

The Southern Indian Ocean Fisheries Agreement (SIOFA) 6th Meeting of the Parties
01-05 July 2019

Pearle Beach Resort & Spa conference centre, Flic en Flac, Mauritius

MoP6-Prop16

CMM for the Prevention of Significant Adverse Impacts on VMEs in the Agreement Area

Relates to agenda item: CC3 4.2, MoP6 12 –new CMMs

Proposal ☒ Working Document ☐ Information Paper ☐ Other Document ☐

Delegation of Australia

Abstract

This CMM in a snapshot

This CMM covers the aspects of bottom fishing that relate to protection of VMEs such as: bottom fishing footprints (areas open to fishing), an encounter protocol (including thresholds and a VME indicator taxa list), bottom fishing impact assessments, future scientific work and protected area designation.

The encounter protocol is the most extensive change. Moving to a system where all CCPs follow the same rules means that all CCPs need to be informed about a potential encounter in a timely way. SPRFMO's bottom fishing measure has been used as a model.

As with the General Measure, the MoP will need to consider how this interacts with potential new and exploratory measures, or measures for research – an idea is proposed.

What has changed from CMM 2018/01?

- Tasks for the Scientific Committee have been updated to reflect the progress made, and the work that needs to continue – including the cumulative bottom fishing impact assessment, which may take time.
- The encounter protocol is further developed borrowing some ideas from CCAMLR, but largely from SPRFMO's new bottom fishing measure, which was adopted in 2019.
- VME thresholds are proposed: for line methods, the SC's advice is incorporated. For trawl methods, noting that no consensus could be reached, the 50kg is proposed which is the

threshold currently applied to trawl vessels by Australia, and is also implemented in some RFMOs.

- Reflects the likelihood that the revised protocol for protected area designation and the research and monitoring plans (and the management actions proposed by the SC) are adopted.

What is unchanged from CMM 2018/01?

- Preambular text
- The objective
- The move-on rule (distance) is unchanged from CMM 2018/01
- The standard for, and process to consider, bottom fishing impact assessments
- Retains the injunction from CMM 2018/01 – no bottom fishing impact assessment means that CCP cannot authorise bottom fishing to occur
- New entrants, and those CCPs that have not previously submitted an impact assessment, continue to need to provide an impact assessment to the SC and MoP prior to authorising fishing.

Recommendations *(proposals only)*

1. That the Meeting of the Parties adopt the proposed CMM

CMM XX-2019

CMM for the Prevention of Significant Adverse Impacts on VMEs in the Agreement Area

The Meeting of the Parties to the Southern Indian Ocean Fisheries Agreement;

NOTING United Nations General Assembly (UNGA) Resolution 61/105 and subsequent resolutions of UNGA that call upon RFMOs to assess, on the basis of the best available scientific information, whether individual bottom fishing activities would have significant adverse impacts on vulnerable marine ecosystems (VMEs), and to ensure that if it is assessed that these activities would have significant adverse impacts, they are managed to prevent such impacts, or not authorised to proceed; [source: PP05 CMM 2018/01];

FURTHER NOTING UNGA Resolution 64/72 which calls upon RFMOs to establish and implement appropriate protocols for the implementation of UNGA Resolution 61/105, including definitions of what constitutes evidence of an encounter with a VME, in particular threshold levels and indicator taxa; and to implement the FAO International Guidelines for the Management of Deep-sea Fisheries in the High Seas (FAO, 2009; FAO Deep-sea Fisheries Guidelines) in order to sustainably manage fish stocks and protect VMEs; [source: PP06 CMM 2018/01];

FURTHER NOTING UNGA Resolution 66/68 which encourages RFMOs to consider the results available from marine scientific research, including those obtained from seabed mapping programs concerning the identification of areas containing VMEs, and to adopt conservation and management measures to prevent significant adverse impacts from bottom fishing on such ecosystems, consistent with the FAO Deep-sea Fisheries Guidelines, or to close such areas to bottom fishing until such conservation and management measures are adopted, as well as to continue to undertake further marine scientific research, in accordance with international law as reflected in Part XIII of the United Nations Convention on the Law of the Sea; [source: PP07 CMM 2018/01];

COMMITTED to ensuring that bottom fishing undertaken in the Agreement Area is consistent with the long-term sustainability of deep sea fish stocks and the protection of the marine environment; [source: PP09 CMM 2018/01];

ADOPTS the following CMM in accordance with Article 6 of the Agreement:

Objective

1. The objective of this CMM, together with [CMM General Measure] [CMM Stocks] is to protect the marine ecosystem, including, *inter alia*, by preventing significant adverse impacts on vulnerable marine ecosystems. [source: OP1 CMM 2018/01].

General provisions and definitions

2. This CMM applies to all fishing vessels flying the flag of a Contracting Party, cooperating non-Contracting Party, participating fishing entity or cooperating non-participating fishing entity (collectively CCPs) to the Agreement engaging or intending to engage in bottom fishing in the Agreement Area. [source: OP2 CMM 2018/01, modified]
3. The terms defined in [CMM General Measure] have the same meaning in this CMM. [New]
4. For the purposes of this CMM:
 - (a) 'encounter' means a catch of VME indicator taxa above the threshold levels set out in paragraph [7]. [source paragraph 27 of SPRFMO CMM 03-2019]

- (b) 'line segment' means
 - i. for bottom lines, a 1000 hook section of line or a 1200 metre section of line, whichever is the shorter,
 - ii. for pot lines, a 1200 metre section. [source: footnote 3 CMM 2018/01]
- (c) 'VME indicator organism means any benthic organism listed in Annex 1. [New]
- (d) 'VME indicator unit' means either one litre of those VME indicator organisms that can be placed in a 10-litre container, or one kilogram of those VME indicator organisms that do not fit into a 10-litre container. [source paragraph 2 of CCAMLR CM 22-07].

5. All activities conducted under this CMM must be conducted in accordance with CMM [General Measure] and [CMM stocks]. [New]

6. This CMM shall be interpreted consistently with [CMM General Measure] [CMM Stocks]. [New]

Encounters with potential VMEs

7. Each CCP shall ensure that, if the combined catch of VME indicator organisms by a vessel flying its flag equals 50 or more VME indicator units for any one trawl shot or equals 10 or more VME indicator units for a line segment:

- (a) the vessel immediately reports the encounter to that CCP and the Secretariat;
- (b) the vessel, and all other vessels flying that CCP's flag, cease bottom fishing activities within an encounter area determined as follows:
 - i. *if the vessel that had the encounter was bottom or mid water trawling, or fishing with any other net* - two (2) nautical miles either side of a trawl track extended by two (2) nautical miles at each end;
 - ii. *if the vessel that had the encounter was using longline or trap gear* - a radius of one (1) nautical mile from the midpoint of the line segment;
 - iii. *if the vessel that had the encounter was using any other bottom fishing gear types* - a radius of one (1) nautical mile from the midpoint of the operation

8. CCPs shall report any such encounter in their National Reports to the Scientific Committee in accordance with the standards at Annex 2. [source: paragraph 12 of CMM 2018/01, modified, including new SC advice].

9. In the event of an encounter, CCPs shall cooperate to the extent possible with the Secretariat and other CCPs engaged in bottom fishing to exchange such data and information as may be relevant to the Scientific Committee's consideration of the encounter area. [source paragraph 30 of SPRFMO CMM 03-2019]

10. On receipt of a notification under paragraph [7], the Secretariat shall:

- (a) record the location of the encounter area; and
- (b) within three working days of receipt, notify all CCPs that bottom fishing is suspended in the encounter area. [source paragraph 30 of SPRFMO CMM 03-2019]

11. Upon receipt of a notification from the Secretariat under paragraph [10(b)], CCPs shall ensure that vessels flying their flags do not undertake bottom fishing in the notified encounter area unless and until the Meeting of the Parties determines management action under paragraph [13] that would permit the resumption of bottom fishing in the encounter

area. [source paragraph 31 of SPRFMO CMM 03-2019]

12. As an encounter may be considered evidence of a potential presence of a VME, the Scientific Committee shall, at each ordinary meeting, review any encounter reported pursuant to paragraph [7] and any other benthic bycatch data it considers relevant and provide advice to the Meeting of the Parties thereon. [New]

13. Taking into account any advice from the Scientific Committee, the Meeting of the Parties shall consider any encounter notified pursuant to paragraph [7] at its next ordinary meeting and consider management action for the encounter area, including permanent closure, resumption of fishing, or other management actions it considers appropriate, taking into account the objective of this CMM. [New]

Bottom fishing impact assessments

14. (a) No CCP shall authorize vessels flying its flag to engage in bottom fishing in the Agreement Area unless:
- i. the CPP submitted a bottom fishing impact assessment to the Scientific Committee consistently with paragraph 14 or 19(b) of CMM 2018/01 (or the CMMs it supersedes),¹ and has not been required to update it under paragraph [16(e)]; or [source paragraph 17 of CMM 2018/01, modified]
 - ii. the CCP has been permitted by the Meeting of the Parties to do so in accordance with the process outlined in paragraph [15]. [new]

(b) Each CCP shall ensure that vessels flying its flag do not engage in bottom fishing in the Agreement Area at levels of effort or catch, in areas, for species or with gears not included in the description of fishing activities provided in that CCP's bottom fishing impact assessment.

15. Subject to meeting the conditions of paragraph [13] of [CMM General Measure], as applicable, a CCP that has not submitted a bottom fishing impact assessment, or that is required by paragraph [16(e)] to update its bottom fishing impact assessment, shall not authorize vessels flying its flag to engage in bottom fishing in the Agreement Area unless permitted by the Meeting of the Parties in accordance with the following process:

- (a) the CCP shall submit a new or updated bottom fishing impact assessment at least 30 days prior to the commencement of any ordinary meeting of the Scientific Committee. [source paragraph 14(b) of CMM 2018/01, modified]
- (b) the Scientific Committee shall consider the new or updated bottom fishing impact assessment and provide advice in its meeting report as to:
 - i. the likely cumulative impacts of bottom fishing impact activity; and
 - ii. whether the new or updated bottom fishing impact assessment meets an appropriate standard in light of international standards and the SIOFA Bottom Fishing Impact Assessment Standard. [source paragraph 15 of CMM 2018/01]
- (c) if the Scientific Committee's advice is that the new or updated bottom fishing impact assessment meets an appropriate standard, the Meeting of the Parties shall decide whether, and if applicable the extent to which, the bottom fishing for which the assessment was conducted should be permitted. [source paragraph 20(d)(i) of SPRFMO CMM 03-2019 modified]
- (d) if the Scientific Committee's advice is that the new or updated bottom fishing impact assessment does not meet an appropriate standard, the Meeting of the

¹ Australia, the Cook Islands, the European Union, France (Territories), Japan and Thailand submitted BFIA's prior to the SC 2018 deadline. Comoros submitted its BFIA in March 2019, after becoming a CNCP in June 2018.

Parties may request that the CCP who submitted the bottom fishing impact assessment revise and resubmit it to the next ordinary meeting of the Scientific Committee and make a decision to either:

- i. suspend any vessel flying the flag of that CCP from bottom fishing in the Agreement Area until the Scientific Committee provides advice that the bottom fishing impact assessment meets an appropriate standard; or
- ii. undertake any other course of action, as the Meeting of the Parties may decide, taking into account Scientific Committee advice and the objectives of this CMM. [source paragraph 16 of CMM 2018/01].

16. All bottom fishing impact assessments, including the SIOFA cumulative bottom fishing impact assessment, shall:

- (a) be prepared, to the extent possible, in accordance with the FAO International guidelines for the management of deep-sea fisheries resources in the high seas (FAO, 2009);
- (b) meet the standards of the SIOFA BFIAS²;
- (c) take into account areas identified where VMEs are known or are likely to occur in the area to be fished;
- (d) take into account all relevant benthic bycatch data and information provided to the Secretariat pursuant to SIOFA CMMs;
- (e) be updated and submitted to the Scientific Committee for review in accordance with paragraph [15] when a substantial change in the fishery has occurred, such that it is likely that the risk or impacts of the fishery may have changed;
- (f) assess, to the extent possible, the historical and anticipated cumulative impact of all bottom fishing activity in the Agreement Area, if applicable;
- (g) address whether the proposed activities achieve the objectives described in paragraph [1] of this CMM and Article 2 of the Agreement; and
- (h) be made publicly available on the SIOFA website. [source: paragraph 18 of CMM 2018/01 with consequential amendments].

17. The SC shall continue its work on matters related to VMEs and shall, by no later than the close of the ordinary meeting of the Scientific Committee in 2022, and thereafter whenever a substantial change to the fishery has occurred or new data has otherwise been provided to the Scientific Committee warranting changes, provide advice on:

- (a) maps of where VMEs are known to occur, or likely to occur, in the Agreement Area;
- (b) criteria for what constitutes evidence of an encounter with a VME, in particular threshold levels and indicator species
- (c) the most appropriate response to a VME encounter, including inter alia closing particular areas to a particular gear type or types;
- (d) a SIOFA Bottom Fishing Impact Assessment which shall take into account the activities of all fishing vessels to which this CMM applies that, at the time the Bottom Fishing Impact Assessment is prepared, have engaged in, are engaged in, or intending to engage in, bottom fishing within a SIOFA bottom fishing footprint. [source paragraphs 5 – 8 of CMM 2018/01, modified].

² Adopted by the Meeting of the Parties at its 4th ordinary meeting in 2017.

18. The Scientific Committee shall also periodically review all benthic bycatch data to inform its consideration of the location of potential VMEs and potential impacts thereon. [New, implements SC advice]

Protected Area Designation

19. The Meeting of the Parties shall apply the *SIOFA Standard Protocol for Future Protected Areas Designation* as [recommended by the Scientific Committee at its 4th ordinary meeting] [adopted by the Meeting of the Parties at its 6th ordinary meeting] when taking decisions on protected area designation.

20. The areas included in Annex 3 are provisionally designated as protected areas. [source paragraph 35 of CMM 2018/01].

21. The Meeting of the Parties shall apply the Research and Management Plans as [recommended by the Scientific Committee at its 4th ordinary meeting] [adopted by the Meeting of the Parties at its 6th ordinary meeting] for the Atlantis Bank, Coral, Fools Flat, Middle of What and Walters Shoal protected areas. In doing so, CCPs shall apply the following measures:

- (a) CCPs shall prohibit all vessels flying their flag from engaging in bottom fishing in the protected areas, [excluding line and trap methods]; and
- (b) [subject to the suggestion in (a)] For all other gears, CCPs shall ensure each vessel flying their flag has a scientific observer onboard at all times while fishing inside those areas];
- (c) Notwithstanding subparagraphs (a) and (b), CCPs shall ensure that prior to authorizing any fishing or research activity in the Atlantis Bank, Coral, Fools Flat, Middle of What or Walters Shoal protected areas, that a research plan specifying how the proposed activity further the objectives of the protected area and an assessment of impacts and proposed measures to prevent or minimize those impacts is submitted at least 30 days prior to the 5th ordinary meeting of the Scientific Committee;
- (d) Non-destructive monitoring³ shall be used for any fishing activity in respect of these areas in conjunction with any fishing or research activity.[source paragraph 35 of CMM 2018/01, modified]

Vulnerable Marine Ecosystem closures

22. Where the Meeting of the Parties, taking into account advice provided by the Scientific Committee, determines that bottom fishing may have significant adverse impacts on VMEs in areas where VMEs are known to occur, or are likely to occur, based on the best available scientific information, the Meeting of the Parties may take a decision to close such areas to bottom fishing, either entirely or with respect to bottom fishing by a particular gear type or types. [source paragraph 38 of CMM 2018/01]

23. The Meeting of the Parties shall cooperate to identify, on the basis of the best available scientific information including advice and recommendations provided by the Scientific Committee, areas where VMEs are known or likely to occur in the Agreement Area and to map these sites, and provide such data and information to all CCPs. [source paragraph 39 of CMM 2018/01, modified]

Review

³ In this context, “non-destructive monitoring” means research that does not cause significant adverse impacts on VMEs but may include the collection of minimal amounts of benthos.

24. This CMM shall be reviewed no later than at the ordinary Meeting of the Parties in 2022. This review shall take into account, *inter alia*, the latest advice of the Scientific Committee.
[source OP41, CMM 2018/01, modified]

SIOFA VME indicator taxa [source: paragraph 104 of SC4 report]

- Chemosynthetic organisms (CXV) (no taxa specified)
- Cnidaria (CNI), which can be, if possible, detailed in recording as: Gorgonacea (GGW) (Order), Anthoathecatae (AZN) (Order), Stylasteridae (AXT) (Family), Scleractinia (CSS) (Order), Antipatharia (AQZ) (Order), Zoantharia (ZOT) (Order), Actiniaria (ATX) (Order), Alcyonacea (AJZ) (Order), Pennatulacea (NTW) (Order)
- Porifera (PFR), which can be, if possible, detailed in recording as: Hexactinellida (HXY) (Class), Demospongiae (DMO) (Class)
- Ascidiacea (SSX) (Class)
- Bryozoans (BZN) (Phylum)
- Brachiopoda (BRQ) (Phylum)
- Pterobranchia (HET)
- Serpulidae (SZS) (Family)
- Xenophyophora (XEF) (Phylum)
- Bathylasmatidae (BWY) (Family)
- Stalked crinoids (CWD) (Class)
- Euryalida (OEQ) (Order)
- Cidaroida (CVD) (Order)

Annex 2

Preparation and Submission of Notifications of Encounters with VMEs [source: annex 1, CMM 2018/01, minor modifications]

1. General Information

Include contact information, nationality, vessel name(s) and dates of data collection.

2. VME location

Start and end positions of all gear deployments and/or observations for this trip.

Maps of fishing locations, underlying bathymetry or habitat and spatial scale of fishing. Depth(s) fished.

3. Fishing gear

Indicate fishing gears used at each location where the threshold was triggered.

4. Additional data collected

Indicate additional data collected at or near the locations fished, if possible.

Data such as multibeam bathymetry, oceanographic data such as CTD profiles, current profiles, water chemistry, substrate types recorded at or near those locations, other fauna observed, video recordings, acoustic profiles etc.

5. VME taxa

For each station fished, provide details of VME taxa observed, including but not limited to their relative density, absolute density, or weight and/or number of taxa.

Interim Protected Areas [source: annex 2 CMM 2018/01]

The boundary of each Area is a line that begins at point 1 then continues along the geodesics sequentially connecting the rest of the points for the area, then west to the point of commencement.

Atlantis Bank

Point	Latitude (S)	Longitude (E)
1	32° 00'	57° 00'
2	32° 50'	57° 00'
3	32° 50'	58° 00'
4	32° 00'	58° 00'

Coral

Point	Latitude (S)	Longitude (E)
1	41 ° 00'	42° 00'
2	41° 40'	42° 00'
3	41° 40'	44° 00'
4	41 ° 00'	44° 00'

Fools Flat

Point	Latitude (S)	Longitude (E)
1	31°30'	94° 40'
2	31°40'	94° 40'
3	31°40'	95° 00'
4	31°30'	95° 00'

Middle of What

Point	Latitude (S)	Longitude (E)
1	37° 54'	50° 23'
2	37° 56.5'	50° 23'
3	37° 56.5'	50° 27'
4	37° 54'	50° 27'

Walter's Shoal

Point	Latitude (S)	Longitude (E)
1	33 ° 00'	43° 10'
2	33° 20'	43° 10'
3	33° 20'	44° 10'
4	33 ° 00'	44° 10'