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Proposed change to CMM 2017-06 in regards the optional use of hook-shielding devices and the southern boundary of seabird mitigation requirements

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Paper by the New Zealand

Proposed change to CMM 2017-06 in regards the optional use of hook-shielding devices and the southern boundary of seabird mitigation requirements

Introduction

CMM 2017-06 to Mitigate the Impact of Fishing for Highly Migratory Fish Stocks on Seabirds, stipulates a range of measures to minimize the bycatch of seabirds. This includes the requirement for the use of a range of seabird bycatch mitigation by all longline vessels fishing south of 30°S or north of 23°N.

Hook-shielding devices

Hook-shielding devices are a novel seabird bycatch mitigation measure which encase the point and barb of baited hooks to prevent seabird attacks during line setting. Their use in WCPFC fisheries is not currently provided for by CMM 2017-06. WCPFC14 tasked SC14 to review the available research on hook shielding devices and advise WCPFC15 if they are effective options for seabird bycatch mitigation in WCPFC fisheries and whether to incorporate them in the seabird CMM as an additional mitigation option. A review of the effectiveness of hook-shielding devices (WCPFC-SC14-2018/EB-WP-10/Rev1) was considered by SC14.

SC14 noted that the evidence presented on hook-shielding device effectiveness was for Hookpods, one hook-shielding device which met the following performance characteristics:

a) the device encases the point and barb of the hook until it reaches a depth of at least 10 m or has been immersed for at least 10 minutes;
b) the device meets current minimum standards for branch line weighting as specified in the seabird bycatch CMM; and
c) the device is designed to be retained on the fishing gear rather than being lost.

SC14 recommended:

- that TCC14 and WCPFC15 note that evidence is available to support the inclusion of hook-shielding devices, specifically Hookpods, on the list of seabird bycatch mitigation options, in addition to already existing mitigation options.
- the revision of CMM 2017-06 to add the use of hook-shielding devices, specifically Hookpods, as an optional stand-alone seabird bycatch mitigation measure in order to provide more choices and greater flexibility to the fishing industry to mitigate seabird bycatch in their fishing operations.
- that if hook-shielding options other than Hookpods, or any other innovative options, are proposed for use in WCPFC in the future, SC and TCC should review the evidence on effectiveness, efficiency, and practicality of the technology in mitigating seabird bycatch.
- that if the revision of CMM 2017-06 to include hook-shielding devices is accepted, SC should be tasked with reviewing information on the use of Hookpods in commercial fishing operations no later than 3 years from the implementation date.
- that while there was no proposal that hook-shielding devices be made mandatory, if this was proposed in future thorough review by SC and TCC would be required.

Southern boundary

In light of evidence presented to SC on the distribution of seabirds vulnerable to bycatch in WCPFC longline fisheries (e.g. WCPFC-SC11-2015/EB-WP-09 and WCPFC-SC12-2016/EB-WP-09), SC12 recommended that the Commission:

- Note the northern limits of the spatial distribution of seabird density data presented extends to areas north of 30^0 S.
- Within the southern hemisphere part of the WCPO the main area of distribution for New Zealand's vulnerable seabirds especially the Antipodean albatross and the black petrel is south of 25^0 S.

- Note that use of effective bycatch mitigation measures across the full range of at-risk seabirds should enhance conservation of those seabirds.
- Note the above information from SC12 and other relevant information when discussing seabird mitigation measures and request that the TCC consider reviewing the 30^0 S boundary of the seabird CMM further north.

Building on this previous evidence, the most recent geolocation data on Antipodean wandering albatross (WCPFC-SC14-2018/EB-WP-11/Rev1), a priority population of conservation concern, was noted by SC14 to indicate the extent of foraging up to and north of 25°S. SC14 further noted:

a) substantial fishing effort occurs in waters of the WCPFC area between 30°S and 25°S which is within the Antipodean wandering albatross foraging range.
b) as CMM2017-06 does not require the use of seabird mitigation in the WCPFC area between 30°S and 25°S, this fishing effort poses a bycatch risk to Antipodean wandering albatross and other species foraging in the area.
c) revision of CMM2017-06 to extend the area of application up to 25°S will reduce the bycatch risks faced by Antipodean wandering albatross and other seabirds.

Extending a recommendation from SC12 that TCC consider reviewing the 30°S boundary of the seabird CMM further north, and based on the latest evidence, SC14 recommended:

- that TCC14 and WCPFC15 consider a revision to the southern area of application of CMM2017-06, including implementation considerations of SIDS and Territories.

Purpose

Recognising the risk of bycatch to seabirds north of 30°S, and the effectiveness of hook-shielding devices as a new option to mitigation seabird bycatch, this proposal seeks to:

1. provide for the optional use of hook-shielding devices as an alternative, stand-alone, measure to mitigate seabird bycatch; and
2. change the southern boundary of required use of mitigation from 30°S to 25°S, to enhance the conservation of seabirds.

In addition, we propose minor amendments to Annex 2 (the guidelines for reporting templates for Part 1 reports). The proposed changes, removing references to specific years, are intended to provide greater clarity of existing reporting requirements under this CMM.

This proposal does not include any changes to the range or specification of existing mitigation methods available to be used.

We seek feedback from TCC14 on these proposed changes.

Options for changing the southern boundary

In accordance with the recommendation from SC14, the compliance and technical considerations of options for changing southern boundary are sought, including implementation considerations of SIDS and Territories. The current 30°S boundary intersects the EEZs of Australia, New Zealand and French Polynesia. The proposed change to 25°S will result in the boundary intersecting more EEZs than the current boundary at 30°S. This would require those affected SIDs and Territories to implement mitigation requirements within their EEZ in order to implement a change to 25°S. These additional SIDs and Territories are New Caledonia, Fiji, Tonga and Cook Islands. In addition, a greater proportion of the EEZs of Australia, New Zealand and French Polynesia would be encompassed by the new boundary. The area south of 25°S in some of the affected EEZs is very small, and in most cases longline fishing effort in those parts of the EEZ are correspondingly very small.

We therefore propose an option to allow for exemption from the requirement to use mitigation south of 25°S for CCMs that can demonstrate that there is consistently only very small amounts of longline fishing effort in that area, thus posing only negligible risk to seabirds. To ensure a fair and equitable treatment for all CCMs, this option would be further expanded to apply to CCMs operating flagged fleets in international waters such that if a CCM can demonstrate that the combined fishing effort of all their flagged vessels south of 25°S is consistently below the threshold, the exemption would also apply to those vessels also.

Determination of a threshold for mitigation use is a policy consideration that balances potential bycatch risk against potential implementation burden. A range of options for a threshold that would be included in the measure are proposed for consideration in the table below:

Option	Trigger level (hooks per year)	Relative risk	Notes
1	10,000	A conservative option, posing least risk of bycatch	Equates to one trip by a smaller vessel setting 1,000 hooks per day.
2	20,000		
3	40,000		
4	80,000	This option would pose the highest risk that bycatch would still occur	Equates to one month of fishing effort by a larger vessel setting > 2,000 hooks per day.

Consideration of CMM 2013-06

1) *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.*
   This revision to the CMM to mitigate the impact of fishing for highly migratory fish stocks on seabirds will not prohibit the development of fisheries. Rather it will allow states to demonstrate the environmental sustainability of their fisheries and how they are avoiding the impact of their fisheries on vulnerable seabirds, as their fisheries develop.

2) *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.*
   The proposal to change the boundary at 25°S takes a risk based approach to managing seabird bycatch by fishing vessels. Coastal and flag states would be eligible for an exemption to the requirement to use seabird bycatch mitigation if the level of effort of their fisheries below 25°S is sufficiently low that it poses a low risk of seabird bycatch, while requiring mitigation may result in a disproportionate burden to implement. This is intended as a fair and balanced approach to avoid placing a disproportionate burden on SIDS and territories, while still meeting the objective of protecting seabirds across the main area of their distribution.

   New Zealand has been working with SIDS and territories to understand how we could take such an approach forward. Further discussions are required, including agreeing a fishing effort level below which a CCM would qualify for an exemption to use bycatch mitigation. This effort level would need to balance avoiding a disproportionate burden with ensuring adequate protection of seabirds.

3) 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:

a) *Who is required to implement the proposal?*
This proposal applies to all CCMs with longline vessels fishing south of 25°S unless they qualify for an exemption.

b) *Which CCMs would this proposal impact and in what way(s) and what proportion?*
This proposal would require any CMM with longline vessels fishing in the area south of 25°S to require the use of prescribed seabird bycatch mitigation in that area. This area effects EEZ's through which the 25°S latitude line passes. Small proportions of the EEZs of New Caledonia, Fiji, Tonga, and the Cook Islands would be included in the requirement to apply bycatch mitigation south of 25°S unless they qualified for an exemption on the basis of low fishing effort.

There is an existing requirement to use seabird bycatch mitigation measures in the other three EEZs i.e. New Zealand, Australia and French Polynesia, through which the 25°S latitude line passes. A larger proportion of each of these EEZ's would be included by the proposed measure, than currently exists. Australia already requires seabird bycatch mitigation measures south of 25°S in their EEZ.

c) *Are there linkages with other proposals or instruments in other regional fisheries management organisations or international organisations that reduce the burden of implementation?*
No, this proposal does not affect access to resources and development aspirations.

d) *Does the proposal affect development opportunities for SIDS?*
A small area of three SIDS EEZ's would be included in the area where this measure would apply. This should not impact on the development opportunities of SIDS. The proposal has been designed to ensure that where fishing effort in the area below 25°S is low there would not be any additional requirements for the fishery.

If French Polynesia wish to develop new fisheries in the southern part of their EEZ, then current mitigation requirements would require vessels to carry mitigation if they would fish south of 30^0 S. This new proposal will raise that boundary to 25°S, potentially affecting more vessels. However this does not prohibit development opportunities. Implementation of this measure aids the development of environmentally responsible fisheries. New Zealand has been working with French Polynesia to trial the use of bycatch mitigation in French Polynesia's EEZ.

e) *Does the proposal affect SIDS domestic access to resources and development aspirations?*
No, this proposal does not affect access to resources and development aspirations.

f) *What resources, including financial and human capacity, are needed by SIDS to implement the proposal?*
There is no extra cost to most nations affected as the required mitigation should already be in use on vessels. Nations fishing south of 25°S, but not south of 30°S, may be affected by the proposal in that they will be required to carry mitigation unless the total effort in their EEZ, or by their fleet, south of 25°S qualifies for an exemption. A number of resources are also already available to support implementation of this measure, e.g. expert advice, educational resources.

g) *What mitigation measures are included in the proposal?*
The proposal is for the use of seabird mitigation measures as proposed in this proposal. These are the measures provided in the current CMM, or the option of using stand-alone hook shielding devices that meet the required specification.

h) *What assistance mechanisms and associated timeframe, including training and financial support, are included in the proposal to avoid a disproportionate burden on SIDS?*
None, however providing training and support to SIDS and Territories would support implementation of this measure. The design of this measure should avoid situations where there is a high administrative burden of applying the bycatch mitigation for areas where there is low risk of bycatch of seabirds.

COMMISSION FOURTEENTH
REGULAR SESSION
Manila, Philippines
3-7 December 2017

CONSERVATION AND MANAGEMENT MEASURE TO MITIGATE THE IMPACT OF FISHING FOR HIGHLY MIGRATORY FISH STOCKS ON SEABIRDS

Conservation and Management Measure 2018-XX~~7-06~~[1]

The Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean

Concerned that some seabird species, notably albatrosses and petrels, are threatened with global extinction;

Noting advice from the Commission for the Conservation of Antarctic Marine Living Resources that together with illegal, unreported and unregulated fishing, the greatest threat to Southern Ocean seabirds is mortality in longline fisheries in waters adjacent to its Convention Area;

Noting scientific research into mitigation of seabird bycatch in surface longline fisheries has showed that the effectiveness of various measures varies greatly depending on the vessel type, season, and seabird species assemblage present; and

Noting the advice of the Scientific Committee that combinations of mitigation measures are essential for effective reduction of seabird bycatch;

Resolves as follows:
1. Commission Members, Cooperating Non-members and participating Territories (CCMs) shall, to the greatest extent practical, implement the International Plan of Action for Reducing Incidental Catches of Seabirds in Longline Fisheries (IPOA-Seabirds) if they have not already done so.

2. CCMs shall report to the Commission on their implementation of the IPOA-Seabirds, including, as appropriate, the status of their National Plans of Action for Reducing Incidental Catches of Seabirds in Longline Fisheries.

[1] ~~This version issued on 16 March 2018, includes an editorial correction to Annex 2 Table Y (the one instance of "TP" was corrected to be "TL"~~

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 to address seabird bycatch:

South of ~~30°~~ 25° South

1. CCMs shall require their longline vessels fishing south of ~~30oS~~25°S, to use either

i) at least two of these three measures:

a. weighted branch lines,

b. night setting ~~and~~

~~a.~~c. tori lines; or

ii) hook-shielding devices.

Table 1 does not apply south of ~~30o~~ 25° South. See Annex 1 for specifications of these measures.

[Optional text to allow for an exemption:

The requirements of paragraph 1 will not apply in the following circumstances:

i) Vessels operating in the EEZ of a CCM if it is demonstrated, through data reported to the Commission annually, that the total longline fishing effort south of 25°S in that EEZ over the preceding three years is less than X,000 hooks each year.

ii) Vessels flagged to a CCM operating on the high seas south of 25°S if it is demonstrated, through data reported to Commission annually, that the total longline fishing effort of all vessels flagged to that CCM south of 25°S over the preceding three years is less than X,000 hooks each year.]

North of 23° North

2. 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 in Table 1, 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 from Column A in Table 1. See Annex 1 for specifications of these measures.

Table 1: Mitigation measures

Column A	*Column B*
Side setting with a bird curtain and weighted branch lines[2]	*Tori line*[3]
Night setting with minimum deck lighting	*Blue-dyed bait*
Tori line	*Deep setting line shooter*
Weighted branch lines	*Management of offal discharge*
Hook-shielding devices[4]	

[2] If using side setting with a bird curtain and weighted branch lines from Column A, this will be counted as two mitigation measures.

[3] If a tori line is selected from both Column A and Column B, this equates to simultaneously using two (i.e. paired) tori lines.

[4] Hook-shielding devices can be used as a stand-alone measure.

Other Areas

3. In other areas (between ~~30°S~~ 25°S and 23°N), where necessary, CCMs are encouraged to have their longline vessels employ one or more of the seabird mitigation measures listed in Table 1.

General Principles

4. For research and reporting purposes, each CCM with longline vessels that fish in the Convention Area south of ~~30~~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 they require their vessels to use, as well as the technical specifications for each of those mitigation measures. 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.

5. CCMs are encouraged to undertake research to further develop and refine measures to mitigate seabird bycatch including mitigation measures 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 measure will be used.

6. The SC and TCC will annually review any new information on new or existing mitigation measures or on seabird interactions from observer or other monitoring programmes. Where necessary, an updated suite of mitigation measures, specifications for mitigation measures, or recommendations for areas of application will then be provided to the Commission for its consideration and review as appropriate.

7. CCMs are encouraged to adopt 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.

8. The intersessional working group for the regional observer programme (IWG-ROP) 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.

9. CCMs shall annually provide to the Commission, in Part 1 of their annual reports, all available information on interactions with seabirds reported or collected by observers to enable the estimation of seabird mortality in all fisheries to which the Convention applies. (see Annex 2 for Part 1 reporting template guideline).. These reports shall include information on:

1. the proportion of observed effort with specific mitigation measures used; and
2. 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.

10. This Conservation and Management measure replaces CMM ~~2015~~2017-~~03~~06, which is hereby repealed.

Annex 1. Specifications

1. Tori lines (South of ~~30°~~ 25° South)

1a) For vessels >=35 m total length

i. Deploy at least 1 tori line. 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 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 that prevent streamers from wrapping around the line. Long streamers of sufficient length to reach the sea surface in calm conditions must be used.

   b. Short streamers (greater than 1m in length) shall be placed no more than 1m apart.

iii. Vessels shall deploy the tori line to achieve a desired aerial extent greater than or equal to 100 m. To achieve this aerial extent the tori line shall have a minimum length of 200m, and 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 single 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.

   b. Short streamers placed at intervals of no more than 1m.

iii. Long streamers should be attached to the line in a way that prevent 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.

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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 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.

2. Tori lines (North of 23º North)

2a) Long Streamer

i. Minimum length: 100 m
ii. 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.
iii. Must be attached so that the aerial extent is maintained over the sinking baited hooks.
iv. Streamers must be less than 5m apart, be using swivels and long enough so that they are as close to the water as possible.
v. 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. 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.
ii. Must be attached so that the aerial extent is maintained over the sinking baited hooks.
iii. Streamers must be less than 1m apart and be 30 cm minimum length.
iv. 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. 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.
ii. Must be attached so that the aerial extent is maintained over the sinking baited hooks.
iii. If streamers are used, it is encouraged to use the streamers designed to be less than 1m apart and be 30cm minimum length.
iv. If two (i.e. paired) tori lines are used, the two lines must be deployed on opposing sides of the mainline.

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 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.

5. Weighted branch lines

i. Following minimum weight specifications are required:

1. one weight greater than or equal to 40g within 50cm of the hook; or
2. greater than or equal to a total of 45g attached to within 1 m of the hook; or
3. greater than or equal to a total of 60 g attached to within 3.5 m of the hook; or
4. greater than or equal to a total of 98 g weight attached to within 4 m of the hook.

6. Hook-shielding devices

~~i.~~ 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:

1. Hookpods, which comply with the following performance characteristics[5]

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.

7~~6~~. Management of offal discharge

i. Either no offal discharge during setting or hauling;
ii. Or strategic offal discharge from the opposite side of the boat to setting/hauling to actively encourage birds away from baited hooks.

8~~7~~. 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.

[5] Noted by SC14.

iii. All bait must be dyed to the shade shown in the placard.

9~~8~~. Deep setting line shooter

i. 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.

Annex 2. Guidelines for reporting templates for annual Part 1 reports

The following tables should be included in the annual 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 30°S25°S; North of 23°N; or 23°N – 30°S[1]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).

Year	Fishing effort				Observed seabird captures	
	Number of vessels	Number of hooks	Observed hooks	% hooks observed	Number	Rate [2]
2013[year]						
2014[year]						
2015[year]						
2016[previous year e.g. 2017]						
2017[current year e.g. 2018]						
2018						

[1] State North of 23°N, South of 30°S 25°S or 23°N – 30°S25°S, for CCMs fishing in all areas provide separate tables for each; [2] Provide as captures per one thousand hooks.

Table y: Proportion of mitigation types[1] used by the fleet in [year].

	Combination of Mitigation Measures	Proportion of observed effort using mitigation measures					
		South of 25°S2013	25°S to 23°N2014	North of 23°N 2015	2016	2017	2018
	No mitigation measures						
Options required south of 25°S	TL + NS						
	TL + WB						
	NS + WB						
	TL + WB + NS						
	HS						
	SS/BC/WB/DSLS						
	SS/BC/WB/(MOD or BDB)						
	TL						
Provide other combination of mitigation measures 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 = hook-shielding device.

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

Species	South of ~~30°S~~25°S	North of 23°N	23°N – ~~30°S~~25°S	Total
E.g. Antipodean albatross				
~~E.g. Gibson's albatross~~				
~~E.g. Unidentified albatross~~				
~~E.g. Flesh-footed shearwater~~				
~~E.g. Great-winged petrel~~				
~~E.g. White-chinned petrel~~				
~~E.g. Unidentified~~				
Total				