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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: WCPFC19 Summary Report - Issued 29 March 2023 | WCPFC Meetings

- 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." [2]

- 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: Informal Intersessional Meetings on the Review of 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, long-term, and ongoing population declines which, for some, are most likely caused by bycatch in commercial pelagic longline fisheries.

[2] See SC19 Outcomes Document (28Nov2023) | WCPFC Meetings and WCPFC-SC19-2023/EB-IP-16, Proposed purpose, scope, and process for the seabird CMM 2018-03 review | WCPFC Meetings
[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 2018-03[4]

- 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

[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)

Key to Text column only:

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.

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

	b) hook-shielding devices; or c) an underwater bait setting device[1].] Table 1 does not apply south of ~~*30*~~*25*° South. See **Annex 1** for specifications of these ~~measure~~ methods. [1] The suitability of underwater bait setting devices for vessels >35m is yet to be demonstrated.	Requiring three out of three reflects SC20 outcome noting the relatively high effectiveness of combining the use of these ~~measures~~ methods (SC Outcomes Doc paragraph 147, SC20-EB-WP06, SC20-EB-WP11) and the reported mitigation use in WPCFC showing that 25% of effort South of 30°S already uses three out of three (SC20-EB-IP27). ACAP recommends that the most effective way to reduce seabird bycatch in pelagic longline fisheries is to use the following three best practice methods simultaneously: branch line weighting, night setting and bird scaring lines (i.e. tori lines). The addition of underwater bait setters reflects SC20 outcome noting their effectiveness (SC Outcomes Doc paragraph 147, SC20-EB-WP06). Alternatively, the use of an assessed hook shielding device or underwater bait setting device is recommended (ACAP, 2023). Bycatch may be reduced to close to zero by using these ACAP recommended methods if they are implemented to ACAP specifications (Pierre, 2023). Analysis of relative effectiveness of different specification scenarios shows that adopting ACAP best practice combinations and specifications in high-risk areas 12 could reduce bycatch (measured by relative standardised interaction rates) of 61% for the area south of 30°S, 81% for the area 25°-30°S.		are still learning about this device. AUS could support the principle of using three measures in combination for vessels that don't have e-monitoring systems or for trips without an observer on board. AUS has implemented 100% e-monitoring on longline vessels which use two of out of the three mitigation measures. These vessels have demonstrated they can achieve zero or near zero seabird bycatch while using two out of three mitigation measures. If a vessel exceeds a seabird bycatch rate of 0.05 seabirds per 1,000 hooks, that vessels may be required to implement additional mitigation measures. This includes night setting or moving fishing operations northwards). AUS supports increased monitoring in areas where seabirds are encountered. This could be through e-monitoring or onboard coverage, and could include mandatory independent monitoring (EM or observers) in areas where there is a high risk of encountering seabirds. AUS supports the area shift from 30 to 25 degrees South.	developed a time/area exemption for where and when the duration of nighttime (time between nautical dusk and nautical dawn) is too short to allow the setting of longlines ("unless longline fishing vessels are fishing south of 40°S in the time between 1 Nov and 31 Jan, during which setting across nautical dusk could be permitted due to the short nighttime period") In addition, NZ would like to point out that the stand-alone options of b) hook-shielding devices or c) underwater bait setting devices allow for the option of setting outside of nighttime. We have included an option to maintain two out of three provided full monitoring and sufficiently low bycatch rates are maintained. However, we note that this approach will provide recording and reporting challenges. At least one underwater bait setting device has been proven an effective stand-alone seabird bycatch mitigation method with no decrease in target catch rates (Robertson et al. 2018)
2	~~*25° South -30° South*~~ ~~CCMs shall require their longline vessels fishing in the area 25°S-30°S to use one of the following mitigation measures: i) weighted branch lines; ii) tori lines; or iii) hook shielding devices. Table 1 does not apply in the area 25°S-30°S. See **Annex 1** for specifications of these measures.~~	Unnecessary given proposed changes to para 1.		JP: As mentioned above, this paragraph should be maintained. AUS: Agree	Please refer to NZ's response under paragraph 1.

3	~~The extension of the scope of application of seabird mitigation measures from 30°S 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 ~~2~~ 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 when they operate within their EEZs.	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%for 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 scientific information. The review shall consider both the efficacy of the mitigation ~~measures~~ methods being used and the risk to vulnerable seabirds in areas where mitigation ~~measures~~ methods 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	
NORTHERN 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 ~~measures~~ methods from Column A in Table 1 or one mitigation method from Column B. See **Annex 1** for specifications of these ~~measures~~ methods.	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 re-reviewed by SC. AUS: The document interchanges measures and methods - suggest use one for clarity and consistency? As this	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 (article 5(e)) requirement to minimise bycatch of non-target species. Furthermore, during the Intersessional Informal Review 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 shooters, blue-dyed

				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*** | |---|---| | ~~*Side setting with a bird curtain and weighted branch lines*~~[3] | *Side setting with a bird curtain and weighted branch lines* ~~*Tori line*~~[3] | | *Night setting with minimum deck lighting* | *Hook-shielding devices* ~~*Blue dyed bait*~~ | | *Tori line*[1,2] | *Underwater bait setting device*[2] ~~*Deep setting line shooter*~~ | | *Weighted branch lines* | ~~*Management of offal discharge*~~ | | ~~*Hook shielding devices*~~[3] | | [1] The use of two (i.e., paired) tori lines is encouraged. [2] The suitability of underwater bait setting devices for vessels >35m is yet to be demonstrated. ~~If using side setting with a bird curtain and weighted branch lines from Column A, this will be counted as two mitigation measures~~. ~~[2] If a tori line is selected from both Column A and Column B, this equates to simultaneously using two (i.e. paired) tori lines.~~ ~~[3] Hook shielding devices can be used as a stand-alone.~~	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-WP11). The addition of underwater bait setters reflects SC20 outcome noting their effectiveness (SC Outcomes Doc paragraph 147, SC20-EB-WP06). Removal of deep-setting line shooters, blue-dyed bait, and offal discharge management based on SC20 outcome noting the limited evidence for their effectiveness (SC Outcomes Doc paragraph 147, SC20-EB-WP06, SC20-EB-WP11). Consequently, the original Column B has been restructured to capture stand-alone methods.	The practicability of underwater bait setters is yet to be demonstrated for >35m vessels, and this is now clarified in a footnote. It was noted that offal discharge is challenging to assess compliance with and the removal of this option would simplify compliance monitoring and transparency.	JP: Please see our comments to paragraph 6 above. US: With the proposed removal of blue dyed bait and offal discards from the suite of mitigation methods, US would like to propose inclusion of night setting as a stand alone measure (in Column B of Table 1) for vessels fishing N of 23N (regardless of size). Research has indicated that night setting is an effective mitigation strategy when adhered to. 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 (~80%). Hawaii's shallow set	The proposal of including night setting as a stand-alone mitigation method is not supported by evidence reviewed during the intersessional review process (e.g., Duckworth 1995, Peterson et al. 2008, Jiminez et al. 2009, Jiminez et al. 2020, Pierre 2023, this presentation, as 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

				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 paragraph 147) which are consequently removed.
OTHER AREAS					
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 ~~measures~~ methods listed in Paragraph ~~Table~~ 1.	Strengthening of encouragement based on SC20 outcome noting that there are areas of importance to albatrosses and petrels vulnerable to bycatch in areas with no bycatch mitigation requirements (in particular 25°S to 20°S). As this area is in the Southern Hemisphere, reference is changed from Table 1 to Paragraph 1 (SC Outcomes DOC paragraph 143, SC20-EB-WP10).	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 SC 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 6.		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~~ methods.	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 para	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.

RESEARCH					
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 ~~measures~~ methods they required their vessels to use per 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 changes from previous years. ~~Each such CCM shall also include in its annual reports for subsequent years any changes it has 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.*	We've included a more concise geographical qualifier accordingly. In addition, we have removed the final sentence to improve clarity.
9	CCMs are encouraged to undertake research to further develop and refine ~~measures~~ methods to mitigate seabird bycatch including mitigation ~~measures~~ methods for 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 ~~measures~~ methods will be used.				
GUIDELINES FOR SAFE RELEASE OF SEABIRDS					
10	CCMs are encouraged to ~~adopt~~ follow the guidelines[1] 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.	Replaced annually with biennially in light of the rotational prioritisation to the SC EB theme			
12	The intersessional working group for the regional observer programme (IWG-ROP) [and the intersessional working group on Electronic Reporting and Electronic Monitoring (ERandEM-IWG)] 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 ~~measures~~ methods.	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 ~~measures~~ methods 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 HSBI 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 Monitoring Scheme process.
13	CCMs shall record information on seabird interactions and report annually ~~provide~~ to the Commission, in Part 1 of their annual reports, all available information on interactions with seabirds, including from electronic daily logs from fishing operations (as set out in paragraph 2 (iii) of CMM 2022-06), reported or collected by observers, or recorded by electronic monitoring, to enable the estimation of seabird mortality in all fisheries to which the Convention applies. (see **Annex** ~~23~~ for Part 1 reporting template guideline). These reports shall include information on: a) the proportion of observed effort with specific mitigation ~~measures~~ methods used; and b) observed and reported species specific seabird bycatch rates and numbers or statistically rigorous estimates of species-specific seabird interaction rates (for longline, interactions per 1,000 hooks) and total numbers.	Annex numbering needs adjusting.		AUS: Suggest interaction information is recorded on all vessels as per CMM 2022-06 (or subsequent renditions). This information may not be collected to species level if an Observer or EM on board. However, this CMM shouldn't preclude the required information to be recorded through other CMMs.	We note the requirement in para 2 (iii) of CMM 2022-06 for CCMs to require vessel masters to record, as part of the daily e-log, information about interactions with other species such as seabirds – and that this 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 201~~8~~-0~~6~~3, which is hereby repealed.	CMM numbering will need updating.			
ANNEX 1. SPECIFICATIONS					
1	**Tori lines (South of 25° South)** **1a) For vessels >=35 m total length** i. Deploy at least 1 (single) tori line ~~with a minimum length of 120 m~~ 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. Where practical, vessels are encouraged to use a second tori line at times of high bird abundance or activity; both tori lines shall be deployed simultaneously~~, one on each side of the line being set~~. If two (paired) tori lines are used baited hooks shall be deployed within the area bounded by the two tori lines. ii. A tori line using long and short streamers shall be used. Streamers shall be: brightly coloured, a mix of long and short streamers. a. Long streamers shall be placed at intervals of no more than 5 m, and long streamers must be attached to the line ~~with swivels~~ in a way that prevents streamers from wrapping around the line (e.g. using unweighted swivels). Long streamers of sufficient length to reach the sea surface in calm conditions must be used. b. Short streamers shall be ~~(~~greater than 1m in length~~)~~ and shall be placed no more than 1m apart. iii. Vessels shall deploy the tori line ~~to achieve~~ with an ~~desired~~ aerial extent greater than or	Tori lines deter seabirds from approaching hooks to feed on baits during setting. It is a line towed from a high point at the stern of the vessel. As the vessel moves forward the section of the line closest to the vessel is lifted off the water. This lifted section (referred to as aerial extent) has flapping streamers that scare seabirds away from sinking baited hooks. Tori lines are generally attached to a strong, purpose-built pole (tori pole). Analysis of relative effectiveness of tori lines at reducing bycatch shows this method can reduce seabird bycatch by approximately 54% over no mitigation at all (WCPFCSC20-EB-WP11). Evidence from around the world illustrates the efficacy of tori lines at reducing seabird bycatch with no negative effect on target catch rate. In fact, some studies show increased target catch with tori line use (Pierre, 2023). Minor practicality changes based on feedback from CCMs during the intersessional review process and contained in recommendations 3 and 4 of SC20-EB-WP06.	Concerns with the lack of clarity on tori line specifications, which may cause challenges for compliance monitoring, are now adjusted. Specifically, a minimum length has now been defined (120m) that should allow for the required aerial extent (100m) to be achieved through a range of different potential options to create sufficient drag. CCMs have flexibility in how they achieve the aerial extent of 100m through a range of different potential options to create sufficient drag.	JP: In subsection i of 1a), "with a minimum length of 120m" is added without track change. JP suggests deleting this part as this was not included with SC document (EB-WP-06) nor reviewed by SC and could be in conflict with subsection iii. In subsection ii a, JP suggests deleting "unweighted" before "swivels" as this insertion was not included with SC document (EB-WP-06) nor reviewed by SC. In subsection iii of 1a), JP has the following comments: - "desired" should be maintained because the actual aerial extent cannot be scaled, and could be changed by	The small changes to the minimum tori line length as well as the swivels were a result of discussions at TCC20. TCC20 discussed that this change would assist the practical implementation of 100m aerial extent. Similarly, discussions during TCC20 highlighted that tori line extent is scalable, as it depends on the drag objects used and the attachment height. The same discussions also underscored that

	equal to 100 m. To achieve this aerial extent the tori line shall have a minimum length[1] of at least 200m, or if a drag object is used, the tori line shall have a minimum length[1] 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 practical. ~~iv. 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. iii. 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 length[1] 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.~~ [1] 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. 7. **1a) For vessels >=35 m total length** i. Deploy at least 1 (single) tori line ~~with a minimum 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 baits. Where practical, vessels are encouraged to use a second tori line at times of high bird abundance or activity; both tori lines shall be deployed simultaneously~~., one on each side of the line being 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.

				are used (paired) baited hooks shall be deployed within the area bounded by the two tori lines. ii. A tori line using long and short streamers shall be used. Streamers shall be: brightly coloured, a mix of long and short streamers. a. Long streamers shall be placed at intervals of no more than 5 m, and long streamers must be attached to the line in a way that prevents streamers from wrapping around the line (e.g. using unweighted swivels). Long streamers of sufficient length to reach the sea surface in calm conditions must be used. b. Short streamers shall be (greater than 1m in length) and shall be placed no more than 1m apart. iii. Vessels shall deploy the tori line with an aerial extent greater than or equal to 100 m. To achieve this aerial extent, the ~~(e.g. 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. ~~iv. 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. A Deploy at least 1 (single) tori line before the first set	

				shall be attached to a tori pole >7m above the sea surface located as close to the stern as practical. ~~iv. 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. A Deploy at least 1 (single) tori line before the first set	

				hook enters the water and retrieved after the last hook has been set. A tori line using 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. Long streamers of sufficient length to reach the sea surface in calm conditions must be used. b. Short streamers placed at intervals of no more than 1m. iii. 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 length 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 (paired), baited hooks shall be deployed within the area bounded by the two tori lines. ~~the two lines must be deployed on opposing sides of the main line.~~ Tori pole: Agree (from the N23N TCC20 comments) that it	

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

	[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 to deter BFAL and LAAL. 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 ~~(e.g. 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	**Side setting with bird curtain and weighted branch lines** 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. ii. Nautical dusk and nautical dawn are defined as set out in the Nautical Almanac tables for relevant latitude, local time and date. iii. Deck lighting to be kept to a minimum. Minimum deck lighting should not breach minimum standards for safety and navigation	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 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 bycatch shows this method provides a 54% improvement over no mitigation at all (WCPFC-SC20-EBWP11).	Some CCMs noted that it was currently unclear who should be recording sets across nautical dawn as referred to in iii.	JP suggests the following changes: "If setting occurs across nautical dawn, or nautical dusk, the settings only before nautical down or after nautical dusk ~~this does not~~ qualify as	We've reinstated sub-paragraph iii as requested under a new General Principle. We've adapted the wording in sub-paragraph iv to

	iv. If setting occurs across nautical dawn, or nautical dusk, only hooks set before nautical dawn or after nautical dusk qualify as night setting, and this should be recorded accordingly 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 4).~~" 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 dawn.	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.
5	**Weighted branch lines** i. Following minimum weight specifications are required: a. one weight greater than or equal to 40g within 50cm of the hook[3]; or b. greater than or equal to a total of ~~45~~60g attached to within 1 m of the hook[4]; 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 ~~6~~80 g attached to within ~~3.5~~2 m of the hook[1]~~, or~~ ~~d. greater than or equal to a total of 98 g weight attached to within 4 m of the hook.~~ ii. When weighting is directly attached to, or integrated into the hook, a minimum of total weight of 50 g (i.e., including the hook) is sufficient. iii. The use of lighting devices or other fishing accessories as weights is not recommended unless they are proven to achieve a sink rate of 0.5 m/s to 5 m depth. iv. When applying weighted branch lines as a seabird bycatch mitigation method, all branch lines 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 weighted 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 in **Annex 3 and 4**). [1] 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 (WCPFC-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 Doc 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 within 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. "When applying weighted branch lines as a seabird bycatch mitigation method, all branch lines must be weighted. In case that setting occurs across nautical dawn or 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 the night setting. " 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 SC Outcomes Doc 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 sub-paragraph 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

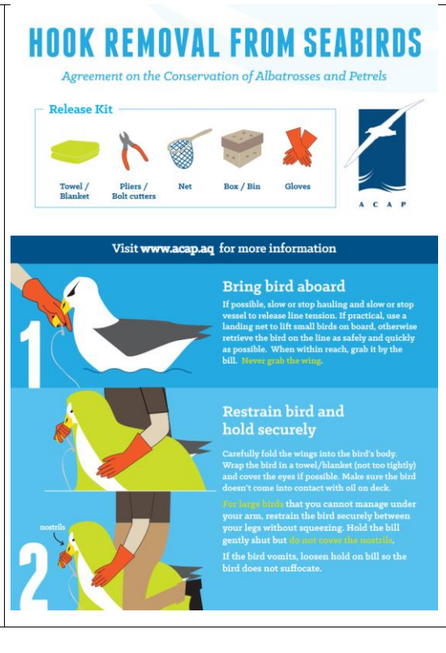
				others that has identified the value of heavier line weights and a specific distance from the hook with regards to seabird bycatch risk. While there is a minimal modeled increased effectiveness, this is not significant and the move of weight towards the hook increases the human safety concern that we 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 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:~~ i. Hook-shielding devices must meet the following requirements for use in WCPFC fisheries: ~~Hookpods, which comply with the following performance characteristics~~[3] 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. 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	Hook-shielding devices cover the point and barb of the hook to protect seabirds 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. 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). Adjusted the paragraph to first define what a hook-shielding device is and which requirements it needs to meet, and then	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.		

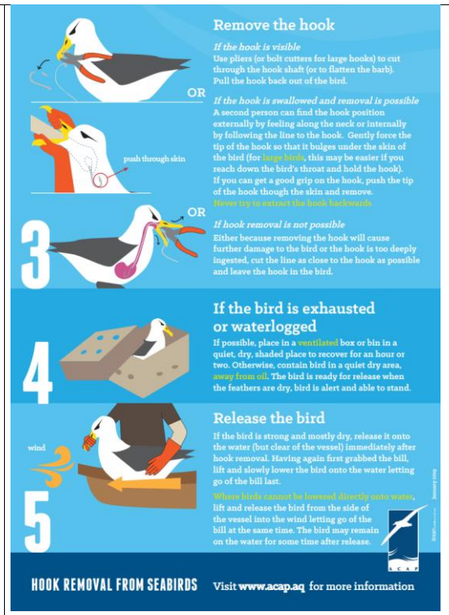
	and Petrels in their advice document which can be found here.	list what approved devices are, rather than conflating the two.			
New para	**Underwater bait setting devices** Underwater bait setting devices set baited hooks at a predefined depth using a capsule mechanism and are proven to be practical 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. **11.**	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 stand-alone 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 a~~No 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.

				shallow-set fishery (where large swordfish heads retained 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 that 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.	
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-SC20-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, SC20-EB-WP06, SC20-EB-WP11).		JP suggests maintaining the 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: 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'i shallow-set fishery. Seabird bycatch in Hawaii's shallow-set fishery represents <5% of overall catches from the longline fishery. The low interaction rates confirm that the methods currently in use are highly effective. Please see additional comments above regarding the options available in Table 1.	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. A large body of evidence (Gilman et al. 2003, 2007, 2008, 2022) has indicated the limited effectiveness of blue-dyed bait (summarized in this presentation during the Intersessional Informal review and SC20-EB-

					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 blue-dyed 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 are consequently removed.
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.	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 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.
ANNEX 2. SAFE HANDLING AND RELEASE GUIDELINES FOR SEABIRDS		Included here to ensure that the Supplement to CMM 2018-03, approved by WCPFC16, is readily available and accessible within the updated CMM			

				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.	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.

					
ANNEX 23. GUIDELINES FOR REPORTING TEMPLATES FOR AANNUAL REPORTS - PART 1 ~~REPORTS~~		Adjusted the title to ensure consistency with the current WCPFC website terminology.			
	The following tables should be included in the ~~a~~Annual Reports - Part 1 ~~country reports~~, summarising the most recent five years. **Table x: Effort, observed, and estimated seabird captures by fishing year for [*CCM*] South of 2530°S; ~~25°S-30°S;~~ North of 23°N; or 23°N – 25°S[1]. For each year, the table gives the total number of hooks; the number of observed hooks; observer coverage (the percentage of hooks that were observed); the number of observed captures (both dead and alive); and the capture rate (captures per thousand hooks).**	Adjusted the title to ensure consistency with the current WCPFC website terminology. Reporting templates adjusted based on changes suggested in paragraph 1 and 6 of the CMM. Reporting templates updated, improved terminology, and fixed missing footnote links. **Note**: the mitigation combinations in Table y will need to be revised according to the final agreement on mitigation methods agreed in paragraphs 1 and 6.		JP reserves its position to make further comments on this Annex since the contents are highly depended on the actual mitigation measures.	

Year	Fishing effort[1]				Observed seabird captures	
	Number of vessels	Number of hooks	Observed hooks	% hooks observed	Number	Rate[2]
[year]						
[year]						
[year]						
[previous year e.g.						
[current year e.g. 20~~18~~24]						

[1]Insert 'North of 23°N', 'South of 25~~30~~°S', ~~'25°S-30°S'~~ or '23°N – 25°S'. For CCMs fishing in all areas, provide separate tables for each area.
[2]Provide data as captures per one thousand hooks.

Table y: Proportion of mitigation methods ~~types~~ used by the fleet in [year].

	Combination of Mitigation ~~Measures~~ Methods	Proportion of observed effort using mitigation ~~measures~~ methods			
		South of ~~30~~25°S	~~25°S-30°S~~	25°S to 23°N	North of 23°N
	No mitigation ~~measures~~ methods				
Options required south of 25°S	~~TL + NS~~				
	~~TL + WB~~				
	~~NS + WB~~				
	TL + WB + NS				
~~Other options~~	HSD				
	~~WB~~ UBS				
	~~TL~~				
Other options north of 23°N	SS/BC/WB/~~DSLS~~				
	~~SS/BC/WB/(MOD or BDB)~~				
Provide any other combination of mitigation ~~measures~~ methods here					
	Totals (must equal 100%)				

[1]TL = tori line, NS = night setting, WB = weighted branch lines, SS = side setting, BC = bird curtain, ~~BDB = blue dyed bait, DSLS = deep setting line shooter, MOD = management of offal discharge,~~ HS**D** = hook-shielding device, UBS = underwater bait setter.

Table z: Number of observed seabird captures in [*CCM*] longline fisheries, ~~2012~~by 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					

Annex 4. Inspection Guidelines for Seabird Mitigation Measures

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

INSPECTION DETAILS		
Date of Inspection:	Officer(s):	Identification Number(s):
Time:	Inspecting Authority:	
Vessel name:	Call sign:	In Port ☐ At Sea ☐
Location of inspection:	Length of Vessel: m	

Inspection of Seabird Mitigation Measure in accordance with Paragraph 1 and 7 (Required South of 25° South and encouraged 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? Comment:	Yes ☐ No ☐ NA ☐
Does the tori line(s) use both long and short streamers? Comment:	Yes ☐ No ☐
Are all long streamers on the tori line placed at an interval of no more than 5m? Comment:	Yes ☐

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.

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 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

NZ supports the development of inspection guidelines, either considered as part of the CMM or separately as a voluntary guideline.

We further acknowledge that additional consultation is needed to ensure that guidelines are a practical tool for inspectors and are as simple as possible to ensure that data collect is consistent, improves thorough inspection rates, and also communicates to CCMs what aspects of their fleets' mitigation

	No ☐
Are long streamers of sufficient length to reach the surface of the sea? Comment:	Yes ☐ No ☐
Are all long streamers brightly coloured? Comment:	Yes ☐ No ☐
Are all short streamers at least 1m in length? Comment:	Yes ☐ No ☐
Are all short streamers brightly coloured? Comment:	Yes ☐ No ☐
Are all short streamers placed at intervals no more than 1m? Comment:	Yes ☐ No ☐
What is the length of the tori line: Is the tori line able to achieve a minimum aerial extent of 100m? Comment:	Yes ☐ No ☐
Do streamers cover the aerial extent of the tori line (at least 100m): Comment:	Yes ☐ No ☐
Is the attachment point at least 7m from the surface of the sea and as close to the stern as practical? Comment:	Yes ☐ No ☐
Does the tori line meet the specifications of Annex 1.1a? Comment:	Yes ☐ No ☐ NA ☐

Specifications for Tori Lines on vessels less than 35m (Annex 1.1b)

Does the vessel deploy at least one tori line? Comment:	Yes ☐ No ☐ NA ☐
Does the tori line(s) use both long and short streamers or only short streamers? Comment:	Long and Short Streamers ☐ Short Streamers Only ☐
Are all long streamers placed at intervals no more than 5m? Comment:	Yes ☐ No ☐
Are long streamers of sufficient length to reach the surface of the sea? (may be modified the first 15m) Comment:	Yes ☐ No ☐
Are all long streamers brightly coloured? Comment:	Yes ☐ No ☐
Are all short streamers at least 1m in length? Comment:	Yes ☐ No ☐
Are all short streamers brightly coloured? Comment:	Yes ☐ No ☐
Are all short streamers placed at intervals no more than 1m? Comment:	Yes ☐ No ☐
What is the length of the tori line: Is the tori line able to achieve a minimum aerial extent of 75m? Comment:	Yes ☐ No ☐
Do streamers cover the aerial extent of the tori line (at least 75m): Comment:	Yes ☐ No ☐
Is the attachment point at least 6m from the surface of the sea and as close to the stern as practical? Comment:	Yes ☐ No ☐
Does the tori line meet the specifications of Annex 1.1b? Comment:	Yes ☐ No ☐

not required to be recorded by vessels.

Compliance in night setting analysis often occurs after the inspection and cannot be decided at time of inspection. However, noting that this analysis could occur outside of an Inspection, either before (if NS is required) or after.

Specifications for Weight Branch Lines (Annex 1.5)
Provide more detail on distance from hook ie. in line with how the observers measure it: is it from the base curve of the hook, or where the hook attaches to line. Include here or in Para 5.

measures will be considered during an inspection (setting the expectation).

Commented [JO1]: Consider addition here.

NZ supports these to be included as part of the HSBI IIP.

Further changes to these will be dependent on the changes in the CMM that are agreed to.

Further details on how to report straddling sets and how to measure distance from the hook have been provided in the relevant Paragraphs of the CMM and the Annex 1.

	NA ☐
Specifications for Night Setting (Annex 1.4)	
Does the vessel only set fishing lines before nautical dawn and after nautical dusk? Comment:	Yes ☐ No ☐
If lines are set across nautical dawn, what is the proportion of hooks set before nautical dawn? Comment:	
Does the vessel comply with night setting specifications Comment:	Yes ☐ No ☐ NA ☐
Specifications for Weight Branch Lines (Annex 1.5)	
Are weighted branch lines used? Comment:	Yes ☐ No ☐
If yes, which weighted branch line specification is used? 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 hook; or c. greater than or equal to a total of 80 g attached to within 2 m of the hook. Comment:	a. ☐ b. ☐ c. ☐
If weight is integrated into the hook, is the total weight (i.e., including the hook) greater than or equal to 50 g? Comment:	Yes ☐ No ☐ NA ☐
Are all branch lines weighted? Comment:	Yes ☐ No ☐
Does the vessel comply with weighted branch line specifications? Comment:	Yes ☐ No ☐ NA ☐
Specifications for Hook Shielding Devices (Annex 1.6)	
Are hook-shielding devices used? Comment:	Yes ☐ No ☐
If yes, are hook-shielding devices used every set and present on all gear? Comment:	Yes ☐ No ☐ NA ☐
Does the device meet the current minimum standard for weighted branch line specifications of Annex 1.5. Comment:	Yes ☐ No ☐ NA ☐
Does the vessel comply with the specifications of WCPFC approved Hook Shielding Devices? Comment:	Yes ☐ No ☐ NA ☐
Specifications for Underwater Bait Setters (Annex 1.7)	
Is an underwater bait setter used? Comment:	Yes ☐ No ☐
Does the device deploy encapsulated hooks in a vertical manner at the stern of the vessel until a minimum prescribed depth of 5m is reached? Comment:	Yes ☐ No ☐ NA ☐
Are weighted branch lines (in accordance with Annex 1.5) also used? Comment:	Yes ☐ No ☐ NA ☐
Does the vessel comply with the specifications of WCPFC approved underwater bait setters? Comment:	Yes ☐ No ☐ NA ☐

Inspection of Seabird Mitigation Measure in accordance with Paragraph 6 and 7 (Required north of 23° North and encouraged between 25° South and 23° North)

What mitigation methods where present during inspection:

Where vessel is greater than 24m in length, **at least two**:	Where vessel is less than 24m in length, **at least one**:
Tori Line (Annex 1.2a & 2b) ☐ Night Setting ☐ Side Setting with Bird Curtain and Weighted Branch Lines ☐ Weighted Branch Lines ☐ **Or as stand-alone method:** Hook Shielding Device ☐ Underwater Bait Setter ☐	Tori line (Annex 1.2c) ☐ Night Setting ☐ Side Setting with Bird Curtain and Weighted Branch Lines ☐ Weighted Branch Lines ☐ Hook Shielding Device ☐ Underwater Bait Setter ☐

Specifications for Side Setting with Bird Curtain and Weighted Branch Lines

Applicable where mainline is deployed from the port or starboard side ☐

Is the mainline deployment from as far from the stern as practicable? (at least 1m) Comment:	Yes ☐ No ☐ NA ☐
If a mainline shooter is used, is this mounted at 1m forward of the stern? Comment:	Yes ☐ 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 streamer long enough to drag on water – minimum diameter 10mm.	 ☐ ☐ ☐ ☐
Does the vessel use weighted branch lines in accordance with Annex 1.5? Comment:	Yes ☐ No ☐
Does the tori line meet the specifications of Annex 1.2b? Comment:	Yes ☐ No ☐ NA ☐

Specifications for Tori Lines for vessels >= 24m in length (Annex 1.2a & 2.b)

Does the vessel deploy at least one tori line? Comment:	Yes ☐ No ☐ NA ☐
Is the minimum length of the tori line at least 100m? Comment:	Yes ☐ No ☐
Is the tori line able to achieve a minimum aerial extent of 100m? Comment:	Yes ☐ No ☐
Is the attachment point of the tori line at least 5m from the surface of the sea and maintained over the sinking baited hooks? Comment:	Yes ☐ No ☐
What streamers are being used: • Long streamers at least 5m apart, attached in a way that prevents wrapping 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 at least 30 cm long? Comment:	 ☐ ☐
Does the tori line meet the specifications of Annex 1.2a/2.b? Comment:	Yes ☐ No ☐ NA ☐

Specifications for Tori Lines for vessels <24 m (Annex 1.2c Vessel)

Does the vessel deploy at least one tori line? Comment:	Yes ☐ No ☐ NA ☐
Is the minimum length of the tori line at least 100m? Comment:	Yes ☐ No ☐
Is the tori line able to achieve a minimum aerial extent of 75m? Comment:	Yes ☐ No ☐
Are short streamers spaced at intervals less than 1m apart and are 30cm minimum length? Comment:	Yes ☐ No ☐
Does the tori line meet the specifications of Annex 1.2c? Comment:	Yes ☐ No ☐ NA ☐

Specifications for Night Setting (Annex 1.4)	
Does the vessel only set fishing lines before nautical dawn and after nautical dusk? Comment:	Yes ☐ No ☐
If lines are set across nautical dawn, what is the proportion of hooks set before nautical dawn? Comment:	
Does the vessel comply with night setting specifications Comment:	Yes ☐ No ☐ NA ☐

Specifications for Weight Branch Lines (Annex 1.5)	
Are weighted branch lines used? Comment:	Yes ☐ No ☐
If yes, which weighted branch line specification is used? 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 hook; or c. greater than or equal to a total of 80 g attached to within 2 m of the hook. Comment:	a. ☐ b. ☐ c. ☐
If weight is integrated into the hook, is the total weight (i.e., including the hook) greater than or equal to 50 g? Comment:	Yes ☐ No ☐ NA ☐
Are all branch lines weighted? Comment:	Yes ☐ No ☐
Does the vessel comply with weighted branch line specifications? Comment:	Yes ☐ No ☐ NA ☐

Specifications for Hook Shielding Devices (Annex 1.6)	
Are hook-shielding devices used? Comment:	Yes ☐ No ☐
If yes, are hook-shielding devices used every set and present on all gear? Comment:	Yes ☐ No ☐ NA ☐
Does the device meet the current minimum standard for weighted branch line specifications of Annex 1.5. Comment:	Yes ☐ No ☐ NA ☐
Does the vessel comply with the specifications of WCPFC approved Hook Shielding Devices? Comment:	Yes ☐ No ☐ NA ☐

Specifications for Underwater Bait Setters (Annex 1.7)	
Is an underwater bait setter used?	Yes ☐

		Comment:	No ☐					
		Does the device deploy encapsulated hooks in a vertical manner at the stern of the vessel until a minimum prescribed depth of 5m is reached? Comment:	Yes ☐ No ☐ NA ☐					
		Are weighted branch lines (in accordance with Annex 1.5) also used? Comment:	Yes ☐ No ☐ NA ☐					
		Does the vessel comply with the specifications of WCPFC approved underwater bait setters? Comment:	Yes ☐ 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 e-logs, 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 sub-set 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 SC20-EB-IP-27 - *"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.