



Briefing for the Fourth Meeting of the Commission of the South Pacific Regional Fisheries Management Organisation

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INTRODUCTION AND SUMMARY

The Deep Sea Conservation Coalition (DSCC) respectfully submits this briefing for the Fourth Meeting of the Commission of the South Pacific RFMO (SPRFMO). The DSCC thanks the hospitality of the Chilean government in holding this fourth Commission meeting. DSCC also welcomes Peru's adoption of the Convention.

This briefing will address agenda items 3, the report of the Scientific Committee, and 6, Conservation and Management Measures, with respect to fisheries that use bottom trawling equipment, including bottom trawling, mid-water trawling and bottom longlining.

In Summary:

1. The Commission will review the work of the Scientific Committee (SC). The SC should have carried out stock assessments of deep-sea fish stocks: both of target stocks and, to the extent possible, bycatch (CMM 2.03 paragraph 5(a).) This has not happened. The Commission is thus not able to ensure that on-going fishing is being carried out sustainably to enable long-term maintenance of deep-sea fish stocks, including non-target species, and therefore fishing should stop pending such assessment, following the specific provisions of United Nations General Assembly (UNGA) resolution 64/72 (2009).

2. States that intend to continue bottom trawling should renew their impact assessments. The last impact assessment of New Zealand was for the 2008-2009 period and for Australia, the 2009- 2010 period. Both impact assessments were carried out over 5 years ago, while bottom trawling has continued during that time.
3. Any amendment of CMM 2.03 should implement and be consistent with UNGA resolution 64/72 (2009) particularly paragraphs 119¹ and 120,² and [resolution 66/68](#) (2011),³ as well as [resolution 61/105](#)⁴ (2006) and the 2008 United Nations Food and Agriculture Organisation (FAO) [Deep Sea Fishing Guidelines](#).⁵ This includes ensuring the sustainability of deep-sea stocks and non-target species.
4. The 3rd Scientific Committee meeting report should be read in this light. Driven by the High Seas Fisheries Group (HSFG) and supported by New Zealand, the last two Scientific Committees have recommended that spatial management be investigated as a key tool to be implemented in management of bottom fisheries. Spatial management must not set aside current conservation measures and cannot supplant the measures laid out in the UNGA resolutions and FAO Guidelines, but must enhance and enable current measures to meet the objectives of UNGA resolution 64/72 (2009) paragraphs 119⁶ and 120,⁷ and [resolution 66/68](#) (2011),⁸ as well as [resolution 61/105](#)⁹ (2006) and the 2008 United Nations Food and Agriculture Organisation (FAO) [Deep Sea Fishing Guidelines](#).¹⁰
5. In particular, spatial management cannot be used as a reason to drop the move-on rule. The move-on rule is part of a suite of measures agreed in 2006 at the United Nations and refined since then, specifically in 2009 and 2011, with technical specifications being provided by the FAO in 2008. SPRFMO, with other RFMOs, have been called on by the UNGA to implement those measures – or not to authorise bottom fishing.
6. The Commission should put into place a process to study ecologically or biologically sensitive areas (EBSAs) identified in the Commission area and to identify appropriate responses, including protected areas. This should include a specific request to the Scientific Committee to assess the EBSAs in the Commission Area and make recommendations.

The Scientific Committee Work Programme

CMM 2.03 set out a work programme¹¹ to be carried out by the meeting of the Scientific Committee in 2015. The Commission will review whether this has been done and should ensure it was carried out to the standard set out in the FAO Guidelines for stock assessments¹²:

Stock Assessments

CMM 2.03 in paragraph 5(b) requested the Scientific Committee to undertake stock assessments of principal deep-sea fishery resources targeted, and, to the extent possible, taken as bycatch and caught incidentally in these fisheries, including straddling resources. This was not done.¹³

Rather, at the third Scientific Committee meeting, New Zealand said that “low-information” stock assessment methods for orange roughy could be applied in the SPRFMO Area. Despite the absence of a stock assessment, the Scientific Committee found that the stock assessment areas for orange roughy to the west of New Zealand remain appropriate and need not be changed.¹⁴ No paper or analysis was presented on defining other species of concern for deepwater fishing.¹⁵

Key questions need to be asked by the Commission about the adequacy of information provided by the SC.

Ecologically or Biologically Sensitive Areas (EBSAs)

A number of EBSAs have been identified within the SPRFMO Convention Area.¹⁶ The 2nd SC noted the need for the Commission to implement appropriate and precautionary measures to protect vulnerable elements of the ecosystem.¹⁷ This was welcomed, although DSCC notes that protection of EBSAs should not be confused with protection of VMEs. VMEs and EBSAs are the product of different processes, and occur at different scales. The EBSA work is not, however, in any way inconsistent with the protection of VMEs. The VME work is a product of the UNGA resolutions, particularly resolution 61/105 (2006) and 64/72 (2009), and the FAO Guidelines, and is central to the management of deep-sea bottom fishing. The EBSA work, on the other hand, is being carried out¹⁸ under the auspices of the CBD,¹⁹ and is focused on identifying areas as a scientific and technical exercise.²⁰

International governance steps responsive to the identified EBSAs, such as designating some EBSAs as marine protected areas (MPAs), have yet to be determined. It is important that SPRFMO carries on its work in identifying and protecting VMEs, as well as to determine its response to identified EBSAs.

At the third SC meeting, the Secretariat introduced information received from the Secretariat of the Convention on Biological Diversity (CBD) regarding five areas within the Convention Area that meet the CBD criteria for EBSAs. The SC considered whether it might address these areas through spatial management. Chile has taken action and established MPAs that include part of some identified EBSAs.

The Commission should put into place a process to study the identified EBSAs and identify appropriate responses, including protected areas. The first step could be to give a specific request to the Scientific Committee to assess the EBSAs in the Commission Area and make recommendations.

Impact Assessments

New Zealand carried out an assessment of impact on benthic species for the year 2008-2009²¹, in that report New Zealand set out that it intends to carry out a similar assessment in 2010 when “it will review its implementation of the interim measures in 2010 more fully.”²² This has not been done and the 2008-2009 assessment was the last assessment carried out by New Zealand. The 2008-2009 report set out that the proposed 2010 assessment would “ties into the provision to open new regions of the SPRFMO Area in 2010 on the basis of an assessment (interim measure paragraph 3). Australia last carried an impact assessment in 2010. Australia and New Zealand are due for a revised impact assessment.

The Move-on Rule

Following Andrew Penney's review of paper SC-01-09 in 2013,²³ the Scientific Committee endorsed the characteristics of effective move-on rules, including that:

- Lists of regionally specific VME indicator taxa should be identified for each fishery, using all available information on species occurrence and retention by fishing gears, VME taxa should be specified at a level that facilitates rapid and accurate onboard visual identification by trained observers, and encounter thresholds indicating evidence of a VME should be based on analyses of historical bycatch data, taking account of the different retention rates of species by each gear type. Multiple species can be used to indicate higher biodiversity;
- Once evidence of a VME is encountered using an agreed protocol, move-on areas should be closed to fishing by all demersal fishing vessels until further analysis or evidence indicates that area does not contain VMEs.
- Move-on distances and area closures should encompass the area covered by typical fishing operations using that gear type.

The UNGA in 2009 had paid particular attention to encounter protocols, including definitions of what constitutes evidence of an encounter with a VME, in particular threshold levels and indicator species, based on the best available scientific information and consistent with the FAO Guidelines.²⁴ The resolution, in paragraph 119(c), calls on States to develop move-on rules on the basis of prior impact assessments - to minimize the possibility that encounters or damage will occur to VMEs as a result of bottom fishing in an area (e.g. existing fishing areas).²⁵

The move-on-rule has only been triggered six times from 2008 to 2013 by New Zealand boats, at an average of 3.3% of tows in the move-on-rule areas per year. This rate of triggering move-on events is less than the expected rate of about 8%.²⁶ This shows that it is not unduly burdensome, as has been claimed. However, nor is it enough: other steps such as cameras on nets to identify any VMEs may be used as well.

New and Exploratory Fisheries

New Zealand presented a proposal to conduct exploratory bottom longlining for toothfish to the 3rd Scientific Committee meeting. For new and exploratory fishing, any revised measures must ensure that no fishing is undertaken until compliant impact assessments have been carried out²⁷ and compliant measures have been adopted.²⁸ They must also comply with UNGA resolution 66/68, which called on States to:

- a) strengthen procedures both for carrying out assessments to take into account individual, collective and cumulative impacts, and for making the assessments publicly available, recognizing that doing so can support transparency and capacity building globally;
- b) establish and improve procedures to ensure that assessments are updated when new conditions or information so require;

- c) establish and improve procedures for evaluating, reviewing and revising, on a regular basis, assessments based on best available science and management measures; and
- d) establish mechanisms to promote and enhance compliance with applicable measures related to the protection of vulnerable marine ecosystems, adopted in accordance with international law.²⁹

To conclude, in practical terms, in order to be consistent with the UNGA resolutions, the best scientific information available and the precautionary approach the impact assessments must:

- be made public,
- take into account individual and collective impacts, as well as cumulative impacts,
- be updated when new conditions or information requires,
- be regularly evaluated, reviewed and revised, based on the best available science and management measures,
- be required prior to the commencement of any exploratory fisheries; and
- be fully consistent with, and operationalize, the UN FAO Guidelines, in particular paragraphs 16-20, 47, and 42 of the Guidelines.

The Review of Conservation Measure 2.03

CMM 2.03 is set down to be reviewed in 2016. At the 3rd SC, the High Seas Fishing Group (HSFG) suggested that spatial management could set aside the need of the current conservation measures such as the move-on rule.

The 2014 and 2015 Scientific Committees recommended to the Commission to implement a spatial management approach for bottom fisheries in order to protect VMEs from significant adverse impacts while enabling viable fisheries to operate. SC2 recommended that spatial management should use open and closed areas and this may render unnecessary for a move-on rule.³⁰ DSCC, as we have in previous years, again emphasises that spatial management is not a replacement for the move-on rule. Further investigation must be carried out to identify VMEs. Spatial management may be a tool to use increased scientific knowledge improve on the current conservation measurements in place, and to bring these measures more in line with the UNGA resolutions and FAO Guidelines, but this is not the approach being taken.

The following considerations should apply to the review of CMM 2.03:

- The objective of CMM 2.03 should be to “ensure”, rather than to “promote”, the sustainable management of bottom fisheries including target fish stocks as well as non-target species taken as bycatch. This is a key objective established in the UNGA resolutions, and the practical actions States are committed to take to meet this objective are spelled out in detail in UNGA resolution 64/72 paragraph 119(d) (such as stock assessments and rebuilding plans)³¹ and the FAO Guidelines. These in turn reflect fundamental and detailed obligations

under international law for the management of fisheries established in Articles 5 & 6 of the UN Fish Stocks Agreement.

- CMM 2.03 requires States to (8(c)) “*Except as provided for in paragraphs 16 to 20 below, limit bottom fishing catch in the Convention Area to a level that does not exceed the annual average levels of that Member or CNCP over the period 1 January 2002 to 31 December 2006.*” This measure falls far short of the commitment to take the measures outlined in paragraph 119(d) of UNGA resolution 64/72 to manage deep-sea stocks for sustainability and the obligations with respect to the conservation and management of fisheries in Articles 5 and 6 of the UN Fish Stocks Agreement.
- Paragraph 8(h), which allows a Member or CNCP to exclude part of its bottom fishing footprint from the application of subparagraph (g) by dividing its footprint into areas open to bottom fishing, areas closed to bottom fishing and areas to which sub-paragraph (g) would apply, needs to be modified to be consistent with the UNGA resolutions. This exception, made to accommodate the New Zealand fishing industry, is far past its used-by date. Any areas open to bottom fishing should only be open after an impact assessment has been done and determined that bottom fishing will be managed to prevent significant adverse impacts on VMEs in the area covered by the assessment. Conservation measures, including a move-on rule, should apply to all areas open to bottom fishing.
- The measure needs to ensure that catches of target and non-target stocks of fish are sustainable, and this requires stock assessments,³² as called for in paragraph 5 of SC-3. In turn, this will require that the SC advises and provides recommendations on:
 - reference points, including precautionary reference points as described in Annex II of the 1995 Agreement (SPRFMO Convention art. 10.2(b)(i));
 - management strategies or plans for fishery resources based on such reference points; (SPRFMO Convention art. 10.2(b)(ii)); and
 - analyses of conservation and management alternatives, such as the establishment of total allowable catch or total allowable fishing effort at different levels, that estimate the extent to which each alternative would achieve the objective or objectives of any management strategy or plan adopted, or under consideration, by the Commission (SPRFMO Convention art. 10.2(b)(iii)).
- The measure needs to be modified to specifically address the potential impacts of midwater trawling for benthic-pelagic species on VMEs (SC2 report page 15).
- The advice of the SC needs to be assessed against the commitment to take specific actions in the UNGA resolutions and the FAO Guidelines. This is a critical point. For example, the SC stated that: “*The question of which areas to open and close to fishing would be best re-examined when considering the spatial management approach and the trade-off between environmental protection of VMEs and access by fisheries*”.³³ The Commission should be aware that this statement is erroneous and beyond the remit of the SC. It is

not a matter of the application of scientific criteria to “trade-off” of environmental protection of VMEs and access by fisheries. There is no such “trade-off” to prevent significant adverse impacts on VMEs envisaged in the UNGA resolutions nor in the FAO Guidelines.

- The SC needs to be tasked with providing advice and recommendations on minimizing impacts on by-catch species and preventing significant adverse impacts on low-productivity fish species. SC2 stated that *“The issue of undertaking assessments of bycatch and non-target species was also briefly discussed by the WG. The WG noted that, with limited resources, it will be important to begin by concentrating on target species, and address the bycatch species at a later date”*.³⁴ This was not an acceptable basis for continuing to fish in disregard of the 2009 UNGA resolution 64/72, which called on States and RFMOs to *“[a]dopt conservation and management measures, including monitoring, control and surveillance measures, on the basis of stock assessments and the best available scientific information, to ensure the long-term sustainability of deep sea fish stocks and non-target species, and the rebuilding of depleted stocks, consistent with the Guidelines”* (paragraph 119(d)). Article 5(f) of the UN Fish Stocks Agreement requires States to *“minimize...catch of non-target species...and impacts on associated or dependent species, in particular endangered species”* This is a longstanding obligation under international law. In the absence of scientific information such as stock assessments, UNGA resolution 64/72 calls on States to *“ensure that conservation and management measures be established consistent with the precautionary approach, including measures to ensure that fishing effort, fishing capacity and catch limits, as appropriate, are at levels commensurate with the long-term sustainability of such stocks;”* in cases *“where scientific information is uncertain, unreliable, or inadequate”* (paragraph 119(d)), again reflecting the obligations of States established in Article 6 of the UN Fish Stocks Agreement.
- If this is not done, flag States and RFMOs are *“not to authorize bottom fishing activities until such measures have been adopted and implemented”* (UNGA 64/72, paragraph 120).

SC-3 noted that “Partly because the global depth layers used in the models were found to be very inaccurate in some of the locations surveyed, the SPRFMO-scale predictive models were found also to be inaccurate”³⁵ and that “[w]ork on predicting and mapping the distribution of Vulnerable Marine Ecosystems (VMEs) has continued, including a field test of model predictions on the Louisville Ridge in 2014 and trialling of spatial decision support tools (see also SC-03-DW-04). Further development and testing is clearly required but this work should also contribute to the development of a revised CMM for bottom fisheries.”³⁶ DSCC supports predictive modelling, but it has clearly not yet reached the stage where it can be relied upon in the absence of the move-on rule and other management measures.

Prior to any spatial management measures, revisions of the move-on rule or any other alteration to the current conservation measures, proper stock assessments must be carried out, and impact assessments need to be revised, using modern techniques. Before this is done, the Commission has inadequate information to evaluate, review and redraft conservation measures to meet the UNGA resolution 64/72 (2009)

paragraphs 119³⁷ and 120,³⁸ and [resolution 66/68](#) (2011),³⁹ as well as [resolution 61/105](#)⁴⁰ (2006) and the 2008 United Nations Food and Agriculture Organisation (FAO) [Deep Sea Fishing Guidelines](#).⁴¹

Spatial Management

During the SC it was suggested that spatial management could almost be a catch-all solution to a number of problems various Members and industry are having with the current conservation measures. Spatial Management was suggested as being able to:

- Map areas of VME and non VME
- Replace footprint and open and closed areas model
- Replace the move-on rule

However, it is not for SPRFMO to discard the New York-based negotiations which gave rise to the UNGA resolutions, ignore scientific study over the last decade and cast aside the implementation of the resolutions by RFMOs around the world. Moreover, SPRFMO has inadequate evaluation of the stocks and impact of fishing on biodiversity of seafloor under the current management regime and conservation measures.

We take the opportunity to recall the objective of the SPRFMO Convention stated in article 2: “The objective of this 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.” The precautionary approach is to be applied (article 3.2(a)) as is the ecosystem approach (article 3.2(b)). Measures are to ensure the long-term sustainability of fishery resources and promote the objective of their responsible utilisation (article 20.1(a)), maintain or restore populations of non-target and associated or dependent species to above levels at which their reproduction may become seriously threatened (article 20.1(c), and 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 vulnerable marine ecosystems and precautionary measures where it cannot adequately be determined whether vulnerable marine ecosystems are present or whether fishing would cause significant adverse impacts on vulnerable marine ecosystems (article 20.1(d).

The UNGA Review

In 2009, the UNGA determined that Resolution 61/105 had not been implemented sufficiently. As a result, the General Assembly adopted additional provisions in Resolution 64/72 (UNGA, 2009). This resolution reaffirmed the 2006 resolution and made it clear that the measures called for in Resolution 61/105 should be implemented, consistent with the FAO Guidelines, by flag states and RFMOs prior to allowing, or authorising, bottom fishing on the high seas to proceed.

Resolution 64/72 placed particular emphasis on conducting impact assessments of bottom fisheries on the high seas and called on states and RFMOs to “ensure that vessels do not engage in bottom fishing until such assessments have been carried out.”

Resolution 64/72 also called for stock assessments and conservation measures to ensure the long-term sustainability of deep-sea fish stocks and non-target species, and rebuilding of depleted fish stocks.⁴²

The UNGA will once again review RFMOs in mid 2016. If the Commission was to adopt a measure inconsistent with the UNGA resolutions and FAO Guidelines, it would be a major step backwards and be a step away from international consensus which was carefully developed over many years and refined since then. It would also be wasteful and self-defeating: its measures would need to be revised according to new UNGA resolutions.

Conclusion

The Commission must not be misled by the efforts of the bottom fishing industry to depart from the UNGA resolutions and the move-on rule under the guise of 'spatial management'. The failure of SC-3 to undertake the required stock assessment and shortcomings of the predictive modelling exercise show that there is insufficient information to implement a spatial management strategy, quite apart from the simple fact that SPRFMO has been called on by the UNGA to manage bottom trawling according to the UNGA resolutions, as have other RFMOs around the world. Far from retreating from the UNGA resolutions, SPRFMO should implement them in calling on Members not to authorize bottom fishing until a stock assessment has been completed.

¹ UNGA Resolution 64/72 (2009) paragraph 119(a) Conduct the assessments called for in paragraph 83 (a) of its resolution 61/105, consistent with the Guidelines, and to ensure that vessels do not engage in bottom fishing until such assessments have been carried out.

² UNGA resolution 64/72 paragraph 120: "Calls upon flag States, members of regional fisheries management organizations or arrangements with the competence to regulate bottom fisheries and States participating in negotiations to establish such organizations or arrangements to adopt and implement measures in accordance with paragraphs 83, 85 and 86 of its resolution 61/105, paragraph 119 of the present resolution, and international law, and consistent with the Guidelines, and not to authorize bottom fishing activities until such measures have been adopted and implemented."

³ A/RES/66/68 - Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instruments (to be issued).

⁴ At <http://www.un.org/Docs/journal/asp/ws.asp?m=A/RES/61/105>.

⁵ FAO, International Guidelines for the Management of Deep-Sea Fisheries in the High Seas (2009). At <http://www.fao.org/docrep/011/i0816t/i0816t00.htm>.

⁶ UNGA Resolution 64/72 (2009) paragraph 119(a) Conduct the assessments called for in paragraph 83 (a) of its resolution 61/105, consistent with the Guidelines, and to ensure that vessels do not engage in bottom fishing until such assessments have been carried out.

⁷ UNGA resolution 64/72 paragraph 120: "Calls upon flag States, members of regional fisheries management organizations or arrangements with the competence to regulate bottom fisheries and States participating in negotiations to establish such organizations or arrangements to adopt and implement

measures in accordance with paragraphs 83, 85 and 86 of its resolution 61/105, paragraph 119 of the present resolution, and international law, and consistent with the Guidelines, and not to authorize bottom fishing activities until such measures have been adopted and implemented."

⁸ A/RES/66/68 - Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instruments (to be issued).

⁹ At <http://www.un.org/Docs/journal/asp/ws.asp?m=A/RES/61/105>.

¹⁰ FAO, International Guidelines for the Management of Deep-Sea Fisheries in the High Seas (2009). At <http://www.fao.org/docrep/011/i0816t/i0816t00.htm>.

¹¹ CMM 2.03 in paragraph 5.

5. To assist in the review of this CMM, including *inter alia*, the development of spatial management arrangements and sustainable catch levels, the Commission requests the Scientific Committee, by no later than the third meeting of the Scientific Committee in 2015, to:

- a. undertake an assessment of the likely impact of specific gear types, particularly trawl, on VMEs, to further inform the definition of bottom fishing;
- b. undertake stock assessments of principal deep-sea fishery resources targeted, and, to the extent possible, taken as bycatch and caught incidentally in these fisheries, including straddling resources;
- c. develop and provide advice and recommendations to the Commission on criteria for what constitutes evidence of an encounter with a VME, in particular threshold levels and indicator species;
- d. develop and provide advice and recommendations to the Commission on the most appropriate response to a VME encounter, including *inter alia* closing particular areas to a particular gear type or types;
- e. review and streamline the SPRFMO Bottom Fishery Impact Assessment Standard (SPRFMO BFIAS) agreed by the Scientific Working Group in 2011 to take account of the latest scientific information available;
- f. provide advice on the appropriate spatial resolution and time period for footprint mapping; and
- g. develop maps of VME distribution in the Convention Area.

¹² FAO guidelines as to Stock assessments, found at <http://ftp.fao.org/docrep/fao/009/a0486e/a0486e00.pdf>.

¹³ A fine scale spatially disaggregated CPUE analysis has been applied to areas to the east of New Zealand, on the Louisville Ridge. "Estimated median stock for these four stocks ranged from 0.23 of K to 0.44 of K with relatively wide confidence limits" SPRFMO Scientific Committee, Report of the Third Scientific Committee, August 2015 pg 7. Attempts to model stocks on the Lorde Howe Rise and Northwest Challenger Plateau have not been completely successful and biomass estimates were very poorly constrained. SPRFMO Scientific Committee, Report of the Third Scientific Committee, August 2015 pg 7. There are a preliminary estimated of initial biomass, productivity and stock status for four of the six orange roughly sub-stocks. There are concerns over the confidence that can be placed in the CPUE modeling generally. SPRFMO Scientific Committee, Report of the Third Scientific Committee, August 2015 pg 7. The SC noted the scarce data that was available for stock assessment. Biomass indices in the SPRFMO area are almost entirely restricted to CPUE low information modeling and thus subject to large variables in outcome. SC03 at 17.

¹⁴ Scientific Committee Report, August 2015 at [6.1].

¹⁵ Scientific Committee Report, August 2015 at pg 17.

¹⁶ <http://www.cbd.int/ebsa/ebsas>

¹⁷ SC-2 Report para. 8.1.

¹⁸ See overview by IDDRI, "Ecologically or biologically significant marine areas (EBSAs): the identification process under the Convention on Biological Diversity (CBD) and possible ways forward. At http://www.iddri.org/Publications/Collections/Idees-pour-le-debat/WP1712_ED_EBSAs.pdf.

¹⁹ See CBD Decision XI/17 (2012). Marine and coastal biodiversity: Ecologically or biologically significant marine areas. At <http://www.cbd.int/cop/cop-11/doc/2012-10-24-advanced-unedited-cop-11-decisions-en.pdf>.

²⁰ CBD Decision XI/17: "6. Noting that, in accordance with decision X/29, the application of the scientific criteria for ecologically or biologically significant marine areas is a scientific and technical exercise and emphasizing that the identification of ecologically or biologically significant marine areas and the selection of conservation and management measures is a matter for States and competent intergovernmental organizations, in accordance with international law, including the United Nations Convention on the Law of the Sea, as stated in paragraph 26 of decision X/29"

²¹ 'New Zealand Bottom Fishing Activities by New Zealand Vessels Fishing in the High Seas in the SPRFMO Area during 2008 and 2009' (New Zealand Ministry of Fisheries 2008b) available at <http://www.southpacificrfmo.org/benthic-impact-assessments/>

²² Ibid at 4.

²³ Report of the First Scientific Committee Meeting, La Jolla, 21-27 October 2013 (SC1 Report), para 8.2.

²⁴ UNGA resolution 64/72 para. 119(c)

²⁵ See DSCC Comments on the Revised Draft Bottom Fishery Impact Assessment Standard SWG-10-DW-03, 17 September 2011. DSCC noted that the threshold quantities should take into account the fact that nets are not designed to retain taxa and that significant amounts of taxa will fall through the net. The proposed method for deriving threshold weights is logically flawed, since it is based on the median of the cumulative distribution of observed bycatch weights. This is not correlated with actual VMEs much less an assessment of the impact on VMEs, and simply relies on a statistical formulation based on past fishing data, as opposed to data on the impact of fishing on VMEs. The exercise is to identify VMEs, not to facilitate a certain amount of fishing. In addition, the threshold should be based on prior assessments, including an assessment of each biogeographic region to identify VMEs and vulnerable fish species, such as sharks, including rare and endemic species. The assessments should use (i) "best available scientific and technical information on the current state of fishery resources and baseline information on the ecosystems, habitats and communities in the fishing area, against which future changes are to be compared" in the (iii) "identification, description and mapping of VMEs known or likely to occur in the fishing area." (From FAO Guidelines para 47).

²⁶ Penney, A.J. (2014). Review of the biodiversity component of the New Zealand Vulnerable Marine Ecosystem Evidence Process. New Zealand Aquatic Environment and Biodiversity Report No 135. 40 pp. (SC-02DW-01). Page 1. At <https://www.mpi.govt.nz/document-vault/4723>.

²⁷ Following UNGA resolution 64/72 paragraph 119(a): Conduct the assessments called for in paragraph 83 (a) of its resolution 61/105, consistent with the Guidelines, and to ensure that vessels do not engage in bottom fishing until such assessments have been carried out.

²⁸ Following UNGA resolution 64/72 paragraph 120: "Calls upon flag States, members of regional fisheries management organizations or arrangements with the competence to regulate bottom fisheries and States participating in negotiations to establish such organizations or arrangements to adopt and implement measures in accordance with paragraphs 83, 85 and 86 of its resolution 61/105, paragraph 119 of the present resolution, and international law, and consistent with the Guidelines, and not to authorize bottom fishing activities until such measures have been adopted and implemented."

²⁹ Paragraph 129 of UN General Assembly document A/66/L.22 adopted by the General Assembly on 6 December 2011. To be issued as UNGA resolution 66/68 http://www.un.org/ga/search/view_doc.asp?symbol=A/66/L.22. Emphasis added.

³⁰ Ibid at 11.

³¹ Adopt conservation and management measures, including monitoring, control and surveillance measures, on the basis of stock assessments and the best available scientific information, to ensure the long-term sustainability of deep sea fish stocks and non-target species, and the rebuilding of depleted stocks, consistent with the Guidelines; and, where scientific information is uncertain, unreliable, or inadequate, ensure that conservation and management measures be established consistent with the precautionary approach, including measures to ensure that fishing effort, fishing capacity and catch limits, as appropriate, are at levels commensurate with the long-term sustainability of such stock.

³² The SC reported that “New Zealand is currently progressing the definition of stock management areas and the assessment of stock status for a number of orange roughy stocks in the SPRFMO Convention Area, and expects to report results at the next meeting of the SC in 2015.

Recent small-scale acoustic surveys of some orange roughy stocks in the SPRFMO Convention Area, as notified to the Secretariat, have been completed. Further planning for such surveys is on-going and the results of these surveys will be used to support stock assessment efforts, all of which will be reported to the SC. “ (page 15)

³³ SC-2 report, page 13.

³⁴ SC-2 report page 14.

³⁵ SC-3 report page 15.

³⁶ SC-3 report page 38.

³⁷ UNGA Resolution 64/72 (2009) paragraph 119(a) Conduct the assessments called for in paragraph 83 (a) of its resolution 61/105, consistent with the Guidelines, and to ensure that vessels do not engage in bottom fishing until such assessments have been carried out.

³⁸ UNGA resolution 64/72 paragraph 120: "Calls upon flag States, members of regional fisheries management organizations or arrangements with the competence to regulate bottom fisheries and States participating in negotiations to establish such organizations or arrangements to adopt and implement measures in accordance with paragraphs 83, 85 and 86 of its resolution 61/105, paragraph 119 of the present resolution, and international law, and consistent with the Guidelines, and not to authorize bottom fishing activities until such measures have been adopted and implemented."

³⁹ A/RES/66/68 - Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instruments (to be issued).

⁴⁰ At <http://www.un.org/Docs/journal/asp/ws.asp?m=A/RES/61/105>.

⁴¹ FAO, International Guidelines for the Management of Deep-Sea Fisheries in the High Seas (2009). At <http://www.fao.org/docrep/011/i0816t/i0816t00.htm>.

⁴² Resolution 64/72 (2009) Paras 119-120.