Summary report of the first informal intersessional meeting to review WCPFC CMM 2018-03 – Conservation and Management Measure to mitigate the impact of fishing for highly migratory fish stocks on seabirds

The first informal intersessional meeting to review WCPFC CMM 2018-03 took place online on 20 February 2024 (NZST). The meeting was attended by representatives from Australia, Canada, Cook Islands, China, Chinese Taipei, French Polynesia, Japan, Republic of Korea, New Caledonia, New Zealand, Papua New Guinea, Republic of the Marshall Islands, United States of America. The meeting was also attended by representatives from the WCPFC Secretariat as well as ACAP, BLI, ISSF, MSC, OPRT, Safina Centre, SPC, SPREP, and TNC as observers.

To accommodate time zone challenges faced by some CCMs, a follow-up informal intersessional meeting, covering the exact same points as the 20th February meeting, took place on 19 March 2024 (NZST), which was attended by the European Union and New Zealand. For the sake of completeness, the summaries of these two meetings have been merged, but to retain oversight, points raised during the follow-up meeting are including in *italics*.

Agenda item 1. Opening and brief background

1. The meeting was opened by Ms Danica Stent, New Zealand, with a presentation on the background of the review of CMM 2018-03.

Agenda item 2. Presentation - Bycatch impacts on seabird populations

2. Dr Johannes Fischer, New Zealand, presented an overview of longline bycatch impacts on seabird populations.

- *The EU requested further insights into seabird interactions and the impacts of longline fishing on seabird populations, highlighted their work and observer data from ICCAT (Fernandez et al. 2018a) and IOTC (Fernandez et al. 2018b), and suggested that based on those results, impacts from the longline fleets examined in these studies appeared to be limited. [all papers are now available on the SharePoint].*
- *New Zealand clarified that there are several risk assessments and mortality estimates available (e.g., Peatman et al. 2019, Edwards et al. 2023), which place the estimated annual mortality in the order of several 10,000s annual mortalities within WCPFC, which is in line with the population declines observed at colonies. Further work is underway in CCSBT. Further and more in-depth discussions on the spatial aspects of risks and impacts are intended to be covered during the second informal intersessional meeting, which is planned for 7 May 2024.*

Agenda item 3. Presentation – MSC relevance to the seabird CMM

3. Dr Adrian Gutteridge, Marine Stewardship Council (MSC), presented on the MSC certification process, MSC Standard V3.0, and its relevance to the review of CMM 2018-03.

- In the MSC Standard V3.0, seabirds fall within the Endangered, Threatened, and Protected/Out Of Scope (ETP/OOS) species category, which is part of Principle 2 (Ecosystem Impacts) of the MSC assessment tree.
- The ETP/OOS category is assessed through three lenses (termed Performance Indicators): 1) ETP/OOS outcome, 2) ETP/OOS management, and 3) ETP/OOS information.
- The MSC's intent is that the Unit of Assessment (UoA) i) does not hinder the recovery of the ETP/OOS unit to a level consistent with achieving favourable conservation status; and ii) minimises impact on ETP/OOS units.

- For the ETP/OOS outcome assessment:
  - The favourable conservation status reference point is set as a minimum of 50% of carrying capacity. If the ETP/OOS unit is below this level, the expectation is that the MSC Unit of Assessment (UoA) does not hinder recovery to this level [over 3 generations or 100 years, whichever is shorter].
  - Where ETP/OOS units are not "likely" to be at favourable conservation status, the UoA needs to demonstrate that any mortalities from the ETP/OOS unit are "unlikely" to hinder recovery.
  - The MSC has defined thresholds for teams to use to determine whether ETP/OOS unit mortalities can be considered "negligible", i.e. a level at which teams are required to consider that the UoA is not hindering recovery.
  - It is not possible to consider that the impact on an OOS species is "negligible" if the ETP/OOS unit has a breeding population (e.g. mature adults) size of less than 5,000 individuals. It is also not possible to consider that the impact is negligible if average annual mortalities from the UoA are greater than 10 individuals.
  - When there are mortalities of ETP/OOS units above "negligible" levels, the team will need to either: 1) in cases without quantitative assessments, apply the RBF [Risk-based Framework] (MSC Fisheries Standard Toolbox Section A) or, 2) evaluate the likelihood that the UoA is hindering recovery to a favourable conservation status on existing quantitative assessments.

- For the ETP/OOS management assessment:
  - To achieve the ETP/OOS outcome, Management measures or strategies [for ETP/OOS species] should be designed to achieve a favourable conservation status (or negligible impact) and work to minimise incidental bycatch. Management actions need to be implemented "on the water".
  - It is the MSC intent for any existing best practices to be applied. For seabirds, these could include FAO best practices to reduce incidental catch of seabirds in capture fisheries, FAO technical guidelines for responsible fisheries, and ACAP publications.
  - Where best practice hasn't been established, management action should have been demonstrated as working in similar fisheries.

- For the ETP/OOS information assessment:
  - Information needs to be adequate to assess impact and efficacy of management.
  - Where best practice hasn't been established, management action should have been demonstrated as working in similar fisheries.

- Further details can be found in the presentation and the associated resources:
  - MSC Fisheries Standard v3.0 Masterclass
  - FSR training Supplementary reading
  - Fisheries Assessor training webinars
  - Change tracker report
  - Capacity Building Training Level 1

- Following the presentation, it was established that while no insights can be provided at this time on the updated MSC Fisheries Standard v3.1, as it's still in draft, a representative from the MSC would likely attend the 20th Regular Session of the Scientific Committee in August 2024 to provide an update.

Agenda item 4. Presentation - Seabird bycatch mitigation methods

4. Dr Igor Debski, New Zealand, presented an overview of seabird bycatch mitigation methods.

- *EU highlighted that while currently mitigation methods are being reviewed one by one, methods are more effective when combined. As such, it would be beneficial to review which combinations are most effective.*
- *New Zealand clarified that this informal intersessional review process is conducted in several stages. During this stage, the methods are being reviewed one by one, while combinations will be reviewed during the second informal intersessional meeting, which is set to take place on the 7th of May. New Zealand noted that while a lot of work has already been dedicated to identifying the most effective combination of methods, all evidence points towards efficacy being highly context dependent.*

Agenda item 5. Facilitated discussion & QA - Mitigation methods not considered best practice

5. Dr Johannes Fischer, New Zealand, presented on mitigation methods that are not considered best practice, such as blue dyed bait, deep setting line shooters, and the management of offal discharge.

6. **Discussion topic:** Is there any scientific evidence from the WCPO indicating that blue-dyed bait is an effective seabird bycatch mitigation method?

- The Safina Centre noted that there is no threshold effect size for WCPFC to refer to on what consists as an effective seabird bycatch mitigation method and referred to McNamara et al. 1999 for further reference.
- New Zealand referred to more recent studies, such as Gilman et al. 2022, that illustrated the relative effectiveness of other mitigation options over blue-dyed bait, highlighting that strong evidence, without a base threshold effect size,

exists, proving the ineffectiveness of blue-dyed bait. [All references are available through the SharePoint set up for the CMM 2018-03 review process]
- BirdLife International queried why blue-dyed bait is listed as an acceptable mitigation option in the CMM 2018-03, but not considered best practice by ACAP.

7. **Discussion topic:** Is there any scientific evidence indicating that deep setting line shooters are an effective seabird bycatch mitigation method?

   - A Japanese researcher shared some papers that discuss the effectiveness of line shooting, including, Brothers et al. 1999, Lokkeborg 2003, and Robertson et al. 2010. [All three references are now available through the SharePoint]
   - New Zealand noted that Robertson et al. 2010 proved the ineffectiveness of the method and highlighted that line shooters increase bycatch risk.
   - SPREP reminded attendees of the existence of the Bycatch Mitigation Information System which contains bycatch resources for all species.

8. **Discussion topic**: Is there any scientific evidence that offal discard management is relevant to only the Northern Hemisphere?

   - No additional insights, beyond those in the presentation, were received from attendees.

9. **Discussion topic:** Is there any scientific evidence to suggest that holding offal during setting shouldn't be considered a common-sense operational practice?

   - No additional insights, beyond those in the presentation, were received from attendees.

10. **Discussion topic:** Is there any scientific evidence indicating that holding offal, or discarding offal in batches on the offside during hauling, shouldn't be considered a common-sense operational practice?

    - USA commented that offal discharge (either holding it or discharging it when seabirds are present) is one of the only available mitigation methods that can be used during the haul. Most methods are designed to protect seabirds during the set. The US shallow-set longline fishery currently catches around 75% of its seabird bycatch during the haul.

Agenda item 6. Facilitated discussion & QA – Branch line weighting

11. Dr. Igor Debski presented on branch line weighting efficacy & specifications.

12. **Discussion topic:** Is there any scientific evidence that branch line weighting at >2 m from the hook is sufficiently effective in reducing seabird bycatch?

    - It was discussed whether target depth should be shallower in the Northern Hemisphere, based on how the assemblages of seabirds vary spatially, and in some areas greater depths are needed than in other; a complex issue informed by different species with different diving abilities. This discussion highlighted the

importance of having a suite of mitigation devices to reach the appropriate depth, and how to combine mitigation measures to achieve this.

- New Zealand clarified that the informal intersessional meeting in May would go into further detail on the combinations of mitigation methods, whereas this workshop in February was focused on individual mitigation measures and the specifications thereof.
- Additionally, New Zealand requested any information from attendees on whether there is any evidence of a difference in the relative effectiveness of line weighting for achieving sink rates 0-5m and 5-10m deep to investigate whether there is any basis for using different regimes in areas of different seabird assemblage.
- The origin of some of the current line weighting options in the CMM, particularly those for weights >2m, was discussed. Specifically, USA inquired whether participants could recall whether the line weighting specifications in the current CMM were based on previous ACAP recommendations. New Zealand responded that the ACAP recommendations for line weighting options were updated in 2016. Cook Islands commented that the work done in late 90s and early 2000s in Australia likely contributed to the development of such line weighting regimes.
- Current ACAP best practice advice on branch-line weighting originated from Barrington et al. 2016, which is an update of earlier advice. [This paper is available on the SharePoint]
- ACAP raised concerns about line weighting devices that are not solely weights, e.g., lights with integrated weights, and highlighted that weight does not equal buoyancy and recommended that the CMM is adjusted to account for this.
- ACAP also raised concerns about line weighting devices that increase plastic and other waste in the marine environment. ACAP would like to see these issues contemplated somehow in the revised CMM.

Agenda item 7. Facilitated discussion & QA – Tori (bird scaring) line efficacy and specifications

13. Dr Johannes Fischer presented on tori (bird scaring) line efficacy & specifications.

14. **Discussion topics:**

I. Is there any scientific evidence to suggest that the tori line specifications between the Northern and Southern Hemisphere should be different?

II. Is there any scientific evidence to suggest that streamer-less tori lines are as effective as tori lines with streamers, when taking differences in aerial extent into account?

III. Is there any scientific evidence to suggest that the aerial extent of tori lines in the Northern Hemisphere should deviate from the aerial extent in the Southern Hemisphere?

- A Japanese researcher highlighted that its streamer-less tori line trials took place in areas with very high seabird abundance to thoroughly evaluate their effectiveness and as such, bycatch per unit effort (BPUE) should not be used as a metric to evaluate their effectiveness, but rather effect size as per Ochi 2023 should be used.

- New Zealand acknowledged this comment, but also highlighted that areas with high seabird abundance will be encountered by fishing vessels, and a BPUE of 2 seabirds per 1000 hooks is too high for a bycatch mitigation option to be considered effective.
- In addition, New Zealand highlighted that the treatments in the Japanese trials in Ochi 2022 and Ochi 2023 were subject to differing aerial extents (more aerial extent when the streamer-less tori lines were evaluated and less aerial extent when the conventional small-streamer tori lines were evaluated). Therefore, the comparisons in the Japanese trials were confounded by differing aerial extents in favour of streamer-less tori lines.
- A Japanese researcher highlighted that achieving sufficient aerial extent is very difficult for small vessels (<20 m) for tori lines with ACAP best practice specifications.
- New Zealand acknowledged these challenges, but also highlighted the extensive work conducted in New Zealand to prove that achieving ≥75 m aerial extents in small vessels (down to 12 m) is possible and referred to: Goad & Debski 2017.
- A Japanese researcher acknowledged the extensive work conducted by New Zealand on this topic but highlighted the fundamental difference between Japanese and New Zealand vessels, which rests in their core materials: Japanese vessels are fibreglass, while New Zealand vessels are metal. Therefore, New Zealand vessels allow for tori poles to be welded to the vessel, while this is impossible in the Japanese small vessels.
- A Japanese researcher concluded that a requirement of ≥75 m aerial extent with the tori lines following ACAP best practice specifications would render all small Japanese vessels non-compliant.
- It was noted that classifying minimum specifications based on vessel size may not be the most appropriate solution to account for such operational differences and should be considered as part of the CMM review.
- ACAP highlighted that a clear solution and path forward is the combination of mitigation methods: if aerial extents are suboptimal, combining tori lines with line weighting becomes important to avoid seabird bycatch.
- An additional conversation ensued on tori line attachment heights, which highlighted that research on attachment height would be beneficial.
- USA commented that research on their deep-set vessels has determined that tori lines that have an aerial extent of ~40 m from stern has been effective (see Gilman et al. 2022). They are currently undertaking research in their shallow set vessels and are exploring aerial extent. Attachment heights are currently 5m within 2m of vessel stern. With respect to effective tori line designs for small scale longline vessels, USA also noted that there were a number of small deep-set vessels (<24m) that participated in their recent research to explore effective tori line designs (as presented in SC18-EB-IP-14), and highlighted that this research may provide a good example of effective tori line design options that could reasonably be implemented on deep-setting longline vessels <24m in length. [All papers are available on the SharePoint as well]

Agenda item 8. Facilitated discussion & QA Night setting efficacy & specifications

15. Dr Igor Debski presented on night setting.

16. **Discussion topic:** Is there any other information on whether minimizing vessel lighting, whilst not breaching minimum standards for safety and navigation, should only occur when using night setting as a seabird bycatch mitigation option?

- SPREP endorsed the light mitigation guidelines of the UN Convention on Migratory Species and recommended some form of inclusion of these guidelines in the revised CMM.
- BirdLife International mentioned the importance of needing to take light mitigation issues into consideration not simply while fishing, but also while the vessel is transiting by important breeding locations (i.e., islands)
- BirdLife International highlighted that sequential use of mitigation options does not equate to simultaneous use of mitigation options.

Agenda item 9. Facilitated discussion & QA – Novel mitigation methods

17. Dr Johannes Fischer presented on novel mitigation methods, including hook-shielding devices and underwater bait setters.

18. **Discussion topic:** Are there any hook-shielding devices, other than Hookpods, that should be considered for approval within WCPFC fisheries?

- New Zealand clarified that the only hook-shielding devices that are currently approved in the WCPFC Convention Area are Hookpods, due to the exact specifications in the CMM.
- A Japanese researcher questioned the appropriateness of third-party mitigation options, such as Hookpods or underwater bait setters.
- New Zealand clarified that the CMM does not mandate the use of third-party mitigation options, and that if CCMs prefer to use more traditional options, that this is still possible. In addition, novel devices needed to be approved specifically to ensure they met minimum specifications.
- *EU questioned the appropriateness of the inclusion of trade-marked mitigation options, such as Hookpods in the CMM as well.*
- *New Zealand explained that the CMM does not mandate the use of trade-marked mitigation options, and that if CCMs prefer to use more traditional options, that this is still possible. In addition, any novel devices needed to be approved specifically to ensure they met minimum specifications. Further details on this can be found in the Summary Report of SC14 (paragraph 154-157).*

19. **Discussion topic:** Should underwater bait setters be considered as an effective mitigation method, in both the Northern and Southern Hemisphere?

- No additional insights, beyond those in the presentation, were received from attendees.

Agenda item 10. Next steps & closing remarks

20. *EU inquired whether the impact of the exemptions included in CMM 2018-03 paragraph 4 on the conservation of seabirds would be also assessed.*

    New Zealand suggested they would look into this.

    The EU expressed its appreciation to New Zealand for the opportunity to be updated on the outcomes of the first informal intersessional meeting and also to provide its contribution for this important work.

21. The meeting was closed by Ms Danica Stent, who outlined the next steps, including the second informal intersessional meeting for the review of CMM 2018-03, which is set to take place on 7 May 2024 (NZST).