Report by New Zealand on actions taken pursuant to paragraphs 113, 117 and 119 to 124 of resolution 64/72, paragraphs 121,126, 129, 130 and 132 to 134 of resolution 66/68, and paragraphs 156, 171, 175, 177 to 188 and 219 of resolution 71/123

11 March 2020

Introduction

New Zealand continues to be actively engaged in developing, improving and implementing measures to sustainably manage deep-sea fish stocks and prevent significant adverse impacts from bottom fishing on vulnerable marine ecosystems (VMEs), both in its own exclusive economic zone and on the high seas.

New Zealand is a member of the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) and the South Pacific Regional Fisheries Management Organisation (SPRFMO). On the high seas, New Zealand-flagged fishing vessels undertake bottom fishing in the CCAMLR Convention Area and the SPRFMO Convention Area.

Since 2016, New Zealand has:

- Continued to advocate for, and implement, improved measures adopted by CCAMLR to prevent significant adverse impacts on VMEs in the CCAMLR Convention Area;
- Co-developed the Ross Sea region Marine Protected Area (RSRMPA) with an objective of better understanding the effects of fishing on the Ross Sea region ecosystem. The RSRMPA was adopted by CCAMLR in 2017; and
- Developed and implemented further measures to prevent significant adverse impacts on VMEs from bottom fishing and measures to improve the management of deep-sea fisheries in the SPRFMO Convention Area.

Further details of New Zealand's actions to implement paragraphs of resolutions 64/72, 66/68, and 71/123 are contained in this report in response to the invitation in paragraph 213 of United Nations General Assembly resolution 74/18. To streamline our response, paragraphs in resolutions that cover similar subject matter have been grouped together.

This report updates information provided to the Secretary-General in:

- 2009 titled 'Report on New Zealand's Implementation of Operative paragraphs 80 and 83-90 of resolution 61/105' (New Zealand's 2009 report);
- 2011 titled 'Report by New Zealand on actions taken pursuant to Operative paragraphs 80 and 83-87 of Resolution 61/105 and Operative Paragraphs 113-117 and 119-127 of Resolution 64/72' (New Zealand's 2011 report);
- 2016 titled 'Report by New Zealand on actions taken pursuant to Operative Paragraphs 113, 117 and 119-124 of Resolution 64/72 and Operative Paragraphs 121, 126, 129, 130 and 132-134 of Resolution 66/68' (New Zealand's 2016 report).

These reports are referenced throughout this document.

Implementing the International Guidelines for the Management of Deep-sea Fisheries in the High Seas

This section addresses paragraphs 113 and 117 (res 64/72), paragraph 122 (res 66/68), and paragraph 171 (res 71/123).

New Zealand was actively involved in developing the Food and Agriculture Organization (FAO) International Guidelines for the Management of Deep-Sea Fisheries in the High Seas and uses the guidelines when formulating proposals for new, or improvements to existing, bottom fishing measures. New Zealand provided a list to the FAO of New Zealand flagged vessels that have approval to fish on the high seas using bottom fishing methods in 2009.

Conservation measures for bottom fisheries

This section addresses paragraphs 119 (a-d), 120, and 123 (res 64/72), paragraphs 129 (a-d) and 132 (res 66/68), and paragraphs 180 (c) and 182 (res 71/123).

CCAMLR Conservation Measures for bottom fisheries

The Conservation Measures (CMs) adopted by CCAMLR to regulate bottom fisheries in the Convention Area and to address the requirements of paragraph 119(a) to (d) have been described in detail in New Zealand's 2009 report. The relevant Conservation Measures (CMs 22-04 to 22-07) are also publicly available on the CCAMLR website (www.ccamlr.org).

Since New Zealand's 2016 report, CCAMLR has:

- Closed further areas recognised as VMEs to bottom fishing based on the best scientific and technical information available;
- Strengthened and stream-lined procedures for carrying out assessments to take into account cumulative impacts on VMEs;
- Refined the data reporting requirements for CCAMLR Members to improve the effectiveness of VME impact assessments and corresponding management measures;
- Established a scientific review focus topic for VMEs, scheduled to take place in 2020. This will review current available information to identify information gaps, revise current impact assessment methodologies, and help to determine whether the current management measures are sufficient;
- Established the RSRMPA in 2017 with an objective to better understand the effects of fishing on the Ross Sea region ecosystem.

New Zealand continues to implement CCAMLR's bottom fishing requirements (CM 22-04 and 22-07) through permits issued under its Antarctic Marine Living Resources Act 1981. These permits are required by any New Zealand national (defined to include corporate bodies) participating in Southern Ocean fisheries. The conditions of the permits reflect all applicable CCAMLR Conservation Measure requirements for operating in CCAMLR fisheries.

SPRFMO Conservation and Management Measures for bottom fisheries

The SPRFMO Convention specifies the use of the precautionary approach and an ecosystem approach to the sustainable management of non-highly migratory species in the high seas of the South Pacific Ocean.

In recent years, SPRFMO has adopted a number of Conservation and Management Measures (CMMs), both at its own initiative and in response to resolutions 64/72 and 66/68, to prevent potential significant adverse impacts on VMEs and sustainably manage deep-sea fisheries:

- CMM 08-2019 prohibits the use of large-scale pelagic driftnets and all deepwater gillnets in the Convention Area.
- CMM 03-2019 and CMM 03a-2019¹ implement a comprehensive suite of measures 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. In doing so, the measures safeguard the marine ecosystems in which these resources occur, including the prevention of significant adverse impacts on VMEs, by *inter alia*:
 - Limiting bottom fishing catch in the Convention Area to precautionary levels estimated from stock assessment models where available, or where no stock assessments are available, to a level that does not exceed the annual average over the period 1 January 2002 and 31 December 2006;
 - Restricting where bottom fishing can be conducted to carefully designed bottom fishing management areas. Bottom fishing management areas are based on the best scientific information and are designed to exclude priority areas for conservation and take into account the history and cumulative impacts of past and proposed bottom fishing. In establishing these areas, research and predictive modelling of areas where VMEs are known to occur or likely to occur are taken into account and these data and analyses are provided to the SPRFMO Secretariat (for circulation) and Scientific Committee (for scientific review);
 - Ensuring 100 percent observer coverage for vessels using trawl gear and at least 10 percent observer coverage for vessels using bottom line fishing gear;
 - Establishing threshold levels and protocols for encounters with potential VMEs, which include both a set of indicator taxa and a biodiversity threshold. Thresholds and move on rules are reviewed every three years using the best available scientific information;
 - Requiring vessels to apply a VME encounter protocol, including a 'move-on' rule, whereby they must cease bottom fishing activities within one nautical mile either side of the trawl track extended by one nautical mile from each

¹ Note: CMMs amended at SPRFMO's Eighth Annual Commission meeting in February 2020 will shortly be reissued with a new date, for instance CMM 03-2019 will be reissued, with amendments, as CMM 03-2020. All activities conducted under CMM 03a-2019 must be conducted in accordance with CMM 03-2019.

end when a VME encounter occurs; and bottom fishing within the encounter area is suspended by all SPRFMO Members unless, based on scientific advice, the Commission agrees to allow fishing to continue;

- o Reporting encounters with VMEs to the SPRFMO Secretariat;
- Requiring an assessment of vessels' bottom fishing impact before authorizing vessels to engage in any bottom fishing;
- Requiring submission of Vessel Monitoring System (VMS) reports to the SPRFMO Secretariat for vessels that participate in bottom fishing. Vessels are required to poll once every thirty minutes for the duration of the trip. Vessels are also required to report at the start of towing or setting and the end position to the 1/100th degree resolution.

New Zealand has implemented CMM 08-2019, CMM 03-2019 and CMM 03a-2019 through conditions on high seas fishing permits issued to New Zealand flagged vessels that are intending to fish in the Convention Area. pursuant to Part 6A of the Fisheries Act 1996. The conditions of the permits reflect all applicable SPRFMO Conservation Measure requirements for operating in SPRFMO fisheries.

Bottom fishing impact assessments

This section addresses paragraph 119(a) (res 64/72), paragraphs 122 (b), 129(a) and 130 (res 66/68), and paragraphs 179 and 180(b) (res 71/123).

New Zealand has conducted impact assessments of all bottom fishing activities by New Zealand vessels in the CCAMLR and SPRFMO Convention Areas, in accordance with 119(a) of resolution 64/72 and 129(a) of resolution 66/68. Both SPRFMO and CCAMLR impact assessments are available on their respective websites.²

CCAMLR impact assessments

Consistent with CCAMLR CM 22-06, New Zealand has continued to submit to CCAMLR an annual preliminary assessment with the best available information of the known and anticipated impacts of its bottom fishing activities on VMEs in the CCAMLR Convention Area.

SPRFMO bottom fishing impact assessments

New Zealand has conducted a qualitative risk and impact assessment for its bottom trawl and bottom longline fishing operations in the SPRFMO Convention Area. This assessment was prepared in accordance with the guidelines in the SPRFMO interim Benthic Assessment Framework. New Zealand's assessment was reviewed by the SPRFMO Science Working

² SPRFMO impact assessments: <u>https://www.sprfmo.int/science/benthic-impact-assessments/</u> CCAMLR impact assessments: <u>https://www.ccamlr.org/en/compliance/vulnerable-marine-</u> <u>ecosystems-vmes</u>

Group and is available on the SPRFMO website.³ As required under CMM 03-2019, New Zealand and Australia are undertaking a joint cumulative bottom fishing impact assessment in 2020 based on an updated Bottom Fishing Impact Assessment Standard adopted by the Commission. Assessments are to be submitted to the Scientific Committee and Commission at least every three years, and also 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.

Marine scientific research

This section addresses paragraph 119(b) (res 64/72), paragraphs 129(b) and 133 (res 66/78), and paragraph 180(a) (res 71/123).

Marine scientific research in CCAMLR bottom fisheries

New Zealand has continued to undertake scientific research to identify where VMEs are likely to occur, and to verify areas classified as either potential or designated VMEs in the Ross Sea region. Information collected by New Zealand vessels participating in the Ross Sea exploratory fishery, data collected by observers on the vessels, and information from New Zealand's scientific research voyages to the Ross Sea all feed into New Zealand's scientific contribution to CCAMLR on this topic. This information helps to inform management decisions within CCAMLR. New Zealand has also contributed to improving procedures within CCAMLR for evaluating, reviewing, and revising assessments, and will continue to be an active member in discussions during the VME focus topic in 2020.

Marine scientific research in SPRFMO bottom fisheries

New Zealand conducted a significant amount of research, including habitat suitability modelling, to predict the distributions of ten VME indicator taxa for the Southwest Pacific, to inform SPRFMO's bottom fishing measure (CMM 03-2019). The decision-support software package, Zonation, was used to combine these predicted distribution maps of VME indicator taxa and the historical distribution of fishing to identify and prioritise areas to be closed to fishing to prevent significant adverse impacts on VMEs, and areas to be open to fishing. This research included analysis of historical VME bycatch weights in bottom trawl operations to develop a definition of what taxa constitute evidence of VMEs. From this research, New Zealand scientists worked to develop a VME encounter protocol based on threshold bycatch weights and an index of biodiversity.

New Zealand has also conducted a significant amount of research for estimating orange roughy biomass and stock structure. Detailed information on scientific research for deep-sea stocks is contained in the 'Sustainability of deep-sea stocks' section below.

Encounter measures for VMEs.

This section addresses paragraphs 119(c) (res 64/72) and 129(c) (res 66/78).

³ <u>https://www.sprfmo.int/assets/Meetings/Meetings-before-2013/Scientific-Working-Group/SWG-06-2008/a-Miscellaneous-Documents/New-Zealand-Bottom-Fishery-Impact-Assessment-v1.3-2009-05-13.pdf</u>

CCAMLR VME encounter measure

CCAMLR has adopted a VME encounter measure (CM 22-07) which is described in New Zealand's 2009 report.

SPRFMO VME Encounter Notification Template

SPRFMO's bottom fishing measure (CMM 03-2019) includes a VME encounter protocol. If there is an encounter, vessels must immediately cease fishing in the vicinity of the encounter. New Zealand submits the data from New Zealand-flagged vessels' encounters with VMEs to SPRFMO at the time of the encounter. This information is then reviewed by SPRFMO's Scientific Committee to determine whether encounters were unexpected based on the relevant VME habitat suitability models and other relevant information. Bottom fishing within the area where the encounter occurred is suspended for all SPRFMO Members unless, based on scientific advice, the Commission agrees to allow fishing to continue. CMM 03 is due to be reviewed in 2021 and at least every three years to take appropriate action to meet the objectives of the CMM and the Convention. Each review considers the protocol for encounters with VME indicator taxa and the appropriateness of applied management measures.

The SPRFMO Scientific Committee also reviews the SPRFMO Bottom Fishing Impact Assessment Standard every five years to ensure that it reflects, as appropriate, best practice.

Sustainability of deep-sea stocks

This section addresses paragraph 119(d) (res 64/72), paragraph 129(d) (res 66/68), and paragraphs 183 and 186 (res 71/123).

Long-term sustainability of CCAMLR deep-sea stocks

The Convention on the Conservation of Antarctic Marine Living Resources prescribes three principles of conservation (Article II, paragraph 3) which have resulted in the adoption of precautionary harvest rules for CCAMLR stocks.

CCAMLR has a robust set of CMs to ensure the long-term sustainability of its deep-sea fish stocks and non-target species. Measures are based on the best scientific information available and are established consistent with the precautionary approach. These measures are supported by a comprehensive Monitoring, Control, and Surveillance (MCS) regime.

New Zealand implements CCAMLR CMs through conditions on permits issued to New Zealand nationals fishing in the CCAMLR Convention Area under the Antarctic Marine Living Resources Act 1981.

New Zealand is a flag state and a port state for CCAMLR toothfish fisheries and undertakes pre-trip and post-trip port inspections of vessels that are going to fish, or have fished, in the Convention Area to ensure operators adhere to CCAMLR's CMs.

New Zealand also implements the CCAMLR Catch Documentation Scheme for toothfish through domestic regulations given effect through the Fisheries Act 1996. This ensures the

origin of toothfish is able to be verified and that all toothfish trade in and out of New Zealand is tracked.

New Zealand also undertakes aerial and surface patrolling in the Convention Area, reporting all sightings of illegal, unreported and unregulated (IUU) vessels or illegal activities to the relevant States and the CCAMLR Secretariat.

Long-term sustainability of South Pacific deep-sea stocks

The SPRFMO deepwater species measure (CMM 03a-2019) limits bottom fishing catch levels. In 2019, conditions on high seas fishing permits issued to New Zealand-flagged vessels intending to fish in the Convention Area limited bottom fishing catch levels to the New Zealand allocation for orange roughy in specified areas (Westpac Bank 190t, Tasman Sea 277t, Louisville Ridge 1,026t, South Tasman Rise 0t), and 762t catch limit for other species in the management areas.

New Zealand used a seamounts meta-analysis to develop first estimates of potential orange roughy biomass on known features within the Convention Area, as a basis for assessing potential sustainable yields for orange roughy in these areas. A review of orange roughy stock structure was also completed by New Zealand, and minor changes were made to the boundaries of probable orange roughy stocks.

New Zealand developed a range of more sophisticated low-information stock assessment models for orange roughy in 2017. SPRFMO's Scientific Committee agreed that these models were, collectively, sufficient to indicate the status of orange roughy stocks and to support advice to the SPRFMO Commission on sustainable catch limits. Catch limits for orange roughy were established for the first time in 2018, significantly reducing the allowable catches from the Tasman Sea.

The stock assessment models for orange roughy on the Louisville Ridge and on the Westpac Bank (a straddling stock which is also caught within New Zealand's EEZ) were updated in 2019 and accepted by SPRFMO's Scientific Committee. No changes to the catch limit for the Louisville Ridge were recommended, and a modest increase for the Westpac Bank was recommended and adopted by the SPRFMO Commission in 2020. These limits are specified in CMM 03a-2019 and implemented for New Zealand-flagged vessels as conditions on high seas fishing permits.

Initially, New Zealand managed its precautionary catch limit allocation through a precautionary approach to high seas permit conditions, whereby only 85% of New Zealand's allocation was able to be harvested to ensure that catch did not exceed the allocation. To improve the implementation of Member allocations of orange roughy, New Zealand and Australia recently developed a proposal to address under and over catch, which was adopted by the SPRFMO Commission in 2020. The amended measure improves implementation by allowing limited carry forward for under catch and deduction of over catch for the subsequent fishing year. No further fishing is permitted once the catch limit has been reached. Looking forward, New Zealand is looking at a long-term domestic management regime to manage its allocation of orange roughy.

Special circumstances of developing States

This section addresses paragraph 121 (res 64/72), paragraph 134 (res 66/68), paragraphs 187 and 188 (res 71/123).

New Zealand recognises the special circumstances and challenges developing States face in fully implementing the relevant paragraphs of these resolutions and is open to exploring ways to accommodate these special circumstances and challenges.

Developing and implementing regional standards

This section addresses paragraph 122 (a) (res 64/72).

The regional standard expected to be met by States is provided for in the CMs adopted by CCAMLR and in the CMMs adopted by SPRFMO. The respective scientific committees of the organisations review the best available information to assess whether the management decisions are achieving the objective of the measures. The CCAMLR and SPRFMO compliance committees monitor the performance of Members to ensure they uphold the agreed management actions, and, if required, procedures are put in place to improve future performance.

Monitoring and Compliance

New Zealand implements paragraph 122 (d) (res 64/72) through conducting aerial and surface patrols in the Pacific and Southern Oceans and supplies detailed information on sightings of any IUU vessels or illegal activities to the relevant Flag States and the Secretariat of the relevant fisheries management body.

Coordination with other regional fisheries bodies

This section addresses paragraph 156 (res 71/123).

New Zealand has shared knowledge and experiences on the development of measures to sustainably manage deep-sea fish stocks and prevent significant adverse impacts on VMEs in the following ways:

- Submitting multiple papers (averaging about 10 each year) to SPRFMO's Scientific Committee and its related workshops on stock assessment, protected species, and VME-related issues, including papers developed jointly with scientists from other SPRFMO Members that also participate in other regional fisheries bodies (Australia and the European Union);
- Submitting progress reports on SPRFMO exploratory fisheries to CCAMLR committees and working groups when those fisheries have the potential to overlap management areas;

- Inviting scientists from other SPRFMO Members and a variety of stakeholders, many of whom overlap with other regional fisheries management organisations or CCAMLR, to participate in New Zealand science review meetings and discussions during the development of scientific advice;
- Publishing multiple articles in scientific journals, including paying for open access to those articles, on the development of habitat suitability models for VME indicator taxa at a range of spatial scales, use of spatial decision-support software to design spatial management areas, and data-informed approaches to setting threshold weights for VME encounter protocols on the high seas;
- Jointly funding and participating in a multi-day workshop in Hobart, Australia in May 2017, (involving scientists from Australia, New Zealand, Chile, and the European Union) to consider the early results of research to inform development of the scientific advice on sustainable management of deep-sea fish stocks and prevention of significant adverse impacts on VMEs;
- Making two invited presentations to the North Pacific Fisheries Commission-FAO workshop in Yokohama, Japan in March 2018, on the protection of VMEs in the North Pacific Fisheries Commission Area;
- Making three invited presentations, funded by FAO, to the Southern Indian Ocean Fisheries Agreement's first Protected Areas and Ecosystems Working Group in Yokohama, Japan in March 2019, on aspects of the science underpinning the development of SPRFMO's spatial management areas;
- Making an invited presentation to FAO's Deep-Sea Conference in Rome, May 2019, on the development of spatial management measures in SPRFMO, including science and stakeholder processes.

Areas beyond national jurisdiction where there are no regional fisheries organisations or arrangements

New Zealand-flagged vessels are not permitted to conduct bottom fishing on the high seas outside the CCAMLR and SPRFMO Convention Areas (paragraph 124, res 64/72).

Human activities other than bottom fishing

This section addresses paragraph 184 (res 71/123).

New Zealand participates in the work of the International Seabed Authority (ISA) as a member of the Assembly. It is not a sponsoring State of seabed mining in the Area. In New Zealand's view, important steps need to be taken before mining can occur in order for VMEs to be protected from significant adverse impacts. These steps include the establishment of a robust Environmental Impact Assessment (EIA) process and ensuring that Regional Environmental Management Plans (REMPs) are developed. New Zealand is actively engaged in discussions on these issues within the ISA.