setters?	Yes □			
Comment:	No □			
	NA 🗆			

Audit points checklist for revised CMM2018-03

- 1. To whom does the obligation apply? Set out any proposed exceptions or exclusions.
 - **∨** CCMs with longline vessels fishing South of 25 South.
 - **∨** CCMs with longline vessels fishing North of 23 North.
 - The requirements of paragraph 1 do not apply in the EEZs of French Polynesia, New Caledonia, Tonga, Cook Islands, and Fiji
- 2. What is the scope of the new obligations (i.e., does it apply to a particular geographical area, fishery, stock, species of special interest?)

The obligations apply to longline vessels and to the area South of 25 South and to the area North of 23 North.

The obligations involve the deployment of mitigation methods by longline fishing vessels in these areas to prevent the bycatch of seabirds.

CCMs are required to report on seabird interactions (using information from fishing vessel daily elogs, observer reports or EM).

3. Are there existing obligations that should be assessed in combination with any of the proposed new obligations? If so, name the CMM and paragraph(s), or other Commission obligation.

Paragraph 2 (iii) of CMM 2022-06 requires CCMs to ensure that the master of each vessel flying its flag in the Convention Area shall complete an accurate electronic log of every day that it spends on the high seas of the Convention Area, including the following information:

Interaction information about other species not listed in those sections, but required to be reported by CCMs under other Commission decisions such as, inter alia, cetaceans, seabirds and sea turtles.

4. Which proposed new obligations will require submission of Reports (R) or Implementation Statements (I), impose Limits (L), or have Deadlines (D)? Please fill out the relevant section(s) for each of the proposed new obligations.

I. Deadline

1. Specify what is required and by what deadline.

See below – Annual Part 1 Report is required one month prior to the Scientific Committee. SciData is required by 30 April annually.

II. Report

2. Specify the type of information that is required, including any specific formats or templates to be used, and whether the information must be complete (100%) or a subset of information is sufficient to meet the proposed objective.

Under paragraph 13, CCMs are required to report on seabird interactions in their Annual Part 1 Report using information from fishing vessel daily e-logs, observer reports or EM. The template for this reporting is in Annex 3 of the CMM.

Note that CCMs are also required to report as part of the Sci Data requirements on seabird interactions recorded in fishing vessel daily e-logs [paragraph 2 (iii) of CMM 2022-06]. SciData should be submitted electronically, where possible in accordance with the agreed Standards, Specifications and Procedures for Electronic Reporting in the WCPFC – operational catch and effort data [paragraph 4, CMM 2022-06]

3. Is this information already provided wholly or in part through any other data submission requirement, i.e. operational level catch and effort data?

As above – data is provided via both SciData and Annual Part One Reports. Data may also be provided by observer reports and electronic monitoring.

4. If no, specify the proposed reporting mechanism to be used for submission of new required information (i.e., Annual Report Part 1, Annual Report Part 2, direct to WCPFC Secretariat, other)

N/A.

5. Can the information provided be verified through another source? If yes, specify what other data or information source should be used. 2

Observer reports, electronic monitoring reports, HSBI reports, Port State inspection reports.

III. Implementation

6. In addition to the required Implementation Statements, list any additional information required to demonstrate CCM's implementation with the proposed new requirement. Describe any data or other information that can be reviewed by the WCPFC Secretariat to confirm or verify implementation.

Paragraph 1 and Paragraph 6 are implementation obligations.

The current Audit Point is below – and will need to be adjusted once the text for paragraphs 1 and 6 are finalized.

Based on CCM identification of which mitigation measures are being applied to CCM vessels in the applicable relevant area, the CCM submitted a statement in AR Pt2 that:

a. confirms CCM's implementation through adoption of a national binding measure that requires its flagged longline vessels to:

i. use at least two mitigation measures in paragraph 1(a) or hook shielding devices when fishing south of 30°S

ii. use one of the mitigation measures in paragraph 2 when fishing in area 25°S-30°S

b. confirms CCM's implementation through adoption of a national binding measure that requires its flagged longline vessels fishing north of 23°N:

- i. 24m or more in overall length, to use at least two mitigation measures in paragraph 6, Table 1 CMM 2018-03, including at least one from Column A
- ii. less than 24m in overall length, to use at least one of the mitigation measures from Column A in Table 1, CMM 2018-03.

c. describes how it is monitoring and ensuring its fishing vessels comply with seabird mitigation requirements in paragraphs 1,2 and 6 of CMM 2018-03 and how the CCM responds to potential infringements or instances of non-compliance with the relevant requirement.

IV. Quantitative Limit

7. Specify the proposed CCM-level or Collective limit. Specify what verifiable data shall be provided by CCM to confirm its adherence to the limit. Specify what data sources are available to the WCPFC Secretariat to review and confirm CCM's reported limit.

Not applicable

V. Other

8. If none of the other categories are appropriate: Specify the nature of the obligation. Specify how compliance is to be assessed.

Not applicable

CMM 2013-06 – assessment of the potential impact of proposals to review of 2018-03 on Small Island Developing States and Territories

"CCMs shall develop, interpret and apply conservation and management measures in the context of and in a manner consistent with the 1982 Convention and Articles 24, 25 and 26 of the Agreement. To this end, CCMs shall cooperate, either directly or through the Commission, to enhance the ability of developing States, particularly the least developed among them and SIDS and territories in the Convention Area, to develop their own fisheries for highly migratory fish stocks, including but not limited to the high seas within the Convention Area.

The Commission shall ensure that any conservation and management measures do not result in transferring, directly or indirectly, a disproportionate burden of conservation action onto SIDS and territories."

In considering any new proposal the Commission shall apply the following questions to determine the nature and extent of the impact of the proposal on SIDS and territories in the Convention Area:

Who is required to implement the proposal?

The obligations within the proposed new seabird CMM apply to all CCMs engaged in pelagic longline fishing south of 25° South or the area north 23°North.

However, the proposed recommendations would not apply in the EEZs of Small Island Developing States and Territories in Paragraph 4 (French Polynesia, New Caledonia, Tonga, Cook Islands and Fiji) of the current CMM-2018-03.

Which CCMs would this proposal impact and in what way(s) and what proportion?

The obligations within the proposed new seabird CMM apply to all CCMs with pelagic longline vessels fishing in the area south of 25° South or the area north 23°North, requiring the use of prescribed seabird bycatch mitigation methods.

These areas are the same as the areas outlined in CMM 2018-03. CCMs have existing requirements to use seabird bycatch mitigation methods on the high seas and in EEZs - unless they are exempt as per Paragraph 4 in CMM 2018-03.

Are there linkages with other proposals or instruments in other regional fisheries management organizations or international organizations that reduce the burden of implementation?

The proposed new seabird CMM follows the approach set out in CMM 2018-03 – it avoids placing a disproportionate burden on Small Island Developing States and Territories by retaining the paragraph 4 exemption. The recommendations are intended to reduce the burden of implementation, while still meeting the objective of protecting vulnerable seabirds across the main area of their distribution.

Does the proposal affect development opportunities for SIDS?

Our assessment is that the proposed recommendations do not affect development opportunities, however we welcome further feedback from Small Island Developing States and Territories.

Does the proposal affect SIDS domestic access to resources and development aspirations?

New Zealand considers that the recommendations do not affect SIDS *domestic access to resources* as proposed recommendations would not apply in the EEZs of Small Island Developing States and Territories named in Paragraph 4 of the current CMM 2018-03.

New Zealand notes that in terms of SIDS *development aspirations* on the high seas the recommendations in the proposed new seabird CMM do include:

- I) increased requirements for seabird bycatch mitigation methods in the areas beyond the EEZs of SIDs exempt under Paragraph 4 in CMM 2018-03 in the WCPO south of 25°S and north of 23 N.
- II) encouragement of the use of seabird mitigation methods in areas north of 25°S, particularly in the area of 20°S-25°S.

Consequently, Small Island Developing States fishing in the high seas beyond their EEZs in areas south of 25°S and north of 23 N could be required to increase the application of seabird bycatch mitigation methods under the proposed recommendations. These recommendations do not deviate from the current spatial requirements in CMM 2018-03. We welcome further feedback from SIDS on this assessment and how this proposal may or may not affect development aspirations.

What resources, including financial and human capacity, are needed by SIDS to implement the proposal?

There should be little to no extra cost to most SIDS affected as at least part of the required mitigation methods should already be in use on vessels flagged to those SIDS fishing outside of the EEZs exempt under Paragraph 4 of CMM 2018-03. A number of existing capacity building programmes are available to further support implementation. We welcome further information from Small Island Developing States and Territories about their individual financial or human capacity needs.

What mitigation measures are included in the proposal?

The primary mitigation measure designed to prevent disproportionate burden on Small Island Developing States and Territories is Paragraph 4 in CMM 2018-03. This exempts Small Island Developing States and Territories with EEZs that include areas south of 25°S from the requirements under CMM 2018-03 - and instead encourages the use of seabird bycatch mitigation.

This approach retains the risk-based approach that was employed when CMM 2018-03 was adopted, in which the impact of fishing of Small Island Developing States and Territories within their EEZs south of 25°S on seabirds was assessed as minimal (<1% of fishing effort in 25°S-30°S).

Upon re-evaluating the potential impact of fishing on seabirds in these areas (south of 25°S) within the EEZs of the Small Island Developing States and Territories, it was further confirmed the fishing effort in the EEZs of Small Island Developing States and Territories are having a minimal impact on seabirds. New

Zealand considers that requiring Small Island Developing States and Territories to bear the administrative burden of domestic regulation or otherwise, would be disproportionate - not least considering the benefit to seabirds would be minimal.

From <u>SC20-EB-IP-27</u> - "The relative fishing effort of the CCMs and territories whose EEZs are exempt of WCPFC CMM 2018-03 requirements for the area of 30°-25°S did not change significantly following the inception of CMM 2018-03. Jointly, the relative fishing effort within the exempt EEZs of the CCMs and Territories within the area of 30°-25°S equated to a mean of **0.22% for 2019-2023**, which mirrors the **2010-2016** mean calculated by McKechnie (2016): **0.25%.**"

What assistance mechanisms and associated timeframe, including training and financial support, are included in the proposal to avoid a disproportionate burden on SIDS?

New Zealand welcomes collaboration with Small Island Developing States and Territories who wish to implement seabird bycatch mitigation methods.

New Zealand, in collaboration with others, has been working directly with some Small Island Developing States and Territories to support implementation of seabird bycatch mitigation and is committed to continuing this work. Examples of this include the existing port-based outreach programme in Fiji, a seabird bycatch mitigation implementation workshop run in French Polynesia in January 2024, seabird bycatch mitigation trials conducted over 2024 in Fiji, and another seabird bycatch mitigation implementation workshop planned in May 2025 in New Caledonia.

Furthermore, the proposed continuation of the exemption in Paragraph 4 ensures there is no additional administrative burden for the listed Small Island Developing States and Territories within their EEZs.