

7th Annual Meeting of the Commission

23-27 January, The Hague, The Netherlands

COMM7-Prop03

<input checked="" type="checkbox"/> Amend	CMM 03-2018 on the Management of Bottom Fishing in the SPRFMO Convention Area
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Submitted by: AUSTRALIA / NEW ZEALAND

Summary of the proposal:

Australia and New Zealand have developed a new set of rules on bottom fishing in the SPRFMO Convention Area to replace the current interim rules. The measure is a comprehensive set of rules based on a spatial management approach that ensure the long-term conservation and sustainable use of deep sea fishery resources.

The main fishing methods in the Western portion of SPRFMO are bottom trawling, mid-water trawling and bottom longlining. The three methods have significantly different impacts on vulnerable marine ecosystems (VMEs), therefore the areas open or closed to fishing vary across fishing methods. Scientific Committee has reviewed the methodology that has been applied to assess the spatial impact of the different fishing methods.

The ability to suspend fishing or close areas where encounters with potential VMEs are above an indicator taxa threshold level has been retained. This provides a backstop to ensure that the scientific models underlying the spatial management are correct.

The Western portion of the Convention Area will be open to all Members. A Member that has not fished previously will be required to submit to the Scientific Committee a proposed assessment based on the SPRFMO Bottom Fishing Impact Assessment to address the cumulative impact of fishing on VMEs. The Commission shall take into account any recommendations of the Scientific Committee when considering the proposed assessment.

Objective of the proposal:

The objective of the CMM (together with Deepwater Species CMM xx-2019) is, through the application of the precautionary approach and an ecosystem approach to fisheries management, to ensure the long-term conservation and sustainable use of deep sea fishery resources, including target fish stocks as well as non-target or associated and dependent species, and, in doing so, to safeguard the marine ecosystems in which these resources occur, including inter alia the prevention of significant adverse impacts on vulnerable marine ecosystems.

Ref: **COMM7-PROP03**

Received on: 04 December 2018

CMM 03-2019¹

Conservation and Management Measure for the Management of Bottom Fishing in the SPRFMO Convention Area

The Commission of the South Pacific Regional Fisheries Management Organisation;

RECOGNISING Article 2 of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean (the Convention), which provides that the objective of the Convention is, through the application of the precautionary approach and an ecosystem approach to fisheries management, to ensure the long-term conservation and sustainable use of fishery resources and, in so doing, to safeguard the marine ecosystems in which these resources occur; [New]

FURTHER RECOGNISING Articles 3(1)(a)(i) and (vii) of the Convention, which call on the Commission, in giving effect to the objective of the Convention, to adopt Conservation and Management Measures (CMMs) that take account of international best practices and protect marine ecosystems, particularly ecosystems with long recovery times following disturbance; [Source: PP1 of CMM 03-2018]

FURTHER RECOGNISING Articles 3(1)(b) and (2) of the Convention which call on the Commission to apply the precautionary approach and an ecosystem approach to the conservation and management of fishery resources under the mandate of the Convention; [Source: PP2 of CMM 03-2018]

FURTHER RECOGNISING Article 4 of the Convention in which Contracting Parties acknowledge their duty to cooperate to ensure compatibility of conservation and management measures established for fishery resources that are identified as straddling areas under national jurisdiction and the adjacent high seas of the Convention Area;

MINDFUL of Article 31(1) of the Convention which calls on the Commission to cooperate with other regional fisheries management organisations (RFMOs), the Food and Agriculture Organization of the United Nations (FAO), other specialised agencies of the United Nations and other relevant organisations on issues of mutual interest; [Source: PP3 of CMM 03-2018]

RECALLING that in 2007, Participants in the International Consultations on the Establishment of the South Pacific RFMO adopted voluntary interim management measures, including *inter alia*, for the management of bottom fisheries in the Convention Area; [Source: PP4 of CMM 03-2018]

NOTING United Nations General Assembly (UNGA) Resolution 61/105 which calls 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: PP5 of CMM 03-2018]

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 species; and to implement the FAO International Guidelines for the Management of Deep-sea Fisheries in the

¹ CMM xx-2019 (Bottom Fishing) supersedes CMM 03-2018 (Bottom Fishing)

High Seas (FAO, 2009; FAO Deep-sea Fisheries Guidelines) in order to sustainably manage fish stocks and protect VMEs; [Source: PP6 of CMM 03-2018]

FURTHER NOTING UNGA Resolution 66/68 which encourages RFMOs to consider the results available from marine scientific research, including those obtained from seabed mapping programmes concerning the identification of areas containing VMEs, and to adopt CMMs 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 CMMs 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 1982 Convention; [Source: PP7 of CMM 03-2018]

FURTHER NOTING UNGA Resolutions 71/123 and 72/72 which call upon RFMOs to use the full set of criteria in the FAO Deep-sea Fisheries Guidelines to identify where VMEs occur or are likely to occur as well as for assessing significant adverse impacts, to ensure that impact assessments, including for cumulative impacts of activities covered by the assessment, are conducted consistent with the FAO Deep-sea Fisheries Guidelines, are reviewed periodically and are revised whenever a substantial change in the fishery has occurred or there is relevant new information, and that, where such impact assessments have not been undertaken, they are carried out as a priority before authorizing bottom fishing activities, and to ensure that CMMs are based on and updated on the basis of the best available scientific information, noting in particular the need to improve effective implementation of thresholds and move-on rules; [New – incorporates reference to 2016 UNGA bottom fishing review from UNGA resolution]

BEARING IN MIND the description in the FAO Deep-sea Fisheries Guidelines of what constitutes significant adverse impacts, factors to be considered when determining the scale and significance of an impact, what constitutes temporary impacts and factors to be considered in determining whether an impact is temporary; [New – reference to FAO Deep-sea Fisheries Guidelines paragraphs 17 to 20]

REAFFIRMING the steps already taken by the Commission to address the impacts of large-scale pelagic driftnets and all deepwater gillnets in the Convention Area, through the implementation of CMM 08-2013 (Gillnetting); [Source: PP8 of CMM 03-2018];

COMMITTED to ensuring that bottom fishing is consistent with the long term sustainability of deep sea fish stocks and the protection of ecosystems; [Source: PP9 of CMM 03-2018]

RECOGNISING Articles 20(1)(a) and (d) of the Convention, which provide that the CMMs adopted by the Commission shall include measures to ensure the long-term sustainability of fishery resources and promote the objective of their responsible utilisation, and to protect the habitats and marine ecosystems in which fishery resources and non-target and associated or dependent species occur from the impacts of fishing, including measures to prevent significant adverse impacts on VMEs and precautionary measures where it cannot adequately be determined whether VMEs are present or whether fishing would cause significant adverse impacts on VMEs; [New]

FURTHER RECOGNISING Article 22 of the Convention, which provides that a fishery that has not been subject to fishing or has not been subject to fishing with a particular gear type or technique for ten years or more shall be opened only when the Commission has adopted cautious preliminary CMMs in respect of that fishery, and, as appropriate, non-target and associated or dependent species, and appropriate measures to protect the marine ecosystem in which that fishery occurs from adverse impacts of fishing activities; [New]

ADOPTS the following CMM in accordance with Articles 8, 20, 21 and 22 of the Convention:

Objective

1. The objective of the CMM together with Deepwater Species CMM xx-2019 is, through the application of the precautionary approach and an ecosystem approach to fisheries management, to ensure the long-term conservation and sustainable use of deep sea fishery resources, including target fish stocks as well as non-target or associated and dependent species, and, in doing so, to safeguard the marine ecosystems in which these resources occur, including inter alia the prevention of significant adverse impacts on vulnerable marine ecosystems. [Source: para 1 of CMM 03-2018]

Definitions

- 2 For the purposes of this CMM, the term “bottom fishing” is defined as fishing using any gear type likely to come in contact with the seafloor or benthic organisms during the normal course of operations, and includes Bottom trawl, Mid-water trawl and Bottom line, as defined in paragraphs 3 to 5. [Source: para 4 of CMM 03-2018 with addition of cross-references to gear type definitions below].
- 3 For the purposes of this CMM, the term “Bottom trawl” is defined as fishing using a trawl net that is designed to be pulled through the water and to come into contact with the seabed. [Source: New Zealand high seas permit definition]
- 4 For the purposes of this CMM, the term “Mid-water trawl” is defined as fishing for benthic-pelagic species using a trawl net that is designed to be pulled through the water near the seabed and not to come into extended contact with the seabed. [Source: New Zealand high seas permit definition, adapted for SPRFMO context]
- 5 For the purposes of this CMM, the term “Bottom line” is defined as fishing using a line to which a hook or hooks (whether baited or not) are attached and rigged to sink and fish on or near the seabed. This includes, but is not limited to, longlines, hand lines, drop lines, trot lines, and dahn lines. [Source: New Zealand high seas permit definition]
- 6 For the purposes of this CMM, the term “vulnerable marine ecosystem” (VME) means a marine ecosystem that has the characteristics referred to in paragraph 42 of, and elaborated in the Annex to, the FAO Deep-sea Fisheries Guidelines [Source: para 3 of CMM 03-2018]
- 7 For the purposes of this CMM, the term “Evaluated Area” means those parts of the Convention Area that are within the area starting at a point of 24°S latitude and 146°W, extending southward to latitude 57° 30S, then eastward to 150°E longitude, northward to 55°S, eastward to 143°E, northward to 24°S and eastward back to point of origin (Annex 1). [New definition to allow management of bottom fisheries in area evaluated by the Scientific Committee for likelihood of vulnerable marine ecosystems].
- 8 For the purposes of this CMM, the term “Management Area(s)” means those parts of the Evaluated Area specified in paragraph 16. [New – see para 7]
- 9 For the purposes of this CMM, the term “fishing year” means the period starting 0001 hours UTC on 1 January and ending 2359 hours on 31 December in the same year. [New definition].

General provisions

- 10 This CMM applies to the entire Convention Area. [New]
- 11 This CMM together with Deepwater Species CMM xx 2019 are adopted as cautious preliminary conservation and management measures consistent with Article 22(1) of the Convention. [New]
- 12 This CMM together with Deepwater Species CMM xx 2019 applies to all fishing vessels flying the flag of a Member or Cooperating non-Contracting Party (CNCP) to the South Pacific Regional Fisheries Management Organisation (SPRFMO) engaging or intending to engage in bottom fishing in the Convention Area. [Source: para 2 of CMM 03-2018, and para 2 of SIOFA CMM 2017/01]
- 13 Members and CNCPs shall prohibit vessels flying their flag from participating in bottom fishing in the Convention Area other than in accordance with the provisions of this CMM together with Deepwater Species CMM xx 2019. [Source: para 8(b) of CMM 03-2018 with “agree to” replaced by “shall”]
- 14 Only fishing vessels duly authorised pursuant to Article 25 of the Convention and in accordance with CMM 05-2016 (Record of Vessels) that are flagged to Members and CNCPs shall participate in bottom fishing in the Convention Area. [Source: para 2 of CMM 01-2018 on Jack Mackerel]
- 15 No Member or CNCP shall authorise vessels flying their flag to engage in any bottom fishing in the Convention Area unless
 - (a) authorisation has been given by the Commission under paragraph 23(c)(i); or
 - (b) paragraph 24 applies to the Member or CNCP.

Bottom fishing Management Areas [New]

- 16 The Commission hereby establishes within the Evaluated Area the following Management Areas, the coordinates for which are provided in Annex 4:
 - (a) Bottom trawl Management Area
 - (b) Mid-water trawl Management Area
 - (c) Bottom line Management Area
- 17 Bottom fishing in the Convention Area shall occur only in the three Management Areas established in paragraph 16 and in accordance with the terms of this CMM together with Deepwater Species CMM xx-2018. CMM 13-201[6] (Exploratory Fisheries) does not apply to bottom fishing in the three Management Areas established in paragraph 16.
- 18 Notwithstanding paragraphs 13 and 17, proposals to undertake bottom fishing:
 - (a) outside a Management Area; or
 - (b) inside a Management Area using bottom fishing methods other than bottom trawl, midwater trawl or bottom line fishing; or
 - (c) in a mid-water trawl Management Area using bottom trawl gear or in a bottom line Management Area using bottom trawl or mid-water trawl gear; or
 - (d) inside a Management Area targeting species not previously targeted in the area the subject of the proposal (unless the species has regularly been caught as part of an existing fishery); shall be handled in accordance with CMM 13-201[6] (Exploratory Fisheries).
- 19 Unless a Member or CNCP is fishing in an exploratory fishery established pursuant to CMM 13-201[9], Members and CNCPs shall ensure that vessels flying their flag comply with the following provisions:
 - (a) Bottom trawling shall only occur in a bottom trawl Management Area;

- (b) Midwater trawling shall only occur in a midwater trawl Management Area or a bottom trawl Management Area;
 - (c) bottom lining shall only occur in a Management Area.
- 20 The Commission may in future establish, disestablish, or adjust the boundaries of the Evaluated Area or any Management Area, based on advice from the Scientific Committee.

Marine mammals, seabirds, reptiles and other species of concern²

- 21 Members and CNCPs shall require vessels flying their flag and undertaking bottom fishing to implement seabird mitigation measures in accordance with CMM 09-2017 (minimising bycatch of seabirds in the SPRFMO Convention Area), and shall report annually to the Commission on bycatch rates and total bycatch estimates in accordance with CMM 02-2018 (Data Standards) and the Guidelines for Annual National Reports to the SPRFMO Scientific Committee.
- 22 The Scientific Committee shall provide advice biennially to the Commission on:
- (a) direct and indirect interactions between bottom fishing and marine mammals, seabirds, reptiles and other species of concern;
 - (b) any recommended spatial or temporal closures or spatially/temporally limited gear prohibitions for any identified hotspots of these species; and
 - (c) any recommended bycatch limits and/or measures for an encounter protocol for any of these species.

Assessment of proposed bottom fishing

- 23 Subject to paragraphs 18 and 24, all proposals to undertake bottom fishing in one of the Management Areas established in paragraph 16 shall be subject to an assessment process, based on the best available scientific information, to determine if such fishing, taking account of the history of bottom fishing in the areas proposed and the cumulative impacts of the past and proposed fishing, would contribute to having significant adverse impacts on VMEs, and to ensure that if it is determined that this fishing would make such contributions, that they are managed to prevent such impacts or are not authorised to proceed. The assessments shall follow the following procedures: [Source: CCAMLR CM 22-06, para 7]
- (a) Each Member or CNCP proposing to participate in bottom fishing activities shall submit to the Scientific Committee a proposed assessment based on the SPRFMO Bottom Fishery Impact Assessment Standard (SPRFMO BFIAS³) with the best available data including consideration of cumulative impacts, not less than 60 days prior to the annual meeting of the Scientific Committee. These submissions shall also include the mitigation measures proposed by the Member or CNCP to prevent such impacts.

² "Other species of concern" means the list contained in Annex 14 of CMM 02-2017 (Data standards).

³ As adopted at the third session of the Preparatory Conference, 2012, available at: <http://www.sprfmo.int/assets/Meetings/Meetings-before-2013/Scientific-Working-Group/SWG-06-2008/a-Miscellaneous-Documents/SPRFMO-Bottom-Fishing-Impact-Assessment-Standardagreed-Vanuatu-Fri23Sep2011-1140am.pdf>

- (b) The Scientific Committee shall undertake a review of the proposed assessment and provide advice to the Commission as to whether the proposed bottom fishing would contribute to having significant adverse impacts on deep sea fish stocks for which no stock assessment has been completed, bycatch species and VMEs and, if so, whether the proposed or additional mitigation measures would prevent such impacts. In its review of the proposed assessment, the Scientific Committee may use additional information available to it, including information from other fisheries in the region or similar fisheries elsewhere. The Scientific Committee is not obliged to consider, or provide advice on, proposed assessments provided after the deadline for submission of proposed assessments contained in paragraph 23(a).
- (c) In line with the precautionary approach, the Commission shall, on the basis of a proposed assessment and the Scientific Committee's review of the proposed assessment, taking into account any recommendations and advice of the Scientific Committee:
- i. consider whether, and if applicable the extent to which, bottom fishing in the Management Area(s) for which the proposed assessment was conducted should be authorised;
 - ii. which, if any, additional measures to those proposed are required pursuant to Article 20 to prevent significant adverse impacts on VMEs;
 - iii. which, if any, additional precautionary measures are required where it cannot adequately be determined whether VMEs are present or whether fishing could cause significant adverse impacts on VMEs; and
 - iv. in relation to an application to target a species for which no total catch limit exists, consider an exemption for such a Member or CNCP to paragraph 11 of CMM XX-2019 (Deepwater Species), bearing in mind the need to be precautionary.
- 24 Members or CNCPs that engaged in bottom fishing in the Convention Area consistently with CMM 03-2018, CMM 03-2017, CMM 4.03 or CMM 2.03 do not need to submit the proposed assessment otherwise required in paragraph 23(a).
- 25 Members and CNCPs whose bottom fishing proposal has been authorised by the Commission under paragraph 23(c)(i) or to whom paragraph 24 applies shall ensure that an updated proposed assessment meeting the requirements contained in paragraph 23(a) is submitted to the Scientific Committee and Commission when a substantial change in the fishery has occurred, such that it is likely that the risk or impact of the fishery may have changed. [Source: CMM 03-2018, para 14]
- 26 The Secretariat shall make publicly available on the SPRFMO website all proposed assessments as well as the Scientific Committee's review of such assessments in accordance with its usual procedures, and shall invite comment on proposed assessments. [Source: CMM 03-2018, para 15]
- 27 The Scientific Committee shall update the SPRFMO BFIAS no later than 2019 and regularly thereafter to ensure that it reflects, as appropriate, best practice and the objectives of this CMM. [New]

Encounters with potential VMEs

- 28 For the purposes of this section of the CMM, the term “VME indicator taxa” means any benthic organism listed in Annex 5. [Source: CCAMLR CM 22-07, para 2(ii)]
- 29 For the purposes of this section of the CMM, the term “Encounter” means catch of a VME indicator taxa above threshold levels as set out in paragraph 30. [source: NAFO Article [x]]
- 30 Where VME indicator taxa are encountered in any one tow at or above the threshold limits in Annex 6(A), or 3 or more different VME indicator taxa at or above the weight limits in Annex 6(B), Members and CNCPs shall require any vessel flying their flag to:
- (a) cease bottom or midwater trawling immediately within an encounter area of one (1) nautical mile either side of the trawl track extended by one (1) nautical mile at each end;
 - (b) report the encounter immediately to the Member or CNCP whose flag the vessel is flying and the Secretariat, in accordance with the Guidelines for the preparation and submission of notifications of encounters with potential VMEs, contained in Annex 7. [Source: CCAMLR CM 22-07, para 4 and SIOFA CMM 2017/01, para 12];
- 31 In the event of an encounter, Members and CNCPs shall cooperate to the extent possible with the Secretariat and other Members or CNCPs engaged in bottom trawl or midwater trawling to exchange such data and information as may be relevant to the Scientific Committee’s consideration of the encounter area.
- 32 On receipt of a notification under paragraph 30(b) the Secretariat shall:
- (a) record the location of the encounter area; and
 - (b) within three (3) working days of receipt, notify the Commission VMS service provider⁴ and all flag States with fishing vessels participating in bottom fishing in the Convention Area that bottom trawling and midwater trawling are suspended in the encounter area in paragraph 30(a).
- 33 Members and CNCPs shall submit to the Scientific Committee a detailed description of each encounter by vessels flying their flag that resulted in a temporary suspension pursuant to paragraph 30, and an analysis of whether the encounter was consistent with scientific models used to underpin the spatial management approach applied to prevent significant adverse impacts on VMEs in the SPRFMO Convention Area.
- 34 The Scientific Committee at its next annual meeting shall review all encounters reported pursuant to paragraph 30(b) and provide advice to the Commission on whether each encounter reviewed is consistent with the scientific models applied to prevent significant adverse impacts on VMEs in the SPRFMO Convention Area. This review should include consideration of:
- (a) the detailed analyses provided by a Member or CNCP pursuant to paragraph 33;
 - (b) historical fishing events within 5nm of the encounter tow, in particular, any previous encounters, and all information on benthic bycatch;
 - (c) model predictions for all VME indicator taxa;
 - (d) details of the relevant fishing activity; and
 - (e) other information the Scientific Committee considers relevant.

⁴ As at January 2019, this is CLS.

- 35 If the Scientific Committee concludes that the encounter was not inconsistent with the scientific models applied to prevent significant adverse impacts on VMEs in the SPRFMO Convention Area, the encounter area suspension shall be lifted and the Secretariat shall, within five (5) working days of the adoption of the report of the Scientific Committee meeting, notify the VMS service provider and all flag States with fishing vessels participating in bottom fishing in the Convention Area.
- 36 If the Scientific Committee concludes that the encounter was not consistent with the scientific models which underpin the spatial management approach applied to prevent significant adverse impacts on VMEs in the SPRFMO Convention Area the suspension on fishing with bottom trawl and midwater trawl gears in the encounter area established pursuant to paragraph 30(a) shall remain in effect until management actions are determined by the Commission.
- 37 Taking into account the advice and information received from the Scientific Committee, at its next annual meeting the Commission shall determine management actions for any encounter area referred to in paragraph 36. In determining management actions, the Commission acknowledges that a single encounter does not in and of itself provide rationale for ongoing suspension of bottom trawling and midwater trawling.
- 38 Members and CNCPs shall submit to the Secretariat annual reports of all benthic bycatch data from vessels flying their flag, consistent with CMM 02-2018 (Data Standards), to enable an ongoing review of the effectiveness of the spatial management arrangements. By no later than its annual meeting in 2019, the Scientific Committee shall develop a review process to provide for ongoing monitoring and feedback.
- 39 The Scientific Committee shall review the VME indicator thresholds and encounter area size contained in paragraph 30 no later than its 2021 meeting, and regularly thereafter, to ensure their appropriateness for achieving the objective of this CMM.
- 40 Nothing in this CMM shall prevent Members or CNCPs from taking additional measures compatible with this measure in relation to encounters with VME indicator taxa below the threshold in paragraph 30.

Monitoring and control of bottom fishing activities

- 41 Members and CNCPs shall:
- (a) ensure that vessels that fly their flag and participate in bottom fishing:
 - i. are equipped and configured so that they can comply with all relevant SPRFMO CMMs
 - ii. act in accordance with CMM 06-2018 (Commission VMS), polling once every 30 minutes for the duration of the trip notwithstanding para 3(b)(i) of CMM 02-2018 (Data standards);⁵
 - iii. report tow or set start and end position to 1/100th degree resolution - decimal format, notwithstanding the Annexes of CMM 02-2018 (Data standards)
 - (b) only authorise vessels flying their flag to fish in the Convention Area where they are able to exercise their responsibilities as a flag State under the Convention and all relevant SPRFMO CMMs;

⁵ The term "duration of the trip" commences from the time the vessel departs from port, includes all times that it is in the Convention Area and concludes once it enters port.

- (c) ensure that they meet the level of observer coverage specified in this CMM to collect data in accordance with this and other CMMs;
- (d) prohibit vessels flying their flag from participating in bottom fishing if the agreed minimum required data submissions have not been provided in accordance with the agreed subset of the vessel identification data requirements;
- (e) in respect of each vessel that flies their flag and participates in bottom fishing, submit VMS reports in an electronic format to the Secretariat in accordance with CMM 06-2018.

- 42 The Executive Secretary shall circulate monthly catch reports (from data provided in accordance with paragraph 41(f)) aggregated by flag State and month, to all Members and CNCPs as soon as possible, once collated.

Observer Coverage

- 43 All Members and CNCPs participating in bottom fishing pursuant to this CMM shall ensure scientific observer coverage of trips for vessels flying their flag consistent with the minimum observer coverage levels set out in Annex 8 and shall ensure that such observers collect and report data as described in CMM 02-2018 (Data Standards). [Source: CMM 01-2018 para 22 for Jack Mackerel]
- 44 Nothing in this measure shall affect the rights of Members and CNCPs to apply higher levels of observer coverage than set out in Annex 8, in accordance with their domestic requirements. [Source: CMM 09-2017 on Seabirds, para 12]

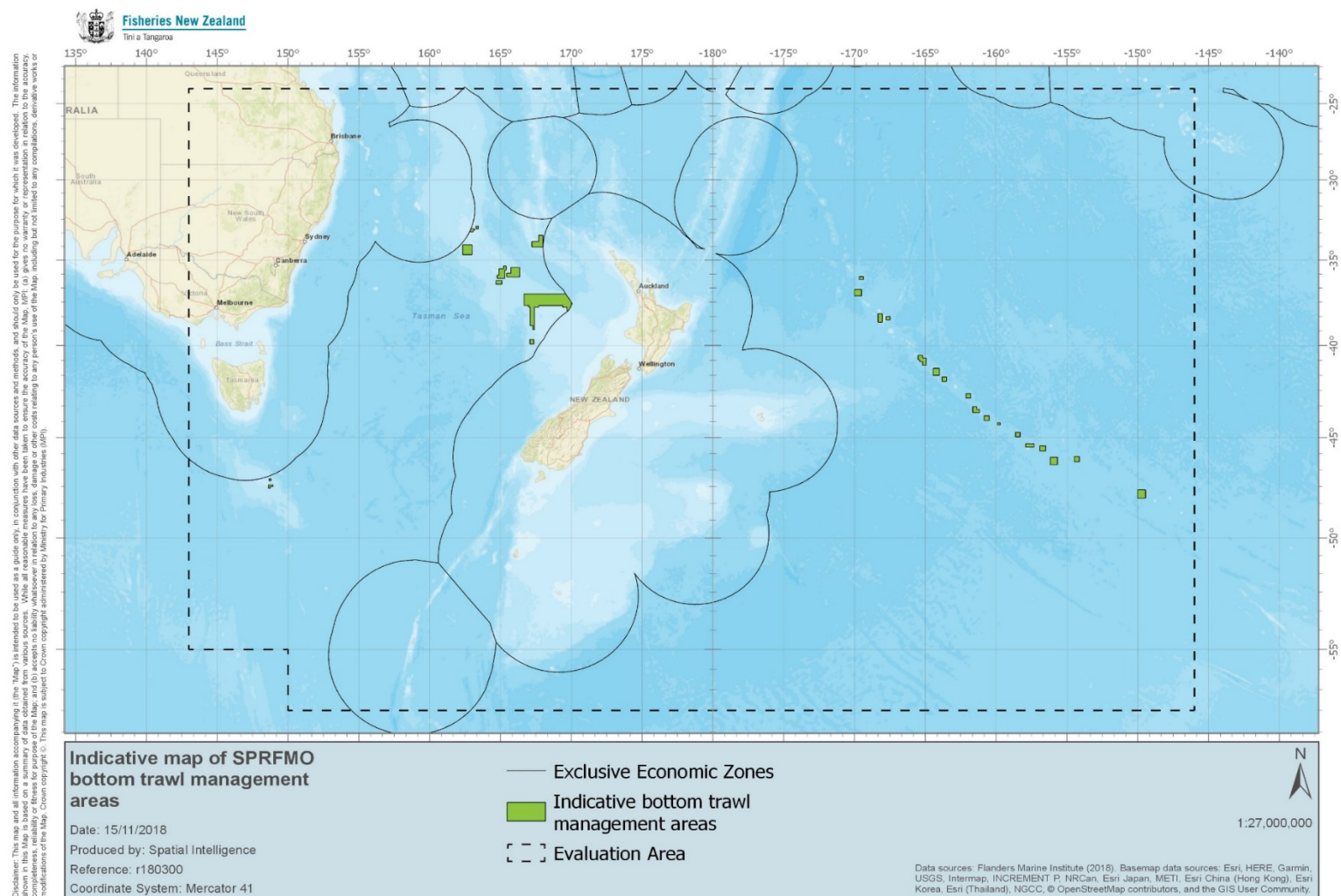
Electronic Monitoring [New]

- 45 Members and CNCPs may also require vessels flying their flag to have an electronic monitoring system installed and operating that is capable of recording (including visually) and storing recordings of fishing events for data collection and verification purposes.

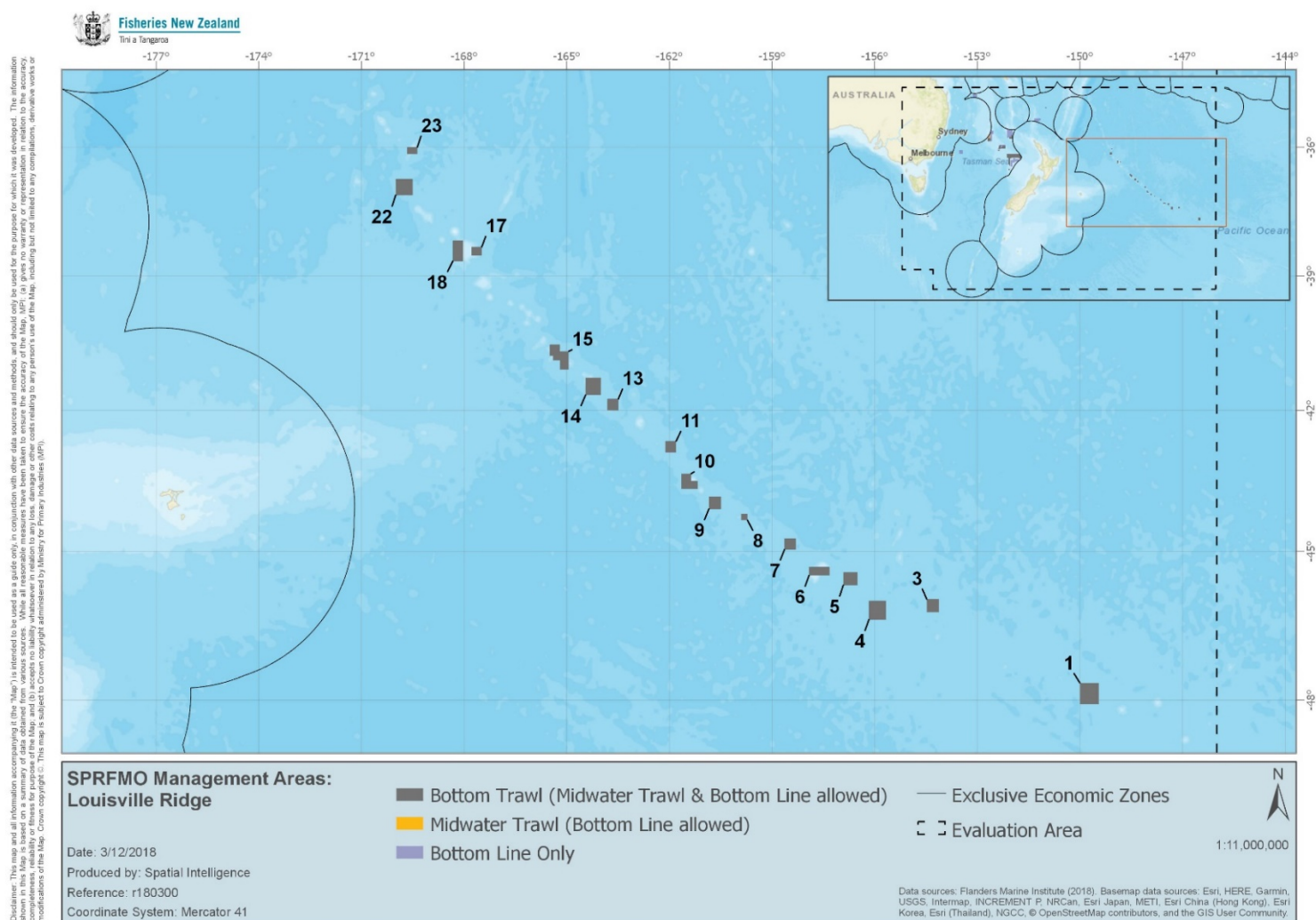
Review

- 46 This CMM shall be reviewed at least every five (5) years by the Commission. The review shall include a review of [*insert reference to provisions on the sharing of TACs*] and the protocol for encounters with VME indicator taxa. Such review shall take into account the advice of the Scientific Committee and the CMM's effectiveness in achieving its objective.

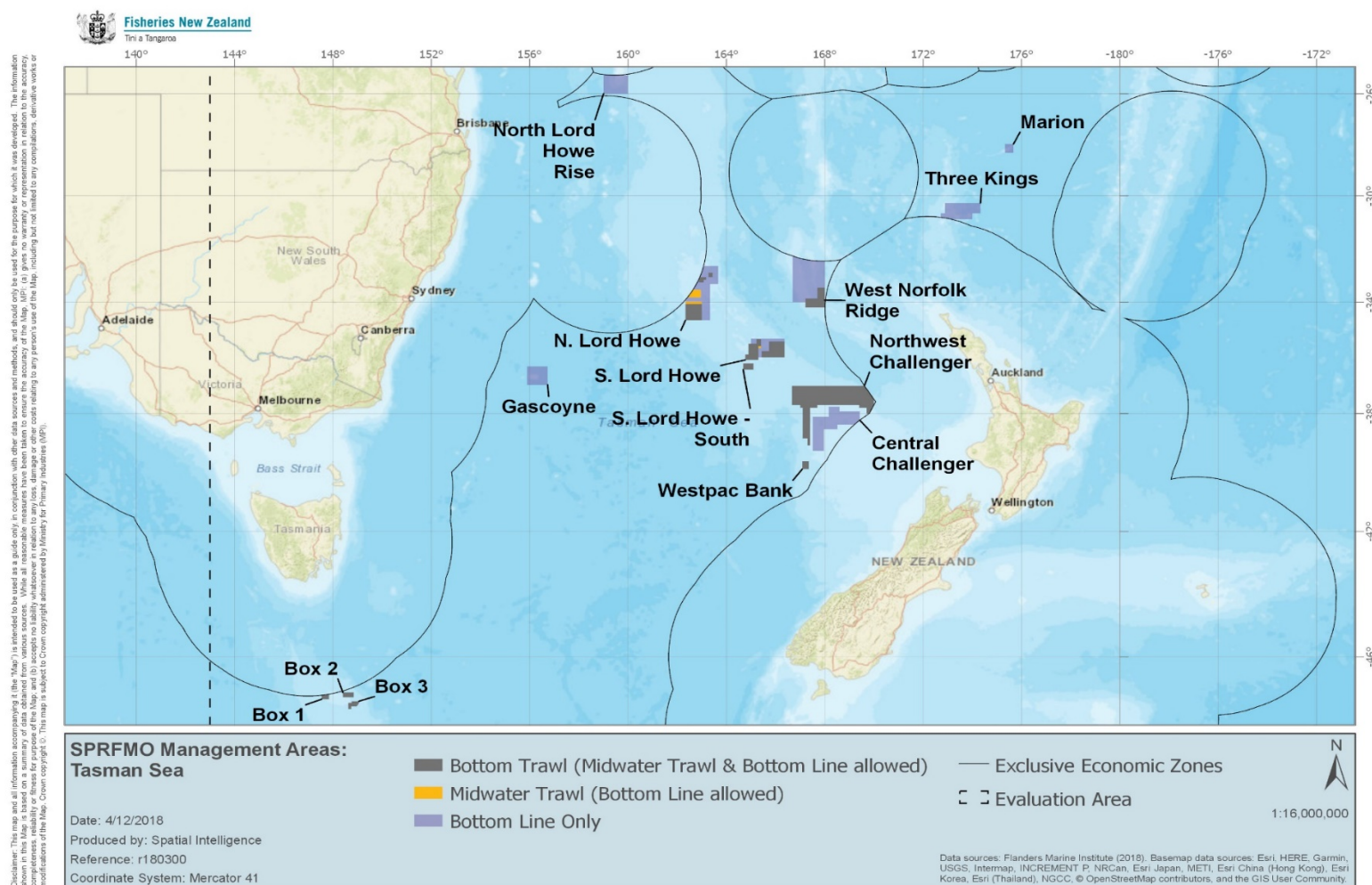
Annex 1: SPRFMO Bottom Fishing Evaluated Area and Bottom Fishing Management Areas



Annex 2: : SPRFMO Bottom Fishing Management Areas for the Louisville Ridge



Annex 3: SPRFMO Bottom Fishing Management Areas for the Tasman Sea



Annex 4: Coordinates for each bottom fishing management area

(a) Bottom Trawl Management Area coordinates

Name	Region	Method	Latitude	Longitude	EEZ Direction
1	Louisville	BT	48°05.000'S	150°00.000'W	
1	Louisville	BT	47°40.000'S	150°00.000'W	
1	Louisville	BT	47°40.000'S	149°27.000'W	
1	Louisville	BT	48°05.000'S	149°27.000'W	
5	Louisville	BT	45°42.000'S	156°55.000'W	
5	Louisville	BT	45°26.000'S	156°55.000'W	
5	Louisville	BT	45°26.000'S	156°30.000'W	
5	Louisville	BT	45°42.000'S	156°30.000'W	
7	Louisville	BT	44°57.950'S	158°38.000'W	
7	Louisville	BT	44°43.950'S	158°38.000'W	
7	Louisville	BT	44°43.950'S	158°18.000'W	
7	Louisville	BT	44°57.950'S	158°18.000'W	
9	Louisville	BT	44°07.000'S	160°50.820'W	
9	Louisville	BT	43°51.183'S	160°50.820'W	
9	Louisville	BT	43°51.183'S	160°29.235'W	
9	Louisville	BT	44°07.000'S	160°29.235'W	
10	Louisville	BT	43°41.440'S	161°39.000'W	
10	Louisville	BT	43°22.000'S	161°39.000'W	
10	Louisville	BT	43°22.000'S	161°21.770'W	
10	Louisville	BT	43°31.370'S	161°21.770'W	
10	Louisville	BT	43°31.370'S	161°10.170'W	
10	Louisville	BT	43°41.440'S	161°10.170'W	
11	Louisville	BT	42°54.500'S	162°07.000'W	
11	Louisville	BT	42°40.000'S	162°07.000'W	
11	Louisville	BT	42°40.000'S	161°48.000'W	
11	Louisville	BT	42°54.500'S	161°48.000'W	
13	Louisville	BT	42°00.000'S	163°29.500'W	
13	Louisville	BT	42°00.000'S	163°49.000'W	
13	Louisville	BT	41°45.000'S	163°49.000'W	
13	Louisville	BT	41°45.000'S	163°29.500'W	
14	Louisville	BT	41°40.000'S	164°00.000'W	
14	Louisville	BT	41°40.000'S	164°27.000'W	
14	Louisville	BT	41°17.000'S	164°27.000'W	
14	Louisville	BT	41°17.000'S	164°00.000'W	
15	Louisville	BT	40°42.000'S	164°56.400'W	
15	Louisville	BT	41°06.000'S	164°56.400'W	
15	Louisville	BT	41°06.000'S	165°12.000'W	
15	Louisville	BT	40°54.000'S	165°12.000'W	

15	Louisville	BT	40°54.000'S	165°24.000'W	
15	Louisville	BT	40°48.000'S	165°24.000'W	
15	Louisville	BT	40°48.000'S	165°30.000'W	
15	Louisville	BT	40°32.897'S	165°30.000'W	
15	Louisville	BT	40°32.897'S	165°12.000'W	
15	Louisville	BT	40°42.000'S	165°12.000'W	
17	Louisville	BT	38°32.000'S	167°47.067'W	
17	Louisville	BT	38°20.013'S	167°47.067'W	
17	Louisville	BT	38°20.013'S	167°29.000'W	
17	Louisville	BT	38°32.000'S	167°29.000'W	
18	Louisville	BT	38°40.000'S	168°01.785'W	
18	Louisville	BT	38°40.000'S	168°20.000'W	
18	Louisville	BT	38°11.013'S	168°20.000'W	
18	Louisville	BT	38°11.013'S	168°01.785'W	
Northwest Challenger	Challenger Plateau	BT	38°00.000'S	169°47.848'E	
Northwest Challenger	Challenger Plateau	BT	38°00.000'S	169°42.000'E	
Northwest Challenger	Challenger Plateau	BT	37°48.000'S	169°42.000'E	
Northwest Challenger	Challenger Plateau	BT	37°48.000'S	169°24.000'E	
Northwest Challenger	Challenger Plateau	BT	37°42.000'S	169°24.000'E	
Northwest Challenger	Challenger Plateau	BT	37°42.000'S	167°42.000'E	
Northwest Challenger	Challenger Plateau	BT	37°48.000'S	167°42.000'E	
Northwest Challenger	Challenger Plateau	BT	37°48.000'S	167°24.000'E	
Northwest Challenger	Challenger Plateau	BT	39°06.000'S	167°24.000'E	
Northwest Challenger	Challenger Plateau	BT	39°06.000'S	167°18.000'E	
Northwest Challenger	Challenger Plateau	BT	38°52.000'S	167°18.000'E	
Northwest Challenger	Challenger Plateau	BT	38°52.000'S	167°06.000'E	
Northwest Challenger	Challenger Plateau	BT	37°48.000'S	167°06.000'E	
Northwest Challenger	Challenger Plateau	BT	37°48.000'S	167°00.000'E	
Northwest Challenger	Challenger Plateau	BT	37°42.000'S	167°00.000'E	

Northwest Challenger	Challenger Plateau	BT	37°42.000'S	166°40.000'E	
Northwest Challenger	Challenger Plateau	BT	37°01.333'S	166°40.000'E	
Northwest Challenger	Challenger Plateau	BT	37°01.333'S	169°36.706'E	South-east along the New Zealand EEZ
Northwest Challenger	Challenger Plateau	BT	37°29.902'S	170°00.000'E	Due south to a point on the New Zealand EEZ
Northwest Challenger	Challenger Plateau	BT	37°41.589'S	170°00.000'E	South-west along the New Zealand EEZ
22	Louisville	BT	36°45.000'S	169°30.000'W	
22	Louisville	BT	37°08.000'S	169°30.000'W	
22	Louisville	BT	37°08.000'S	170°00.000'W	
22	Louisville	BT	36°45.000'S	170°00.000'W	
S. Lord Howe - South	South Lord Howe Rise	BT	36°26.800'S	164°40.830'E	
S. Lord Howe - South	South Lord Howe Rise	BT	36°13.460'S	164°40.830'E	
S. Lord Howe - South	South Lord Howe Rise	BT	36°13.460'S	165°06.050'E	
S. Lord Howe - South	South Lord Howe Rise	BT	36°26.800'S	165°06.050'E	
23	Louisville	BT	36°10.000'S	169°22.000'W	
23	Louisville	BT	36°10.000'S	169°40.000'W	
23	Louisville	BT	36°00.000'S	169°40.000'W	
23	Louisville	BT	36°00.000'S	169°22.000'W	
S. Lord Howe - West	South Lord Howe Rise	BT	35°31.000'S	164°54.000'E	
S. Lord Howe - West	South Lord Howe Rise	BT	35°31.000'S	165°13.550'E	
S. Lord Howe - West	South Lord Howe Rise	BT	35°21.000'S	165°13.553'E	
S. Lord Howe - West	South Lord Howe Rise	BT	35°21.000'S	165°24.000'E	
S. Lord Howe - West	South Lord Howe Rise	BT	35°36.000'S	165°24.000'E	
S. Lord Howe - West	South Lord Howe Rise	BT	35°36.000'S	165°18.000'E	
S. Lord Howe - West	South Lord Howe Rise	BT	36°06.000'S	165°18.000'E	
S. Lord Howe - West	South Lord Howe Rise	BT	36°06.000'S	164°46.000'E	

S. Lord Howe - West	South Lord Howe Rise	BT	35°54.000'S	164°46.000'E	
S. Lord Howe - West	South Lord Howe Rise	BT	35°54.000'S	164°54.000'E	
N. Lord Howe - West	Lord Howe Rise	BT	33°16.400'S	162°52.540'E	
N. Lord Howe - West	Lord Howe Rise	BT	33°09.296'S	162°52.540'E	North-east along the Australian EEZ
N. Lord Howe - West	Lord Howe Rise	BT	33°04.400'S	162°54.941'E	
N. Lord Howe - West	Lord Howe Rise	BT	33°04.400'S	163°10.540'E	
N. Lord Howe - West	Lord Howe Rise	BT	33°10.400'S	163°10.540'E	
N. Lord Howe - West	Lord Howe Rise	BT	33°10.400'S	163°04.540'E	
N. Lord Howe - West	Lord Howe Rise	BT	33°16.400'S	163°04.540'E	
N. Lord Howe - East	Lord Howe Rise	BT	33°04.400'S	163°16.615'E	
N. Lord Howe - East	Lord Howe Rise	BT	32°54.650'S	163°16.615'E	
N. Lord Howe - East	Lord Howe Rise	BT	32°54.650'S	163°26.380'E	
N. Lord Howe - East	Lord Howe Rise	BT	33°04.400'S	163°26.380'E	
6	Louisville	BT	45°19.500'S	157°55.000'W	
6	Louisville	BT	45°19.500'S	157°19.000'W	
6	Louisville	BT	45°30.000'S	157°19.000'W	
6	Louisville	BT	45°30.000'S	157°55.000'W	
8	Louisville	BT	44°21.000'S	159°54.000'W	
8	Louisville	BT	44°13.000'S	159°54.000'W	
8	Louisville	BT	44°13.000'S	159°43.000'W	
8	Louisville	BT	44°21.000'S	159°43.000'W	
Westpac Bank	Challenger Plateau	BT	39°55.000'S	167°05.000'E	
Westpac Bank	Challenger Plateau	BT	39°39.000'S	167°05.000'E	
Westpac Bank	Challenger Plateau	BT	39°39.000'S	167°21.090'E	
Westpac Bank	Challenger Plateau	BT	39°55.000'S	167°21.090'E	
3	Louisville	BT	46°15.000'S	154°28.653'W	
3	Louisville	BT	45°59.000'S	154°28.653'W	
3	Louisville	BT	45°59.000'S	154°07.224'W	
3	Louisville	BT	46°15.000'S	154°07.224'W	

S. Lord Howe - East	South Lord Howe Rise	BT	36°00.500'S	165°26.000'E	
S. Lord Howe - East	South Lord Howe Rise	BT	35°47.000'S	165°26.000'E	
S. Lord Howe - East	South Lord Howe Rise	BT	35°47.000'S	165°44.000'E	
S. Lord Howe - East	South Lord Howe Rise	BT	35°26.000'S	165°44.000'E	
S. Lord Howe - East	South Lord Howe Rise	BT	35°26.000'S	166°21.915'E	
S. Lord Howe - East	South Lord Howe Rise	BT	36°00.500'S	166°21.915'E	
N. Lord Howe - South	Lord Howe Rise	BT	34°04.035'S	163°00.000'E	
N. Lord Howe - South	Lord Howe Rise	BT	34°40.000'S	163°00.000'E	
N. Lord Howe - South	Lord Howe Rise	BT	34°40.000'S	162°20.000'E	
N. Lord Howe - South	Lord Howe Rise	BT	34°04.035'S	162°20.000'E	
Wanganella	West Norfolk Ridge	BT	34°12.000'S	168°00.000'E	
Wanganella	West Norfolk Ridge	BT	34°12.000'S	167°13.000'E	
Wanganella	West Norfolk Ridge	BT	33°52.000'S	167°13.000'E	
Wanganella	West Norfolk Ridge	BT	33°52.000'S	167°42.000'E	
Wanganella	West Norfolk Ridge	BT	33°28.000'S	167°42.000'E	
Wanganella	West Norfolk Ridge	BT	33°28.000'S	168°00.000'E	
4	Louisville	BT	46°01.000'S	156°10.000'W	
4	Louisville	BT	46°01.000'S	155°40.000'W	
4	Louisville	BT	46°24.000'S	155°40.000'W	
4	Louisville	BT	46°24.000'S	156°10.000'W	
Box 3	South Tasman	BT	47°21.000'S	149°03.200'E	
Box 3	South Tasman	BT	47°24.800'S	149°03.200'E	
Box 3	South Tasman	BT	47°30.320'S	148°57.650'E	
Box 3	South Tasman	BT	47°30.320'S	148°44.390'E	
Box 3	South Tasman	BT	47°35.205'S	148°44.390'E	
Box 3	South Tasman	BT	47°35.205'S	148°37.235'E	

Box 3	South Tasman	BT	47°24.015'S	148°37.235'E	
Box 3	South Tasman	BT	47°24.015'S	148°45.610'E	
Box 3	South Tasman	BT	47°21.000'S	148°45.610'E	
Box 2	South Tasman	BT	47°05.160'S	148°50.670'E	
Box 2	South Tasman	BT	47°13.780'S	148°50.670'E	
Box 2	South Tasman	BT	47°13.780'S	148°24.165'E	
Box 2	South Tasman	BT	47°05.160'S	148°24.165'E	
Box 1	South Tasman	BT	47°08.280'S	147°50.200'E	Start on the Australian EEZ
Box 1	South Tasman	BT	47°17.370'S	147°50.200'E	
Box 1	South Tasman	BT	47°17.370'S	147°32.300'E	
Box 1	South Tasman	BT	47°10.197'S	147°32.300'E	East along the Australian EEZ to the start point

(b) Mid-water trawl Management Area coordinates

Name	Region	Method	Latitude	Longitude	EEZ_Direction
1	Louisville Ridge	MWT	48°05.000'S	150°00.000'W	
1	Louisville Ridge	MWT	47°40.000'S	150°00.000'W	
1	Louisville Ridge	MWT	47°40.000'S	149°27.000'W	
1	Louisville Ridge	MWT	48°05.000'S	149°27.000'W	
5	Louisville Ridge	MWT	45°42.000'S	156°55.000'W	
5	Louisville Ridge	MWT	45°26.000'S	156°55.000'W	
5	Louisville Ridge	MWT	45°26.000'S	156°30.000'W	
5	Louisville Ridge	MWT	45°42.000'S	156°30.000'W	
7	Louisville Ridge	MWT	44°57.950'S	158°38.000'W	
7	Louisville Ridge	MWT	44°43.950'S	158°38.000'W	
7	Louisville Ridge	MWT	44°43.950'S	158°18.000'W	
7	Louisville Ridge	MWT	44°57.950'S	158°18.000'W	
9	Louisville Ridge	MWT	44°07.000'S	160°50.820'W	
9	Louisville Ridge	MWT	43°51.183'S	160°50.820'W	
9	Louisville Ridge	MWT	43°51.183'S	160°29.235'W	
9	Louisville Ridge	MWT	44°07.000'S	160°29.235'W	
10	Louisville Ridge	MWT	43°41.440'S	161°39.000'W	
10	Louisville Ridge	MWT	43°22.000'S	161°39.000'W	
10	Louisville Ridge	MWT	43°22.000'S	161°21.770'W	
10	Louisville Ridge	MWT	43°31.370'S	161°21.770'W	
10	Louisville Ridge	MWT	43°31.370'S	161°10.170'W	
10	Louisville Ridge	MWT	43°41.440'S	161°10.170'W	
11	Louisville Ridge	MWT	42°54.500'S	162°07.000'W	
11	Louisville Ridge	MWT	42°40.000'S	162°07.000'W	
11	Louisville Ridge	MWT	42°40.000'S	161°48.000'W	
11	Louisville Ridge	MWT	42°54.500'S	161°48.000'W	

13	Louisville Ridge	MWT	42°00.000'S	163°29.500'W	
13	Louisville Ridge	MWT	42°00.000'S	163°49.000'W	
13	Louisville Ridge	MWT	41°45.000'S	163°49.000'W	
13	Louisville Ridge	MWT	41°45.000'S	163°29.500'W	
14	Louisville Ridge	MWT	41°40.000'S	164°00.000'W	
14	Louisville Ridge	MWT	41°40.000'S	164°27.000'W	
14	Louisville Ridge	MWT	41°17.000'S	164°27.000'W	
14	Louisville Ridge	MWT	41°17.000'S	164°00.000'W	
15	Louisville Ridge	MWT	40°42.000'S	164°56.400'W	
15	Louisville Ridge	MWT	41°06.000'S	164°56.400'W	
15	Louisville Ridge	MWT	41°06.000'S	165°12.000'W	
15	Louisville Ridge	MWT	40°54.000'S	165°12.000'W	
15	Louisville Ridge	MWT	40°54.000'S	165°24.000'W	
15	Louisville Ridge	MWT	40°48.000'S	165°24.000'W	
15	Louisville Ridge	MWT	40°48.000'S	165°30.000'W	
15	Louisville Ridge	MWT	40°32.897'S	165°30.000'W	
15	Louisville Ridge	MWT	40°32.897'S	165°12.000'W	
15	Louisville Ridge	MWT	40°42.000'S	165°12.000'W	
17	Louisville Ridge	MWT	38°32.000'S	167°47.067'W	
17	Louisville Ridge	MWT	38°20.013'S	167°47.067'W	
17	Louisville Ridge	MWT	38°20.013'S	167°29.000'W	
17	Louisville Ridge	MWT	38°32.000'S	167°29.000'W	
18	Louisville Ridge	MWT	38°40.000'S	168°01.785'W	
18	Louisville Ridge	MWT	38°40.000'S	168°20.000'W	
18	Louisville Ridge	MWT	38°11.013'S	168°20.000'W	
18	Louisville Ridge	MWT	38°11.013'S	168°01.785'W	
Northwest Challenger	Challenger Plateau	MWT	37°01.333'S	166°40.000'E	
Northwest Challenger	Challenger Plateau	MWT	37°01.333'S	169°36.706'E	South-east along the New Zealand EEZ
Northwest Challenger	Challenger Plateau	MWT	37°29.902'S	170°00.000'E	Due south to a point on the New Zealand EEZ
Northwest Challenger	Challenger Plateau	MWT	37°41.589'S	170°00.000'E	South-west along the New Zealand EEZ
Northwest Challenger	Challenger Plateau	MWT	38°00.000'S	169°47.848'E	
Northwest Challenger	Challenger Plateau	MWT	38°00.000'S	169°42.000'E	
Northwest Challenger	Challenger Plateau	MWT	37°48.000'S	169°42.000'E	
Northwest Challenger	Challenger Plateau	MWT	37°48.000'S	169°24.000'E	
Northwest Challenger	Challenger Plateau	MWT	37°42.000'S	169°24.000'E	

Northwest Challenger	Challenger Plateau	MWT	37°42.000'S	167°42.004'E	
Northwest Challenger	Challenger Plateau	MWT	37°48.000'S	167°42.000'E	
Northwest Challenger	Challenger Plateau	MWT	37°48.000'S	167°24.000'E	
Northwest Challenger	Challenger Plateau	MWT	39°06.000'S	167°24.000'E	
Northwest Challenger	Challenger Plateau	MWT	39°06.000'S	167°18.000'E	
Northwest Challenger	Challenger Plateau	MWT	38°52.000'S	167°18.000'E	
Northwest Challenger	Challenger Plateau	MWT	38°52.000'S	167°06.000'E	
Northwest Challenger	Challenger Plateau	MWT	37°48.000'S	167°06.000'E	
Northwest Challenger	Challenger Plateau	MWT	37°48.000'S	167°00.000'E	
Northwest Challenger	Challenger Plateau	MWT	37°42.000'S	167°00.000'E	
Northwest Challenger	Challenger Plateau	MWT	37°42.000'S	166°40.000'E	
22	Louisville Ridge	MWT	36°45.000'S	169°30.000'W	
22	Louisville Ridge	MWT	37°08.000'S	169°30.000'W	
22	Louisville Ridge	MWT	37°08.000'S	170°00.000'W	
22	Louisville Ridge	MWT	36°45.000'S	170°00.000'W	
S. Lord Howe - South	South Lord Howe Rise	MWT	36°26.800'S	164°40.830'E	
S. Lord Howe - South	South Lord Howe Rise	MWT	36°13.460'S	164°40.830'E	
S. Lord Howe - South	South Lord Howe Rise	MWT	36°13.460'S	165°06.050'E	
S. Lord Howe - South	South Lord Howe Rise	MWT	36°26.800'S	165°06.050'E	
23	Louisville Ridge	MWT	36°10.000'S	169°22.000'W	
23	Louisville Ridge	MWT	36°10.000'S	169°40.000'W	
23	Louisville Ridge	MWT	36°00.000'S	169°40.000'W	
23	Louisville Ridge	MWT	36°00.000'S	169°22.000'W	
S. Lord Howe - West	South Lord Howe Rise	MWT	35°31.000'S	164°54.000'E	
S. Lord Howe - West	South Lord Howe Rise	MWT	35°31.000'S	165°13.550'E	
S. Lord Howe - West	South Lord Howe Rise	MWT	35°21.000'S	165°13.550'E	
S. Lord Howe - West	South Lord Howe Rise	MWT	35°21.000'S	165°24.000'E	

S. Lord Howe - West	South Lord Howe Rise	MWT	35°40.383'S	165°24.000'E	
S. Lord Howe - West	South Lord Howe Rise	MWT	35°40.383'S	165°18.000'E	
S. Lord Howe - West	South Lord Howe Rise	MWT	36°06.000'S	165°18.000'E	
S. Lord Howe - West	South Lord Howe Rise	MWT	36°06.000'S	164°46.000'E	
S. Lord Howe - West	South Lord Howe Rise	MWT	35°54.000'S	164°46.000'E	
S. Lord Howe - West	South Lord Howe Rise	MWT	35°54.000'S	164°54.000'E	
N. Lord Howe - West	Lord Howe Rise	MWT	33°16.400'S	162°52.540'E	
N. Lord Howe - West	Lord Howe Rise	MWT	33°09.296'S	162°52.540'E	North-east along the Australian EEZ
N. Lord Howe - West	Lord Howe Rise	MWT	33°04.400'S	162°54.941'E	
N. Lord Howe - West	Lord Howe Rise	MWT	33°04.400'S	163°10.540'E	
N. Lord Howe - West	Lord Howe Rise	MWT	33°10.400'S	163°10.540'E	
N. Lord Howe - West	Lord Howe Rise	MWT	33°10.400'S	163°04.540'E	
N. Lord Howe - West	Lord Howe Rise	MWT	33°16.400'S	163°04.540'E	
N. Lord Howe - East	Lord Howe Rise	MWT	33°04.400'S	163°16.615'E	
N. Lord Howe - East	Lord Howe Rise	MWT	32°54.650'S	163°16.615'E	
N. Lord Howe - East	Lord Howe Rise	MWT	32°54.650'S	163°26.380'E	
N. Lord Howe - East	Lord Howe Rise	MWT	33°04.400'S	163°26.380'E	
6	Louisville Ridge	MWT	45°19.500'S	157°55.000'W	
6	Louisville Ridge	MWT	45°19.500'S	157°19.000'W	
6	Louisville Ridge	MWT	45°30.000'S	157°19.000'W	
6	Louisville Ridge	MWT	45°30.000'S	157°55.000'W	
8	Louisville Ridge	MWT	44°21.000'S	159°54.000'W	
8	Louisville Ridge	MWT	44°13.000'S	159°54.000'W	
8	Louisville Ridge	MWT	44°13.000'S	159°43.000'W	
8	Louisville Ridge	MWT	44°21.000'S	159°43.000'W	
Westpac Bank	Challenger Plateau	MWT	39°55.000'S	167°05.000'E	
Westpac Bank	Challenger Plateau	MWT	39°39.000'S	167°05.000'E	

Westpac Bank	Challenger Plateau	MWT	39°39.000'S	167°21.090'E	
Westpac Bank	Challenger Plateau	MWT	39°55.000'S	167°21.090'E	
3	Louisville Ridge	MWT	46°15.000'S	154°28.653'W	
3	Louisville Ridge	MWT	45°59.000'S	154°28.653'W	
3	Louisville Ridge	MWT	45°59.000'S	154°07.224'W	
3	Louisville Ridge	MWT	46°15.000'S	154°07.224'W	
S. Lord Howe - East	South Lord Howe Rise	MWT	36°00.500'S	165°26.000'E	
S. Lord Howe - East	South Lord Howe Rise	MWT	35°47.000'S	165°26.000'E	
S. Lord Howe - East	South Lord Howe Rise	MWT	35°47.000'S	165°44.000'E	
S. Lord Howe - East	South Lord Howe Rise	MWT	35°26.000'S	165°44.000'E	
S. Lord Howe - East	South Lord Howe Rise	MWT	35°26.000'S	166°21.915'E	
S. Lord Howe - East	South Lord Howe Rise	MWT	36°00.500'S	166°21.915'E	
N. Lord Howe - South	Lord Howe Rise	MWT	33°58.670'S	163°00.000'E	
N. Lord Howe - South	Lord Howe Rise	MWT	34°40.000'S	163°00.000'E	
N. Lord Howe - South	Lord Howe Rise	MWT	34°40.000'S	162°20.000'E	
N. Lord Howe - South	Lord Howe Rise	MWT	33°58.670'S	162°20.000'E	
Wanganella	West Norfolk Ridge	MWT	34°12.000'S	168°00.000'E	
Wanganella	West Norfolk Ridge	MWT	34°12.000'S	167°13.000'E	
Wanganella	West Norfolk Ridge	MWT	33°52.000'S	167°13.000'E	
Wanganella	West Norfolk Ridge	MWT	33°52.000'S	167°42.000'E	
Wanganella	West Norfolk Ridge	MWT	33°28.000'S	167°42.000'E	
Wanganella	West Norfolk Ridge	MWT	33°28.000'S	168°00.000'E	
4	Louisville Ridge	MWT	46°01.000'S	156°10.000'W	
4	Louisville Ridge	MWT	46°01.000'S	155°40.000'W	
4	Louisville Ridge	MWT	46°24.000'S	155°40.000'W	
4	Louisville Ridge	MWT	46°24.000'S	156°10.000'W	
N. Lord Howe - Central	Lord Howe Rise	MWT	33°49.630'S	162°25.670'E	

N. Lord Howe - Central	Lord Howe Rise	MWT	33°48.622'S	162°25.670'E	North-east along the Australian EEZ
N. Lord Howe - Central	Lord Howe Rise	MWT	33°32.530'S	162°38.450'E	
N. Lord Howe - Central	Lord Howe Rise	MWT	33°32.530'S	162°57.770'E	
N. Lord Howe - Central	Lord Howe Rise	MWT	33°49.630'S	162°57.770'E	
Box 3	South Tasman	MWT	47°21.000'S	149°03.200'E	
Box 3	South Tasman	MWT	47°24.800'S	149°03.200'E	
Box 3	South Tasman	MWT	47°30.320'S	148°57.650'E	
Box 3	South Tasman	MWT	47°30.320'S	148°44.390'E	
Box 3	South Tasman	MWT	47°35.205'S	148°44.390'E	
Box 3	South Tasman	MWT	47°35.205'S	148°37.235'E	
Box 3	South Tasman	MWT	47°24.015'S	148°37.235'E	
Box 3	South Tasman	MWT	47°24.015'S	148°45.610'E	
Box 3	South Tasman	MWT	47°21.000'S	148°45.610'E	
Box 2	South Tasman	MWT	47°05.160'S	148°50.670'E	
Box 2	South Tasman	MWT	47°13.780'S	148°50.670'E	
Box 2	South Tasman	MWT	47°13.780'S	148°24.165'E	
Box 2	South Tasman	MWT	47°05.160'S	148°24.165'E	
Box 1	South Tasman	MWT	47°08.280'S	147°50.200'E	Start on the Australian EEZ
Box 1	South Tasman	MWT	47°17.370'S	147°50.200'E	
Box 1	South Tasman	MWT	47°17.370'S	147°32.300'E	
Box 1	South Tasman	MWT	47°10.197'S	147°32.300'E	East along the Australian EEZ to the start point

(c) Bottom line Management Area coordinates

Name	Region	Method	Latitude	Longitude	EEZ_Direction
1	Louisville Ridge	Bottom Line	48°05.000'S	149°27.000'W	
1	Louisville Ridge	Bottom Line	48°05.000'S	150°00.000'W	
1	Louisville Ridge	Bottom Line	47°40.000'S	150°00.000'W	
1	Louisville Ridge	Bottom Line	47°40.000'S	149°27.000'W	
4	Louisville Ridge	Bottom Line	46°24.000'S	155°40.000'W	
4	Louisville Ridge	Bottom Line	46°24.000'S	156°10.000'W	
4	Louisville Ridge	Bottom Line	46°01.000'S	156°10.000'W	
4	Louisville Ridge	Bottom Line	46°01.000'S	155°40.000'W	
3	Louisville Ridge	Bottom Line	46°15.000'S	154°07.224'W	
3	Louisville Ridge	Bottom Line	46°15.000'S	154°28.653'W	
3	Louisville Ridge	Bottom Line	45°59.000'S	154°28.653'W	
3	Louisville Ridge	Bottom Line	45°59.000'S	154°07.224'W	
5	Louisville Ridge	Bottom Line	45°26.000'S	156°30.000'W	

5	Louisville Ridge	Bottom Line	45°42.000'S	156°30.000'W	
5	Louisville Ridge	Bottom Line	45°42.000'S	156°55.000'W	
5	Louisville Ridge	Bottom Line	45°26.000'S	156°55.000'W	
6	Louisville Ridge	Bottom Line	45°30.000'S	157°19.000'W	
6	Louisville Ridge	Bottom Line	45°30.000'S	157°55.000'W	
6	Louisville Ridge	Bottom Line	45°19.500'S	157°55.000'W	
6	Louisville Ridge	Bottom Line	45°19.500'S	157°19.000'W	
7	Louisville Ridge	Bottom Line	44°57.950'S	158°18.000'W	
7	Louisville Ridge	Bottom Line	44°57.950'S	158°38.000'W	
7	Louisville Ridge	Bottom Line	44°43.950'S	158°38.000'W	
7	Louisville Ridge	Bottom Line	44°43.950'S	158°18.000'W	
8	Louisville Ridge	Bottom Line	44°21.000'S	159°43.000'W	
8	Louisville Ridge	Bottom Line	44°21.000'S	159°54.000'W	
8	Louisville Ridge	Bottom Line	44°13.000'S	159°54.000'W	
8	Louisville Ridge	Bottom Line	44°13.000'S	159°43.000'W	
9	Louisville Ridge	Bottom Line	44°07.000'S	160°29.235'W	
9	Louisville Ridge	Bottom Line	44°07.000'S	160°50.820'W	
9	Louisville Ridge	Bottom Line	43°51.183'S	160°50.820'W	
9	Louisville Ridge	Bottom Line	43°51.183'S	160°29.235'W	
10	Louisville Ridge	Bottom Line	43°22.000'S	161°21.770'W	
10	Louisville Ridge	Bottom Line	43°31.370'S	161°21.770'W	
10	Louisville Ridge	Bottom Line	43°31.370'S	161°10.170'W	
10	Louisville Ridge	Bottom Line	43°41.440'S	161°10.170'W	
10	Louisville Ridge	Bottom Line	43°41.440'S	161°39.000'W	
10	Louisville Ridge	Bottom Line	43°22.000'S	161°39.000'W	
11	Louisville Ridge	Bottom Line	42°54.500'S	161°48.000'W	
11	Louisville Ridge	Bottom Line	42°54.500'S	162°07.000'W	
11	Louisville Ridge	Bottom Line	42°40.000'S	162°07.000'W	
11	Louisville Ridge	Bottom Line	42°40.000'S	161°48.000'W	
13	Louisville Ridge	Bottom Line	42°00.000'S	163°29.500'W	
13	Louisville Ridge	Bottom Line	42°00.000'S	163°49.000'W	
13	Louisville Ridge	Bottom Line	41°45.000'S	163°49.000'W	
13	Louisville Ridge	Bottom Line	41°45.000'S	163°29.500'W	
14	Louisville Ridge	Bottom Line	41°40.000'S	164°00.000'W	
14	Louisville Ridge	Bottom Line	41°40.000'S	164°27.000'W	
14	Louisville Ridge	Bottom Line	41°17.000'S	164°27.000'W	
14	Louisville Ridge	Bottom Line	41°17.000'S	164°00.000'W	
15	Louisville Ridge	Bottom Line	40°32.897'S	165°12.000'W	
15	Louisville Ridge	Bottom Line	40°42.000'S	165°12.000'W	
15	Louisville Ridge	Bottom Line	40°42.000'S	164°56.400'W	
15	Louisville Ridge	Bottom Line	41°06.000'S	164°56.400'W	
15	Louisville Ridge	Bottom Line	41°06.000'S	165°12.000'W	
15	Louisville Ridge	Bottom Line	40°54.000'S	165°12.000'W	
15	Louisville Ridge	Bottom Line	40°54.000'S	165°24.000'W	

15	Louisville Ridge	Bottom Line	40°48.000'S	165°24.000'W	
15	Louisville Ridge	Bottom Line	40°48.000'S	165°30.000'W	
15	Louisville Ridge	Bottom Line	40°32.897'S	165°30.000'W	
Westpac Bank	Challenger Plateau	Bottom Line	39°55.000'S	167°21.090'E	
Westpac Bank	Challenger Plateau	Bottom Line	39°55.000'S	167°05.000'E	
Westpac Bank	Challenger Plateau	Bottom Line	39°39.000'S	167°05.000'E	
Westpac Bank	Challenger Plateau	Bottom Line	39°39.000'S	167°21.090'E	
17	Louisville Ridge	Bottom Line	38°32.000'S	167°29.000'W	
17	Louisville Ridge	Bottom Line	38°32.000'S	167°47.067'W	
17	Louisville Ridge	Bottom Line	38°20.013'S	167°47.067'W	
17	Louisville Ridge	Bottom Line	38°20.013'S	167°29.000'W	
18	Louisville Ridge	Bottom Line	38°40.000'S	168°01.785'W	
18	Louisville Ridge	Bottom Line	38°40.000'S	168°20.000'W	
18	Louisville Ridge	Bottom Line	38°11.013'S	168°20.000'W	
18	Louisville Ridge	Bottom Line	38°11.013'S	168°01.785'W	
Central Challenger	Challenger Plateau	Bottom Line	37°45.615'S	168°35.830'E	
Central Challenger	Challenger Plateau	Bottom Line	37°55.230'S	168°35.830'E	
Central Challenger	Challenger Plateau	Bottom Line	37°55.230'S	169°25.400'E	
Central Challenger	Challenger Plateau	Bottom Line	38°13.830'S	169°25.400'E	South-west along the New Zealand EEZ
Central Challenger	Challenger Plateau	Bottom Line	38°23.165'S	169°11.967'E	
Central Challenger	Challenger Plateau	Bottom Line	38°23.165'S	168°30.780'E	
Central Challenger	Challenger Plateau	Bottom Line	38°32.750'S	168°30.780'E	
Central Challenger	Challenger Plateau	Bottom Line	38°32.750'S	167°57.950'E	
Central Challenger	Challenger Plateau	Bottom Line	39°17.180'S	167°57.950'E	
Central Challenger	Challenger Plateau	Bottom Line	39°17.180'S	167°30.500'E	
Central Challenger	Challenger Plateau	Bottom Line	38°06.430'S	167°30.500'E	
Central Challenger	Challenger Plateau	Bottom Line	38°06.430'S	168°09.833'E	
Central Challenger	Challenger Plateau	Bottom Line	37°45.615'S	168°09.833'E	

Northwest Challenger	Challenger Plateau	Bottom Line	37°01.333'S	169°36.706'E	South-east along the New Zealand EEZ
Northwest Challenger	Challenger Plateau	Bottom Line	37°29.902'S	170°00.000'E	Due south to a point on the New Zealand EEZ
Northwest Challenger	Challenger Plateau	Bottom Line	37°41.589'S	170°00.000'E	South-west along the New Zealand EEZ
Northwest Challenger	Challenger Plateau	Bottom Line	38°00.000'S	169°47.848'E	
Northwest Challenger	Challenger Plateau	Bottom Line	38°00.000'S	169°42.000'E	
Northwest Challenger	Challenger Plateau	Bottom Line	37°48.000'S	169°42.000'E	
Northwest Challenger	Challenger Plateau	Bottom Line	37°48.000'S	169°24.000'E	
Northwest Challenger	Challenger Plateau	Bottom Line	37°42.000'S	169°24.000'E	
Northwest Challenger	Challenger Plateau	Bottom Line	37°42.000'S	167°42.000'E	
Northwest Challenger	Challenger Plateau	Bottom Line	37°48.000'S	167°42.000'E	
Northwest Challenger	Challenger Plateau	Bottom Line	37°48.000'S	167°24.000'E	
Northwest Challenger	Challenger Plateau	Bottom Line	39°06.000'S	167°24.000'E	
Northwest Challenger	Challenger Plateau	Bottom Line	39°06.000'S	167°18.000'E	
Northwest Challenger	Challenger Plateau	Bottom Line	38°52.000'S	167°18.000'E	
Northwest Challenger	Challenger Plateau	Bottom Line	38°52.000'S	167°06.000'E	
Northwest Challenger	Challenger Plateau	Bottom Line	37°48.000'S	167°06.000'E	
Northwest Challenger	Challenger Plateau	Bottom Line	37°48.000'S	167°00.000'E	
Northwest Challenger	Challenger Plateau	Bottom Line	37°42.000'S	167°00.000'E	
Northwest Challenger	Challenger Plateau	Bottom Line	37°42.000'S	166°40.000'E	
Northwest Challenger	Challenger Plateau	Bottom Line	37°01.333'S	166°40.000'E	
22	Louisville Ridge	Bottom Line	37°08.000'S	169°30.000'W	
22	Louisville Ridge	Bottom Line	37°08.000'S	170°00.000'W	
22	Louisville Ridge	Bottom Line	36°45.000'S	170°00.000'W	
22	Louisville Ridge	Bottom Line	36°45.000'S	169°30.000'W	
Gascoyne	West Tasman	Bottom Line	36°59.440'S	156°43.770'E	
Gascoyne	West Tasman	Bottom Line	36°59.440'S	155°53.630'E	

Gascoyne	West Tasman	Bottom Line	36°19.950'S	155°53.630'E	
Gascoyne	West Tasman	Bottom Line	36°19.950'S	156°43.770'E	
S. Lord Howe - South	South Lord Howe Rise	Bottom Line	36°26.800'S	165°06.050'E	
S. Lord Howe - South	South Lord Howe Rise	Bottom Line	36°26.800'S	164°40.830'E	
S. Lord Howe - South	South Lord Howe Rise	Bottom Line	36°13.460'S	164°40.830'E	
S. Lord Howe - South	South Lord Howe Rise	Bottom Line	36°13.460'S	165°06.050'E	
23	Louisville Ridge	Bottom Line	36°10.000'S	169°22.000'W	
23	Louisville Ridge	Bottom Line	36°10.000'S	169°40.000'W	
23	Louisville Ridge	Bottom Line	36°00.000'S	169°40.000'W	
23	Louisville Ridge	Bottom Line	36°00.000'S	169°22.000'W	
S. Lord Howe	South Lord Howe Rise	Bottom Line	35°20.000'S	166°21.915'E	
S. Lord Howe	South Lord Howe Rise	Bottom Line	36°00.500'S	166°21.915'E	
S. Lord Howe	South Lord Howe Rise	Bottom Line	36°00.500'S	165°18.000'E	
S. Lord Howe	South Lord Howe Rise	Bottom Line	36°06.000'S	165°18.000'E	
S. Lord Howe	South Lord Howe Rise	Bottom Line	36°06.000'S	164°46.000'E	
S. Lord Howe	South Lord Howe Rise	Bottom Line	35°54.000'S	164°46.000'E	
S. Lord Howe	South Lord Howe Rise	Bottom Line	35°54.000'S	164°54.000'E	
S. Lord Howe	South Lord Howe Rise	Bottom Line	35°31.000'S	164°54.000'E	
S. Lord Howe	South Lord Howe Rise	Bottom Line	35°31.000'S	165°00.000'E	
S. Lord Howe	South Lord Howe Rise	Bottom Line	35°20.000'S	165°00.000'E	
N. Lord Howe	Lord Howe Rise	Bottom Line	32°39.630'S	163°04.415'E	Start on the Australian EEZ
N. Lord Howe	Lord Howe Rise	Bottom Line	32°39.630'S	163°40.000'E	
N. Lord Howe	Lord Howe Rise	Bottom Line	33°20.000'S	163°40.000'E	
N. Lord Howe	Lord Howe Rise	Bottom Line	33°20.000'S	163°20.000'E	

N. Lord Howe	Lord Howe Rise	Bottom Line	34°40.000'S	163°20.000'E	
N. Lord Howe	Lord Howe Rise	Bottom Line	34°40.000'S	162°20.000'E	
N. Lord Howe	Lord Howe Rise	Bottom Line	33°54.773'S	162°20.000'E	North-east along the Australian EEZ to the start point
West Norfolk Ridge	West Norfolk Ridge	Bottom Line	32°17.000'S	166°41.530'E	
West Norfolk Ridge	West Norfolk Ridge	Bottom Line	32°17.000'S	166°41.921'E	South-east along the Australian EEZ
West Norfolk Ridge	West Norfolk Ridge	Bottom Line	32°28.633'S	168°00.000'E	
West Norfolk Ridge	West Norfolk Ridge	Bottom Line	34°12.000'S	168°00.000'E	
West Norfolk Ridge	West Norfolk Ridge	Bottom Line	34°12.000'S	167°13.000'E	
West Norfolk Ridge	West Norfolk Ridge	Bottom Line	34°00.000'S	167°13.000'E	
West Norfolk Ridge	West Norfolk Ridge	Bottom Line	34°00.000'S	166°41.530'E	
Three Kings	Three Kings Ridge	Bottom Line	30°49.324'S	172°42.880'E	Start on the New Zealand EEZ
Three Kings	Three Kings Ridge	Bottom Line	30°40.115'S	172°42.880'E	
Three Kings	Three Kings Ridge	Bottom Line	30°40.115'S	172°53.295'E	
Three Kings	Three Kings Ridge	Bottom Line	30°16.500'S	172°53.295'E	
Three Kings	Three Kings Ridge	Bottom Line	30°16.500'S	174°20.000'E	
Three Kings	Three Kings Ridge	Bottom Line	30°40.245'S	174°20.000'E	
Three Kings	Three Kings Ridge	Bottom Line	30°40.245'S	174°00.200'E	
Three Kings	Three Kings Ridge	Bottom Line	30°53.670'S	174°00.200'E	

Three Kings	Three Kings Ridge	Bottom Line	30°53.670'S	173°08.819'E	West along the New Zealand EEZ to the start point
Marion	South Fiji Basin	Bottom Line	28°19.800'S	175°40.370'E	
Marion	South Fiji Basin	Bottom Line	28°19.800'S	175°19.590'E	
Marion	South Fiji Basin	Bottom Line	27°59.155'S	175°19.590'E	
Marion	South Fiji Basin	Bottom Line	27°59.155'S	175°40.370'E	
North Lord Howe Rise	North Lord Howe Rise	Bottom Line	25°59.640'S	160°00.000'E	
North Lord Howe Rise	North Lord Howe Rise	Bottom Line	25°59.640'S	159°00.285'E	
North Lord Howe Rise	North Lord Howe Rise	Bottom Line	25°14.950'S	159°00.285'E	
North Lord Howe Rise	North Lord Howe Rise	Bottom Line	25°14.950'S	160°00.000'E	
Box 3	South Tasman	Bottom Line	47°21.000'S	149°03.200'E	
Box 3	South Tasman	Bottom Line	47°24.800'S	149°03.200'E	
Box 3	South Tasman	Bottom Line	47°30.320'S	148°57.650'E	
Box 3	South Tasman	Bottom Line	47°30.320'S	148°44.390'E	
Box 3	South Tasman	Bottom Line	47°35.205'S	148°44.390'E	
Box 3	South Tasman	Bottom Line	47°35.205'S	148°37.235'E	
Box 3	South Tasman	Bottom Line	47°24.015'S	148°37.235'E	
Box 3	South Tasman	Bottom Line	47°24.015'S	148°45.610'E	
Box 3	South Tasman	Bottom Line	47°21.000'S	148°45.610'E	
Box 2	South Tasman	Bottom Line	47°05.160'S	148°50.670'E	
Box 2	South Tasman	Bottom Line	47°13.780'S	148°50.670'E	
Box 2	South Tasman	Bottom Line	47°13.780'S	148°24.165'E	
Box 2	South Tasman	Bottom Line	47°05.160'S	148°24.165'E	
Box 1	South Tasman	Bottom Line	47°08.280'S	147°50.200'E	Start on the Australian EEZ
Box 1	South Tasman	Bottom Line	47°17.370'S	147°50.200'E	
Box 1	South Tasman	Bottom Line	47°17.370'S	147°32.300'E	
Box 1	South Tasman	Bottom Line	47°10.197'S	147°32.300'E	East along the Australian EEZ to the start point

Annex 5: List of VME indicator taxa

Taxonomic Level	Common Name	Qualifying taxa
<i>Vulnerable taxa</i>		
Phylum Porifera	Sponges	All taxa of the classes Demospongiae and Hexactinellidae
Phylum Cnidaria		
Class Anthozoa		
Order Scleractinia	Stony corals	All taxa within the following genera: <i>Solenosmilia</i> ; <i>Goniocorella</i> ; <i>Oculina</i> ; <i>Enallopsammia</i> ; <i>Madrepora</i> ; <i>Lophelia</i>
Order Antipatharia	Black corals	All taxa
Order Alcyonacea	True soft corals	All taxa excluding Gorgonacea
Informal group	Sea fans octocorals	All taxa within the following suborders: Holaxonia; Calaxonia; Scleraxonia
Gorgonacea		
Order Pennatulacea	Sea pens	All taxa
Order Actiniaria	Anemones	All taxa
Class Hydrozoa		
Order Anthoathecatae		
Family	Hydrocorals	All taxa
Stylasteridae		
<i>Habitat indicators</i>		
Phylum Echinodermata		
Class Asteroidea		
Order Brisingida	Armless stars	All taxa
Class Crinoidea	Sea lillies	All taxa

Annex 6A: Weight threshold for triggering VME encounter protocol in any one tow for a single VME indicator taxa

Taxonomic Level	Common Name	Weight Threshold (kg)
Vulnerable taxa		
Phylum Porifera	Sponges	50
Phylum Cnidaria		
Class Anthozoa		
Order Scleractinia	Stony corals	250
Order Antipatharia	Black Corals	5
Order Alcyonacea	True soft corals	60
Informal group	Seafan octocorals	15
Gorgonacea		
Order Actiniaria	Anemones	40

Annex 6B: Weight threshold for triggering VME encounter protocol in any one tow for three or more different VME indicator taxa

Taxonomic Level	Common Name	Weight Threshold (kg)
Vulnerable taxa		
Phylum Porifera	Sponges	5
Phylum Cnidaria		
Class Anthozoa		
Order Scleractinia	Stony corals	5
Order Antipatharia	Black corals	1
Order Alcyonacea	True soft corals	1
Informal group Gorgonacea	Seafan octocorals	1
Order Pennatulacea	Sea pens	1
Order Actiniaria	Anemones	5
Class Hydrozoa		
Order Anthoathecatae		
Family	Hydrocorals	1
Stylasteridae		
Phylum Echinodermata		
Class Asteroidea		
Order Brisingida	Armless stars	1
Class Crinoidea	Sea lillies	1

Annex 7: Guidelines for the preparation and submission of notifications of encounters with potential VMEs

1. General Information:
a. Contact details
b. Nationality
c. Vessel name
d. Date of fishing effort and notification
e. Time of shot start (UTC)
f. Time of shot end (UTC)
g. Fishing gear used
2. Location Information:
Bottom trawl or mid-water trawl
a. Start and end position of trawl (to nearest 0.01 decimal degree)
3. VME Information:
a. Summary information:
i. Number of VME Indicator taxa encountered
ii. Total weight of VME Indicator taxa encountered
b. Detailed information:
i. Weight of each VME Indicator taxa in tow (including any under threshold)

Annex 8: Minimum observer coverage levels

Gear type	Minimum level of observer coverage
Vessels using bottom trawl and mid-water trawl gear	100% observer coverage
Bottom line gear	At least 10% observer coverage for the fishing year ⁶

⁶ Expressed as the percentage of the total number of observed hooks.