

CMM 01-2021

Conservation and Management Measure for *Trachurus murphyi* (supersedes CMM 01-2020)

The Commission of the South Pacific Regional Fisheries Management Organisation;

NOTING that the *Trachurus murphyi* stock remains at very low levels;

CONCERNED in particular with the low levels of the current biomass, historically high fishing mortality, the need to maintain low fishing mortality, and the high degree of associated uncertainties;

TAKING INTO ACCOUNT the outcomes of the stock assessment carried out on 3 to 8 October 2020 and the advice of the Scientific Committee;

BEARING IN MIND the commitment to apply the precautionary approach and take decisions based on the best scientific and technical information available as set out in Article 3 of the Convention;

RECOGNISING that a primary function of the Commission is to adopt Conservation and Management Measures (CMMs) to achieve the objective of the Convention, including, as appropriate, CMMs for particular fish stocks;

AFFIRMING its commitment to rebuilding the stock of *Trachurus murphyi* and ensuring its long-term conservation and sustainable management in accordance with the objective of the Convention;

RECOGNISING the need for effective monitoring and control and surveillance of fishing for *Trachurus murphyi* in the implementation of this measure pending the establishment of monitoring, control and surveillance measures pursuant to Article 27 of the Convention;

NOTING Article 4(1) regarding the need to ensure compatibility of conservation and management measures established for fishery resources that are identified as straddling areas under the national jurisdiction of a coastal State Contracting Party and the adjacent high seas of the Convention Area and acknowledge their duty to cooperate to this end;

BEARING IN MIND, the Findings and Recommendations of the Review Panel, from 5 June 2018, convened pursuant to Article 17 and Annex II of the Convention, in relation to the Objection by the Republic of Ecuador and their statements on possible ways forward in relation to that objection;

RECALLING Articles 4(2), 20(3), 20(4) and 21(2) of the Convention;

RECALLING also Article 21(1) of the Convention;

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

General Provisions

1. This CMM applies to fisheries for *Trachurus murphyi* undertaken by vessels flagged to Members and Cooperating Non-Contracting Parties (CNCs) included on the Commission Record of Vessels (CMM 05-2021) in the Convention Area and, in accordance with Article 20(4)(a)(iii) and with the express consent of Chile and Ecuador, to fisheries for *Trachurus murphyi* undertaken by Chile and Ecuador in areas under their national jurisdiction.
2. Only fishing vessels duly authorised pursuant to Article 25 of the Convention and in accordance with CMM 05-2021 (Record of Vessels) that are flagged to Members and Cooperating Non-Contracting Parties (CNCs) shall participate in the fishery for *Trachurus murphyi* in the Convention Area.
3. This CMM is not to be considered a precedent for future allocation decisions.



Effort Management

4. Relevant Members and CNCPs shall limit the total gross tonnage (GT)¹ of vessels flying their flag and participating in the fishing activities described in Article 1, (1)(g)(i) and (ii) of the Convention in respect of the *Trachurus murphyi* fisheries in the Convention Area to the total tonnage of their flagged vessels that were engaged in such fishing activities in 2007 or 2008 or 2009 in the Convention Area and as set out in Table 1 of CMM 1.01 (*Trachurus murphyi*; 2013). Such Members and CNCPs may substitute their vessels as long as the total level of GT for each Member and CNCP does not exceed the level recorded in that table.

Catch Management

5. In 2021 the total catch of *Trachurus murphyi* in the area to which this CMM applies in accordance with paragraph 1 shall be limited to 710,702 tonnes. Members and CNCPs are to share in this total catch in the tonnages set out in Table 1 of this CMM.
6. Catches will be attributed to the flag State whose vessels have undertaken the fishing activities described in Article 1 (1)(g)(i) and (ii) of the Convention.
7. In the event that a Member or CNCP reaches 70% of its catch limit set out in Table 1, the Executive Secretary shall inform that Member or CNCP of that fact, with a copy to all other Members and CNCPs. That Member or CNCP shall close the fishery for its flagged vessels when the total catch of its flagged vessels is equivalent to 100% of its catch limit. Such Member or CNCP shall notify promptly the Executive Secretary of the date of the closure.
8. The provisions of this CMM are without prejudice to the right of Members and CNCPs to adopt measures limiting vessels flying their flag and fishing for *Trachurus murphyi* in the Convention Area to catches less than the limits set out in Table 1. In any such case, Members and CNCPs shall notify the Executive Secretary of the measures, when practicable, within 1 month of adoption. Upon receipt, the Executive Secretary shall circulate such measures to all Members and CNCPs without delay.
9. By 31 December each year a Member or CNCP may transfer to another Member or CNCP all or part of its entitlement to catch up to the limit set out in Table 1, without prejudice to future agreements on the allocation of fishing opportunities, subject to the approval of the receiving Member or CNCP. When receiving fishing entitlement by transfer, a Member or CNCP may either allocate it domestically or endorse arrangements between owners participating in the transfer. Members and CNCPs receiving fishing entitlements by transfer who have consented to a total allowable catch that will apply throughout the range of the fishery resource under Art 20(4)(a)(iii) may pursue those entitlements in the Convention Area and in their areas under their national jurisdiction. Before the transferred fishing takes place, the transferring Member or CNCP shall notify the transfer to the Executive Secretary for circulation to Members and CNCPs without delay.
10. Members and CNCPs agree, having regard to the advice of the Scientific Committee, that catches of *Trachurus murphyi* in 2021 throughout the range of the stock should not exceed 782,000 tonnes.
11. The Executive Secretary shall inform Members and CNCPs when catches of *Trachurus murphyi* in the range of its distribution have reached 70% of the amount referred to in paragraph 10. The Executive Secretary shall notify Members and CNCPs when the amount referred to in paragraph 10 has been reached.

¹ In the event that GT is not available, Members and CNCPs shall utilise Gross Registered Tonnage (GRT) for the purposes of this CMM.



Data Collection and Reporting

12. Members and CNCPs participating in the *Trachurus murphyi* fishery shall report in an electronic format the monthly catches of their flagged vessels to the Secretariat within 20 days of the end of the month, in accordance with CMM 02-2021 (Data Standards) and using templates prepared by the Secretariat and available on the SPRFMO website.
13. When total catches have reached 70% of the amount indicated in paragraph 10, Members and CNCPs agree to implement a 15-day reporting period:
 - a) for purposes of implementing this system, the calendar month shall be divided into 2 reporting periods, viz: day 1 to day 15 and day 16 to the end of the month;
 - b) once the 15-day reporting has been activated, Members and CNCPs shall report their catches within 10 days of the end of each period, excepting the first report, which shall be made within 20 days of the end of the period.
14. The Executive Secretary shall circulate monthly catches, aggregated by flag State, to all Members and CNCPs on a monthly basis. Once 15-day reporting has been activated the Executive Secretary shall circulate 15-day catches, aggregated by flag State, to all Members and CNCPs on a 15-day basis.
15. Except as described in paragraphs 12 and 13 above, each Member and CNCP participating in the *Trachurus murphyi* fishery shall collect, verify, and provide all required data to the Executive Secretary, in accordance with CMM 02-2021 (Data Standards) and the templates available on the SPRFMO website, including an annual catch report.
16. The Executive Secretary shall verify the annual catch reports submitted by Members and CNCPs against the submitted data (tow-by-tow in the case of trawlers, and set-by-set or trip-by-trip in the case of purse-seine fishing vessels). The Executive Secretary shall inform Members and CNCPs of the outcome of the verification exercise and any possible discrepancies encountered.
17. Members and CNCPs participating in the *Trachurus murphyi* fisheries shall implement a vessel monitoring system (VMS) in accordance with CMM 06-2020 (VMS) and other relevant CMMs adopted by the Commission.
18. Each Member and CNCP participating in the *Trachurus murphyi* fishery shall provide the Executive Secretary a list of vessels² they have authorised to fish in the fishery in accordance with Article 25 of the Convention and CMM 05-2021 (Record of Vessels) and other relevant CMMs adopted by the Commission. They shall also notify the Executive Secretary of the vessels that are actively fishing or engaged in transshipment in the Convention Area within 20 days of the end of each month. The Executive Secretary shall maintain lists of the vessels so notified and will make them available on the SPRFMO website.
19. The Executive Secretary shall report annually to the Commission on the list of vessels having actively fished or been engaged in transshipment in the Convention Area during the previous year using data provided under CMM 02-2021 (Data Standards).
20. In order to facilitate the work of the Scientific Committee, Members and CNCPs shall provide their annual national reports, in accordance with the existing guidelines for such reports, in advance of the 2021 Scientific Committee meeting. Members and CNCPs shall also provide observer data for the 2021 fishing season to the Scientific Committee to the maximum extent possible. The reports shall be submitted to the Executive Secretary at least one month before the 2021 Scientific Committee meeting in order to ensure that the Scientific Committee has an adequate opportunity to consider the reports in its deliberations. Members should notify the Executive Secretary in the event they will not be submitting an annual report together with the reasons for not doing so.
21. In accordance with Article 24(2) of the Convention, all Members and CNCPs participating in the *Trachurus*

² Fishing vessels as defined in Article 1 (1)(h) of the Convention.



murphyi fishery shall provide a report describing their implementation of this CMM in accordance with the timelines specified in CMM 10-2020 (Compliance Monitoring Scheme). On the basis of submissions received the CTC shall develop a template to facilitate future reporting. The implementation reports will be made available on the SPRFMO website.

22. The information collected under paragraphs 11, 13 and 18, and any stock assessments and research in respect of *Trachurus murphyi* fisheries shall be submitted for review to the Scientific Committee. The Scientific Committee will conduct the necessary analysis and assessment, in accordance with its SC Multi-annual workplan (2021) agreed by the Commission, in order to provide updated advice on stock status and recovery.
23. Contracting Parties and CNCPs, as port States, shall, subject to their national laws, facilitate access to their ports on a case-by-case basis to reefer vessels, supply vessels and vessels fishing for *Trachurus murphyi* in accordance with this CMM. Contracting Parties and CNCPs shall implement measures to verify catches of *Trachurus murphyi* caught in the Convention Area that are landed or transhipped in its ports. When taking such measures, a Contracting Party or CNCP shall not discriminate in form or fact against fishing, reefer or supply vessels of any Member or CNCP. Nothing in this paragraph shall prejudice the rights, jurisdiction and duties of these Contracting Parties and CNCPs under international law. In particular, nothing in this paragraph shall be construed to affect:
 - a) the sovereignty of Contracting Parties and CNCPs over their internal, archipelagic and territorial waters or their sovereign rights over their continental shelf and in their exclusive economic zone;
 - b) the exercise by Contracting Parties and CNCPs of their sovereignty over ports in their territory in accordance with international law, including their right to deny entry thereto as well as adopt more stringent port State measures than those provided for in this CMM and other relevant CMMs adopted by the Commission.
24. Until the Commission adopts an Observer Programme in accordance with Article 28 of the Convention, all Members and CNCPs participating in the *Trachurus murphyi* fishery shall ensure a minimum of 10% scientific observer coverage of trips for trawlers and purse seiners flying their flag and ensure that such observers collect and report data as described in CMM 02-2021 (Data Standards). In the case of the flagged vessels of a Member or CNCP undertaking no more than 2 trips in total, the 10% observer coverage shall be calculated by reference to active fishing days for trawlers and sets for purse seine vessels.

Cooperation in Respect of Fisheries in Adjacent Areas Under National Jurisdiction

25. Members and CNCPs participating in *Trachurus murphyi* fisheries in areas under national jurisdiction adjacent to the area to which this CMM applies in accordance with paragraph 1, and Members and CNCPs participating in *Trachurus murphyi* fisheries in the area to which this CMM applies, shall cooperate in ensuring compatibility in the conservation and management of the fisheries. Members and CNCPs participating in *Trachurus murphyi* fisheries in areas under national jurisdiction adjacent to the area to which this CMM applies are invited to apply the measures set out in paragraphs 12-24, insofar as they are applicable, to vessels associated with the *Trachurus murphyi* fisheries in their areas under national jurisdiction. They are also requested to inform the Executive Secretary of the Conservation and Management Measures in effect for *Trachurus murphyi* in areas under their national jurisdiction.
26. Acknowledging the duty to cooperate to promote and ensure that CMMs established for the high seas and those adopted for areas under national jurisdiction are compatible, as required by Article 4 paragraph 2 and Article 8 (f) of the Convention, coastal State Contracting Parties participating in the *Trachurus murphyi* fishery in areas under national jurisdiction that have not given their express consent under Article 20 paragraph 4 (a) (ii), will undertake their utmost efforts to restrain from authorising catches that exceed the difference between the amount agreed in paragraph 10 of this CMM and the total catch allocated in paragraph 5 of this CMM.
27. Where, due to exceptional and unforeseen circumstances in the stock biomass in the inter-sessional period,



coastal States that have not given their express consent under Article 20 paragraph 4 (a) (ii) establish domestic measures concerning catches of *Trachurus murphyi* in areas under their national jurisdiction that may result in exceeding such difference as indicated in paragraph 26 above, they agree to:

- a) submit to the Secretariat, as a matter of urgency and no later than 15 days after their adoption, a report explaining to the Commission how the national measures concerning the *Trachurus murphyi* fishery in areas under their national jurisdiction are compatible with those adopted by the Commission, and how they have taken into account the requirements of Article 4 paragraph 2 (a), (b) and (c) of the Convention;
- b) report to the Secretariat any subsequent changes to the national measures, no later than 15 days after their adoption;
- c) cooperate in the coordination of the conservation measures they intend to apply with the Scientific Committee and the Commission to ensure that the intended measures do not undermine the effectiveness of the conservation and management measures adopted by the Commission.

28. At its next annual meeting, the Scientific Committee will assess the information received and provide advice to the Commission regarding the possible impact of the national measures adopted on the *Trachurus murphyi* fishery. The CTC will consider the information provided by the coastal State and whether the national measures it adopted are compatible with those established by the Commission and will advise the Commission accordingly. The Commission will consider measures to ensure compatible management, considering the advice of the Scientific Committee and the CTC.

29. In case any Member or CNCP considers that the information presented by the coastal State has not taken into account the requirements of Article 4, 2 (a), (b) and (c) of the Convention, it may request a special meeting of the Commission in accordance with Article 7 paragraphs 3 and 4 of the Convention and Regulation 3 of the SPRFMO Rules of Procedure, except that such special meeting may take place by electronic means, under the same quorum provided for by the Rules of Procedure for special meetings.

Special Requirements of Developing States

30. In recognition of the special requirements of developing States, in particular small island developing States and territories and possessions in the region, Members and CNCPs are urged to provide financial, scientific and technical assistance, where available, to enhance the ability of those developing States and territories and possessions to implement this CMM.

Review

31. This Measure shall be reviewed by the Commission in 2022. The review shall take into account the latest advice of the Scientific Committee and the CTC, and the extent to which this CMM, CMM 1.01 (*Trachurus murphyi*, 2013), CMM 2.01 (*Trachurus murphyi*, 2014), CMM 3.01 (*Trachurus murphyi*; 2015), CMM 4.01 (*Trachurus murphyi*, 2016), CMM 01-2017 (*Trachurus murphyi*), CMM 01-2018 (*Trachurus murphyi*), CMM 01-2019 (*Trachurus murphyi*) and CMM 01-2020 (*Trachurus murphyi*) as well as the Interim Measures for pelagic fisheries of 2007, as amended in 2009, 2011 and 2012, have been complied with.

32. Without prejudice to Members and CNCPs without an entitlement in Table 1 and the rights and obligations specified in Article 20(4)(c) and having regard to paragraph 10, the percentages included in Table 2 will be used by the Commission as a basis for the allocation of Member and CNCPs' catch limits from 2018 to 2021 inclusive.



Table 1: Tonnages in 2021 fishery as referred to in paragraph 5.

Member / CNCP	Tonnage
Chile	504 889
China	49 639
Cook Islands	0
Cuba	1 745
Ecuador	9 883
European Union	47 769
Faroe Islands	8 670
Korea	10 027
Peru (HS)	15 862
Russian Federation	25 669
Vanuatu	36 549
Total	710 702

Table 2: Percentages³ related to the catches referred to in paragraph 10.

Member / CNCP	%
Chile	64.5638
China	6.3477
Cook Islands	0.0000
Cuba	0.2231
Ecuador	1.2638
European Union	6.1086
Faroe Islands	1.1087
Korea	1.2822
Peru (HS)	2.0284
Russian Federation	3.2825
Vanuatu	4.6738

³ These percentages shall apply from 2018 to 2021 inclusive as amended in 2020.

CMM 02-2021

Conservation and Management Measure on Standards for the Collection, Reporting, Verification and Exchange of Data

(Supersedes CMM 02-2020)

With regard to the fishing vessels flying their flag and fishing for non-highly migratory fishery resources in the Convention Area,

1. Data on Fishing Activities and the Impacts of Fishing

Members and Cooperating non-Contracting Parties (Members and CNCPs) are to develop, implement and improve systems to:

- a) ensure that for each calendar year, Members and CNCPs collate annual catch totals raised to “live” weight for all species/species groups caught during that year, and that these are collated as described in Annex 13. Members and CNCPs will provide by the 30 September, their previous year’s (January to December) annual catch totals raised to “live” weight for all species/ species groups caught;
- b) ensure that data on fishing activities, including data to assess the impacts of fishing on non-target and associated or dependent species (including marine mammals, seabirds, reptiles or other species of concern), are collected from vessels according to the operational characteristics of each fishing method;
 - i. for trawling methods, Members and CNCPs are to collect the data described in Annex 1;
 - ii. for purse seining methods, Members and CNCPs are to collect the data described in Annex 2;
 - iii. for bottom long lining methods, Members and CNCPs are to collect the data described in Annex 3;
 - iv. for jigging methods, Members and CNCPs are to collect the data described in Annex 4;
 - v. for potting methods, Members and CNCPs are to collect the data described in Annex 5;
 - vi. for hand/drop/dahn lining methods, Members and CNCPs are to collect the data described in Annex 6.
- c) ensure that data on landings and transshipment are collected from vessels according to Annexes 11 and 12 respectively;
- d) compile data on fishing activities and the impacts of fishing and provide these in a timely manner to the Secretariat of the South Pacific Regional Fisheries Management Organisation (SPRFMO) using the SPRFMO data submission templates. The data under this subparagraph will be used for the assessment and monitoring of stocks. Members and CNCPs will provide by the 30th June, their previous (January to December) year’s data on fishing activities and the impacts of fishing described in sections 1b) – 1c) above.

2. Observer Data

- a) Implementation of observer programmes

Members and CNCPs are to develop and implement observer programmes consistent with CMM16-2021 (Observer Programme) to achieve the objectives in Article 28 of the Convention, and to collect verified scientific data and additional information related to fishing activities in the Convention Area and its impacts on the ecosystem, and also to support the functions of the Commission and its subsidiary bodies, including the CTC.



b) Information and Data to be Collected

All national observer programmes or service providers accredited under the SPRFMO observer programme should, through the relevant Member or CNCP, provide the information in Annex 7 (Parts A to O) collected by their observers when deployed at sea in the Convention Area. Observer information from such programmes on SPRFMO-managed species collected from landings, or from vessels while they are in port, may be collected and provided on a voluntary basis, by referring to Part P of Annex 7.

c) Data Provision

Observer data should be provided to the Secretariat of the SPRFMO in a standardised format, to be included in the SPRFMO Observer Database. Specifications and standards for observer data submissions are on the SPRFMO website. Until the Secretariat determines a change is needed, observer data will be submitted in Microsoft Excel format. Members and CNCPs will provide by 30 September, their previous (January to December) year's data.

d) Maintenance of Confidentiality

The Secretariat of the SPRFMO is to compile and disseminate accurate and complete observer data to ensure that the best scientific evidence is available, while maintaining confidentiality where appropriate. In doing so, the Secretariat is to follow the procedures specified in Section 6.

3. Historical Data

Members and CNCPs are to collate pre-2007 data on fishing activities in the Convention Area and provide these to the Secretariat of the SPRFMO wherever possible.

4. Data Verification

Members and CNCPs are to ensure that fishery data are verified through an appropriate system. Members and CNCPs are to develop, implement and improve mechanisms for verifying data, such as:

- a) position verification through vessel monitoring systems;
- b) implementation of the Observer Programme CMM (CMM16-2021 (Observer Programme));
- c) vessel trip, landing and transshipment reports;
- d) port sampling; and
- e) electronic monitoring.

5. Data Exchange

Members and CNCPs are to report all data required by this measure to the Secretariat in accordance with the specifications and format described in Annex 8 of this measure, using the templates created by the Secretariat and stored on the SPRFMO website.

6. Maintenance of Confidentiality

The Secretariat of the SPRFMO is to compile and disseminate accurate and complete statistical data to ensure that the best scientific evidence is available while maintaining confidentiality. Specifically, the Secretariat is to:

- a) compile and disseminate the following "public domain" data:
 - i. data on fishing activities, aggregated by flag State and month and 1 degree by 1 degree areas, except in those cases where such data describes the activities of less than 3 vessels (in which case a lower resolution will be used);



- ii. data for vessels authorised by Members and CNCPs shall include current flag, name, registration number, international radio call sign, IHS-Fairplay (IMO) number, previous names, port of registry, previous flag, type of vessel, types of fishing methods, when built, where built, length, length type, moulded depth, beam, gross tonnage (and/ or gross register tonnage), power of main engine(s), hold capacity, vessel authorisation start and end dates, images provided pursuant to Paragraph 11 and Annex 1 of CMM 05-2021 (Record of Vessels);
 - iii. the occurrence of bottom fishing within a 20 minute block (without specifying flag, any vessel identification, or measure of fishing effort);
- b) operate comprehensive and robust processes to maintain the confidentiality of the non-public domain data that Members and CNCPs provide to it. These processes will be based on the ISO/IEC27002:2005 (updates ISO/IEC 17799:2005) international standard for information security management¹. SPRFMO specific data security standards will be developed over time;
 - c) compile and disseminate to Members and CNCPs or their designates non-public domain data (being any data not described in 6(a)):
 - i. in response to a written request from Commission, for the purposes documented by the Commission; and
 - ii. in the absence of a written request from the Commission - only with the authorisation of the Participant(s) that originally provided that data.

These standards will be reviewed periodically to ensure that they are adequate for the current and foreseeable needs of the SPRFMO.

7. Annual Reports to the SPRFMO SC

In order to facilitate the work of the Scientific Committee, Members and CNCPs shall submit reports on an annual basis in order to keep the Scientific Committee informed, in a concise format, of their fishing, research, management activities over the previous year and include information pursuant to paragraph 44 of CMM16-2021 (Observer Programme). A “nil report” is still required in cases where there was no fishing inside the Convention Area. These reports should be prepared in accordance with the existing guidelines for such reports and shall be submitted to the Executive Secretary at least one month before each Scientific Committee meeting in order to ensure that the Scientific Committee has an adequate opportunity to consider the reports in its deliberations.

8. Review

This CMM shall be reviewed no later than the regular meeting of the Commission in 2022 based on advice from the 2021 meeting of the Scientific Committee and following review by the Compliance and Technical Committee.

- 9. This measure replaces CMM 02-2020 (Data Standards).

¹ <https://www.iso.org/standard/50297.html>



ANNEX 1

Standard for Trawl Fishing Activity Data

(Taking into account Annex 8)

1. Data are to be collected on an un-aggregated (tow by tow) basis.
2. The following fields of data are to be collected:
 - a) Vessel flag;
 - b) Vessel name;
 - c) Vessel call sign;
 - d) Registration number of vessel;
 - e) UVI (Unique Vessel Identifier)/IMO number;
 - f) Tow start date and time (UTC format);
 - g) Tow end date and time (UTC format);
 - h) Tow start position (1/100th degree resolution for bottom fishing, 1/10th degree resolution for pelagic trawl- decimal format), latitude and longitude;
 - i) Tow end position (1/100th degree resolution for bottom fishing, 1/10th degree resolution for pelagic trawl – decimal format), latitude and longitude;
 - j) Intended target species (FAO species code);
 - k) Type of trawl, bottom or mid-water (use appropriate bottom or midwater trawl codes from the standard ISCCFG fishing gear standards attached at Annex 9);
 - l) Type of trawl: single, double or triple (S, D or T);
 - m) Height of net opening;
 - n) Width of net opening;
 - o) Gear depth at start of fishing;
 - p) Bottom depth at start of fishing;
 - q) Incidental captures of species of concern (marine mammals, seabirds, reptiles or other species of concern²) or benthic taxa (Yes/No/Unknown);
 - r) FAO species code and estimated live weight of catch retained on board for all species caught by the tow including target, bycatch and species of concern;
 - s) FAO species code and estimation of the amount³ of all living marine resources discarded by species, to the extent practicable, including any marine mammals, seabirds, reptiles, other species of concern, and benthic taxa.

² Annex 14

³ In weight for fish and benthic material; numbers for marine mammals, seabirds, reptiles and other species of concern



ANNEX 2

Standard for Purse Seine Fishing Activity Data

(Taking into account Annex 8)

1. Data are to be collected on an un-aggregated (set by set) basis.
2. The following fields of data are to be collected:
 - a) Vessel flag;
 - b) Vessel name;
 - c) Vessel call sign;
 - d) Registration number of vessel;
 - e) UVI (Unique Vessel Identifier)/IMO number;
 - f) Set start date and time (UTC format);
 - g) Set end date time (UTC format);
 - h) Set start position (1/10th degree resolution – decimal format), latitude and longitude;
 - i) Net length;
 - j) Net height;
 - k) Intended target species (FAO species code);
 - l) Incidental captures of species of concern (marine mammals, seabirds, reptiles or other species of concern⁴) or benthic taxa (Yes/No/Unknown);
 - m) FAO species code and estimated live weight of catch retained on board for all species caught by the set including target, bycatch and species of concern;
 - n) FAO species code and estimation of the amount⁵ of all living marine resources discarded by species, to the extent practicable, including any marine mammals, seabirds, reptiles, other species of concern, and benthic taxa.

⁴ Annex 14

⁵ In weight for fish and benthic material; numbers for marine mammals, seabirds, reptiles and other species of concern



ANNEX 3

Standard for bottom long lining fishing activity data

(Taking into account Annex 8)

1. Data are to be collected on an un-aggregated (set by set) basis.
2. The following fields of data are to be collected:
 - a) Vessel flag;
 - b) Vessel name;
 - c) Vessel call sign;
 - d) Registration number of vessel;
 - e) UVI (Unique Vessel Identifier)/IMO number;
 - f) Set start date and time (UTC format);
 - g) Set end date and time (UTC format);
 - h) Set start position (1/100th degree resolution – decimal format), latitude and longitude;
 - i) Set end position (1/100th degree resolution – decimal format), latitude and longitude;
 - j) Intended target species (FAO species code);
 - k) Number of hooks;
 - l) Bottom depth at start of set;
 - m) Incidental captures of species of concern (marine mammals, seabirds, reptiles or other species of concern⁶) or benthic taxa (Yes/No/Unknown);
 - n) FAO species code and estimated live weight of catch retained on board for all species caught by the set including target, bycatch and species of concern;
 - o) FAO species code and estimation of the amount⁷ of all living marine resources discarded by species to the extent practicable, including any marine mammals, seabirds, reptiles, species of concern, and benthic taxa.

⁶ Annex 14

⁷ In weight for fish and benthic material; numbers for marine mammals, seabirds, reptiles and other species of concern



ANNEX 4

Standard for jigging fishing activity data

(Taking into account Annex 8)

1. Data are to be collected on a daily basis
2. The following fields of data are to be collected:
 - a) Vessel flag;
 - b) Vessel name;
 - c) Vessel call sign;
 - d) Registration number of vessel;
 - e) UVI (Unique Vessel Identifier)/IMO number;
 - f) Date of fishing activity (UTC date);
 - g) Position at start of drift (1/10th degree resolution – decimal format), latitude and longitude;
 - h) Position at end of drift (1/10th degree resolution – decimal format), latitude and longitude;
 - i) Intended target species (FAO species code);
 - j) Echo Sounder (Yes/No);
 - k) Number of crew;
 - l) Number of single jig machines;
 - m) Number of double jig machines;
 - n) Number of jigs per line;
 - o) Maximum Operating depth;
 - p) Total deck light power (kW);
 - q) Total hours fished (h);
 - r) Incidental captures of species of concern (marine mammals, seabirds, reptiles or other species of concern⁸) or benthic taxa (Yes/No/Unknown);
 - s) FAO species code and estimated live weight of catch retained on board for all species caught by the fishing event including target, bycatch and species of concern;
 - t) FAO species code and estimation of the amount⁹ of all living marine resources discarded by species, to the extent practicable, including any marine mammals, seabirds, reptiles, species of concern, and benthic taxa.

⁸ Annex 14

⁹ In weight for fish and benthic material; numbers for marine mammals, seabirds, reptiles and other species of concern



ANNEX 5

Standard for potting methods fishing activity data

(Taking into account Annex 8)

1. Data are to be collected on an un-aggregated (set by set) basis
2. The following fields of data are to be collected:
 - a) Vessel flag;
 - b) Vessel name;
 - c) Vessel call sign;
 - d) Registration number of vessel;
 - e) UVI (Unique Vessel Identifier)/IMO number;
 - f) Set start date and time (UTC format);
 - g) Set end date and time (UTC format);
 - h) Start of set position (1/10th degree resolution – decimal format), latitude and longitude;
 - i) End of set position (1/10th degree resolution – decimal format), latitude and longitude;
 - j) Intended target species (FAO species code);
 - k) Depth at start of set;
 - l) Depth at end of set;
 - m) Type of pots;
 - n) Total number of pots set;
 - o) Type of bait used;
 - p) Incidental captures of species of concern (marine mammals, seabirds, reptiles or other species of concern¹⁰) or benthic taxa (Yes/No/Unknown);
 - q) FAO species code and estimated live weight of catch retained on board for all species caught by the set including target, bycatch and species of concern;
 - r) FAO species code and estimation of the amount¹¹ of all living marine resources discarded by species, to the extent practicable, including any marine mammals, seabirds, reptiles, species of concern, and benthic taxa.

¹⁰ Annex 14

¹¹ In weight for fish and benthic material; numbers for marine mammals, seabirds, reptiles and other species of concern



ANNEX 6

Standard for hand/drop/dahn lining fishing activity data

(Taking into account Annex 8)

1. Data are to be collected on an un-aggregated (series by series) basis
2. The following fields of data are to be collected:
 - a) Vessel flag;
 - b) Vessel name;
 - c) Vessel call sign;
 - d) Registration number of vessel;
 - e) UVI (Unique Vessel Identifier)/Lloyd's/IMO number;
 - f) Set start date and time (UTC format);
 - g) Set end date and time (UTC format);
 - h) Start of set position (1/100th degree resolution – decimal format), latitude and longitude;
 - i) End of set position (1/100th degree resolution – decimal format), latitude and longitude;
 - j) Intended target species (FAO species code);
 - k) Depth at start of set;
 - l) Depth at end of set;
 - m) Total number of hooks in the set;
 - n) Number of hooks lost;
 - o) Type of hooks used;
 - p) Type of leader used;
 - q) Total number of line lifts in the set;
 - r) Type of bait used;
 - s) Incidental captures of species of concern (marine mammals, seabirds, reptiles or other species of concern¹²) or benthic taxa (Yes/No/Unknown);
 - t) FAO species code and estimated live weight of catch retained on board for all species caught by the set including target, bycatch and species of concern;
 - u) FAO species code and estimation of the amount¹³ of all living marine resources discarded by species, to the extent practicable, including any marine mammals, seabirds, reptiles, species of concern, and benthic taxa.

¹² Annex 14

¹³ In weight for fish and benthic material; numbers for marine mammals, seabirds, reptiles and other species of concern



ANNEX 7

Standard for Observer Data

A. Vessel & Observer Data to be Collected for Each Observer Trip

1. Vessel and observer details are to be recorded only once for each observed trip, and must be reported in a way that links the vessel data to data required in Sections B, C, D and E.
2. The following vessel data are to be collected for each observed trip:
 - a) Current vessel flag;
 - b) Name of vessel;
 - c) Name of the Captain;
 - d) Name of the fishing master;
 - e) Registration number;
 - f) International radio call sign (if any);
 - g) UVI (Unique Vessel Identifier) / Lloyd's / IMO number;
 - h) Previous Names (if known);
 - i) Port of registry;
 - j) Previous flag (if any);
 - k) Type of vessel (use appropriate ISSCFV codes, Annex 10);
 - l) Type of fishing method(s) (use appropriate ISSCFG codes, Annex 9);
 - m) Vessel length (m);
 - n) Vessel length type e.g. "LOA", "LBP";
 - o) Beam (m);
 - p) Gross Tonnage – GT (to be provided as the preferred unit of tonnage);
 - q) Gross register tonnage – GRT (to be provided if GT not available; may also be provided in addition to GT);
 - r) Power of main engine(s) (kilowatts);
 - s) Hold capacity (cubic metres);
 - t) Record of the equipment on board which may affect fishing power factors (navigational equipment, radar, sonar systems, weather fax or satellite weather receiver, sea-surface temperature image receiver, Doppler current monitor, radio direction finder), where practical;
 - u) Total number of crew (all staff, excluding observers).
3. The following observer data are to be collected for each observed trip:
 - a) Observer's name;
 - b) Observer's organisation;
 - c) Date observer embarked (UTC date);
 - d) Port of embarkation;
 - e) Date observer disembarked (UTC date);
 - f) Port of disembarkation.



*B. Catch & Effort Data to be Collected for Trawl Fishing Activity
(Taking into account Annex 8)*

1. Data are to be collected on an un-aggregated (tow by tow) basis for all observed trawls.
2. The following data are to be collected for each observed trawl tow:
 - a) Tow start date and time (the time gear starts fishing - UTC);
 - b) Tow end date and time (the time haul back starts - UTC);
 - c) Tow start position (Lat/Lon, nearest 1/100th degree for bottom fishing and 1/10th for pelagic trawl - decimal);
 - d) Tow end position (Lat/Lon, nearest 1/100th degree for bottom fishing and 1/10th for pelagic trawl - decimal);
 - e) Intended target species (FAO species code);
 - f) Type of trawl, bottom or mid-water (use appropriate bottom or midwater trawl codes from the standard ISCCFG fishing gear standards attached at Annex 9);
 - g) Type of trawl: single, double or triple (S, D or T);
 - h) Height of net opening;
 - i) Width of net opening;
 - j) Mesh size of the cod-end net (stretched mesh, mm);
 - k) Mesh type (diamond, square, etc);
 - l) Gear depth (of footrope) at start of fishing;
 - m) Bottom (seabed) depth at start of fishing;
 - n) Record any bycatch mitigation measures employed, as per below:
 - i. Tori lines – if so, record details as described in Section M;
 - ii. Bird baffler(s) – if so, record details as described in Section O;
 - iii. Offal management - if so, record as per below:
 - i. No discharge during shooting and hauling;
 - ii. Only liquid discharge;
 - iii. Waste batching ≥ 2 hours/other/none;
 - iv. Other – if so, record details;
 - o) Estimated catch of all species (FAO species code) retained on board, split by species, in live weight (to the nearest kg);
 - p) Estimated catch of all species (FAO species code) discarded, split by species, in live weight (to the nearest kg), including all benthic taxa;
 - q) If any marine mammals, seabirds, reptiles or other species of concern were caught, report as per requirements described in Section H;
 - r) If any benthic material, including VME Indicator Taxa¹⁴, was caught record as per the requirements described in Section I.

¹⁴ VME Indicator Taxa are defined in Annex 5 of CMM 03-2021 (Bottom Fishing)



*C. Catch & Effort Data to be Collected for Purse Seine Fishing Activity
(Taking into account Annex 8)*

1. Data are to be collected on an un-aggregated (set by set) basis for all observed purse-seine sets.
2. The following data are to be collected for each observed purse-seine set:
 - a) Total search time before this set, since the last set;
 - b) Set start date and time (the time gear starts fishing - UTC);
 - c) Set end date and time (the time haul back starts - UTC);
 - d) Set start position (Lat/Long, nearest 1/100th degree resolution);
 - e) Net length (m);
 - f) Net height (m);
 - g) Net mesh size (stretched mesh, mm) and mesh type (diamond, square, etc);
 - h) Intended target species (FAO species code);
 - i) Record any bycatch mitigation measures employed, using types as described below and providing detail as required:
 - i. Tori lines – if so, record details as described in Section M;
 - ii. Bird baffler(s) – if so, record details as described in Section O;
 - iii. Offal management - if so, record as per below:
 - i. No discharge during shooting and hauling;
 - ii. Only liquid discharge;
 - iii. Waste batching \geq 2 hours/other/none;
 - iv. Night setting, (when setting is restricted to between the times of nautical dusk and nautical dawn);
 - v. Line weighting – if so, record details as described in Section N;
 - vi. Other – if so, record details;
 - j) Estimated catch of all species (FAO species code) retained on board, split by species, in live weight (to the nearest kg);
 - k) Estimated catch of all species (FAO species code) discarded, split by species, in live weight (to the nearest kg), including all benthic taxa;
 - l) If any marine mammals, seabirds, reptiles or other species of concern were caught, report as per requirements described in Section H;
 - m) If any benthic material, including VME Indicator Taxa¹⁵, was caught record as per the requirements described in Section I.

¹⁵ VME Indicator Taxa are defined in Annex 5 of CMM 03-2021 (Bottom Fishing)



*D. Catch & Effort Data to be Collected for Bottom Long Line Fishing Activity
(Taking into account Annex 8)*

1. Data are to be collected on an un-aggregated (set by set) basis for all observed longline sets.
2. The following fields of data are to be collected for each set:
 - a) Set start date and time (UTC format);
 - b) Set end date and time (UTC format);
 - c) Set start position (Lat/Lon, nearest 1/100th degree – decimal format);
 - d) Set end position (Lat/Lon, nearest 1/100th degree – decimal format);
 - e) Intended target species (FAO species code);
 - f) Total length of longline set (km);
 - g) Number of hooks for the set;
 - h) Bottom (seabed) depth at start of set;
 - i) Number of hooks actually observed (including for marine mammals, seabirds, reptiles or other species of concern caught) during the haul;
 - j) Estimated catch of all species (FAO species code) retained on board, split by species, in live weight (to the nearest kg);
 - k) Estimated catch of all species (FAO species code) discarded, split by species, in live weight (to the nearest kg), including all benthic taxa;
 - l) If any marine mammals, seabirds, reptiles or other species of concern were caught, report as per requirements described in Section H;
 - m) If any benthic material, including VME Indicator Taxa, was caught record as per the requirements described in Section I;
 - n) Record any bycatch mitigation measures employed and bait type, using types as described below and providing detail as required:
 - i. Tori lines – if so, record details as described in Section M;
 - ii. Bird baffler(s) – if so, record details as described in Section O;
 - iii. Offal management - if so, record as per below:
 - i. No discharge during shooting and hauling;
 - ii. Only liquid discharge;
 - iii. Waste batching ≥ 2 hours/other/none;
 - iv. Night setting, (when setting is restricted to between the times of nautical dusk and nautical dawn);
 - v. Line weighting – if so, record details as described in Section N;
 - vi. Bait type – record if fish/squid/mixed; live/dead/mixed; frozen/thawed/mixed; synthetic;
 - vii. Other – if so, record details;
 - o) What haul mitigation was used? (bird deterrent curtains/other/none). If other, describe.



*E. Catch & Effort Data to be Collected for Jigging Fishing Activity
(Taking into account Annex 8)*

1. Data are to be collected on a daily basis for all observed squid jig effort.
2. The following data are to be collected for each observed day of squid jig effort:
 - a) Fishing start date and time (UTC);
 - b) Fishing end date and time (UTC);
 - c) Position at start of drift (1/10th degree - decimal) latitude and longitude;
 - d) Position at end of drift (1/10th degree - decimal) latitude and longitude;
 - e) Intended target species (FAO species code);
 - f) Blast freezing throughput (tonnes per hour);
 - g) Total deck light power (kW);
 - h) Number of hand jig lines;
 - i) Number of single jig machines;
 - j) Number of double jig machines;
 - k) Number of jigs per line;
 - l) Bycatch mitigation measures employed (if applicable);
 - m) Estimated catch of all species (FAO species code) retained on board, split by species, in live weight (to the nearest kg);
 - n) Estimated catch of all species (FAO species code) discarded, split by species, in live weight (to the nearest kg), including all benthic taxa;
 - o) If any marine mammals, seabirds, reptiles or other species of concern were caught, report as per requirements described in Section H.



F. Length-Frequency Data to Be Collected

Representative and randomly sampled length-frequency data are to be collected for the target species and, time permitting, for other main by-catch species. Length data should be collected and recorded at the most precise level appropriate for the species (cm or mm and whether to the nearest unit or unit below) and the type of measurement used (total length, fork length, or standard length) should also be recorded. If possible, total weight of length-frequency samples for each species should be recorded, or estimated and the method of estimation recorded, and observers may be required to also determine sex of measured fish to generate length-frequency data stratified by sex.

1. Commercial Sampling Protocol

- a) Fish species other than skates, rays and sharks:
 - i. Fish length should be measured, consistent with Section Q, to the nearest cm for fish which attain a maximum length greater than 40 cm;
 - ii. Fish length should be measured, consistent with Section Q, to the nearest mm for fish which attain a maximum length less than 40 cm;
- b) Squid:
 - i. Mantle length should be measured to the nearest cm;
- c) Skates and rays:
 - i. maximum disk width should be measured;
- d) Sharks
 - i. Appropriate length measurement to be used should be selected for each species (see Section Q). As a default, total length should be measured;
- e) Marine mammals and reptiles (as possible)
 - i. Total length should be measured wherever possible.

2. Scientific Sampling Protocol

For scientific sampling of species, length measurements may need to be made at a finer resolution than specified above.

Measurement standards for invertebrates (i.e. crabs/lobsters) will be developed as required in line with the development of the associated exploratory fishery.



G. Biological Sampling to be Conducted

1. The following biological data should be collected for representative samples of the main target species and, time permitting, for other main by-catch species contributing to the catch:
 - a) Species;
 - b) Length (mm or cm). Measurement precision and type should be determined on a species by species basis consistent with that defined in Section F above;
 - c) Type of length measurement used (i.e. total length, fork length, etc);
 - d) Sex (male, female, immature, unsexed);
 - e) Maturity stage (for sharks, report if pregnant, and how many (if any) eggs/pups found).
2. Observers should collect tissue, otolith and/or stomach samples according to pre-determined specific research programmes implemented by the Scientific Committee or other national scientific research.
3. Observers are to be briefed and provided with written length-frequency and biological sampling protocols, where appropriate, and priorities for the above sampling specific to each observer trip.



H. Data to be Collected on Incidental Captures of seabirds, mammals, reptiles (turtles) and other species of concern

1. The following data are to be collected for all seabirds, mammals, reptiles (turtles) and other species of concern caught in fishing operations:
 - a) Species (identified taxonomically as far as possible, or accompanied by photographs if identification is difficult) and size;
 - b) Count of the number of each species caught per tow or set;
 - c) Fate of bycaught animal(s) (retained or released/discarded);
 - d) If released, life status (vigorous, alive, lethargic, dead) upon release;
 - e) If dead, then collect adequate information or samples¹⁶ for onshore identification in accordance with pre-determined sampling protocols. Where this is not possible, observers may be required to collect sub-samples of identifying parts, as specified in biological sampling protocols;
 - f) Record the type of interaction (hook/line entanglement/warp strike/net capture/other). If other, describe.
2. Record sex of each individual for taxa where this is feasible from external observation, e.g. pinnipeds, small cetaceans or elasmobranchii species of concern.
3. Record the length of each individual (cm), with record of the type of length measurement used. Measurement precision and type should be determined on a species by species basis.
4. Record the life-history stage of each individual where this is feasible (i.e. juvenile/adult).

¹⁶ Options include: return of carcasses for necropsy, photographs taken using appropriate protocols or tissue or feather samples for genetic determination.



1. Detection of Fishing in Association with Vulnerable Marine Ecosystems

1. **For all bottom fishing events, including trawl, bottom line, and potting, the following data are to be collected for all benthic taxa caught:**
 - a) Species (or accompanied by a photograph where identification to genus or species level is difficult);
 - b) An estimate of the quantity (to the nearest 0.1 kg) of each listed benthic taxon caught in the fishing event;
 - c) The method of weight estimation (e.g., visual estimate, weighed in full, accurate count of bins multiplied by number of bins) (note this information is not collected by the SPRFMO Secretariat but should be available upon request);
 - d) Where possible, and particularly for new or scarce benthic species which do not appear in ID guides, whole samples should be collected and suitably preserved for identification on shore;
 - e) Wherever possible, observers should collect samples and images according to pre-determined specific research programmes implemented by the Scientific Committee or other national scientific research.

2. **For all bottom fishing events, the following data are to be collected for all taxa identified as VME indicators as defined in Annex 5 of CMM 03-2021 (Bottom fishing):**
 - a) An estimate of the quantity (to the nearest 0.1 kg) of each VME indicator taxon caught in the fishing event;
 - b) Wherever possible, a photograph of a representative sample of each VME indicator taxa caught in the fishing event, archived by the Member or CNCP through the SPRFMO Observer Programme in a way that allows the photograph to be linked to the specific weight record for the fishing event;
 - c) Wherever possible, a photograph of the entire quantity of each VME indicator taxa caught in the fishing event, archived by the Member or CNCP through the SPRFMO Observer Programme in a way that allows the photograph to be linked to the specific weight record for the fishing event.

3. **For each observed trawl, the following data are to be collected for all taxa identified as VME indicators in Annex 5 of CMM 03-2021 (Bottom Fishing) using the appropriate VME Encounter template:**
 - a) A record of whether the weight of any of the VME indicator taxa in the trawl catch exceeded taxa-specific weight thresholds as defined in Annex 6A of CMM03-2021 (Bottom Fishing);
 - b) A record of whether three or more VME indicator taxa in the trawl catch exceeded taxa-specific weight thresholds as defined in Annex 6B of CMM 03-2021 (Bottom Fishing).



J. Data to be Collected for all Tag Recoveries

1. The following data are to be collected for all recovered fish, seabird, mammal or reptile tags if the organism is dead, to be retained, or alive:
 - a) Observer name;
 - b) Vessel name;
 - c) Vessel call sign;
 - d) Vessel flag;
 - e) Collect, label (with all details below) and store the actual tags for later return to the tagging agency;
 - f) Species from which tag recovered;
 - g) Tag colour and type (spaghetti, archival);
 - h) Tag numbers (the tag number is to be provided for all tags when multiple tags were attached to one fish. If only one tag was recorded, a statement is required that specifies whether or not the other tag was missing). If the organism is alive and to be released, tag information should be collected in accordance with pre-determined sampling protocols;
 - i) Date and time of capture (UTC);
 - j) Location of capture (Lat/Lon, to the nearest 1/10th degree);
 - k) Animal length/size (cm or mm) with description of what measurement was taken (such as total length, fork length, etc). Length measurements should be collected according to the criteria defined in Section F above;
 - l) Sex (F=female, M=male, I=indeterminate, D=not examined);
 - m) Whether the tags were found during a period of fishing that was being observed (Y/N);
 - n) Reward information (e.g. name and address where to send reward).

(It is recognised that some of the data recorded here duplicates data that already exists in the previous categories of information. This is necessary because tag recovery information may be sent separately to other observer data.)



K. Hierarchies for Observer Data Collection

1. Recognising that observers may not be able to collect all of the data described in these standards on each trip, a hierarchy of priorities is to be implemented for collection of observer data. Trip-specific or programme-specific observer task priorities may be developed in response to specific research programme requirements, in which case such priorities should be followed by observers.
2. In the absence of trip- or programme-specific priorities, the following generalised priorities should be followed by observers:
 - a) Fishing Operation Information
 - i. All vessel and tow / set / effort information;
 - b) Reporting of Catches
 - i. Record time, weight of catch sampled versus total catch or effort (e.g. number of hooks), and total numbers of each species caught;
 - ii. Identification and counts of seabirds, mammals, reptiles (turtles), sensitive benthic species and vulnerable species;
 - iii. Record numbers or weights of each species retained or discarded;
 - iv. Record instances of depredation, where appropriate;
 - c) Biological Sampling
 - i. Check for presence of tags;
 - ii. Length-frequency data for target species;
 - iii. Basic biological data (sex, maturity) for target species;
 - iv. Length-frequency data for main by-catch species;
 - v. Otoliths (and stomach samples, if being collected) for target species;
 - vi. Basic biological data for by-catch species;
 - vii. Biological samples of by-catch species (if being collected);
 - viii. Take photos;
 - d) The reporting of catches and biological sampling procedures should be prioritised among species groups as follows:

Species	Priority (1 highest)
Primary target species (such as jack mackerel, for pelagic fisheries, orange roughy for demersal fisheries, and squid where targeted)	1
Seabirds, mammals, reptiles (turtles) or other species of concern	2
All sharks	3
Other species typically within top 5 in the fishery (such as blue mackerel for pelagic fisheries, and oreos and alfonsino for demersal fisheries)	4
All other species	5

The allocation of observer effort among these activities will depend on the type of operation and setting. The size of sub-samples relative to unobserved quantities (e.g. number of hooks examined for species composition relative to the number of hooks set) should be explicitly recorded as per CMM 16-2021 (Observer Programme).



L. Coding Specifications to be Used for Recording Observer Data

1. Unless otherwise specified, observer data are to be provided in accordance with the same coding specifications as specified in Annex 8 of the SPRFMO Data Standards.
2. Coordinated Universal Time (UTC) is to be used to describe times.
3. Decimal degrees are to be used to describe locations.
4. **The following coding schemes are to be used:**
 - a) Species are to be described using the FAO species codes¹⁷;
 - b) Fishing methods are to be described using the International Standard Classification of Fishing Gear (ISSCFG - 29 July 1980) codes (Annex 9);
 - c) Types of fishing vessel are to be described using the International Standard Classification of Fishery Vessels (ISSCFV) codes (Annex 10).
5. **Metric units of measure are to be used, specifically:**
 - a) Kilograms are to be used to describe catch weight;
 - b) Metres are to be used to describe height, width, depth, beam or length;
 - c) Cubic metres are to be used to describe volume;
 - d) Kilowatts are to be used to describe engine power.

¹⁷ FAO species code means the 3-alpha code as described in www.fao.org/fi/statist/fisoft/asfis/asfis.asp



M. Bird scaring line description form

General Bird Scaring Line Description:

Trip Number Bird scaring line position

Bird scaring line equipment code

Distance between streamers (m)

Number of streamers (e.g. 7 in this diagram)

Streamer length min/max (m)

Attached height above water (m)

Streamer colours

Bird scaring line aerial coverage length (m)

Backbone length (m)

Bird scaring line design: (Design shown is paired)

Bird scaring line material

Streamer material

Towed object

Additional Comments

Summary of Inputed Values:

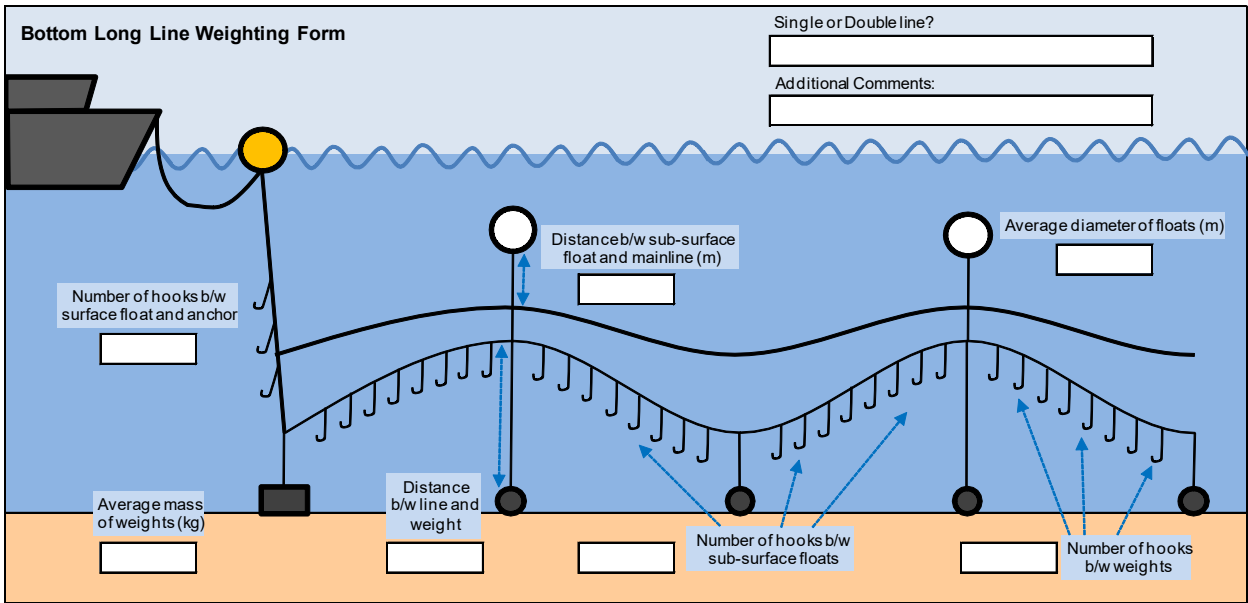
Trip Number		Distance between streamers	
Bird scaring line equipment code		Streamer length (min)	
Bird scaring line position		Streamer length (max)	
Backbone length		Streamer colour	
Aerial coverage length		Streamer material	
Attached height above water		Number of streamers	
Bird scaring line material		Towed object	
Bird scaring line design		Additional comments	

Bird Scaring Line Codes/ List Options:

Position	Design	Towed Object	Material	Colour
Port Side	Single	F = Inverted funnel/plastic cone	T = Plastic tubing	P = Pink
Starboard Side	Paired	L = Length of thick line	S = Plastic strapping	R = Red
Stern		K = Knot or loop of thick line	O = Other	C = Carrot (Orange)
		B = Buoy		Y = Yellow
		N = Netted buoy		G = Green
		S = Sack or bag		B = Blue
		W = Weight		W = Brown
		Z = No towed object		F = Faded colour (any colour)
		O = Other		O = Other



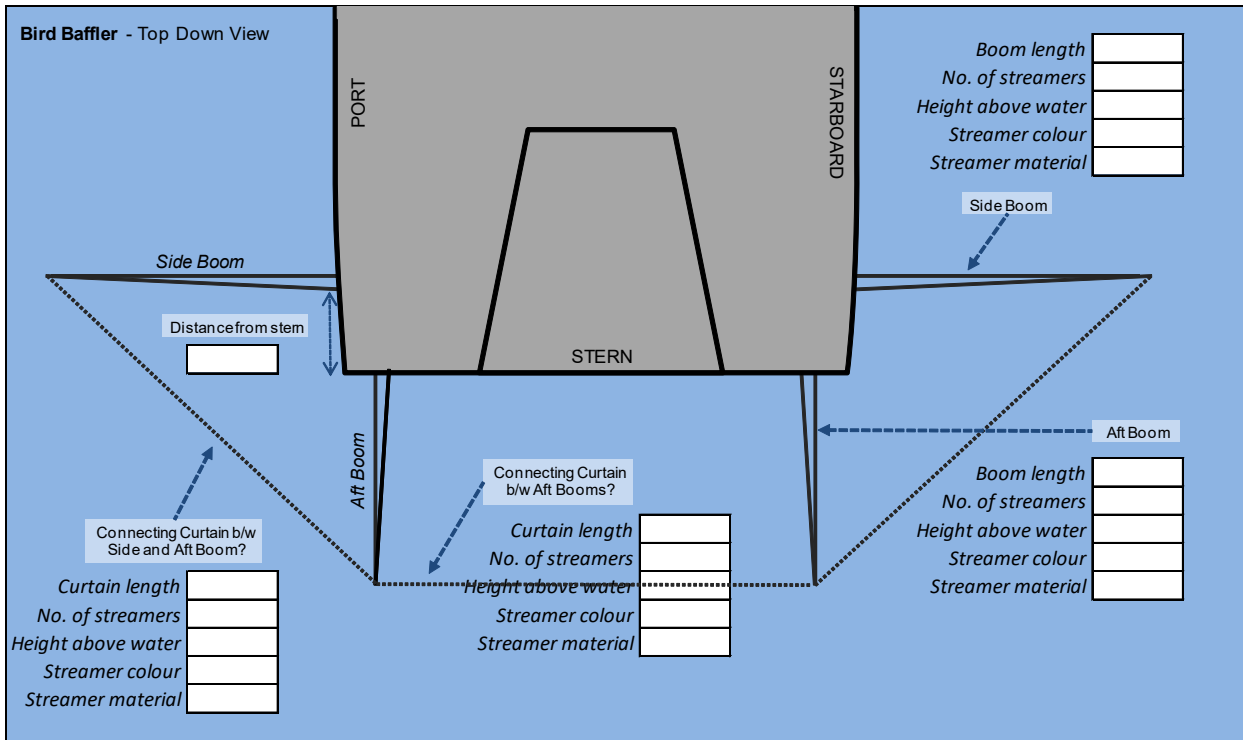
N. External line weighting description form



Summary of Inputed Values:			
Single or Double line?	<input type="text"/>	Number of hooks b/w surface float & anchor	<input type="text"/>
Avg mass of weights	<input type="text"/>	Number of hooks b/w sub-surface floats	<input type="text"/>
Distance b/w sub-surface float and mainline	<input type="text"/>	Number of hooks b/w weights	<input type="text"/>
Distance b/w line and weight	<input type="text"/>	Additional comments	<input type="text"/>



O. Bird baffle description form



Summary of Inputted Values	
<ul style="list-style-type: none"> Distance from stern 	
<p>Side Boom</p> <ul style="list-style-type: none"> Boom length Number of streamers Avg. distance b/w streamers Height above water Streamer colour Streamer material 	<p>Aft Boom</p> <ul style="list-style-type: none"> Boom length Number of streamers Avg. distance b/w streamers Height above water Streamer colour Streamer material
<p>Side-Aft Curtain</p> <ul style="list-style-type: none"> Curtain length Number of streamers Avg. distance b/w streamers Height above water Streamer colour Streamer material 	<p>Aft Curtain</p> <ul style="list-style-type: none"> Curtain length Number of streamers Avg. distance b/w streamers Height above water Streamer colour Streamer material



*P. Standard for Observer Data collected during a Landing
or while a vessel is in port*

With regards to fishing vessels flying their flag, and landing unprocessed (i.e. whole and no part of the fish having been removed) SPRFMO managed species, and where these landings are observed, Members and CNCPs may collect and provide the following information:

1. The following vessel data for each observed landing:

- f) Current vessel flag;
- g) Name of vessel;
- h) Fishing vessel registration number;
- i) International radio call sign (if any);
- j) Unique Vessel Identifier / IMO number;
- k) Type of vessel (use appropriate ISSCFV codes, Annex 10);
- l) Type of fishing method(s) (use appropriate ISSCFG codes, Annex 9).

2. The following observer data for each observed landing:

- a) Observer's name;
- b) Observer's organisation;
- c) Country of landing (standard ISO 3-alpha country codes);
- d) Port/Point of landing.

3. The following data for each observed landing:

- a) Landing Date and time (UTC format);
- b) First day of trip – to the extent practicable;
- c) Last day of trip – to the extent practicable;
- d) Indicative fishing area (decimal Lat/Long, nearest 1/10th degree – to the extent practicable);
- e) Main target species (FAO species code);
- f) Landed state by species (FAO species code);
- g) Landed (live) weight by species (kilograms) for the landing event being observed.

In addition, the collection of Length-Frequency data, Biological data and/or Tag recovery data should follow the standards described in parts E and F respectively of this Annex for those species observed during landings or while a vessel is in port.

Members and CNCPs should note that Annex 7 Parts H (Incidental capture) and I (VMEs) are not considered relevant for observed landings. However, the standards described in Parts J (Tag recovery), K (Hierarchies) and L (Coding specifications) should still be followed when possible.



Q. Standard for length measurements

Total length should be used for the following fish species:

- Groupers, seabasses (Serranidae);
- Oreodories (Oreosomatidae);
- Grenadiers, rattails (Macrouridae);
- Hake (Merluccidae);
- Hapuka (*Polyprion* spp);
- Cusk eels, brotulas (Ophidiidae);
- Moras (Moridae);
- Pelagic armourheads (*Pseudopentaceros* spp);
- Rockfishes, rockcods, and thornyheads (*Sebastidae* spp);
- Scorpionfishes (Scorpaenidae);
- Slimeheads (Trachichthyidae);
- Antarctic toothfishes (*Dissostichus* spp);
- Any shark or chimaera species not otherwise listed (see FAO technical report 474 on measuring sharks).

Fork length should be used for the following fish species:

- Amberjacks (*Seriola* spp);
- Barracouta (Gempylidae);
- Bluenose warehou (*Hyperoglyphe antarctica*);
- Alfonsinos, etc. (Berycidae);
- Driftfishes (Nomeidae);
- Cardinalfishes, etc. (Apogonidae);
- Chilean Jack mackerel (*Trachurus murphyi*);
- Chub Mackerel (*Scomber japonicus*);
- Morwongs (*Nemadactylus* spp);
- Emperors (Lethrinidae);
- Pomfrets, ocean breams (Bramidae);
- Snappers (Lutjanidae);
- Snake mackerels (Gempylidae);
- Other warehou (all).

Standard Length should be used for:

- Orange roughy (*Hoplostethus atlanticus*).

Mantle length should be used for:

Squid (all including *Dosidicus gigas*).



ANNEX 8

Specifications for the exchange of data

1. **Coordinated Universal Time (UTC) is to be used to describe times, using the following submission format:**

YYYY-MON-DDThh:mm:ss

Where:

YYYY- represents a 4-digit year e.g. "2007"

MON- represents a 3-character month abbreviation e.g."APR"

DD- represents a 2-digit day e.g. "05"

T- is a space separator

hh- represents hours based on the 24hr clock (length = 2 digits) e.g. "16"

mm- represents minutes (length = 2 digits) e.g. "05"

ss- represents seconds (length = 2 digits) e.g. "00"

Example

2003-JUL-17T13:10:00 1.10pm (1310h), 17 July 2003

2. **Decimal degrees (WGS84) are to be used to describe locations**

The following standard should be used for the submission of latitudinal/ longitudinal information:

- Northern latitudes and eastern longitudes should be indicated by the use of [un-signed] positive decimal degree values
- Southern latitudes and western longitudes should be indicated by the use of negative decimal degree values

Latitude	<p>Degrees: represented as positive (unsigned) or negative numbers from 0 to 89.99</p> <p>e.g. If value = 83.2, this means 83.2° N</p> <p>e.g. if value = -83.2, this means 83.2° S</p>
Longitude	<p>Degrees: represented as positive (unsigned) or negative numbers from 0 to 179.99</p> <p>e.g. If value = 83.2, this means 83.2° E</p> <p>e.g. if value = -83.2, this means 83.2° W</p>



3. The following coding schemes are to be used:

- a) Species are to be described using the FAO species codes¹⁸;
- b) Fishing methods are to be described using the International Standard Classification of Fishing Gear (ISSCFG - 29 July 1980) codes¹⁹ - Annex 9;
- c) Types of fishing vessel are to be described using the International Standard Classification of Fishery Vessels (ISSCFV) codes²⁰ - Annex 10.

4. Metric units of measure are to be used, specifically:

- a) Kilograms are to be used to describe catch weight;
- b) Metres are to be used to describe height, width, depth, beam or length;
- c) Cubic metres are to be used to describe volume;
- d) Kilowatts are to be used to describe engine power.

¹⁸ FAO species code means the 3-alpha code as described in www.fao.org/fi/statist/fisoft/asfis/asfis.asp

¹⁹ <http://www.fao.org/fishery/cwp/handbook/M> - see "Annex MI"

²⁰ <http://www.fao.org/fishery/cwp/handbook/L> - see "Annex L.II"



ANNEX 9

ISSCFG Codes

International Standard Statistical Classification of Fishing Gear (ISSCFG) (29 July 1980)

Gear Categories Abbreviation Code	Standard Abbreviations	ISSCFG
SURROUNDING NETS		01.0.0
With purse lines (purse seines)	PS	01.1.0
- one boat operated purse seines	PS1	01.1.1
- two boats operated purse seines	PS2	01.1.2
Without purse lines (lampara)	LA	01.2.0
SEINE NETS		02.0.0
Beach seines	SB	02.1.0
Boat or vessel seines	SV	02.2.0
- Danish seines	SDN	02.2.1
- Scottish seines	SSC	02.2.2
- pair seines	SPR	02.2.3
Seine nets (not specified)	SX	02.9.0
TRAWLS		03.0.0
Bottom trawls		03.1.0
- beam trawls	TBB	03.1.1
- otter trawls ²¹	OTB	03.1.2
- pair trawls	PTB	03.1.3
- nephrops trawls	TBN	03.1.4
- shrimp trawls	TBS	03.1.5
- bottom trawls (not specified)	TB	03.1.9
Midwater trawls		03.2.0
- otter trawls ²¹	OTM	03.2.1
- pair trawls	PTM	03.2.2
- shrimp trawls	TMS	03.2.3
- midwater trawls (not specified)	TM	03.2.9
Otter twin trawls	OTT	03.3.0
Otter trawls (not specified)	OT	03.4.9
Pair trawls (not specified)	PT	03.5.9
Other trawls (not specified)	TX	03.9.0
DREDGES		04.0.0
Boat dredges	DRB	04.1.0
Hand dredges	DRH	04.2.0
LIFT NETS		05.0.0
Portable lift nets	LNP	05.1.0
Boat-operated lift nets	LNB	05.2.0
Shore-operated stationary lift nets	LNS	05.3.0
Lift nets (not specified)	LN	05.9.0
FALLING GEAR		06.0.0
Cast nets	FCN	06.1.0
Falling gear (not specified)	FG	06.9.0

²¹ Fisheries agencies may indicate side and stern bottom, and side and stern midwater trawls, as OTB-1 and OTB-2, and OTM-1 and OTM-2, respectively



Gear Categories Abbreviation Code	Standard Abbreviations	ISSCFG
GILLNETS AND ENTANGLING NETS		07.0.0
Set gillnets (anchored)	GNS	07.1.0
Driftnets	GND	07.2.0
Encircling gillnets	GNC	07.3.0
Fixed gillnets (on stakes)	GNF	07.4.0
Trammel nets	GTR	07.5.0
Combined gillnets-trammel nets	GTN	07.6.0
Gillnets and entangling nets (not specified)	GEN	07.9.0
Gillnets (not specified)	GN	07.9.1
TRAPS		08.0.0
Stationary uncovered pound nets	FPN	08.1.0
Pots	FPO	08.2.0
Fyke nets	FYK	08.3.0
Stow nets	FSN	08.4.0
Barriers, fences, weirs, etc.	FWR	08.5.0
Aerial traps	FAR	08.6.0
Traps (not specified)	FIX	08.9.0
HOOKS AND LINES		09.0.0
Handlines and pole-lines (hand-operated) ²²	LHP	09.1.0
Handlines and pole-lines (mechanized) ²³	LHM	09.2.0
Set longlines	LLS	09.3.0
Drifting longlines	LLD	09.4.0
Longlines (not specified)	LL	09.5.0
Trolling lines	LTL	09.6.0
Hooks and lines (not specified)	LX	09.9.0
GRAPPLING AND WOUNDING		10.0.0
Harpoons	HAR	10.1.0
HARVESTING MACHINES		11.0.0
Pumps	HMP	11.1.0
Mechanised dredges	HMD	11.2.0
Harvesting machines (not specified)	HMX	11.9.0
MISCELLANEOUS GEAR ²⁴	MIS	20.0.0
RECREATIONAL FISHING GEAR	RG	25.0.0
GEAR NOT KNOW OR NOT SPECIFIED	NK	99.0.0

²² Including jigging lines

²³ Code LDV for dory-operated line gears will be maintained for historical data purposes

²⁴ This item includes: hand and landing nets, drive-in-nets, gathering by hand with simple hand implements with or without diving equipment, poisons and explosives, trained animals, electrical fishing



ANNEX 10

ISSCFV Codes

International Standard Statistical Classification of Fishery Vessels by Vessel Types (approved by CWP-12, 1984)

Vessel Type		Standard Abbreviation	Code
TRAWLERS		TO	01.0.0
	Side trawlers	TS	01.1.0
	Side trawlers wet-fish	TSW	01.1.1
	Side trawlers freezer	TSF	01.1.2
	Sterntrawlers	TT	01.2.0
	Sterntrawlers wet-fish	TTW	01.2.1
	Sterntrawlers freezer	TTF	01.2.2
	Sterntrawlers factory	TTP	01.2.3
	Outrigger trawlers	TU	01.3.0
	Trawler nei	TOX	01.9.0
SEINERS		SO	02.0.0
	Purse seiners	SP	02.1.0
	North American type	SPA	02.1.1
	European type	SPE	02.1.2
	Tuna purse seiners	SPT	02.1.3
	Seiner netters	SN	02.2.0
	Seiner nei	SOX	02.9.0
DREDGERS		DO	03.0.0
	Using boat dredge	DB	03.1.0
	Using mechanical dredge	DM	03.2.0
	Dredgers nei	DOX	03.9.0
LIFT NETTERS		NO	04.0.0
	Using boat operated net	NB	04.1.0
	Lift netters nei	BOX	04.9.0
GILL NETTERS		GO	05.0.0
TRAP SETTERS		WO	06.0.0
	Potvessels	WOP	06.1.0
	Trap setters nei	WOX	06.9.0
LINERS		LO	07.0.0
	Handliners	LH	07.1.0
	Longliners	LL	07.2.0
	Tuna longliners	LLT	07.2.1
	Pole and line vessels	LP	07.3.0
	Japanese type	LPJ	07.3.1
	American type	LPA	07.3.2
	Trollers	LT	07.4.0
	Liners nei	LOX	07.9.0
VESSELS USING PUMPS FOR FISHING		PO	08.0.0
MOTHERSHIPS		HO	11.0.0
	Salted-fish motherships	HSS	11.1.0



Vessel Type		Standard Abbreviation	Code
	Factory motherships	HSF	11.2.0
	Tuna motherships	HST	11.3.0
	Motherships for two-boat purse seining seining	HSP	11.4.0
	Motherships nei	HOX	11.9.0
FISH CARRIERS		FO	12.0.0
HOSPITAL SHIPS		KO	13.0.0
PROTECTION AND SURVEY VESSELS		BO	14.0.0
FISHERY RESEARCH VESSELS		ZO	15.0.0
FISHERY TRAINING VESSELS		CO	16.0.0
NON-FISHING VESSELS nei		VOX	99.0.0

Source: CWP Handbook of Fishery Statistical Standards (p.206). FAO, Rome. 2004.



ANNEX 11

Standard for Landings Data: Fishing and Reefer Vessels

With regard to the fishing vessels flying their flag that directly harvested non-highly migratory fishery resources in the Convention Area, Members and CNCPs are to:

1. Collect data on an individual landings basis

2. Collect the following fields of data:

- a) Current vessel flag;
- b) Name of vessel;
- c) Registration number of vessel;
- d) International radio call sign (if any);
- e) Unique Vessel Identifier / IMO number;
- f) Date entered Convention Area;
- g) Date exited Convention Area;
- h) Landing date;
- i) Area catch taken (FAO area²⁵);
- j) Country of landing (standard ISO 3-alpha country codes);
- k) Port/ point of landing;
- l) Landed state²⁶ by species (FAO species code);
- m) Landed (live) weight by species;
- n) Containers –type by species (if applicable);
- o) Containers –number by species (if applicable);
- p) Containers –total content weight for all containers by species (if applicable);
- q) Port of previous landing;
- r) Date of arrival at previous port;
- s) Verification (if applicable):
 - i. Name of observer;
 - ii. Authority.

²⁵ FAO statistical area codes

²⁶ Landed state: This means the “state” in which the fish was landed. States may include “live” (fish has not been processed and no part of the fish has been removed), or other states, for example headed and gutted, filleted, etc.



With regard to reefer vessels flying their flag and transporting non-highly migratory fishery resources in the Convention Area, Members and CNCPs are to:

1. Collect data on an individual unloading (landing) basis
2. Collect the following fields of data:

VESSEL

- a) Current flag State;
- b) Name of vessel;
- c) Registration number of vessel;
- d) Radio call sign (If any);
- e) Unique Vessel Identifier / IMO number;
- f) Name of charter party or owner;

GENERAL INFORMATION ON THE UNLOADING (LANDING)

- a) Country of landing (using 3 alpha ISO codes);
- b) Port/point of landing;
- c) Landing date;
- d) Port of previous destination if in Convention Area;

LANDING DESCRIPTION SPLIT BY SPECIES, FOR EACH SPECIES

- a) Landed state²⁷;
- b) Containers – Type;
- c) Containers – Number;
- d) Containers – Total Content weight for all containers;

TRANSHIPMENT (IF WITHIN THE CONVENTION AREA).

- a) Name(s) of fishing vessel(s) (delivering);
- b) IMO number/Lloyd number (if allocated);
- c) Total net weight(s) of product transhipped by species by vessel(s);
- d) Date(s) of transhipment activities by vessel(s);

VERIFICATION (IF APPLICABLE)

- a) Name of observer;
- b) Port authority.

²⁷ Landed state: This means the “state” in which the fish was landed. States may include “live” (fish has not been processed and no part of the fish has been removed), or other states for example headed and gutted, filleted, etc.



ANNEX 12

Standard for Transhipment Data

(Taking into account Annex 8)

With regard to the fishing vessels flying their flag and fishing for non-highly migratory fishery resources in the Convention Area, Members and CNCPs are to:

1. Collect data on an individual transhipment basis
2. Collect the following fields of data:

DETAILS OF TRANSHIPPING VESSEL (DELIVERING)

- a) Name of vessel;
- b) Registration number;
- c) Radio call sign;
- d) Vessel flag State;
- e) Unique Vessel Identifier / IMO number;
- f) Master of transhipping vessel;

DETAILS OF REEFER VESSEL (RECEIVING)

- a) Name of vessel;
- b) Registration number;
- c) Radio call sign;
- d) Vessel flag State;
- e) Unique Vessel Identifier / IMO number;
- f) Master of reefer vessel;

TRANSHIPMENT OPERATION

- a) Date and time of commencement of transhipment (UTC);
- b) Date and time of completion of transhipment (UTC);
- c) Position (nearest 1/10th degree) at commencement of transhipment (decimal);
- d) Position (nearest 1/10th degree) at completion of transhipment (decimal);
- e) Description of product type by species (e.g. whole, frozen fish in 20 kg cartons);
- f) Number of cartons, net weight (kg) of product, by species;
- g) Total net weight of product transhipped (kg);
- h) Hold numbers in reefer vessel in which product is stowed;
- i) Destination port of reefer vessel;
- j) Arrival date estimate;
- k) Landing date estimate;

VERIFICATION (IF APPLICABLE)

- a) Name of observer;
- b) Authority.



ANNEX 13

Standard for Annual Catch Data

Part A – for all fisheries other than the jumbo flying squid fishery

Annual catch summaries should list all species/groups caught in the Convention Area during the Calendar year.

For a calendar year and for each distinct combination of Sea Type, FAO statistical area, and FAO species/group name (for that calendar year), and stock unit (as specified in a relevant CMM) provide the following data:

- a) Calendar year;
- b) Sea Type (either “HS” – High Seas - or “EEZ” – Exclusive Economic Zone);
- c) FAO Statistical Area (e.g. FAO87);
- d) Species/ group name (e.g. orange roughy);
- e) Species/ group code (FAO species code²⁸, e.g. ORY);
- f) Stock unit (as specified in relevant CMM);
- g) Fishing method (use appropriate ISSCFG code, Annex 9);
- h) Annual catch total – tonnes raised to “live” weight.

Part B – pertaining to the jumbo flying squid fishery

- a) Participant
- b) Calendar year;
- c) Month
- d) Sea Type (either “HS” – High Seas - or “EEZ” – Exclusive Economic Zone);
- e) FAO Statistical Area (e.g. FAO87);
- f) Fishing method (use appropriate ISSCFG code, Annex 9);
- g) Species/ group code (FAO species code²⁹, e.g. GIS);
- h) Catch Total (tonnes "live" weight- t)
- i) Number of vessels
- j) Number of days fished

²⁸ FAO species code means the 3-alpha code as described in www.fao.org/fi/statist/fisoft/asfis/asfis.asp

²⁹ FAO species code means the 3-alpha code as described in www.fao.org/fi/statist/fisoft/asfis/asfis.asp



ANNEX 14

Definition of “other species of concern”

As advised by the Scientific Committee and informed by Appendix 1 of the Convention on the Conservation of Migratory Species of Wild Animals (a.k.a. CMS or Bonn Convention), the International Union for Conservation of Nature and Natural Resources (IUCN) Red List of Threatened Species, Appendix 1 and 2 of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), “other species of concern” are defined, as of January 2017, as:

Scientific name	English name	3-alpha code ³⁰
<i>Carcharhinus longimanus</i>	Oceanic whitetip shark	OCS
<i>Carcharodon carcharias</i>	Great white shark	WSH
<i>Cetorhinus maximus</i>	Basking shark	BSK
<i>Lamna nasus</i>	Porbeagle shark	POR
<i>Manta</i> spp.	Manta rays	MNT
<i>Mobula</i> spp.	Mobula nei	RMV
<i>Rhincodon typus</i>	Whale shark	RHN

Other species may be added by agreement of the Members based on the advice of the Scientific Committee.

³⁰ 2016 ASFIS List of Species for Fishery Statistics Purposes

CMM 03-2021

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

(Supersedes CMM 03-2020)

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;

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;

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;

FURTHER RECOGNISING Article 4 of the Convention in which Contracting Parties acknowledge their duty to cooperate to ensure compatibility of (CMMs) 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;

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;

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;

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 High Seas (FAO, 2009; FAO Deep-sea Fisheries Guidelines) in order to sustainably manage fish stocks and protect VMEs;

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;



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 authorising 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;

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;

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 08-2019 (Gillnetting);

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;

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;

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 CMM 03a-2021 (Deepwater Species) 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.

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:
 - a) “Bottom trawl” which 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;
 - b) “Mid-water trawl” which 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 designed not to come into extended contact with the seabed;



- c) “Bottom line” which 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.
3. 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.
4. 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).
5. For the purposes of this CMM, the term “Management Area(s)” means those parts of the Evaluated Area specified in paragraph 13.
6. 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.

General Provisions

7. This CMM applies to the entire Convention Area.
8. This CMM together with CMM 03a-2021 (Deepwater Species) are adopted as cautious preliminary CMMs consistent with Article 22(1) of the Convention.
9. This CMM together with CMM 03a-2021 (Deepwater Species) 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.
10. 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 CMM 03a-2021 (Deepwater Species).
11. Only fishing vessels duly authorised pursuant to Article 25 of the Convention and in accordance with CMM 05-2021 (Record of Vessels) that are flagged to Members and CNCPs shall participate in bottom fishing in the Convention Area.
12. 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 21(d)(i); or
 - b) approval has been given by the Commission under paragraph 14 of CMM 13-2021 (Exploratory Fisheries).

Bottom Fishing Management Areas

13. 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



14. Bottom fishing in the Convention Area shall occur only in the three Management Areas established in paragraph 13 and in accordance with the terms of this CMM together with CMM 03a-2021 (Deepwater Species). CMM 13-2021 (Exploratory Fisheries) does not apply to bottom fishing in the three Management Areas established in paragraph 13.
15. Notwithstanding paragraphs 10 and 14, 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 proposed to be fished (unless the species has regularly been caught as part of an existing fishery);
- shall be handled in accordance with CMM 13-2021 (Exploratory Fisheries).
16. Unless a Member or CNCP is fishing in an exploratory fishery established pursuant to CMM 13-2021 (Exploratory Fisheries), 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.
17. 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.
18. No later than at its 2022 annual meeting, the Commission shall decide on the level of protection required to prevent significant adverse impacts on VMEs, taking into account the advice and recommendations of the Scientific Committee.

Marine Mammals, Seabirds, Reptiles and Other Species of Concern¹

19. Members and CNCPs shall require vessels flying their flag and undertaking bottom fishing to implement seabird mitigation measures in accordance with CMM 09-2017 (Seabirds), and shall report annually to the Commission on bycatch rates and total bycatch estimates in accordance with CMM 02-2021 (Data Standards) and the Guidelines for Annual National Reports to the SPRFMO Scientific Committee.
20. 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.

¹ "Other species of concern" means the list contained in Annex 14 of CMM 02-2021 (Data standards).



Assessment of Proposed Bottom Fishing

21. Subject to paragraph 15, all proposals to undertake bottom fishing in one of the Management Areas established in paragraph 13 shall be subject to an assessment process, based on the best available scientific information and taking into account the history of bottom fishing in the areas proposed and cumulative impacts of past and proposed fishing. The assessment will determine if such 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 not authorised to proceed. The assessments shall follow the following procedures:

- a) Each Member or CNCP proposing to participate in bottom fishing activities shall submit to the Scientific Committee a proposed assessment that meets the SPRFMO Bottom Fishery Impact Assessment Standard (SPRFMO BFIAS²) 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.
- b) The Scientific Committee shall undertake a review of the proposed assessment and provide advice to the Commission on:
 - i. 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/or VMEs and, if so,
 - ii. whether any proposed or additional mitigation measures would prevent such impacts.
- c) 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 21(a).
- d) On the basis of the Scientific Committee's review of the submitted assessment, taking into account any recommendations and advice of the Scientific Committee and in line with the precautionary approach, the Commission shall:
 - 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 10 of CMM 03a-2021 (Deepwater Species), bearing in mind the need to be precautionary

² As approved by the seventh session of the Scientific Committee 2019, available at: <https://www.sprfmo.int/assets/Fisheries/Science/SPRFMO-Bottom-Fishery-Impact-Assessment-Standard-2019.pdf>



22. Members and CNCPs whose bottom fishing proposal has been authorised by the Commission under paragraph 21(d)(i) shall ensure that a proposed assessment meeting the requirements contained in paragraph 21(a) is submitted to the Scientific Committee and Commission at least every 3 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.
23. The Secretariat shall make publicly available on the SPRFMO website all assessments submitted in accordance with paragraph 21(a) within three days of receipt and shall invite public comment for 30 days from the date of publication on such assessment. The Secretariat shall also make the Scientific Committee's review of such assessments public in accordance with its usual procedures,
24. The Scientific Committee shall review, and update if required, the SPRFMO BFIAS every 5 years, starting in 2025, to ensure that it reflects, as appropriate, best practice.

Encounters with Potential VMEs

25. For the purposes of this section of the CMM, the term "VME indicator taxa" means any benthic organism listed in Annex 5.
26. 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 27.
27. Where VME indicator taxa are encountered in any one tow at or above the threshold limits in Annex 6A, or three or more different VME indicator taxa at or above the weight limits in Annex 6B, Members and CNCPs shall require any vessel flying their flag to:
 - a) cease bottom fishing 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.
28. 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 fishing to exchange such data and information as may be relevant to the Scientific Committee's consideration of the encounter area.
29. On receipt of a notification under paragraph 27(b) the Secretariat shall:
 - a) record the location of the encounter area; and
 - b) within three (3) working days of receipt, notify all Members and CNCPs that bottom fishing is suspended in the encounter area in paragraph 27(a).
30. Members and CNCPs shall ensure that vessels flying their flags do not bottom fish in an encounter area notified under paragraph 29(b) unless and until such time as the Commission determines management actions under paragraph 33 that would permit the resumption of bottom fishing in the area.
31. 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 27, a comparison of the encounter with the existing model prediction, and suggested management actions to prevent significant adverse impacts on VMEs³.

³ Relevant outputs from habitat suitability models (e.g. shapefiles of predicted distributions) will be made available to Members.



32. The Scientific Committee, at its next annual meeting, shall review all encounters reported pursuant to paragraph 27(b), including considering the extent to which encounters are consistent or inconsistent with VME habitat suitability model predictions, and provide advice on management actions proposed by the relevant Member or CNCP under paragraph 31 and any other management actions the Scientific Committee considers appropriate. This review should include consideration of:
- a) the detailed analyses provided by a Member or CNCP pursuant to paragraph 31;
 - 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, including the bioregion; and
 - e) any other information the Scientific Committee considers relevant.
33. Taking into account the Scientific Committee's review of each encounter and its advice on management actions, at its next annual meeting, the Commission shall determine management actions for each encounter area, which may include: the closing of some areas to some or all bottom fishing gear, temporal restrictions, spatial restriction, reopening areas. Management actions determined by the Commission will apply as appropriate, unless otherwise determined, from the conclusion of the relevant Commission meeting.
34. Members and CNCPs shall submit to the Secretariat annual reports of all benthic bycatch data from vessels flying their flag, consistent with CMM 02-2021 (Data Standards), as part of their annual reports to the Scientific Committee, to enable an ongoing review of the effectiveness of the spatial management arrangements. By no later than its annual meeting in 2021, the Scientific Committee shall develop a review process to provide for ongoing monitoring and feedback.
35. At its annual meeting in 2021, the Scientific Committee shall review and provide advice on the effectiveness of the applied management measures, including:
- a) VME indicator thresholds;
 - b) the Management Areas;
 - c) the number of encounters;
 - d) the relationship between benthic bycatch from fishing vessels (including encounter events) and the habitat suitability models;
 - e) the relationship of benthic bycatch to estimates of abundance of VME taxa, where information is available;
 - f) the appropriateness of the management approach (e.g. scale);
 - g) additional relevant VME indicator taxa or species that have not been modelled, assessed or for which thresholds have not been established;
 - h) refinement of the encounter protocol;
 - i) measures to prevent the catch of and/or impacts on rare species; and
 - j) anything else the SC considers relevant
- to ensure the measure is achieving its objective and the objectives of the Convention.



36. The Scientific Committee shall review all available data and provide advice on the ongoing effectiveness of the management measures in this CMM to ensure the measure meets its objective and the objectives of the Convention and implements the relevant United Nations General Assembly Resolutions⁴.
37. 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 27.

Monitoring and Control of Bottom Fishing Activities

38. Members and CNCPs shall:

- a) ensure that vessels that fly their flag and participate in bottom fishing:
- are equipped and configured so that they can comply with all relevant SPRFMO CMMs;
 - act in accordance with CMM 06-2020 (Commission VMS), polling once every 30 minutes for the duration of the trip;⁵
 - report tow or set start and end position to 1/100th degree resolution - decimal format, notwithstanding the Annexes of CMM 02-2021 (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;
- 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 to the Secretariat in accordance with CMM 06-2020 (Commission VMS).

Observer Coverage

39. 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 02-2021 (Data Standards).
40. The Commission shall review the appropriateness of the minimum observer coverage levels specified in Annex 8 of this CMM at its annual meeting in 2021, taking into account the bottom fishing impact assessment and the SC advice and recommendations therein.
41. 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.

Electronic Monitoring

42. 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.

⁴ UNGA Resolutions 61/105, 64/72, 66/68, 71/123, 72/72 and any subsequent resolutions adopted by the United Nations General Assembly.

⁵ This obligation shall apply to all trips in which the vessel departs port with the intention of entering the Convention Area. 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.

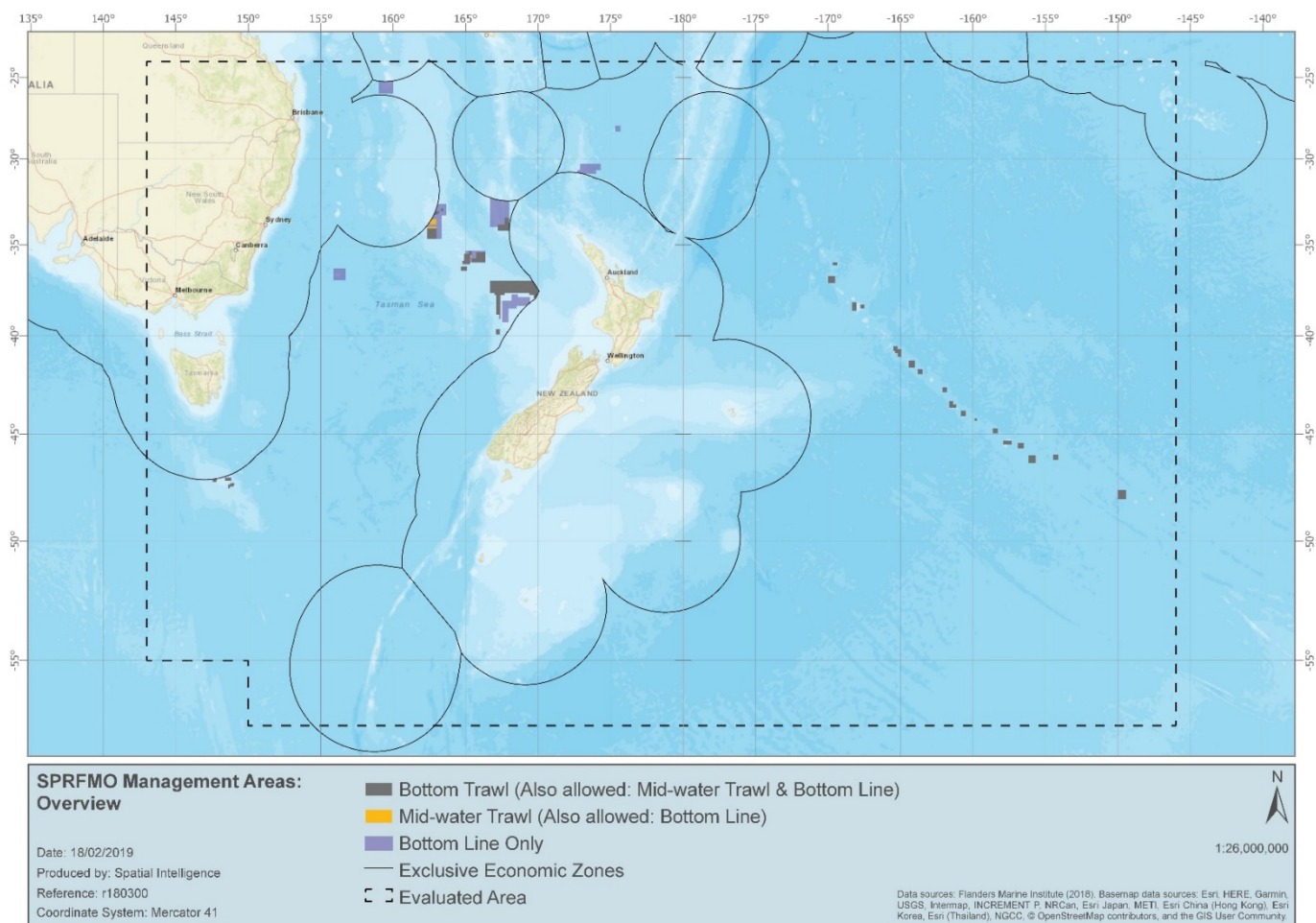


Review

43. The Commission shall review this CMM in 2022 and at least every 3 years thereafter, and in doing so, take appropriate action to meet the objectives of this CMM and the Convention, in view of the advice and recommendations of the Scientific Committee. Each such review shall consider the protocol for encounters with VME indicator taxa and the appropriateness of applied management measures. The Commission shall also review this CMM in 2023, taking into account relevant technical information from the United Nations bottom fishing review scheduled for 2022, and any related resolutions adopted by the United Nations General Assembly. The Commission shall make any modification to the CMM as is required to meet its objective

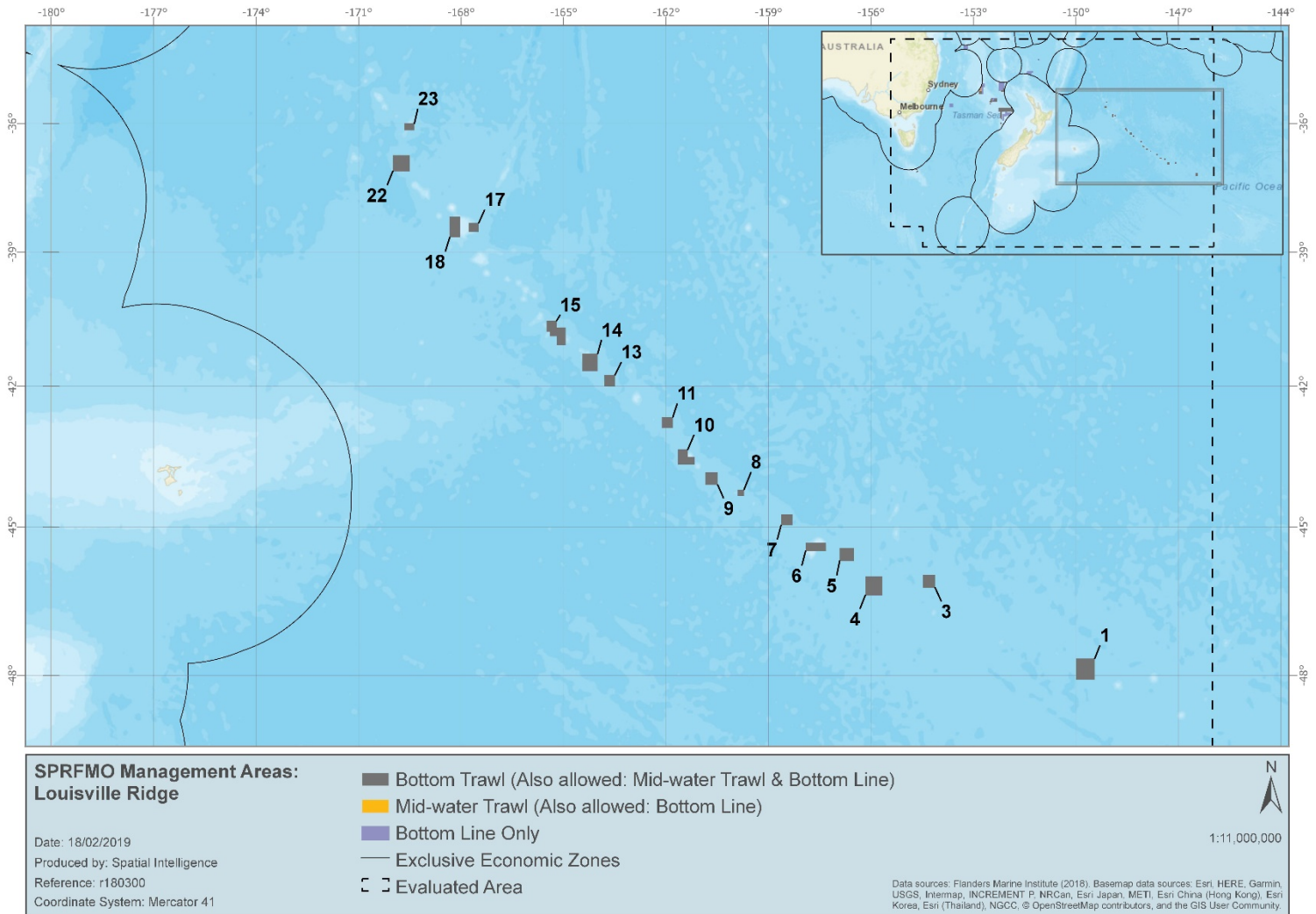


ANNEX 1: SPRFMO Bottom Fishing Evaluated Area and Bottom Fishing Management Areas



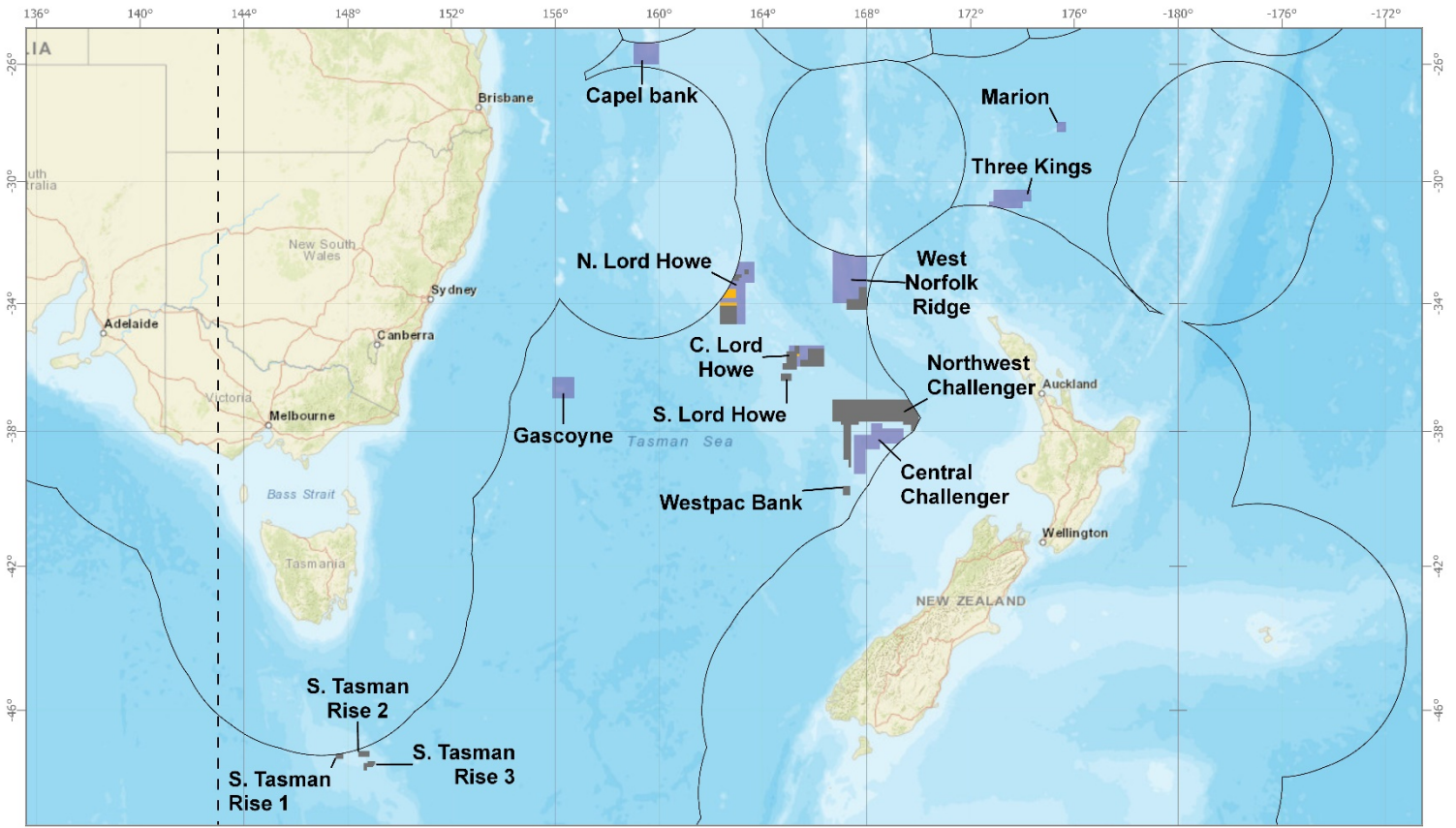


ANNEX 2: SPRFMO Bottom Fishing Management Areas for the Louisville Ridge





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



**SPRFMO Management Areas:
Tasman Sea**

Date: 18/02/2019
Produced by: Spatial Intelligence
Reference: r180300
Coordinate System: Mercator 41

- Bottom Trawl (Also allowed: Mid-water Trawl & Bottom Line)
- Mid-water Trawl (Also allowed: Bottom Line)
- Bottom Line Only
- Exclusive Economic Zones
- Evaluated Area



1:16,000,000

Data sources: Flanders Marine Institute (2018). Basemap data sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community.



ANNEX 4: Coordinates for Each Bottom Fishing Management Area⁶

a) Bottom Trawl Management Area coordinates

Block Name	Locality	Method	Latitude	Longitude	EEZ Direction
S. Lord Howe – West	C. Lord Howe	Bottom trawl	35°21.000'S	165°13.553'E	
S. Lord Howe – West	C. Lord Howe	Bottom trawl	35°21.000'S	165°24.000'E	
S. Lord Howe – West	C. Lord Howe	Bottom trawl	35°36.000'S	165°24.000'E	
S. Lord Howe – West	C. Lord Howe	Bottom trawl	35°36.000'S	165°18.000'E	
S. Lord Howe – West	C. Lord Howe	Bottom trawl	36°06.000'S	165°18.000'E	
S. Lord Howe – West	C. Lord Howe	Bottom trawl	36°06.000'S	164°46.000'E	
S. Lord Howe – West	C. Lord Howe	Bottom trawl	35°54.000'S	164°46.000'E	
S. Lord Howe – West	C. Lord Howe	Bottom trawl	35°54.000'S	164°54.000'E	
S. Lord Howe – West	C. Lord Howe	Bottom trawl	35°31.000'S	165°54.000'E	
S. Lord Howe – West	C. Lord Howe	Bottom trawl	35°31.000'S	165°13.550'E	
S. Lord Howe – East	C. Lord Howe	Bottom trawl	35°26.000'S	165°44.000'E	
S. Lord Howe - East	C. Lord Howe	Bottom trawl	35°26.000'S	166°21.915'E	
S. Lord Howe - East	C. Lord Howe	Bottom trawl	35°47.000'S	165°26.000'E	
S. Lord Howe - East	C. Lord Howe	Bottom trawl	35°47.000'S	165°44.000'E	
S. Lord Howe - East	C. Lord Howe	Bottom trawl	36°00.500'S	165°26.000'E	
S. Lord Howe - East	C. Lord Howe	Bottom trawl	36°00.500'S	166°21.915'E	
01	Louisville	Bottom trawl	47°40.000'S	149°27.000'W	
01	Louisville	Bottom trawl	47°40.000'S	150°00.000'W	
01	Louisville	Bottom trawl	48°05.000'S	149°27.000'W	
01	Louisville	Bottom trawl	48°05.000'S	150°00.000'W	
03	Louisville	Bottom trawl	45°59.000'S	154°07.224'W	
03	Louisville	Bottom trawl	45°59.000'S	154°28.653'W	
03	Louisville	Bottom trawl	46°15.000'S	154°07.224'W	
03	Louisville	Bottom trawl	46°15.000'S	154°28.653'W	

⁶ For the avoidance of doubt, no Management Area shall include any area under within the exclusive economic zone of a Member, CNCP or non-Member.



Block Name	Locality	Method	Latitude	Longitude	EEZ Direction
04	Louisville	Bottom trawl	46°01.000'S	155°40.000'W	
04	Louisville	Bottom trawl	46°01.000'S	156°10.000'W	
04	Louisville	Bottom trawl	46°24.000'S	155°40.000'W	
04	Louisville	Bottom trawl	46°24.000'S	156°10.000'W	
05	Louisville	Bottom trawl	45°26.000'S	156°30.000'W	
05	Louisville	Bottom trawl	45°26.000'S	156°55.000'W	
05	Louisville	Bottom trawl	45°42.000'S	156°30.000'W	
05	Louisville	Bottom trawl	45°42.000'S	156°55.000'W	
06	Louisville	Bottom trawl	45°19.500'S	157°19.000'W	
06	Louisville	Bottom trawl	45°19.500'S	157°55.000'W	
06	Louisville	Bottom trawl	45°30.000'S	157°19.000'W	
06	Louisville	Bottom trawl	45°30.000'S	157°55.000'W	
07	Louisville	Bottom trawl	44°43.950'S	158°18.000'W	
07	Louisville	Bottom trawl	44°43.950'S	158°38.000'W	
07	Louisville	Bottom trawl	44°57.950'S	158°18.000'W	
07	Louisville	Bottom trawl	44°57.950'S	158°38.000'W	
08	Louisville	Bottom trawl	44°13.000'S	159°43.000'W	
08	Louisville	Bottom trawl	44°13.000'S	159°54.000'W	
08	Louisville	Bottom trawl	44°21.000'S	159°43.000'W	
08	Louisville	Bottom trawl	44°21.000'S	159°54.000'W	
09	Louisville	Bottom trawl	43°51.183'S	160°29.235'W	
09	Louisville	Bottom trawl	43°51.183'S	160°50.820'W	
09	Louisville	Bottom trawl	44°07.000'S	160°29.235'W	
09	Louisville	Bottom trawl	44°07.000'S	160°50.820'W	
10	Louisville	Bottom trawl	43°22.000'S	161°21.770'W	
10	Louisville	Bottom trawl	43°22.000'S	161°39.000'W	
10	Louisville	Bottom trawl	43°31.370'S	161°10.170'W	
10	Louisville	Bottom trawl	43°31.370'S	161°21.770'W	
10	Louisville	Bottom trawl	43°41.440'S	161°10.170'W	



Block Name	Locality	Method	Latitude	Longitude	EEZ Direction
10	Louisville	Bottom trawl	43°41.440'S	161°39.000'W	
11	Louisville	Bottom trawl	42°40.000'S	161°48.000'W	
11	Louisville	Bottom trawl	42°40.000'S	162°07.000'W	
11	Louisville	Bottom trawl	42°54.500'S	161°48.000'W	
11	Louisville	Bottom trawl	42°54.500'S	162°07.000'W	
13	Louisville	Bottom trawl	41°45.000'S	163°29.500'W	
13	Louisville	Bottom trawl	41°45.000'S	163°49.000'W	
13	Louisville	Bottom trawl	42°00.000'S	163°29.500'W	
13	Louisville	Bottom trawl	42°00.000'S	163°49.000'W	
14	Louisville	Bottom trawl	41°17.000'S	164°00.000'W	
14	Louisville	Bottom trawl	41°17.000'S	164°27.000'W	
14	Louisville	Bottom trawl	41°40.000'S	164°00.000'W	
14	Louisville	Bottom trawl	41°40.000'S	164°27.000'W	
15	Louisville	Bottom trawl	40°32.897'S	165°12.000'W	
15	Louisville	Bottom trawl	40°32.897'S	165°30.000'W	
15	Louisville	Bottom trawl	40°42.000'S	164°56.400'W	
15	Louisville	Bottom trawl	40°42.000'S	165°12.000'W	
15	Louisville	Bottom trawl	40°48.000'S	165°24.000'W	
15	Louisville	Bottom trawl	40°48.000'S	165°30.000'W	
15	Louisville	Bottom trawl	40°54.000'S	165°12.000'W	
15	Louisville	Bottom trawl	40°54.000'S	165°24.000'W	
15	Louisville	Bottom trawl	41°06.000'S	164°56.400'W	
15	Louisville	Bottom trawl	41°06.000'S	165°12.000'W	
17	Louisville	Bottom trawl	38°20.013'S	167°29.000'W	
17	Louisville	Bottom trawl	38°20.013'S	167°47.067'W	
17	Louisville	Bottom trawl	38°32.000'S	167°29.000'W	
17	Louisville	Bottom trawl	38°32.000'S	167°47.067'W	
18	Louisville	Bottom trawl	38°11.013'S	168°01.785'W	
18	Louisville	Bottom trawl	38°11.013'S	168°20.000'W	



Block Name	Locality	Method	Latitude	Longitude	EEZ Direction
18	Louisville	Bottom trawl	38°40.000'S	168°01.785'W	
18	Louisville	Bottom trawl	38°40.000'S	168°20.000'W	
22	Louisville	Bottom trawl	36°45.000'S	169°30.000'W	
22	Louisville	Bottom trawl	36°45.000'S	170°00.000'W	
22	Louisville	Bottom trawl	37°08.000'S	169°30.000'W	
22	Louisville	Bottom trawl	37°08.000'S	170°00.000'W	
23	Louisville	Bottom trawl	36°00.000'S	169°22.000'W	
23	Louisville	Bottom trawl	36°00.000'S	169°40.000'W	
23	Louisville	Bottom trawl	36°10.000'S	169°22.000'W	
23	Louisville	Bottom trawl	36°10.000'S	169°40.000'W	
N. Lord Howe - South	N. Lord Howe	Bottom trawl	34°04.035'S	162°20.000'E	
N. Lord Howe - South	N. Lord Howe	Bottom trawl	34°04.035'S	163°00.000'E	
N. Lord Howe - South	N. Lord Howe	Bottom trawl	34°40.000'S	162°20.000'E	
N. Lord Howe - South	N. Lord Howe	Bottom trawl	34°40.000'S	163°00.000'E	
N. Lord Howe - East	N. Lord Howe	Bottom trawl	32°54.650'S	163°16.615'E	
N. Lord Howe - East	N. Lord Howe	Bottom trawl	32°54.650'S	163°26.380'E	
N. Lord Howe - East	N. Lord Howe	Bottom trawl	33°04.400'S	163°16.615'E	
N. Lord Howe - East	N. Lord Howe	Bottom trawl	33°04.400'S	163°26.380'E	
N. Lord Howe - West	N. Lord Howe	Bottom trawl	33°16.400'S	162°52.540'E	
N. Lord Howe - West	N. Lord Howe	Bottom trawl	33°09.296'S	162°52.540'E	North-east along the Australian EEZ
N. Lord Howe - West	N. Lord Howe	Bottom trawl	33°04.400'S	162°54.941'E	
N. Lord Howe - West	N. Lord Howe	Bottom trawl	33°04.400'S	163°10.540'E	
N. Lord Howe - West	N. Lord Howe	Bottom trawl	33°10.400'S	163°10.540'E	
N. Lord Howe - West	N. Lord Howe	Bottom trawl	33°10.400'S	163°04.540'E	
N. Lord Howe - West	N. Lord Howe	Bottom trawl	33°16.400'S	163°04.540'E	
Northwest Challenger	Northwest Challenger	Bottom trawl	38°00.000'S	169°47.848'E	
Northwest Challenger	Northwest Challenger	Bottom trawl	38°00.000'S	169°42.000'E	



Block Name	Locality	Method	Latitude	Longitude	EEZ Direction
Northwest Challenger	Northwest Challenger	Bottom trawl	37°48.000'S	169°42.000'E	
Northwest Challenger	Northwest Challenger	Bottom trawl	37°48.000'S	169°24.000'E	
Northwest Challenger	Northwest Challenger	Bottom trawl	37°42.000'S	169°24.000'E	
Northwest Challenger	Northwest Challenger	Bottom trawl	37°42.000'S	167°42.000'E	
Northwest Challenger	Northwest Challenger	Bottom trawl	37°48.000'S	167°42.000'E	
Northwest Challenger	Northwest Challenger	Bottom trawl	37°48.000'S	167°24.000'E	
Northwest Challenger	Northwest Challenger	Bottom trawl	39°06.000'S	167°24.000'E	
Northwest Challenger	Northwest Challenger	Bottom trawl	39°06.000'S	167°18.000'E	
Northwest Challenger	Northwest Challenger	Bottom trawl	38°52.000'S	167°18.000'E	
Northwest Challenger	Northwest Challenger	Bottom trawl	38°52.000'S	167°06.000'E	
Northwest Challenger	Northwest Challenger	Bottom trawl	37°48.000'S	167°06.000'E	
Northwest Challenger	Northwest Challenger	Bottom trawl	37°48.000'S	167°00.000'E	
Northwest Challenger	Northwest Challenger	Bottom trawl	37°42.000'S	167°00.000'E	
Northwest Challenger	Northwest Challenger	Bottom trawl	37°42.000'S	166°40.000'E	
Northwest Challenger	Northwest Challenger	Bottom trawl	37°01.333'S	166°40.000'E	
Northwest Challenger	Northwest Challenger	Bottom trawl	37°01.333'S	169°36.706'E	South-east along the New Zealand EEZ
Northwest Challenger	Northwest Challenger	Bottom trawl	37°29.902'S	170°00.000'E	Due south to a point on the New Zealand EEZ
Northwest Challenger	Northwest Challenger	Bottom trawl	37°41.589'S	170°00.000'E	South-west along the New Zealand EEZ
Box 1	S. Tasman Rise 1	Bottom trawl	47°08.280'S	147°50.200'E	Start on the Australian EEZ
Box 1	S. Tasman Rise 1	Bottom trawl	47°17.370'S	147°50.200'E	
Box 1	S. Tasman Rise 1	Bottom trawl	47°17.370'S	147°32.300'E	
Box 1	S. Tasman Rise 1	Bottom trawl	47°10.197'S	147°32.300'E	East along the Australian EEZ to the start point
Box 2	S. Tasman Rise 2	Bottom trawl	47°05.160'S	148°24.165'E	
Box 2	S. Tasman Rise 2	Bottom trawl	47°05.160'S	148°50.670'E	
Box 2	S. Tasman Rise 2	Bottom trawl	47°13.780'S	148°24.165'E	
Box 2	S. Tasman Rise 2	Bottom trawl	47°13.780'S	148°50.670'E	
Box 3	S. Tasman Rise 3	Bottom trawl	47°21.000'S	148°45.610'E	



Block Name	Locality	Method	Latitude	Longitude	EEZ Direction
Box 3	S. Tasman Rise 3	Bottom trawl	47°21.000'S	149°03.200'E	
Box 3	S. Tasman Rise 3	Bottom trawl	47°24.015'S	148°37.235'E	
Box 3	S. Tasman Rise 3	Bottom trawl	47°24.015'S	148°45.610'E	
Box 3	S. Tasman Rise 3	Bottom trawl	47°24.800'S	149°03.200'E	
Box 3	S. Tasman Rise 3	Bottom trawl	47°30.320'S	148°44.390'E	
Box 3	S. Tasman Rise 3	Bottom trawl	47°30.320'S	148°57.650'E	
Box 3	S. Tasman Rise 3	Bottom trawl	47°35.205'S	148°37.235'E	
Box 3	S. Tasman Rise 3	Bottom trawl	47°35.205'S	148°44.390'E	
S. Lord Howe - West	S. Lord Howe	Bottom trawl	35°31.000'S	164°54.000'E	
S. Lord Howe - South	S. Lord Howe	Bottom trawl	36°13.460'S	164°40.830'E	
S. Lord Howe - South	S. Lord Howe	Bottom trawl	36°13.460'S	165°06.050'E	
S. Lord Howe - South	S. Lord Howe	Bottom trawl	36°26.800'S	164°40.830'E	
S. Lord Howe - South	S. Lord Howe	Bottom trawl	36°26.800'S	165°06.050'E	
Wanganella	West Norfolk Ridge	Bottom trawl	33°28.000'S	167°42.000'E	
Wanganella	West Norfolk Ridge	Bottom trawl	33°28.000'S	168°00.000'E	
Wanganella	West Norfolk Ridge	Bottom trawl	33°52.000'S	167°13.000'E	
Wanganella	West Norfolk Ridge	Bottom trawl	33°52.000'S	167°42.000'E	
Wanganella	West Norfolk Ridge	Bottom trawl	34°12.000'S	167°13.000'E	
Wanganella	West Norfolk Ridge	Bottom trawl	34°12.000'S	168°00.000'E	
Westpac Bank	Westpac Bank	Bottom trawl	39°39.000'S	167°05.000'E	
Westpac Bank	Westpac Bank	Bottom trawl	39°39.000'S	167°21.090'E	
Westpac Bank	Westpac Bank	Bottom trawl	39°55.000'S	167°05.000'E	
Westpac Bank	Westpac Bank	Bottom trawl	39°55.000'S	167°21.090'E	



b) Mid-water Trawl Management Area coordinates

Block name	Locality	Method	Latitude	Longitude	EEZ Direction
S. Lord Howe - East	C. Lord Howe	Mid-water trawl	35°26.000'S	165°44.000'E	
S. Lord Howe - East	C. Lord Howe	Mid-water trawl	35°26.000'S	166°21.915'E	
S. Lord Howe - East	C. Lord Howe	Mid-water trawl	35°47.000'S	165°26.000'E	
S. Lord Howe - East	C. Lord Howe	Mid-water trawl	35°47.000'S	165°44.000'E	
S. Lord Howe - East	C. Lord Howe	Mid-water trawl	36°00.500'S	165°26.000'E	
S. Lord Howe - East	C. Lord Howe	Mid-water trawl	36°00.500'S	166°21.915'E	
S. Lord Howe - West	C. Lord Howe	Mid-water trawl	35°21.000'S	165°13.550'E	
S. Lord Howe - West	C. Lord Howe	Mid-water trawl	35°21.000'S	165°24.000'E	
S. Lord Howe - West	C. Lord Howe	Mid-water trawl	35°31.000'S	164°54.000'E	
S. Lord Howe - West	C. Lord Howe	Mid-water trawl	35°31.000'S	165°13.550'E	
S. Lord Howe - West	C. Lord Howe	Mid-water trawl	35°40.383'S	165°18.000'E	
S. Lord Howe - West	C. Lord Howe	Mid-water trawl	35°40.383'S	165°24.000'E	
S. Lord Howe - West	C. Lord Howe	Mid-water trawl	35°54.000'S	164°46.000'E	
S. Lord Howe - West	C. Lord Howe	Mid-water trawl	35°54.000'S	164°54.000'E	
S. Lord Howe - West	C. Lord Howe	Mid-water trawl	36°06.000'S	164°46.000'E	
S. Lord Howe - West	C. Lord Howe	Mid-water trawl	36°06.000'S	165°18.000'E	
1	Louisville Ridge	Mid-water trawl	47°40.000'S	149°27.000'W	
1	Louisville Ridge	Mid-water trawl	47°40.000'S	150°00.000'W	



Block name	Locality	Method	Latitude	Longitude	EEZ Direction
1	Louisville Ridge	Mid-water trawl	48°05.000'S	149°27.000'W	
1	Louisville Ridge	Mid-water trawl	48°05.000'S	150°00.000'W	
3	Louisville Ridge	Mid-water trawl	45°59.000'S	154°07.224'W	
3	Louisville Ridge	Mid-water trawl	45°59.000'S	154°28.653'W	
3	Louisville Ridge	Mid-water trawl	46°15.000'S	154°07.224'W	
3	Louisville Ridge	Mid-water trawl	46°15.000'S	154°28.653'W	
4	Louisville Ridge	Mid-water trawl	46°01.000'S	155°40.000'W	
4	Louisville Ridge	Mid-water trawl	46°01.000'S	156°10.000'W	
4	Louisville Ridge	Mid-water trawl	46°24.000'S	155°40.000'W	
4	Louisville Ridge	Mid-water trawl	46°24.000'S	156°10.000'W	
5	Louisville Ridge	Mid-water trawl	45°26.000'S	156°30.000'W	
5	Louisville Ridge	Mid-water trawl	45°26.000'S	156°55.000'W	
5	Louisville Ridge	Mid-water trawl	45°42.000'S	156°30.000'W	
5	Louisville Ridge	Mid-water trawl	45°42.000'S	156°55.000'W	
6	Louisville Ridge	Mid-water trawl	45°19.500'S	157°19.000'W	
6	Louisville Ridge	Mid-water trawl	45°19.500'S	157°55.000'W	
6	Louisville Ridge	Mid-water trawl	45°30.000'S	157°19.000'W	
6	Louisville Ridge	Mid-water trawl	45°30.000'S	157°55.000'W	
7	Louisville Ridge	Mid-water trawl	44°43.950'S	158°18.000'W	



Block name	Locality	Method	Latitude	Longitude	EEZ Direction
7	Louisville Ridge	Mid-water trawl	44°43.950'S	158°38.000'W	
7	Louisville Ridge	Mid-water trawl	44°57.950'S	158°18.000'W	
7	Louisville Ridge	Mid-water trawl	44°57.950'S	158°38.000'W	
8	Louisville Ridge	Mid-water trawl	44°13.000'S	159°43.000'W	
8	Louisville Ridge	Mid-water trawl	44°13.000'S	159°54.000'W	
8	Louisville Ridge	Mid-water trawl	44°21.000'S	159°43.000'W	
8	Louisville Ridge	Mid-water trawl	44°21.000'S	159°54.000'W	
9	Louisville Ridge	Mid-water trawl	43°51.183'S	160°29.235'W	
9	Louisville Ridge	Mid-water trawl	43°51.183'S	160°50.820'W	
9	Louisville Ridge	Mid-water trawl	44°07.000'S	160°29.235'W	
9	Louisville Ridge	Mid-water trawl	44°07.000'S	160°50.820'W	
10	Louisville Ridge	Mid-water trawl	43°22.000'S	161°21.770'W	
10	Louisville Ridge	Mid-water trawl	43°22.000'S	161°39.000'W	
10	Louisville Ridge	Mid-water trawl	43°31.370'S	161°10.170'W	
10	Louisville Ridge	Mid-water trawl	43°31.370'S	161°21.770'W	
10	Louisville Ridge	Mid-water trawl	43°41.440'S	161°10.170'W	
10	Louisville Ridge	Mid-water trawl	43°41.440'S	161°39.000'W	
11	Louisville Ridge	Mid-water trawl	42°40.000'S	161°48.000'W	
11	Louisville Ridge	Mid-water trawl	42°40.000'S	162°07.000'W	



Block name	Locality	Method	Latitude	Longitude	EEZ Direction
11	Louisville Ridge	Mid-water trawl	42°54.500'S	161°48.000'W	
11	Louisville Ridge	Mid-water trawl	42°54.500'S	162°07.000'W	
13	Louisville Ridge	Mid-water trawl	41°45.000'S	163°29.500'W	
13	Louisville Ridge	Mid-water trawl	41°45.000'S	163°49.000'W	
13	Louisville Ridge	Mid-water trawl	42°00.000'S	163°29.500'W	
13	Louisville Ridge	Mid-water trawl	42°00.000'S	163°49.000'W	
14	Louisville Ridge	Mid-water trawl	41°17.000'S	164°00.000'W	
14	Louisville Ridge	Mid-water trawl	41°17.000'S	164°27.000'W	
14	Louisville Ridge	Mid-water trawl	41°40.000'S	164°00.000'W	
14	Louisville Ridge	Mid-water trawl	41°40.000'S	164°27.000'W	
15	Louisville Ridge	Mid-water trawl	40°32.897'S	165°12.000'W	
15	Louisville Ridge	Mid-water trawl	40°32.897'S	165°30.000'W	
15	Louisville Ridge	Mid-water trawl	40°42.000'S	164°56.400'W	
15	Louisville Ridge	Mid-water trawl	40°42.000'S	165°12.000'W	
15	Louisville Ridge	Mid-water trawl	40°48.000'S	165°24.000'W	
15	Louisville Ridge	Mid-water trawl	40°48.000'S	165°30.000'W	
15	Louisville Ridge	Mid-water trawl	40°54.000'S	165°12.000'W	
15	Louisville Ridge	Mid-water trawl	40°54.000'S	165°24.000'W	
15	Louisville Ridge	Mid-water trawl	41°06.000'S	164°56.400'W	



Block name	Locality	Method	Latitude	Longitude	EEZ Direction
15	Louisville Ridge	Mid-water trawl	41°06.000'S	165°12.000'W	
17	Louisville Ridge	Mid-water trawl	38°20.013'S	167°29.000'W	
17	Louisville Ridge	Mid-water trawl	38°20.013'S	167°47.067'W	
17	Louisville Ridge	Mid-water trawl	38°32.000'S	167°29.000'W	
17	Louisville Ridge	Mid-water trawl	38°32.000'S	167°47.067'W	
18	Louisville Ridge	Mid-water trawl	38°11.013'S	168°01.785'W	
18	Louisville Ridge	Mid-water trawl	38°11.013'S	168°20.000'W	
18	Louisville Ridge	Mid-water trawl	38°40.000'S	168°01.785'W	
18	Louisville Ridge	Mid-water trawl	38°40.000'S	168°20.000'W	
22	Louisville Ridge	Mid-water trawl	36°45.000'S	169°30.000'W	
22	Louisville Ridge	Mid-water trawl	36°45.000'S	170°00.000'W	
22	Louisville Ridge	Mid-water trawl	37°08.000'S	169°30.000'W	
22	Louisville Ridge	Mid-water trawl	37°08.000'S	170°00.000'W	
23	Louisville Ridge	Mid-water trawl	36°00.000'S	169°22.000'W	
23	Louisville Ridge	Mid-water trawl	36°00.000'S	169°40.000'W	
23	Louisville Ridge	Mid-water trawl	36°10.000'S	169°22.000'W	
23	Louisville Ridge	Mid-water trawl	36°10.000'S	169°40.000'W	
N. Lord Howe - Central	N. Lord Howe	Mid-water trawl	33°49.630'S	162°25.670'E	
N. Lord Howe - Central	N. Lord Howe	Mid-water trawl	33°48.622'S	162°25.670'E	North-east along the Australian EEZ



Block name	Locality	Method	Latitude	Longitude	EEZ Direction
N. Lord Howe - Central	N. Lord Howe	Mid-water trawl	33°32.530'S	162°38.450'E	
N. Lord Howe - Central	N. Lord Howe	Mid-water trawl	33°32.530'S	162°57.770'E	
N. Lord Howe - Central	N. Lord Howe	Mid-water trawl	33°49.630'S	162°57.770'E	
N. Lord Howe - East	N. Lord Howe	Mid-water trawl	32°54.650'S	163°16.615'E	
N. Lord Howe - East	N. Lord Howe	Mid-water trawl	32°54.650'S	163°26.380'E	
N. Lord Howe - East	N. Lord Howe	Mid-water trawl	33°04.400'S	163°16.615'E	
N. Lord Howe - East	N. Lord Howe	Mid-water trawl	33°04.400'S	163°26.380'E	
N. Lord Howe - South	N. Lord Howe	Mid-water trawl	33°58.670'S	162°20.000'E	
N. Lord Howe - South	N. Lord Howe	Mid-water trawl	33°58.670'S	163°00.000'E	
N. Lord Howe - South	N. Lord Howe	Mid-water trawl	34°40.000'S	162°20.000'E	
N. Lord Howe - South	N. Lord Howe	Mid-water trawl	34°40.000'S	163°00.000'E	
N. Lord Howe - West	N. Lord Howe	Mid-water trawl	33°16.400'S	162°52.540'E	
N. Lord Howe - West	N. Lord Howe	Mid-water trawl	33°09.296'S	162°52.540'E	North-east along the Australian EEZ
N. Lord Howe - West	N. Lord Howe	Mid-water trawl	33°04.400'S	162°54.941'E	
N. Lord Howe - West	N. Lord Howe	Mid-water trawl	33°04.400'S	163°10.540'E	
N. Lord Howe - West	N. Lord Howe	Mid-water trawl	33°10.400'S	163°04.540'E	
N. Lord Howe - West	N. Lord Howe	Mid-water trawl	33°10.400'S	163°10.540'E	
N. Lord Howe - West	N. Lord Howe	Mid-water trawl	33°16.400'S	163°04.540'E	
Northwest Challenger	Northwest Challenger	Mid-water trawl	37°01.333'S	166°40.000'E	



Block name	Locality	Method	Latitude	Longitude	EEZ Direction
Northwest Challenger	Northwest Challenger	Mid-water trawl	37°01.333'S	169°36.706'E	South-east along the New Zealand EEZ
Northwest Challenger	Northwest Challenger	Mid-water trawl	37°29.902'S	170°00.000'E	Due south to a point on the New Zealand EEZ
Northwest Challenger	Northwest Challenger	Mid-water trawl	37°41.589'S	170°00.000'E	South-west along the New Zealand EEZ
Northwest Challenger	Northwest Challenger	Mid-water trawl	38°00.000'S	169°47.848'E	
Northwest Challenger	Northwest Challenger	Mid-water trawl	38°00.000'S	169°42.000'E	
Northwest Challenger	Northwest Challenger	Mid-water trawl	37°48.000'S	169°42.000'E	
Northwest Challenger	Northwest Challenger	Mid-water trawl	37°48.000'S	169°24.000'E	
Northwest Challenger	Northwest Challenger	Mid-water trawl	37°42.000'S	169°24.000'E	
Northwest Challenger	Northwest Challenger	Mid-water trawl	37°42.000'S	167°42.004'E	
Northwest Challenger	Northwest Challenger	Mid-water trawl	37°48.000'S	167°42.000'E	
Northwest Challenger	Northwest Challenger	Mid-water trawl	37°48.000'S	167°24.000'E	
Northwest Challenger	Northwest Challenger	Mid-water trawl	39°06.000'S	167°24.000'E	
Northwest Challenger	Northwest Challenger	Mid-water trawl	39°06.000'S	167°18.000'E	
Northwest Challenger	Northwest Challenger	Mid-water trawl	38°52.000'S	167°18.000'E	
Northwest Challenger	Northwest Challenger	Mid-water trawl	38°52.000'S	167°06.000'E	
Northwest Challenger	Northwest Challenger	Mid-water trawl	37°48.000'S	167°06.000'E	
Northwest Challenger	Northwest Challenger	Mid-water trawl	37°48.000'S	167°00.000'E	
Northwest Challenger	Northwest Challenger	Mid-water trawl	37°42.000'S	167°00.000'E	
Northwest Challenger	Northwest Challenger	Mid-water trawl	37°42.000'S	166°40.000'E	



Block name	Locality	Method	Latitude	Longitude	EEZ Direction
S. Lord Howe - South	S. Lord Howe	Mid-water trawl	36°13.460'S	164°40.830'E	
S. Lord Howe - South	S. Lord Howe	Mid-water trawl	36°13.460'S	165°06.050'E	
S. Lord Howe - South	S. Lord Howe	Mid-water trawl	36°26.800'S	164°40.830'E	
S. Lord Howe - South	S. Lord Howe	Mid-water trawl	36°26.800'S	165°06.050'E	
Box 1	S. Tasman Rise 1	Mid-water trawl	47°08.280'S	147°50.200'E	Start on the Australian EEZ
Box 1	S. Tasman Rise 1	Mid-water trawl	47°17.370'S	147°50.200'E	
Box 1	S. Tasman Rise 1	Mid-water trawl	47°17.370'S	147°32.300'E	
Box 1	S. Tasman Rise 1	Mid-water trawl	47°10.197'S	147°32.300'E	East along the Australian EEZ to the start point
Box 2	S. Tasman Rise 2	Mid-water trawl	47°05.160'S	148°24.165'E	
Box 2	S. Tasman Rise 2	Mid-water trawl	47°05.160'S	148°50.670'E	
Box 2	S. Tasman Rise 2	Mid-water trawl	47°13.780'S	148°24.165'E	
Box 2	S. Tasman Rise 2	Mid-water trawl	47°13.780'S	148°50.670'E	
Box 3	S. Tasman Rise 3	Mid-water trawl	47°21.000'S	148°45.610'E	
Box 3	S. Tasman Rise 3	Mid-water trawl	47°21.000'S	149°03.200'E	
Box 3	S. Tasman Rise 3	Mid-water trawl	47°24.015'S	148°37.235'E	
Box 3	S. Tasman Rise 3	Mid-water trawl	47°24.015'S	148°45.610'E	
Box 3	S. Tasman Rise 3	Mid-water trawl	47°24.800'S	149°03.200'E	
Box 3	S. Tasman Rise 3	Mid-water trawl	47°30.320'S	148°44.390'E	
Box 3	S. Tasman Rise 3	Mid-water trawl	47°30.320'S	148°57.650'E	



Block name	Locality	Method	Latitude	Longitude	EEZ Direction
Box 3	S. Tasman Rise 3	Mid-water trawl	47°35.205'S	148°37.235'E	
Box 3	S. Tasman Rise 3	Mid-water trawl	47°35.205'S	148°44.390'E	
Wanganella	West Ridge Norfolk	Mid-water trawl	33°28.000'S	167°42.000'E	
Wanganella	West Ridge Norfolk	Mid-water trawl	33°28.000'S	168°00.000'E	
Wanganella	West Ridge Norfolk	Mid-water trawl	33°52.000'S	167°13.000'E	
Wanganella	West Ridge Norfolk	Mid-water trawl	33°52.000'S	167°42.000'E	
Wanganella	West Ridge Norfolk	Mid-water trawl	34°12.000'S	167°13.000'E	
Wanganella	West Ridge Norfolk	Mid-water trawl	34°12.000'S	168°00.000'E	
Westpac Bank	Westpac Bank	Mid-water trawl	39°39.000'S	167°05.000'E	
Westpac Bank	Westpac Bank	Mid-water trawl	39°39.000'S	167°21.090'E	
Westpac Bank	Westpac Bank	Mid-water trawl	39°55.000'S	167°05.000'E	
Westpac Bank	Westpac Bank	Mid-water trawl	39°55.000'S	167°21.090'E	



c) Bottom Line Management Area coordinates

Block name	Locality	Method	Latitude	Longitude	EEZ Direction
S. Lord Howe	C. Lord Howe	Bottom Line	35°20.000'S	165°00.000'E	
S. Lord Howe	C. Lord Howe	Bottom Line	35°20.000'S	166°21.915'E	
S. Lord Howe	C. Lord Howe	Bottom Line	35°31.000'S	164°54.000'E	
S. Lord Howe	C. Lord Howe	Bottom Line	35°31.000'S	165°00.000'E	
S. Lord Howe	C. Lord Howe	Bottom Line	35°54.000'S	164°46.000'E	
S. Lord Howe	C. Lord Howe	Bottom Line	35°54.000'S	164°54.000'E	
S. Lord Howe	C. Lord Howe	Bottom Line	36°00.500'S	165°18.000'E	
S. Lord Howe	C. Lord Howe	Bottom Line	36°00.500'S	166°21.915'E	
S. Lord Howe	C. Lord Howe	Bottom Line	36°06.000'S	164°46.000'E	
S. Lord Howe	C. Lord Howe	Bottom Line	36°06.000'S	165°18.000'E	
North Lord Howe Rise	Capel bank	Bottom Line	25°14.950'S	159°00.285'E	
North Lord Howe Rise	Capel bank	Bottom Line	25°14.950'S	160°00.000'E	
North Lord Howe Rise	Capel bank	Bottom Line	25°59.640'S	159°00.285'E	
North Lord Howe Rise	Capel bank	Bottom Line	25°59.640'S	160°00.000'E	
Central Challenger	Central Challenger	Bottom Line	37°45.615'S	168°35.830'E	
Central Challenger	Central Challenger	Bottom Line	37°55.230'S	168°35.830'E	
Central Challenger	Central Challenger	Bottom Line	37°55.230'S	169°25.400'E	
Central Challenger	Central Challenger	Bottom Line	38°13.830'S	169°25.400'E	South-west along the New Zealand EEZ
Central Challenger	Central Challenger	Bottom Line	38°23.165'S	169°11.967'E	
Central Challenger	Central Challenger	Bottom Line	38°23.165'S	168°30.780'E	
Central Challenger	Central Challenger	Bottom Line	38°32.750'S	168°30.780'E	
Central Challenger	Central Challenger	Bottom Line	38°32.750'S	167°57.950'E	



Block name	Locality	Method	Latitude	Longitude	EEZ Direction
Central Challenger	Central Challenger	Bottom Line	39°17.180'S	167°57.950'E	
Central Challenger	Central Challenger	Bottom Line	39°17.180'S	167°30.500'E	
Central Challenger	Central Challenger	Bottom Line	38°06.430'S	167°30.500'E	
Central Challenger	Central Challenger	Bottom Line	38°06.430'S	168°09.833'E	
Central Challenger	Central Challenger	Bottom Line	37°45.615'S	168°09.833'E	
Gascoyne	Gascoyne	Bottom Line	36°19.950'S	155°53.630'E	
Gascoyne	Gascoyne	Bottom Line	36°19.950'S	156°43.770'E	
Gascoyne	Gascoyne	Bottom Line	36°59.440'S	155°53.630'E	
Gascoyne	Gascoyne	Bottom Line	36°59.440'S	156°43.770'E	
1	Louisville Ridge	Bottom Line	47°40.000'S	149°27.000'W	
1	Louisville Ridge	Bottom Line	47°40.000'S	150°00.000'W	
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	
3	Louisville Ridge	Bottom Line	45°59.000'S	154°07.224'W	
3	Louisville Ridge	Bottom Line	45°59.000'S	154°28.653'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	
4	Louisville Ridge	Bottom Line	46°01.000'S	155°40.000'W	
4	Louisville Ridge	Bottom Line	46°01.000'S	156°10.000'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	
5	Louisville Ridge	Bottom Line	45°26.000'S	156°30.000'W	
5	Louisville Ridge	Bottom Line	45°26.000'S	156°55.000'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	
6	Louisville Ridge	Bottom Line	45°19.500'S	157°19.000'W	



Block name	Locality	Method	Latitude	Longitude	EEZ Direction
6	Louisville Ridge	Bottom Line	45°19.500'S	157°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	
7	Louisville Ridge	Bottom Line	44°43.950'S	158°18.000'W	
7	Louisville Ridge	Bottom Line	44°43.950'S	158°38.000'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	
8	Louisville Ridge	Bottom Line	44°13.000'S	159°43.000'W	
8	Louisville Ridge	Bottom Line	44°13.000'S	159°54.000'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	
9	Louisville Ridge	Bottom Line	43°51.183'S	160°29.235'W	
9	Louisville Ridge	Bottom Line	43°51.183'S	160°50.820'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	
10	Louisville Ridge	Bottom Line	43°22.000'S	161°21.770'W	
10	Louisville Ridge	Bottom Line	43°22.000'S	161°39.000'W	
10	Louisville Ridge	Bottom Line	43°31.370'S	161°10.170'W	
10	Louisville Ridge	Bottom Line	43°31.370'S	161°21.770'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	
11	Louisville Ridge	Bottom Line	42°40.000'S	161°48.000'W	
11	Louisville Ridge	Bottom Line	42°40.000'S	162°07.000'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	
13	Louisville Ridge	Bottom Line	41°45.000'S	163°29.500'W	
13	Louisville Ridge	Bottom Line	41°45.000'S	163°49.000'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	



Block name	Locality	Method	Latitude	Longitude	EEZ Direction
14	Louisville Ridge	Bottom Line	41°17.000'S	164°00.000'W	
14	Louisville Ridge	Bottom Line	41°17.000'S	164°27.000'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	
15	Louisville Ridge	Bottom Line	40°32.897'S	165°12.000'W	
15	Louisville Ridge	Bottom Line	40°32.897'S	165°30.000'W	
15	Louisville Ridge	Bottom Line	40°42.000'S	164°56.400'W	
15	Louisville Ridge	Bottom Line	40°42.000'S	165°12.000'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°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	41°06.000'S	164°56.400'W	
15	Louisville Ridge	Bottom Line	41°06.000'S	165°12.000'W	
17	Louisville Ridge	Bottom Line	38°20.013'S	167°29.000'W	
17	Louisville Ridge	Bottom Line	38°20.013'S	167°47.067'W	
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	
18	Louisville Ridge	Bottom Line	38°11.013'S	168°01.785'W	
18	Louisville Ridge	Bottom Line	38°11.013'S	168°20.000'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	
22	Louisville Ridge	Bottom Line	36°45.000'S	169°30.000'W	
22	Louisville Ridge	Bottom Line	36°45.000'S	170°00.000'W	
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	
23	Louisville Ridge	Bottom Line	36°00.000'S	169°22.000'W	
23	Louisville Ridge	Bottom Line	36°00.000'S	169°40.000'W	
23	Louisville Ridge	Bottom Line	36°10.000'S	169°22.000'W	



Block name	Locality	Method	Latitude	Longitude	EEZ Direction
23	Louisville Ridge	Bottom Line	36°10.000'S	169°40.000'W	
Marion	Marion	Bottom Line	27°59.155'S	175°19.590'E	
Marion	Marion	Bottom Line	27°59.155'S	175°40.370'E	
Marion	Marion	Bottom Line	28°19.800'S	175°19.590'E	
Marion	Marion	Bottom Line	28°19.800'S	175°40.370'E	
N. Lord Howe	N. Lord Howe	Bottom Line	32°39.630'S	163°04.415'E	Start on the Australian EEZ
N. Lord Howe	N. Lord Howe	Bottom Line	32°39.630'S	163°40.000'E	
N. Lord Howe	N. Lord Howe	Bottom Line	33°20.000'S	163°40.000'E	
N. Lord Howe	N. Lord Howe	Bottom Line	33°20.000'S	163°20.000'E	
N. Lord Howe	N. Lord Howe	Bottom Line	34°40.000'S	162°20.000'E	
N. Lord Howe	N. Lord Howe	Bottom Line	34°40.000'S	163°20.000'E	
N. Lord Howe	N. Lord Howe	Bottom Line	33°54.773'S	162°20.000'E	North-east along the Australian EEZ to the start point
Northwest Challenger	Northwest Challenger	Bottom Line	37°01.333'S	169°36.706'E	South-east along the New Zealand EEZ
Northwest Challenger	Northwest Challenger	Bottom Line	37°29.902'S	170°00.000'E	Due south to a point on the New Zealand EEZ
Northwest Challenger	Northwest Challenger	Bottom Line	37°41.589'S	170°00.000'E	South-west along the New Zealand EEZ
Northwest Challenger	Northwest Challenger	Bottom Line	38°00.000'S	169°47.848'E	
Northwest Challenger	Northwest Challenger	Bottom Line	38°00.000'S	169°42.000'E	
Northwest Challenger	Northwest Challenger	Bottom Line	37°48.000'S	169°42.000'E	
Northwest Challenger	Northwest Challenger	Bottom Line	37°48.000'S	169°24.000'E	
Northwest Challenger	Northwest Challenger	Bottom Line	37°42.000'S	169°24.000'E	
Northwest Challenger	Northwest Challenger	Bottom Line	37°42.000'S	167°42.000'E	
Northwest Challenger	Northwest Challenger	Bottom Line	37°48.000'S	167°42.000'E	
Northwest Challenger	Northwest Challenger	Bottom Line	37°48.000'S	167°24.000'E	



Block name	Locality	Method	Latitude	Longitude	EEZ Direction
Northwest Challenger	Northwest Challenger	Bottom Line	39°06.000'S	167°24.000'E	
Northwest Challenger	Northwest Challenger	Bottom Line	39°06.000'S	167°18.000'E	
Northwest Challenger	Northwest Challenger	Bottom Line	38°52.000'S	167°18.000'E	
Northwest Challenger	Northwest Challenger	Bottom Line	38°52.000'S	167°06.000'E	
Northwest Challenger	Northwest Challenger	Bottom Line	37°48.000'S	167°06.000'E	
Northwest Challenger	Northwest Challenger	Bottom Line	37°48.000'S	167°00.000'E	
Northwest Challenger	Northwest Challenger	Bottom Line	37°42.000'S	167°00.000'E	
Northwest Challenger	Northwest Challenger	Bottom Line	37°42.000'S	166°40.000'E	
Northwest Challenger	Northwest Challenger	Bottom Line	37°01.333'S	166°40.000'E	
S. Lord Howe - South	S. Lord Howe	Bottom Line	36°13.460'S	164°40.830'E	
S. Lord Howe - South	S. Lord Howe	Bottom Line	36°13.460'S	165°06.050'E	
S. Lord Howe - South	S. Lord Howe	Bottom Line	36°26.800'S	164°40.830'E	
S. Lord Howe - South	S. Lord Howe	Bottom Line	36°26.800'S	165°06.050'E	
Box 1	S. Tasman Rise 1	Bottom Line	47°08.280'S	147°50.200'E	Start on the Australian EEZ
Box 1	S. Tasman Rise 1	Bottom Line	47°17.370'S	147°50.200'E	
Box 1	S. Tasman Rise 1	Bottom Line	47°17.370'S	147°32.300'E	
Box 1	S. Tasman Rise 1	Bottom Line	47°10.197'S	147°32.300'E	East along the Australian EEZ to the start point
Box 2	S. Tasman Rise 2	Bottom Line	47°05.160'S	148°24.165'E	
Box 2	S. Tasman Rise 2	Bottom Line	47°05.160'S	148°50.670'E	
Box 2	S. Tasman Rise 2	Bottom Line	47°13.780'S	148°24.165'E	
Box 2	S. Tasman Rise 2	Bottom Line	47°13.780'S	148°50.670'E	
Box 3	S. Tasman Rise 3	Bottom Line	47°21.000'S	148°45.610'E	



Block name	Locality	Method	Latitude	Longitude	EEZ Direction
Box 3	S. Tasman Rise 3	Bottom Line	47°21.000'S	149°03.200'E	
Box 3	S. Tasman Rise 3	Bottom Line	47°24.015'S	148°37.235'E	
Box 3	S. Tasman Rise 3	Bottom Line	47°24.015'S	148°45.610'E	
Box 3	S. Tasman Rise 3	Bottom Line	47°24.800'S	149°03.200'E	
Box 3	S. Tasman Rise 3	Bottom Line	47°30.320'S	148°44.390'E	
Box 3	S. Tasman Rise 3	Bottom Line	47°30.320'S	148°57.650'E	
Box 3	S. Tasman Rise 3	Bottom Line	47°35.205'S	148°37.235'E	
Box 3	S. Tasman Rise 3	Bottom Line	47°35.205'S	148°44.390'E	
Three Kings	Three Kings	Bottom Line	30°49.324'S	172°42.880'E	Start on the New Zealand EEZ
Three Kings	Three Kings	Bottom Line	30°40.115'S	172°42.880'E	
Three Kings	Three Kings	Bottom Line	30°40.115'S	172°53.295'E	
Three Kings	Three Kings	Bottom Line	30°16.500'S	172°53.295'E	
Three Kings	Three Kings	Bottom Line	30°16.500'S	174°20.000'E	
Three Kings	Three Kings	Bottom Line	30°40.245'S	174°20.000'E	
Three Kings	Three Kings	Bottom Line	30°40.245'S	174°00.200'E	
Three Kings	Three Kings	Bottom Line	30°53.670'S	174°00.200'E	
Three Kings	Three Kings	Bottom Line	30°53.670'S	173°08.819'E	West along the New Zealand 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	
Westpac Bank	Westpac Bank	Bottom Line	39°39.000'S	167°05.000'E	



Block name	Locality	Method	Latitude	Longitude	EEZ Direction
Westpac Bank	Westpac Bank	Bottom Line	39°39.000'S	167°21.090'E	
Westpac Bank	Westpac Bank	Bottom Line	39°55.000'S	167°05.000'E	
Westpac Bank	Westpac Bank	Bottom Line	39°55.000'S	167°21.090'E	



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 Gorgonian Alcyonacea
Informal group Gorgonian Alcyonacea	Sea fans octocorals	All taxa within the following suborders: Holaxonia; Calaxonia; Scleraxonia
Order Pennatulacea	Sea pens	All taxa
Order Actiniaria	Anemones	All taxa
Order Zoantharia	Hexacorals	All taxa
Class Hydrozoa	Hydrozoans	All taxa within the orders Anthoathecata and Leptothecata, excluding Stylasteridae
Order Anthoathecatae		
Family Stylasteridae	Hydrocorals	All taxa
Phylum Bryozoa	Bryozoans	All taxa within the orders Cheilostomatida and Ctenostomatida
<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	25
Phylum Cnidaria		
Class Anthozoa		
Order Scleractinia	Stony corals	60
Order Antipatharia	Black Corals	5
Informal group Gorgonian Alcyonacea	Seafan octocorals	15
Order Actiniaria	Anemones	35
Order Zoantharia	Hexacorals	10

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 Gorgonian Alcyonacea	Seafan octocorals	1
Order Pennatulacea	Sea pens	1
Order Actiniaria	Anemones	5
Order Zoantharia	Hexacorals	1



Taxonomic Level	Common Name	Weight Threshold (kg)
Class Hydrozoa	Hydrozoans	1
Order Anthoathecatae		
Family Stylasteridae	Hydrocorals	1
Phylum Bryozoa	Bryozoans	1
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 ⁷

⁷Expressed as the percentage of the total number of observed hooks.

CMM 03a-2020

Conservation and Management Measure for Deepwater Species in the SPRFMO Convention Area

(Supersedes CMM 03a-2019)

The Commission of the South Pacific Regional Fisheries Management Organisation;

ADOPTS the following Conservation and Management Measure (CMM) in accordance with Articles 8, 20, 21 and 22 of the Convention:

Objective

1. The objective of this CMM together with CMM 03-2020 (Bottom Fishing) 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.

Interpretation

2. For the purposes of this CMM, the definitions applicable in CMM 03-2020 (Bottom Fishing) have the same meaning in this CMM.

Application

3. All activities conducted under this CMM must be conducted in accordance with CMM 03 -2020 (Bottom Fishing).
4. This CMM together with CMM 03-2020 (Bottom Fishing) are adopted as cautious preliminary conservation and management measures consistent with Article 22(1) of the Convention.

Catch Limits and Monitoring for Deep Sea Fish Stocks

5. The following precautionary catch limits are set by the Commission on the basis of the advice of the Scientific Committee:
 - a) The total catch of orange roughy (*Hoplostethus atlanticus*) in the Louisville Ridge¹ in the 2020, 2021, 2022 fishing years shall be limited to 1,140 tonnes in each fishing year.

¹ "Louisville Ridge" means all areas within the Evaluated Area to the east of 178°E.



- b) The total catch of orange roughy in the Tasman Sea² in the 2020 fishing year shall be limited to 346 tonnes.
6. Members and CNCs agree, having regard to the Scientific Committee's advice, that the total catch of orange roughy throughout its range in the South Tasman Rise³ should not exceed 0 tonnes.
 7. The total catch of orange roughy in the portion of the South Tasman Rise⁴ occurring in the Convention Area shall be 0 tonnes, until otherwise decided by the Commission, based on advice from the Scientific Committee.
 8. Consistent with the report of the 7th meeting of the Scientific Committee, Members and CNCs acknowledged that to maintain the Southwest Challenger Plateau orange roughy stock at or above 40% B₀ for the next five years, the estimated annual yield was calculated to be 2,448 tonnes.
 9. The total catch of orange roughy in Westpac Bank⁵ shall be limited to 258 tonnes (based on the assumption that 12.5% of the Southwest Challenger Plateau biomass resides in the Westpac Bank area) in each of the 2020, 2021, 2022, 2023 fishing years but may be reviewed by the Commission following advice from the Scientific Committee based on a stock assessment undertaken by New Zealand and other relevant information.
 10. Until the Scientific Committee recommends precautionary catch limits, the catch of all other target and non-target fish species in the Evaluated Area shall be limited to a level that does not exceed the annual average catch levels of that Member or CNC over the period 1 January 2002 to 31 December 2006 as shown in Table 3.
 11. The Scientific Committee should provide regular advice on the status of bottom fishing target species and non-target species to enable the Commission to continue meeting the objectives of the Convention and this CMM. The Scientific Committee may provide advice on the revision or subdivision of the catch limits set out in this section.
 12. The Scientific Committee shall review its advice on bottom fishing target species and non-target species no later than every five (5) years, or a shorter period as determined by the Commission. The advice on bottom fishing target species and non-target species, or elements of the advice, may be reviewed together or separately, as determined by the Commission.
 13. In 2020 Members and CNCs are to share in the total catch of orange roughy, as specified in paragraphs 5, 7 and 9, in the tonnages set out in Table 1 of this CMM.

² "Tasman Sea" means all areas within the Evaluated Area to the west of 178°E, excluding the "Westpac Bank" and the "South Tasman Rise".

³ "South Tasman Rise" means that part of the Australian EEZ and the high seas area adjacent to the Australian EEZ within and bounded by a line beginning at the point of latitude 46°26' 07" S, longitude 146°30 E; and running:

- (i) from there east along that meridian to its intersection with the meridian of longitude 150° 00 E;
- (ii) from there south along that meridian to its intersection with the parallel of 48°30 S; and
- (iii) from there west along that parallel to its intersection with the meridian of longitude 146°30 E; and
- (iv) from there north along that meridian to the point where the line began.

⁴ "the portion of the South Tasman Rise occurring in the Convention Area" means the high seas area adjacent to the Australian EEZ bounded by a line beginning at the intersection of the outer limit of the Australian EEZ with the meridian of longitude 150°00 E; and running:

- (i) from there south along that meridian to its intersection with the parallel of 48°30 S; and
- (ii) from there west along that parallel to its intersection with the meridian of longitude 146°30 E; and
- (iii) from there north along that meridian to the intersection with the outer limit of the Australian EEZ; and
- (iv) from there generally north easterly along that outer limit to the point where the line began.

⁵ "Westpac Bank" means the high seas area adjacent to the New Zealand EEZ bounded by a line beginning at the intersection of the outer limit of the New Zealand EEZ at 39° 20S and 168° 34E; and extending:

- (i) from there west to 39° 20S and 166° 30E; and
- (ii) from there south to 40° 30S and 166° 30E; and
- (iii) from there due east to 40° 30S and 167° 24E; and
- (iv) from there generally north east to the point where the line began.



14. Without prejudice to Members and CNCPs without an entitlement in Table 1 and the rights and obligations specified in Article 20(4)(c) of the Convention and having regard to paragraphs 5, 7 and 9, the percentages included in Table 2 shall be used by the Commission as a basis for the allocation of Member and CNCPs' catch limits from 2020 to 2023 inclusive.
15. By 31 December each year, a Member or CNCP may transfer to another Member or CNCP all or part of its entitlement to catch up to the limit set out in Table 1, without prejudice to future agreements on the allocation of fishing opportunities, subject to the approval of the receiving Member or CNCP. When receiving fishing entitlement by transfer, a Member or CNCP may allocate it on the basis of domestic legislation. Before the transferred fishing takes place, the transferring Member or CNCP shall notify the transfer to the Executive Secretary for circulation to Members and CNCPs without delay. Such transfers shall only occur within, and not across, the catch limits and areas defined in paragraphs 5, 7 and 9.
16. Where a Member or CNCP has reached 70% of their catch limit, that Member or CNCP shall monitor catch daily and ensure there is no further fishing effort⁶ by fishing vessels flying its flag once the catch limit has been reached. Members and CNCPs shall notify the Secretariat as soon as practicable of the catch limit being reached.
17. If a Member or CNCP's catch is below their allocated or revised⁷ catch limit for orange roughy in an area for which a catch limit has been set in a given year, that Member or CNCP may carry forward the undercatch amount⁸. The total carry forward amount shall not exceed 10% of their allocated catch limit for the year from which the amount is being carried forward. This carry-forward shall only be added to their catch limit for the following fishing year.
18. If a Member or CNCP has exceeded their allocated or revised catch limit for orange roughy in an area for which a catch limit has been set in a given year, the full amount of their catch above the allocated or revised catch limit (whichever results in a greater deduction) shall be deducted from their allocated catch limit for the following fishing year.
19. By 10 December each year Members and CNCPs shall notify the Secretariat whether they intend to carry forward under caught orange roughy catch for a defined area to the next fishing year, and if they have excess orange roughy catch for a defined area to confirm the revised catch limit for the next fishing year.
20. As soon as practicable following the annual meeting of the Commission, Members and CNCPs shall notify the Secretariat of any revised catch limits. The Secretariat shall circulate notifications to all Members and CNCPs, and reflect revised catch limits in monthly catch reports.
21. If, on the basis of advice from the Scientific Committee, the Commission agrees to reduce the total catch for an area, the carry-forward provision in paragraph 17 shall not apply, unless decided otherwise by the Commission. The overcatch provision, specified in paragraph 18, shall still apply.
22. If the Commission agrees to reduce the orange roughy catch limit of one or more Members or CNCPs for an area for which a catch limit has been set, the carry forward provision in paragraph 17 shall not apply unless decided otherwise by the Commission, taking into account the circumstances of the reduction. The overcatch provision, specified in paragraph 18, shall still apply.
23. For the purposes of monitoring catch levels, catches shall be attributed to the flag State of the vessels that have undertaken the fishing described in Article 1(1)(g)(i) and (ii) of the Convention.

⁶ No tows will begin after the catch limit is reached.

⁷ The revised catch limit is the limit determined following the application of the carry forward provision in this paragraph or the overcatch provision in paragraph 18, as applicable.

⁸ The undercatch amount is defined as the difference between actual catch and the allocated or revised catch limit (whichever results in lesser carry forward).



24. Members and CNCs shall report, in an electronic format, the monthly catches of their flagged vessels participating in bottom fishing to the Secretariat within 20 days of the end of each month, consistent with the SPRFMO Data submission templates.
25. The Executive Secretary shall circulate monthly catch reports from data provided in accordance with paragraph 17, aggregated by flag State and month, to all Members and CNCs as soon as possible, once collated.
26. The provisions of this CMM are not necessarily to be considered precedents for future allocation or other decisions in accordance with Article 21 of the Convention relating to participation in bottom fisheries in the Convention Area and adjacent areas of national jurisdiction in the circumstances provided for in Article 20(4)(ii) and (iii) with the consent of the relevant coastal State Member or Members.

Review

27. Notwithstanding that the Commission may alter the catch limits prescribed in paragraphs 5, 7 and 9, this CMM shall be reviewed no later than the annual meeting of the Commission in 2024.

Table 1: Tonnages of orange roughy in 2020 as referred to in paragraph 13.

	Tonnages	
	Australia	New Zealand
Tasman Sea	69	277
Louisville Ridge	114	1 026
Westpac Bank	13	245
Portion of the South Tasman Rise occurring in the Convention Area	0	0

Table 2: Percentages referred to in paragraph 14 related to the catches of orange roughy referred to in paragraphs 5, 7 and 9

	Percentages %	
	Australia	New Zealand
Tasman Sea	20	80
Louisville Ridge	10	90
Westpac Bank	5	95
Portion of the South Tasman Rise occurring in the Convention Area	75	25



Table 3: Tonnages of all other target and non-target fish species in the Evaluated Area as referred to in paragraph 10.

All other target and non-target fish species ⁹	
Australia	New Zealand
211	762

⁹ Noting that the tonnages in Table 3 correspond to the evaluated area defined in paragraph 4 of CMM03-2020 (Bottom fishing).

CMM 04-2020

Conservation and Management Measure Establishing a List of Vessels Presumed to Have Carried Out Illegal, Unreported and Unregulated Fishing Activities in the SPRFMO Convention Area (Supersedes CMM 04-2019)

The Commission of the South Pacific Regional Fisheries Management Organisation,

RECALLING that the FAO Council adopted on 23 June 2001 an International Plan of Action to prevent, to deter and eliminate illegal, unreported and unregulated fishing (IPOA-IUU). This plan stipulates that the identification of the vessels carrying out illegal, unreported and unregulated (IUU) fishing activities should follow agreed procedures and be applied in an equitable, transparent and non-discriminatory way;

CONCERNED by the fact that IUU fishing activities in the Convention Area diminish the effectiveness of SPRFMO Conservation and Management Measures (CMMs);

DETERMINED to address the challenge of an increase in IUU fishing activities by way of counter-measures to be applied in respect to the vessels, without prejudice to further measures adopted in respect of flag States under the relevant SPRFMO instruments;

NOTING that efforts to prevent, deter and eliminate IUU fishing must be addressed in the light of all relevant international fisheries instruments and in accordance with other relevant international obligations, including the rights and obligations established under the World Trade Organization (WTO) Agreement;

RECALLING Article 27 of the Convention, which calls on Members to address IUU fishing activities and to establish appropriate cooperative procedures for effective monitoring, control and surveillance of fishing and to ensure compliance with the Convention;

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

Definition of IUU Fishing Activities

1. For the purposes of this CMM, the fishing vessels flying the flag of a non-Member, or a Member or a Cooperating non-Contracting Party (hereafter CNCP), are presumed to have carried out IUU fishing activities in the Convention Area, inter alia, when a Member or a CNCP presents evidence that such vessels:
 - a) engage in fishing for fishery resources and are not registered on the SPRFMO list of vessels authorised to fish in the Convention Area;
 - b) engage in fishing for fishery resources whose flag State has exhausted or has no quotas, catch limit or effort allocation, including, if applicable, those received from another Member or CNCP under relevant SPRFMO CMMs;
 - c) do not record and/or report their catches or catch related data made in the Convention Area, or make false reports;
 - d) take on board, tranship or land undersized fish in a way that undermines SPRFMO CMMs;
 - e) engage in fishing during closed fishing periods or in closed areas, without or after exhaustion of a quota or beyond a closed depth, in contravention of SPRFMO CMMs;
 - f) use prohibited or non-compliant fishing gear in a way that undermines SPRFMO CMMs;
 - g) tranship with, or participate in joint operations such as re-supply or re-fuelling vessels included in the IUU Vessel List;



- h) are without nationality and engage in fishing for fisheries resources in the Convention Area; and/or
- i) engage in fishing activities contrary to any other SPRFMO CMMs.

Information on alleged IUU Fishing activities

2. Members and CNCPs shall transmit every year to the Executive Secretary at least 120 days before the annual meeting, their list of vessels presumed to be carrying out IUU fishing activities in the Convention Area over the past two years¹, accompanied by suitably documented evidence concerning the presumption of IUU fishing activity.
3. This list shall be based, *inter alia*, on reports by Members and CNCPs relating to SPRFMO CMMs in force, trade information obtained on the basis of relevant trade statistics such as Food and Agriculture Organization of the United Nations (FAO) data, statistical documents and other national and international verifiable statistics, as well as any other information obtained from port States and/or gathered from the fishing grounds that is suitably documented. Information from Members and CNCPs should be provided in the SPRFMO Reporting Form of Illegal Activity (Annex 1).
4. Before or at the same time as transmitting a list of presumed IUU vessels to the Executive Secretary, the Member or CNCP shall notify, either directly or through the Executive Secretary using the Reporting Form in Annex 1, the relevant flag State of a vessel's inclusion on this list and provide a copy of the pertinent suitably documented information. The flag State shall promptly acknowledge receipt of the notification.

Draft IUU Vessel List

5. On the basis of the information received pursuant to paragraph 2 and/or any other suitably documented information at his/her disposal, the SPRFMO Executive Secretary shall draw up a Draft IUU Vessel List. This list shall be drawn up in conformity with Annex 2. The Secretary shall transmit it together with the current IUU Vessel List, including any inter-sessional amendments, as well as all the supporting evidence provided, to Members and CNCPs whose vessels are included on these lists at least 90 days before the annual meeting.
6. Members and CNCPs, shall transmit their comments, as appropriate, including evidence showing that the listed vessels have neither fished in contravention to SPRFMO CMMs, nor had the possibility of fishing for fishery resources in the Convention Area, at least 30 days before the annual meeting of SPRFMO.
7. The Commission shall request the flag State to notify the owner of the vessel of its inclusion in the Draft IUU Vessel List and of the consequences that may result from its inclusion being confirmed in the IUU Vessel List adopted by the Commission.
8. Upon receipt of the Draft IUU Vessel List, Members and CNCPs shall closely monitor these vessels included in the Draft IUU Vessel List in order to determine their activities and possible changes of name, flag and/or registered owner.

Provisional and current IUU Vessel List

9. On the basis of the information received pursuant to paragraphs 5 and 6 the Executive Secretary shall re-circulate to the Members and CNCPs two weeks in advance of the Commission meeting the Draft IUU Vessel list and the current IUU Vessel List, including any intersessional modifications to the current IUU Vessel List in the sense of paragraphs 21-23, together with all suitably documented information provided pursuant to paragraph 6.

¹ Beginning with the entry into force of this CMM



10. Members and CNCs may at any time submit to the Executive Secretary any additional information which might be relevant for the CTC to discuss the Draft IUU Vessel List. The Executive Secretary shall circulate the information to the official contacts together with all the evidence provided.
11. The Compliance and Technical Committee of the SPRFMO (CTC) shall examine each year the Draft IUU Vessel List and current IUU Vessel List.
12. The CTC shall remove a vessel from the Draft IUU Vessel List if the flag State demonstrates that:
 - a) the vessel did not take part in any IUU fishing activities described in paragraph 1, or
 - b) effective action has been taken in response to the IUU fishing activities in question, including, *inter alia*, prosecution and/or imposition of sanctions of adequate severity. Members and CNCs will report any actions and measures taken to promote compliance by their flagged vessels with SPRFMO CMMs.
13. Following this examination of the Draft and current IUU Vessel List, the CTC shall:
 - a) Adopt a Provisional IUU Vessel List in conformity with Annex 2 following consideration of the Draft IUU Vessel List. The Provisional IUU Vessel List shall be submitted to the Commission for approval.
 - b) Recommend to the Commission which, if any, vessels should be removed from the current IUU Vessel List adopted at the previous SPRFMO annual meeting, following consideration of that List and after assessing whether the requirements of paragraph 21 are met.

IUU Vessel List

14. At its annual meeting the Commission shall review the Provisional IUU Vessel List, taking into account any new suitably documented information related to vessels on the Provisional IUU Vessel List, and any recommendations to amend the current IUU Vessel List made by CTC pursuant to paragraph 13 above, and adopt a new IUU Vessel List.
15. On adoption of the list, the Commission shall request Members, CNCs and non-Members, whose vessels appear on the IUU Vessel List:
 - a) to notify the owner of the vessel identified on the IUU Vessel List of its inclusion on the List and the consequences which result from being included on the List, as referred to in paragraph 16;
 - b) to take all the necessary measures to eliminate these IUU fishing activities, including if necessary, the withdrawal of the registration or of the fishing licenses of these vessels, and to inform the Commission of the measures taken in this respect.
16. Members and CNCs shall take all necessary non-discriminatory measures, under their applicable legislation and international law:
 - a) to remove or withdraw any fishing authorisations for fisheries resources under the competence of SPRFMO granted to vessels on the IUU Vessel List and not to grant fishing licenses, permits or licenses to those vessels;
 - b) so that the fishing vessels, support vessels, refuelling vessels, the motherships and the cargo vessels flying their flag do not assist in any way, engage in fishing processing operations or participate in any transshipment or joint fishing operations with vessels included on the IUU Vessel List;
 - c) so that vessels on the IUU Vessel List are not authorised to land, tranship, re-fuel, re-supply, or engage in other commercial transactions in their ports, except in case of *force majeure*;
 - d) to prohibit the entry into their ports of vessels included on the IUU Vessel List, except in case of *force majeure*;
 - e) to prohibit the chartering of a vessel included on the IUU Vessel List;
 - f) to refuse to grant their flag to vessels included in the IUU Vessel List, except if the vessel has



changed owner and the new owner has provided sufficient evidence demonstrating the previous owner or operator has no further legal, beneficial or financial interest in, or control of, the vessel, or having taken into account all relevant facts, the flag Member or CNCP determines that granting the vessel its flag will not result in IUU fishing;

- g) to prohibit the imports, or landing and/or transshipment, of species covered by the Convention from vessels included in the IUU Vessel List;
- h) to encourage the importers, transporters and other sectors concerned, to refrain from transaction, transshipment and processing of species covered by the Convention caught by vessels included in the IUU Vessel List;
- i) to collect and exchange with other Members and CNCPs any appropriate information with the aim of searching for, controlling and preventing false import/export certificates regarding species covered by the Convention from vessels included in the IUU Vessel List.

17. The Executive Secretary will take any necessary measure to ensure publicity of the IUU Vessel List adopted by SPRFMO, in a manner consistent with any applicable confidentiality requirements, and through electronic means, by placing it on the SPRFMO web site. Furthermore, the Executive Secretary will transmit the IUU Vessel List to the FAO and to appropriate regional fisheries organisations for the purposes of enhanced co-operation between SPRFMO and these organisations in order to prevent, deter and eliminate IUU fishing.
18. Upon receipt of the final IUU vessel list established by another Regional Fisheries Management Organisation (RFMO), and any other information regarding the list, including its modification, the Executive Secretary shall circulate it to the Members and CNCPs and shall place it on the SPRFMO web site.
19. Measures referred to in paragraph 16 shall apply *mutatis mutandis* to fishing vessels included in the final IUU list established by another RFMO and operating in the SPRFMO Convention Area.
20. Without prejudice to the rights of flag States and coastal States to take proper action consistent with international law, including applicable WTO obligations, Members and CNCPs shall not take any unilateral trade measures or other sanctions against vessels provisionally included in the Draft and Provisional IUU Vessel List, pursuant to paragraphs 5 and 13, or which have been already removed from the IUU Vessel List, pursuant to paragraph 14 or paragraphs 21-23, on the grounds that such vessels are involved in IUU fishing activities.

Modification of the IUU Vessel List

21. A Member, CNCP or non-Member whose vessel appears on the IUU Vessel List may request the removal of this vessel from the list, including during the intersessional period, by providing to the Executive Secretary suitably documented information demonstrating that:
 - a) it has adopted measures so that this vessel conforms with SPRFMO CMMs; and
 - b) it is and will continue to assume effectively its responsibilities with respect to this vessel in particular as regards the monitoring and control of the fishing activities executed by this vessel in the SPRFMO Convention Area; and
 - c)
 - i. it has taken effective action in response to the IUU fishing activities in question including prosecution and/or imposition of sanctions of adequate severity; and/or
 - ii. the vessel has changed ownership and that the new owner can establish the previous owner no longer has any legal, financial or real interests in the vessel or exercises control over it and that the new owner has not participated in IUU fishing.
22. On the basis of the information received in accordance with paragraph 21, the SPRFMO Executive Secretary



will transmit electronically the removal request, with all the supporting information to the official contacts of each member within 15 days following the notification of the removal request. The intersessional decision on the request to remove the vessel shall be made electronically in accordance with Rule 7, paragraphs 8 to 11 of the Rules of Procedure. In the event that a member objects to the removal request, the decision will be taken at the subsequent annual meeting of the Commission.

23. The Executive Secretary will communicate the result of the decision to all Members and CNCs.
24. The Executive Secretary will take the necessary measures to remove the vessel concerned from the IUU Vessel List, as published on the SPRFMO web site. Moreover, the Executive Secretary will forward the decision of removal of the vessel to the FAO and appropriate regional fisheries organisations.

Action against nationals involved in IUU fishing activities

25. Without prejudice to the primacy of the responsibility of the flag state, Members and CNCs shall take all appropriate measures, subject to and in accordance with their domestic laws and regulations, with regard to their nationals, and any other natural or legal person subject to their jurisdiction, identified as engaged in, responsible for, benefiting from, or supporting the activities of any vessel engaged in IUU fishing activities in the Convention Area. Nothing in this paragraph shall preclude the rights of Members and CNCs to apply additional or more stringent measures.
26. For the purpose of paragraph 25, nationals and any other natural or legal person subject to the jurisdiction of the Members and CNCs include operators, effective beneficiaries, owners, logistics and service providers, including property insurance providers and other financial service providers.
27. Members and CNCs shall cooperate, including by seeking reciprocal and cooperative arrangements for exchange of information, for the purpose of implementing this CMM. To this end, relevant agencies of Members and CNCs should designate a contact point through which information on reported activities described in paragraph 25, including information regarding vessel identification, ownership including beneficial ownership, crew and catch, as well as information regarding relevant domestic legislation and the results of actions taken with regard to the implementation of this CMM can be exchanged.
28. To assist with the implementation of this CMM, Members and CNCs shall include in their Implementation Reports the actions and measures taken in accordance with this CMM.

Information indicating a change of circumstances of vessels appearing on the current IUU Vessel List

29. A Member or CNC with information indicating a change in the details of a vessel appearing on the SPRFMO IUU Vessel List shall, as soon as practicable, transmit such information to the Executive Secretary. The Executive Secretary shall communicate such information to all Members and CNCs and, after verification², update the current IUU Vessel List on the SPRFMO website to reflect such information.

² If the Secretariat, after reasonable efforts, is unable to verify the information submitted by the Member or CNC the vessel details will not be updated.



ANNEX 1

SPRFMO Reporting Form for Illegal, Unreported and Unregulated Fishing Activity

Recalling SPRFMO CMM 04-2020 (IUU Vessel List) on *Establishing a list of vessels presumed to have carried out illegal, unreported and unregulated fishing activities in the SPRFMO Convention Area*, attached are details of IUU fishing activity recorded in

1. Details of Vessel

- a) Name of vessel and previous names, if any;
- b) Flag of vessel and previous flag, if any;
- c) Name and address of owner of vessel and previous owners, including beneficial owners, if any, and owner's place of registration;
- d) Operator of vessel and previous operators, if any;
- e) Call sign of vessel and previous call sign;
- f) IMO number;
- g) Unique Vessel Identifier (UVI), or, if not applicable, any other vessel identifier;
- h) Photographs of the vessel;
- i) Date vessel was first included on the IUU Vessel List;
- j) Position of alleged IUU fishing activities
- k) Summary of alleged IUU fishing activities (more detail in section 2)
- l) Summary of any actions known to have been taken in respect of the alleged IUU fishing activities
- m) Outcome of actions taken

2. Details of Elements Contravened

(Indicate with an "X" the individual elements of CMM 04-2020 (IUU Vessel List) contravened, and provide relevant details including date, location, source of information. Additional information can be provided in an attachment, if necessary, and listed under section 3).

Item	Definition	Indicate
a	Engage in fishing for fishery resources and are not registered on the SPRFMO list of vessels authorised to fish in the SPRFMO Convention Area	
b	Engage in fishing for fishery resources, whose flag State has exhausted or has no quotas, catch limit or effort allocation, including, if applicable, those received from another Member or CNCP, pursuant to an agreement notified to the Executive Secretary under relevant SPRFMO CMMs	
c	Do not record and/or report their catches or catch related data made in the Convention Area, or make false reports	
d	Take on board, tranship or land undersized fish in a way that undermines SPRFMO CMMs	
e	Engage in fishing during closed fishing periods or in closed areas, without or after exhaustion of a quota or beyond a closed depth, in contravention of SPRFMO CMMs	
f	Use prohibited or non-compliant fishing gear in a way that undermines SPRFMO CMMs	
g	Tranship with, or participate in joint operations such as re-supply or refuelling vessels included in the IUU Vessel List	
h	Are without nationality and engage in fishing for fishery resources in the SPRFMO Convention Area	
i	Engage in fishing activities that are contrary to any other SPRFMO CMMs	



3. Associated Documents

(List here the associated documents that are appended e.g. boarding reports, court proceedings, photographs).

4. Recommended Actions

Item	Recommended actions	Indicate
a	Notification to SPRFMO Executive Secretary only. No further action is recommended	
b	Notification of IUU fishing activity to SPRFMO Executive Secretary. Recommend notification of activity to flag State	
c	Recommended for inclusion on SPRFMO IUU Vessel List	



ANNEX 2

Information to be Included in all IUU Vessel Lists (Draft, Provisional and Final)

The Draft IUU Vessel List, as well as the Provisional and Final IUU Vessel Lists shall contain the following details, where available:

- a) Name of vessel and previous names, if any;
- b) Flag of vessel and previous flag, if any;
- c) Name and address of owner of vessel and previous owners, including beneficial owners, if any, and owner's place of registration;
- d) Operator of vessel and previous operators, if any;
- e) Call sign of vessel and previous call sign;
- f) IMO number;
- g) Unique Vessel Identifier (UVI), or, if not applicable, any other vessel identifier;
- h) Photographs of the vessel;
- i) Date vessel was first included on the IUU Vessel List;
- j) Summary of activities which justify inclusion of the vessel on the List, together with references to all relevant documents informing of and evidencing those activities.

CMM 05-2021

Conservation and Management Measure for the Establishment of the Commission Record of Vessels Authorised to Fish in the Convention Area (Supersedes CMM 05-2019)

The Commission of the South Pacific Regional Fisheries Management Organisation;

RECALLING Article 27 (1)(a) of the Convention regarding the establishment of appropriate procedures for effective monitoring, control and surveillance of fishing and to ensure compliance with this Convention and the Conservation and Management Measures (CMMs) adopted by the Commission, including the establishment and maintenance of a Commission record of vessels authorised to fish in the Convention Area;

CONSIDERING that according to Article 1 (1)(h) of the Convention, “fishing vessel” means any vessel used or intended for fishing, including fish processing vessels, support ships, carrier vessels and any other vessel directly engaged in fishing operations;

NOTING that Article 19(2)(b) of the Convention stresses the need to avoid adverse impacts on, and ensure access to fisheries by, subsistence, small-scale and artisanal fishers and women fish workers when establishing CMMs for fishery resources covered by the Convention.

TAKING INTO ACCOUNT the provisions of Articles 23 and 25 of the Convention, regarding Data collection, compilation and exchange and flag State duties;

ADOPTS the following CMM in accordance with Articles 8 and 27 of the Convention:

1. The appropriate government authorities of Members and Cooperating Non-Contracting Parties (CNCP) shall only authorise fishing vessels flying their flag to fish in the Convention Area where they are able to exercise effectively their responsibilities in respect of such vessels under the Convention, including relevant CMMs adopted by the Commission, and in accordance with relevant international law.
2. Each Member and CNCP will take into account the history of fishing vessels and operators with respect to their compliance (or non-compliance) with relevant CMMs when considering whether or not to authorise a particular fishing vessel flying its flag to fish in the Convention Area. Members and CNCPs shall ensure that no authorisation to fish in the Convention Area is issued to or maintained for a vessel included on any Regional Fisheries Management Organisation Illegal, Unreported and Unregulated (IUU) vessel list or on the IUU vessel list of the Commission for the Conservation of Antarctic Marine Living Resources.
3. Each Member or CNCP shall take necessary measures to ensure that vessels flying their flag and authorised to fish in the Convention Area have a sufficient level of ownership by citizens, residents or legal entities within its jurisdiction to allow enforcement action to be effectively taken against them.
4. Each Member and CNCP is to maintain a register of fishing vessels entitled to fly its flag and authorised to fish in the Convention Area.
5. Members and CNCPs are to collect and include for each vessel on its register of fishing vessels entitled to fly its flag and authorised to fish in the Convention area, the data described in Annex 1 of this Measure.
6. For vessels not previously on the SPRFMO Record of Vessels Members and CNCPs shall inform the Executive Secretary of the vessels flying their flag authorised to fish in the Convention Area at least 15 days previous to the first entry of such vessels in the Convention Area for the purposes of fishing for SPRFMO fishery resources. In doing so, Members or CNCP shall provide the Executive Secretary the vessel’s details, as indicated in Annex 1 of this Measure.



7. Members and CNCPs shall ensure that the vessel data specified in Annex 1 for the vessels flying their flag authorised to fish in the Convention Area is updated. Any modification regarding the vessel data shall be notified by the relevant Member or CNCP to the Executive Secretary within 15 days after such modification.
8. Members and CNCPs shall inform the Executive Secretary when authorisations to fish in the Convention area are revoked, relinquished or otherwise no longer valid. This information shall be submitted immediately or in any case in no more than 3 days of the date of any such change.
9. An authorisation entry on the SPRFMO Record of Vessels shall cease to be a valid entry when there is a change in any of the following details until the required information is updated:
 - a) Vessel flag State;
 - b) International Radio call sign (if any);
 - c) Flag authorisation start date;
 - d) Flag authorisation end date;
 - e) UVI (Unique Vessel Identifier)/IMO number (if issued).
10. Where a notification indicates a change of Vessel flag, the Secretariat shall inform the previous flag State on the Record of Vessels of the notification within 5 days of receiving such notification in order to confirm the Vessel flag has changed.
11. The Commission Record of Vessels shall include all the fishing vessels on Member's and CNCP's records authorised to fish in the Convention Area, including the data submitted by Members and CNCPs according to Annex 1 of this Measure.
12. The Executive Secretary shall maintain the Commission Record of Vessels authorised to fish in the Convention Area. A summary of the Record of Vessels shall be publicly available on the SPRFMO website, according to the provision of paragraph 6 of CMM 02-2021 (Data Standards).
13. The Record of Vessels shall indicate which of the authorised vessels have been actively fishing for each year. To this end each Member and CNCP participating in fishing activities in the Convention shall notify the Executive Secretary of the vessels that are actively fishing or engaged in transshipment in the Convention Area. In the case of vessels involved in the *Trachurus murphyi* fishery, this information shall be submitted within 20 days of the end of each month. For vessels involved in other fisheries within the Convention Area, this information shall be submitted on annual basis, within 30 days of the end of the year. The Executive Secretary shall maintain lists of the vessels so notified and will make them available on the SPRFMO website.
14. When a previously authorised vessel is no longer authorised by the Member or CNCP to fish within the Convention Area, such vessel shall not be deleted from the Record of Vessels, but labelled as "not currently authorised".
15. The Commission will review this CMM as required, to consider amendments to this measure to improve its effectiveness and to take into account, among others, the developments of the FAO Global Record initiative as relevant.



ANNEX 1 Standard for Vessel Data

1. Members and CNCP are to collect data on an un-aggregated (vessel by vessel) basis.
2. The following fields of data are to be collected, included on Member's and CNCP's authorised vessel records, and informed to the Executive Secretary, pursuant to paragraphs 6 and 7 of this measure.
 - a) Current vessel flag (using the codes indicated in Annex 2);
 - b) Name of vessel;
 - c) Registration number;
 - d) International radio call sign (if any);
 - e) UVI (Unique Vessel Identifier)/IMO number (if issued)¹;
 - f) Previous Names (if known);
 - g) Port of registry;
 - h) Previous flag (if any, and using the codes indicated in Annex 2);
 - i) Type of vessel (Use appropriate ISSCFV codes, Annex 10 of CMM 02-2021 (Data Standards));
 - j) Type of fishing method(s) (Use appropriate ISSCFG codes, Annex 9 of CMM 02-2021 (Data Standards));
 - k) Length;
 - l) Length type e.g. "LOA", "LBP";
 - m) Gross Tonnage – GT (to be provided as the preferred unit of tonnage);
 - n) Gross Register Tonnage – GRT (to be provided if GT not available; may also be provided in addition to GT);
 - o) Power of main engine(s) (kW);
 - p) Hold capacity (m³);
 - q) Freezer type (if applicable);
 - r) Number of freezers units (if applicable);
 - s) Freezing capacity (if applicable);
 - t) Vessel communication types and numbers (INMARSAT A, B and C numbers)²;
 - u) VMS system details (brand, model, features and identification);
 - v) Name of owner(s);
 - w) Address of owner(s);
 - x) Date of inclusion into the SPRFMO Record;
 - y) Flag authorisation end date;
 - z) Flag authorisation start date;
 - aa) Good quality high resolution photographs of the vessel of appropriate brightness and contrast, no older than 5 years, which shall consist of:
 - i. one photograph not smaller than 12 x 7 cm showing the starboard side of the vessel displaying its full overall length and complete structural features;
 - ii. one photograph not smaller than 12 x 7 cm showing the port side of the vessel displaying its full overall length and complete structural features;
 - iii. one photograph not smaller than 12 x 7 cm showing the stern taken directly from astern.

¹ Effective 1 January 2020, Members and CNCPs shall ensure that all fishing vessels flying their flag that are authorised to fish in the Convention Area have IMO numbers issued to them. Artisanal fishing vessels from coastal developing States of no more than 15 metres in length fishing for jumbo flying squid will not be required to provide such information if not qualified to be issued one. Under that circumstance, these artisanal vessels must comply with international accepted identification and marking requirements, to identify the flag State, followed by the vessel's national registration or authorisation number (separated by a hyphen) as it appears in its flag State national registration certificate, and provide the information as an alternative of this requirement. The flag State shall notify the Secretariat of the vessels to which this derogation applies at least 15 days before their first entering into the Convention area. Unless otherwise decided by the Commission, this derogation will expire on 1 January 2026.

² Artisanal fishing vessels from coastal developing States of no more than 15 metres in length, if not capable of having an INMARSAT system on board, shall comply with the communications and safety of human life on board requirements established for the high seas by its flag State, and provide the information as an alternative of this requirement. Unless otherwise decided by the Commission, this derogation will expire on 1 January 2026.



3. Each Member and CNCP shall, to the extent practicable, also provide to the Executive Secretary at the same time as submitting information in accordance with paragraph 2 of this Annex, the following additional information:
 - a) External markings (such as vessel name, registration number or international radio call sign);
 - b) Types of fish processing lines (if applicable);
 - c) When built;
 - d) Where built;
 - e) Moulded depth;
 - f) Beam;
 - g) Electronic equipment on board (i.e., radio, echo sounder, radar, net sonde);
 - h) Name of license owner(s) (if different from vessel owner);
 - i) Address of license owner(s) (if different from vessel owner);
 - j) Name of operator(s) (if different from vessel owner);
 - k) Address of operator(s) (if different from vessel owner);
 - l) Name of vessel master;
 - m) Nationality of vessel master;
 - n) Name of fishing master;
 - o) Nationality of fishing master.
4. When Members and CNCPs provide the data indicated in paragraph 2 of this Annex, they will do so in accordance with the specifications and format prescribed in Annex 8 of CMM 02-2021 (Data Standards).



ANNEX 2

Flag codes

Australia	AUS	Italy	ITA
Austria	AUT	Korea	KOR
Belgium	BEL	Latvia	LVA
Belize	BLZ	Liberia	LBR
Bulgaria	BGR	Lithuania	LTU
Chile	CHL	Luxembourg	LUX
China	CHN	Malta	MLT
Colombia	COL	Netherlands	NLD
Cook Islands	COK	New Zealand	NZL
Croatia	HRV	Panama	PAN
Cuba	CUB	Peru	PER
Curaçao	CUW	Poland	POL
Cyprus	CYP	Portugal	PRT
Czech Republic	CZE	Romania	ROU
Denmark	DNK	Russian Federation	RUS
Ecuador	ECU	Slovakia	SVK
Estonia	EST	Slovenia	SVN
Faroe Islands	FRO	Spain	ESP
Finland	FIN	Sweden	SWE
France	FRA	Chinese Taipei	TWN
Germany	DEU	United Kingdom	GBR
Greece	GRC	United States	USA
Hungary	HUN	Vanuatu	VUT
Ireland	IRL		

CMM 06-2020

Conservation and Management Measure for the Establishment of the Vessel Monitoring System in the SPRFMO Convention Area (Supersedes CMM 06-2018)

The Commission of the South Pacific Regional Fisheries Management Organisation;

RECALLING the relevant provisions of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean, in particular Articles 25 (1)(c) and 27 (1)(a);

NOTING the importance of the vessel monitoring system as a tool to effectively support the principles and measures for the conservation and management of fisheries resources within the Convention Area;

MINDFUL of the rights and obligations of Commission Members and Cooperating non-Contracting Parties (CNCs) in promoting the effective implementation of Conservation and Management Measures (CMMs) adopted by the Commission;

FURTHER MINDFUL of the key principles upon which the vessel monitoring system is based, including the confidentiality and security of information handled by the system, and its efficiency, cost-effectiveness and flexibility;

ADOPTS the following CMM to provide for the implementation of the SPRFMO Vessel Monitoring System:

A Commission Vessel Monitoring System

1. The Commission Vessel Monitoring System (“Commission VMS”) shall be fully operational after its official acceptance by the Commission.
2. The Commission VMS shall apply to vessels included in the Commission Record of Vessels Authorised to Fish in the SPRFMO Convention Area. It shall cover the area as defined in Article 5 of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean and have a buffer zone of 100 nautical miles outside the Convention Area. The buffer zone shall not apply to vessels flagged to adjacent coastal States fishing in waters under their jurisdiction.

Definitions

3. For the purposes of interpreting and implementing these procedures, the following definitions shall apply:
 - a) “Convention” means the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean;
 - b) “Convention Area” means the Area to which this Convention applies in accordance with Article 5 of the Convention;
 - c) “Commission” means the Commission of the South Pacific Regional Fisheries Management Organisation established by Article 6 of the Convention;
 - d) “Automatic Satellite Position Device/Automatic Location Communicator” (ALC) means a near real-time satellite position fixing transceiver;
 - e) “Commission VMS” means the SPRFMO Vessel Monitoring System that is established under this CMM;



- f) “Member/CNCP VMS” means the domestic Vessel Monitoring Systems that each Member and CNCP are obliged to develop in accordance with this CMM;
- g) “Fisheries Monitoring Centre” (FMC) means the government/fishing entity authority or agency responsible for managing VMS for its flagged fishing vessels.

Purpose

- 4. The purpose of the Commission VMS is to continuously monitor the movements and activity of fishing vessels that are on the Commission Record of Vessels and are authorised by Members or CNCPs to fish for fisheries resources in the SPRFMO Convention Area in a cost-effective manner in order to, *inter alia*, support the implementation of SPRFMO CMMs.

Applicability

- 5. The Commission VMS shall apply to all fishing vessels as defined in Article 1 (1)(h) of the Convention. The system shall operate on a permanent basis, or until decided otherwise by the Commission, in the area defined in paragraph 2 of this CMM.
- 6. Any Member or CNCP may request, for the Commission's consideration and approval that waters under its jurisdiction be included within the area covered by the Commission VMS. Necessary expenses incurred in the inclusion of such area into the Commission VMS shall be borne by the Member or CNCP that made the request.

Nature and Specification of the Commission VMS

- 7. The Commission VMS shall be administered by the Secretariat under the guidance of the Commission.
- 8. Data collected by the Commission VMS shall be securely stored by the Secretariat indefinitely and shall be used by the Members and CNCPs, in accordance with the provisions of this CMM, to achieve compliance with CMMs. VMS data may also be used by the Scientific Committee for analysis to support specific scientific advice requested by the Commission for sound fisheries management decision-making in the Convention Area.
- 9. Without prejudice to the principle of flag State responsibilities and duties, each Member and CNCP shall require vessels flying its flag to report VMS data automatically either:
 - a) to the Secretariat via their Member or CNCP's FMC; or
 - b) simultaneously to both the Secretariat and its FMC.
- 10. Each Member and CNCP shall notify the Secretariat of its chosen means of reporting (i.e., option (a) or (b) under paragraph 9 of this CMM) before the Commission VMS is activated.
- 11. Members and CNCPs that choose to report under option (a) of paragraph 9 shall automatically forward VMS reports to the Secretariat at an interval not less frequent than hourly.
- 12. All Member and CNCP fishing vessels required to report to the Commission VMS shall use a functioning ALC that complies with the Commission's minimum standards for ALCs in Annex 1.
- 13. All Members, CNCPs, the Secretariat, the service provider and the Scientific Committee and its subsidiary bodies shall manage VMS data in accordance with the Security and Confidentiality Requirements in Annex 2 of this CMM and the Maintenance of Confidentiality Requirements of paragraph 6 of CMM 02-2021 (Data Standards).



Procedure for Manual Reporting

14. In the event of failure of automatic reporting, the procedure outlined in Annex 3 of this CMM shall apply.

Measures to Prevent Tampering with ALCs

15. It shall be prohibited to destroy, damage, switch off, render inoperative or otherwise interfere with the ALC unless the competent authorities of the Member or CNCP have authorised its repair or replacement.

16. Where a Member or CNCP has reason to suspect that an ALC does not meet the requirements of Annex 1, or has been tampered with in any way, it shall immediately notify the Secretariat and:

- a) in the event that the ALC is installed onboard a vessel flying the flag of another Member or CNCP, the Member or CNCP shall notify the Member or CNCP concerned;
- b) in the event the vessel is flagged to the Member or CNCP, it shall:
 - i. investigate the suspected breach of this measure as soon as possible;
 - ii. depending on the outcome of the investigation, if necessary suspend the vessel from fishing until an ALC that meets the specifications outlined in Annex 1 is operational onboard the vessel; and
 - iii. communicate actions taken to the Commission, including the outcome of the investigation.

17. Members and CNCPs shall ensure that vessels flying their flag install and use ALCs which fulfil the conditions of Annex 4 of this CMM.

18. Members and CNCPs shall report in the annual Implementation Report of paragraph 5 of CMM 10-2020 (CMS) the methods used to prevent tampering by their individual vessels. Such methods may include the use of ALCs sealed by the Member or CNCP or manufacturer, tamper-evident external or internal seals, or other methods. The Commission shall review the effectiveness of the tampering methods applied by the vessels of Members and CNCPs at the latest at its annual meeting in 2023 in accordance with paragraph 33 of this CMM.

19. Members and CNCPs shall report on their implementation of paragraph 17 through the Implementation Report of paragraph 5 of CMM 10-2020 (CMS), including the brand, model, security features, e.g. "tamper-evident seals installed", and identification of the ALC approved for use for each vessel flying its flag.

20. Nothing in this measure shall prevent a Member or CNCP from applying additional or more stringent measures to prevent tampering of ALCs onboard vessels flying its flag.

Use and Release of VMS Data Requiring the Permission of the Member or CNCP

21. All requests for access to VMS data must be made to the Secretariat by electronic means by a VMS Point of Contact as specified in paragraph 7 of Annex 2 of this CMM. Other than the specific purposes set out in paragraph 24 of this CMM, the Secretariat shall only provide VMS data to a requesting Member or CNCP where the VMS data relates to vessels flagged to other Members or CNCPs that have provided prior written consent through their VMS Point of Contact for the data to be shared. The Secretariat shall only provide VMS data in accordance with the Security and Confidentiality Requirements at Annex 2 of this CMM.

22. A Member or CNCP may request VMS data for their own flagged vessels from the Secretariat and for the purposes described in paragraph 24 using the appropriate template available via the non-public section of the SPRFMO website.

23. Subject to paragraphs 13 and 21, VMS data may also be requested by the Scientific Committee for the purposes described in paragraph 8 using the appropriate template available via the SPRFMO website.



Use and Release of VMS Data not Requiring the Consent of the Member or CNCP

24. Upon request of a Member or CNCP, as applicable, the Secretariat shall only provide VMS data in accordance with the procedure of Paragraphs 25 to 28 and Annex 5 of this CMM without the permission of the Member or CNCP for the exclusive purposes of:
- a) planning for active surveillance operations and/or inspections at sea within 72 hours of the expected start of the operations;
 - b) active surveillance operations and/or inspections at sea;
 - c) supporting search and rescue activities undertaken by a competent Maritime Rescue Coordination Centre (MRCC) subject to the terms of any Arrangement between the Secretariat and the competent MRCC.
25. For the purpose of implementing Paragraph 24 a) and b):
- a) Inspections at sea will be undertaken in accordance with CMM 11-2015 (Boarding and Inspection);
 - b) each Member or CNCP, as applicable, shall only make available such VMS data to a Member authorised inspector, and any other government officials for whom it is deemed necessary to access the data;
 - c) VMS data relevant to the planned or active surveillance operations and/or inspections at sea shall be transmitted by the VMS Point of Contact of the Member or CNCP, as applicable, to the inspectors and government officials in charge of the operations referred to in paragraph 24 a) and b);
 - d) Members and CNCPs, as applicable, shall ensure that such inspectors and government officials keep the data confidential and only use the data for the purposes described in paragraph 24 a) and b);
 - e) Members may retain VMS data provided by the Secretariat for the purposes described in paragraph 24 a) and b) until 24 hours after the time that the active operation has concluded. Except in the circumstances outlined in paragraph 25 f), Members shall submit a written confirmation to the Secretariat of the deletion of the VMS data immediately after the 24 hours' period;
 - f) Members and CNCPs' authorised inspectors and government officials authorities may retain VMS data provided by the Secretariat for the purposes described in paragraph 24 a) and b) for longer than the periods specified in paragraph 25 e) only if it is part of an investigation, judicial or administrative proceeding of an alleged violation of the provisions of the Convention, any CMMs or decisions adopted by the Commission, or domestic laws and regulations. Members shall inform the Secretariat of the purposes and expected timing of the additional period of data retention.
26. For the purpose of paragraph 24 a), Members requesting VMS data shall provide the Secretariat the geographic area of the planned surveillance and/or inspection activity. In this case, Members authorised inspectors and government officials shall advise the Secretariat at least 72 hours in advance of the planned commencement of Monitoring, Control and Surveillance (MCS) activities in the notified geographic area of the high seas areas of the Convention Area. In the event that the MCS activities will no longer take place or if the notified geographic area of the high seas has changed, the Secretariat will be promptly notified.
27. For the purpose of paragraph 24 b), the Secretariat shall provide VMS data for vessels detected during surveillance, and/or inspection activity. Members conducting the active surveillance and/or inspection activity shall provide the Secretariat and the VMS Point of Contact of the Member or CNCP with a report including the name of the vessel or aircraft on active surveillance and/or inspection activity. This information shall be made available without undue delay after the surveillance and/or inspection activities are complete.
28. For the purpose of paragraph 24 c), upon the request of a Member or CNCP, the Secretariat shall provide VMS data without the permission of the Member or CNCP for the purposes of supporting search and rescue activities undertaken by a competent MRCC subject to the terms of an arrangement between the Secretariat and the competent MRCC. The Member or CNCP requesting the information shall ensure that the data will only be used only for the purposes described in this paragraph.



29. A Member or CNCP may request VMS data for the purposes described in paragraph 24 using the appropriate template available via the non-public section of the SPRFMO website.
30. The Commission shall review paragraph 24 at the latest by its annual meeting in 2023 to assess the enhanced use of the Commission VMS, as appropriate, as a complementary tool to promote further cooperation amongst Members and CNCP for the purposes of ensuring the long term conservation and sustainable use of the fishery resources in accordance with the provisions of the Convention.
31. Paragraphs 24 to 30 shall be reviewed by the Commission when the Commission adopts a specific SPRFMO high seas inspection regime.

Review

32. At each annual meeting of the Commission, the Secretariat shall provide the Commission with a report on the implementation and operation of the Commission VMS.
33. The Commission shall conduct a review of the implementation of the Commission VMS at its annual meeting in 2023 and shall consider its efficiency and effectiveness and consider further improvements to the system as required.



ANNEX 1

Minimum Standards for Automatic Location Communicators (ALCs) used in the Commission Vessel Monitoring System

1. The ALC shall continuously, automatically and independently of any intervention by the vessel communicate the following data when operating in the area defined in paragraph 2 of this CMM with at least the level of accuracy specified at paragraph 7 of this Annex and obtained by a satellite-based positioning system:

Category	Data Element	Remarks
Vessel registration	Static unique vessel identifier	For example, country code followed by national vessel registration number
Activity detail	Latitude	Position latitude
Activity detail	Longitude	Position longitude
Message detail	Date	Position date in UTC
Message detail	Time	Position time in UTC

2. ALCs fitted to fishing vessels must be capable of transmitting data at least every 15 minutes.
3. The Member or CNCP shall ensure that its FMC receives VMS positions at least with the frequency adopted according to this CMM and shall be able to request the VMS information at a higher frequency.
4. The Member or CNCP shall maintain a record of all vessel position information reported while these vessels are operational in the Convention Area, such that this information may be used to document vessel activity in the Convention Area, and to validate fishing position information provided by those vessels.
5. Under normal satellite navigation operating conditions, positions derived from the data forwarded must be accurate to within 100 metres.
6. The ALC and/or forwarding service provider must be able to support the ability for data to be sent to multiple independent destinations.
7. Members and CNCPs shall ensure that VMS position reports are reported by each of their vessels
 - a) at least once every hour if fishing using benthic or benthic-pelagic trawling¹, bottom long-line gear or potting or if operating within 20 nm of an EEZ boundary;
 - b) at least once every four hours in other circumstances²;
8. The Commission shall review the reporting frequency applicable to vessels fishing in the Convention Area at the latest at its annual meeting in 2023.

¹ Benthic-pelagic trawling is interpreted here to mean trawling with a mid-water net where the net has a likelihood of coming into contact with the seabed at any time during the trawling operation.

² In February 2013 China advised that it was not able to report more frequently than twice daily according to domestic regulation. In January 2018, China advised that it is now able to report as frequently as every four hours according to current domestic legislation.



ANNEX 2

Security and Confidentiality Requirements

Security Provisions Applicable to all Members, CNCPs and the Secretariat

1. The provisions of this Annex shall apply to all VMS data received pursuant to this CMM.
2. All VMS data received by the Commission VMS shall be treated as confidential information.
3. All Members, CNCPs, the Secretariat and the Commission's VMS provider shall ensure the secure treatment of VMS data in their respective electronic data processing facilities, in particular where the processing involves transmission over a network.
4. All Members, CNCPs and the Secretariat shall implement appropriate technical and organisational measures to protect reports and messages against accidental or unlawful destruction or accidental loss, alteration, unauthorised disclosure or access, and against all inappropriate forms of processing. The following features shall be mandatory:
 - a) System access control: the system has to withstand a break-in attempt from unauthorised persons;
 - b) Authenticity and data access control: the system has to be able to limit the access of authorised parties to only the data necessary for their task, via a flexible user identification and password mechanism;
 - c) VMS data must be securely communicated: communication between Members, CNCPs and the Secretariat or the VMS provider for the purpose of this CMM shall use secure Internet protocols SSL, DES or verified certificates obtained from the Secretariat;
 - d) Data security: all VMS data that enter the system must be securely stored for the required time, and shall not be tampered with;
 - e) The Secretariat shall design security procedures to address access to the system (both hardware and software), system administration and maintenance, backup and general usage of the system for consideration by the Commission.
5. Each Member, CNCP and the Secretariat shall nominate a security system administrator. The security system administrator shall review the log files generated by the software for which they are responsible, properly maintain the system security for which they are responsible, restrict access to the system for which they are responsible as deemed needed and, in the case of Members or CNCPs, also act as a liaison with the Secretariat in order to solve security matters.
6. Members and CNCPs as applicable shall submit a written confirmation of the deletion of the VMS data in accordance with this CMM. The Secretariat shall take all the necessary steps to ensure that the requirements pertaining to the deletion of VMS data handled by the Secretariat are complied with.
7. Each Member and CNCP shall designate a Point of Contact for the purposes of any communication regarding the VMS system ("VMS Point of Contact"). Any subsequent changes to the contact information shall be notified to the Secretariat within 21 days after such changes take effect. The Secretariat shall promptly notify Members and CNCPs of any such changes.
8. The Secretariat shall establish and maintain a register of Points of Contact based on the information submitted by the Members and CNCPs. The register and any subsequent changes shall be published promptly on the "Members only" area of the SPRFMO website.
9. The Secretariat shall inform all Members and CNCPs of the measures taken by the Secretariat to comply with these security and confidentiality requirement provisions at the annual meeting following the establishment of the Commission VMS. Such measures shall ensure a level of security appropriate to the risks represented by the processing of VMS data.



10. Submission of VMS data for the purpose of this CMM shall use cryptographic protocols to ensure secure communications.
11. The Security System Administrator of the Secretariat shall review the log files generated by the software, properly maintain the system security, and restrict access to the system as deemed necessary. The Security System Administrator shall also act as a liaison between the VMS Point of Contact and the Secretariat in order to resolve security matters.



ANNEX 3

SPRFMO Rules on the manual reporting in the SPRFMO Convention Area

1. In the event of non-reception of four consecutive, expected programmed VMS positions, and where the Secretariat has exhausted all reasonable steps³ to re-establish normal automatic reception of VMS positions, the Secretariat shall notify the Member or CNCP whose flag the vessel is flying. That Member or CNCP shall immediately direct the vessel Master to begin manual reporting.
2. In accordance with the chosen means of reporting for VMS data of paragraph 10 of this CMM, the manual report shall be sent by the vessel to the Secretariat via their FMC, or simultaneously to both the Secretariat and its FMC as applicable.
3. Following the receipt of a direction from a Member or CNCP to a vessel to begin manually reporting in accordance with paragraph 1 of this Annex, the Member or CNCP of the vessel shall ensure that the vessel Master manually reports its position every 4 hours. If automatic reporting to the SPRFMO VMS has not been re-established within 60 days of the commencement of manual reporting that Member or CNCP shall order the vessel to cease fishing, stow all fishing gear and return immediately to port in order to undertake repairs.
4. The vessel may recommence fishing in the SPRFMO Convention Area only when the ALC has been confirmed as operational by the Secretariat. Four consecutive, programmed VMS positions must have been received by the Secretariat to confirm that the ALC/Mobile Transceiver Unit is fully operational.
5. The format for manual reports to be used is as below. Vessels are encouraged to use email as the primary means of communication and shall send these messages to vms@sprfmo.int.
6. The standard format for manual position reporting in the event of ALC malfunction or failure shall be as follows:
 - a) IMO number (if applicable)
 - b) International Radio Call Sign
 - c) Vessel Name
 - d) Vessel Master's name
 - e) Position Date (UTC)
 - f) Position Time (UTC)
 - g) Latitude (with at least the level of accuracy specified at paragraph 5 of Annex 1)
 - h) Longitude (with at least the level of accuracy specified at paragraph 5 of Annex 1)
 - i) Activity (Fishing/Transit/Transshipping)
7. Members and CNCPs are encouraged to carry more than one ALC when operating in the SPRFMO Convention Area in order to avoid the need to manually report if the primary ALC fails.
8. The Secretariat shall publicise vessels that are reporting in accordance with this Annex on the SPRFMO Website.

³ The Member or CNCP, in coordination with the Secretariat and through communication with the vessel master as appropriate, will endeavour to re-establish normal automatic reception of VMS positions. If such efforts reveal that the vessel is successfully reporting to the Member or CNCP's VMS (indicating that the vessel's ALC hardware is functional), the Secretariat, in coordination with the Member or CNCP will take additional steps to re-establish automatic reporting to the Commission VMS.



ANNEX 4

Minimum Standards to prevent tampering with ALC Units Automatic Location Communicators (ALCs)

1. ALCs fitted to fishing vessels must be protected so as to preserve the security and integrity of data referred to in paragraph 1 of Annex 1 in accordance to the provisions of this Annex.
2. ALCs must be of a type and configuration that prevent the input or output of false positions, are not capable of being over-ridden, whether manually, electronically or otherwise and are capable of detecting and transmitting satellite alerts in the case of a tampering event.
3. It must not be reasonably possible for anyone, other than the FMC, to alter any of the VMS data stored in the ALC, including the frequency of position reporting to the FMC.
4. Storage of information within the ALC must be safe, secure and integrated under normal operating conditions.
5. Any features built into the ALC or terminal software to assist with servicing shall not allow unauthorised access to any areas of the ALC that could potentially compromise the operation of the VMS.
6. The satellite navigation decoder and transmitter shall be fully integrated and housed in the same tamper-proof physical enclosure.
7. In the case that the antenna is mounted separately from the physical enclosure, a single common antenna shall be used for both satellite navigation decoder and transmitter, and the physical enclosure shall be connected using a single length of unbroken cable to the antenna.
8. All ALCs shall be installed on vessels in accordance with their manufacturer's specifications and applicable standards.



ANNEX 5

Process for the Use and Release of VMS Data

1. A Member or CNCP or as established in the arrangement between the Secretariat and the competent MRCC seeking access to Commission VMS data for the purposes outlined in paragraphs 21 and 24 of this CMM shall forward a request to the Secretariat, through its VMS Point(s) of Contact, indicating the purpose(s) for which the data is sought and the time period covered by the VMS data. The request shall indicate the commitment from the Member or CNCP to respect the Security and Confidentiality requirements of Annex 2 of this CMM as applicable. The request must be submitted at least 5 working days in advance of the intended use except for the purposes of paragraph 24 of this CMM.

Use and Release of VMS Data Requiring the Permission of the Member or CNCP

2. For the purposes of paragraphs 21, 22 and 23 of this CMM, the Secretariat shall immediately forward the request to the relevant VMS Point(s) of Contact from whom access to VMS data is requested. The release of the VMS data to the requesting Member or CNCP shall only be permitted with approval from the Member or CNCP who owns the VMS data. A Member or CNCP who refuses the request for VMS shall send the reasons for the refusal in writing to the Secretariat within 15 days of the communication of the request by the Secretariat.
3. Members and CNCPs may restrict access to their VMS data to exclude fleets, individual vessels, geographical areas, time periods and others subject to the capacity of the Secretariat and/or their contracted VMS provider to filter the data.
4. Members or CNCPs shall only use the VMS data for the purposes indicated in the request and which are agreed by the other Member or CNCP and shall not disclose the data in full or in part to any third party. Any additional restrictions for VMS data access established by Members or CNCPs in accordance with paragraph 3 of this Annex shall also be complied with.

Use and Release of VMS Data Without the Permission of the Member or CNCP

5. For the purposes of paragraph 24 of this CMM, the Secretariat shall, no later than 7 days after the provision of VMS data, inform the VMS Points of Contact for which access to VMS data has been requested:
 - a) The requesting Member, CNCP or MRCC;
 - b) The date the request was made to the Secretariat;
 - c) The proposed purpose for the use of that VMS data⁴;
 - d) The anticipated length of time that the VMS data will be required⁵.
6. In accordance with paragraph 25 f) of this CMM, in the event of retention of the VMS data for longer periods than specified in the request, the Secretariat shall immediately inform the relevant VMS Points of Contact of the purposes of the retention and its expected timing.
7. The Secretariat shall immediately notify the relevant VMS Points of Contact when the requesting Member or CNCPs has ceased their use of that VMS data.
8. The Secretariat shall maintain a record of the requests received regarding use and release of VMS data for the purposes of paragraph 24 of this CMM including the requesting member, date of the request, purpose and length of time for which the data was required. The Secretariat shall include in the report on the

⁴ 'Proposed purpose' means the purpose identified by the requesting Member or CNCP pursuant to paragraph 24 of this CMM

⁵ This shall not include spatial and temporal operational details



implementation and operation of the Commission VMS of paragraph 32 of this CMM information on the number and purposes of VMS data access requests received.

CMM 07-2021

Conservation and Management Measure on Minimum Standards of Inspection in Port

(Supersedes CMM 07-2019)

The Commission of the South Pacific Regional Fisheries Management Organisation;

DEEPLY CONCERNED about Illegal, Unreported and Unregulated (IUU) fishing in the SPRFMO Area and its detrimental effect upon fish stocks, marine ecosystems and the livelihoods of legitimate fishers in particular in developing States;

CONSCIOUS of the role of the port State in the adoption of effective measures to promote the sustainable use and the long-term conservation of living marine resources;

RECOGNISING that measures to combat illegal, unreported and unregulated fishing should build on the primary responsibility of flag States and use all available jurisdiction in accordance with international law, including port State measures, coastal State measures, market related measures and measures to ensure that nationals do not support or engage in illegal, unreported and unregulated fishing;

RECOGNISING that port State measures provide a powerful and cost-effective means of preventing, deterring and eliminating illegal, unreported and unregulated fishing;

AWARE OF the need for increasing coordination at the regional and interregional levels to combat IUU fishing through port State measures;

BEARING IN MIND that, in the exercise of their sovereignty over ports located in their territory, Member and Cooperating Non-Contracting Parties (CNCs) may adopt more stringent measures, in accordance with international law;

RECALLING the relevant provisions of the United Nations Convention on the Law of the Sea of 10 December 1982;

RECALLING the 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 of 4 December 1995, the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas of 24 November 1993 and the 1995 FAO Code of Conduct for Responsible Fisheries;

RECALLING Article 27 of the SPRFMO Convention, which calls on Members to address IUU fishing activities and to establish appropriate cooperative procedures for effective monitoring, control and surveillance of fishing and to ensure compliance with the Convention;

BEARING IN MIND Article 12 of the FAO Agreement on Port States Measure and the need to take into account the specifics of the fleets operating in the SPRFMO Convention, the number of catches, the frequency and mode of port landings, and the status of the stocks, amongst others, in order to determine the level of port inspections sufficient to achieve the objective of preventing, deterring and eliminating IUU fishing;

ADOPTS the following Conservation and Management Measure (CMM) in accordance with Articles 8 and 20 of the Convention:



Scope

1. With a view to monitor compliance with SPRFMO CMMs, each Member and Cooperating non-Contracting Party (CNCP), in its capacity as a port State, shall apply this CMM for an effective scheme of port inspections in respect of foreign fishing vessels carrying SPRFMO-managed species caught in the SPRFMO Convention Area and/or fish products originating from such species that have not been previously landed or transhipped at port, or at sea following the applicable SPRFMO procedures, hereinafter referred to as "foreign fishing vessels".
2. Without prejudice to specifically applicable provisions of other SPRFMO CMMs, and except as otherwise provided in this CMM, this CMM shall apply to all foreign fishing vessels.
3. Each Member and CNCP may, in its capacity as a port State, decide not to apply this CMM to:
 - a) foreign fishing vessels chartered by its nationals operating under its authority. Chartered fishing vessels shall be subject to measures by the port State which are as effective as measures applied in relation to vessels entitled to fly its flag.
 - b) vessels of a neighboring State that are engaged in artisanal fishing for subsistence, provided that the port State and the flag State cooperate to ensure that such vessels do not engage in IUU fishing or fishing related activities in support of such fishing.
 - c) container vessels that are not carrying fish or, if carrying fish, only fish that have been previously landed, provided that there are no clear grounds for suspecting that such vessels have engaged in fishing related activities in support of IUU fishing.
4. Members and CNCPs shall take necessary action to inform fishing vessels entitled to fly their flag of this and other relevant SPRFMO CMMs.

Points of Contact

5. Each Member and CNCP shall designate a point of contact for the purposes of receiving notifications pursuant to paragraph 11. Each Member and CNCP shall designate a point of contact for the purpose of receiving inspection reports pursuant to paragraph 26(b) of this CMM. It shall transmit the name and contact information for its points of contact to the SPRFMO Executive Secretary no later than 30 days following the entry into force of this CMM. Any subsequent changes shall be notified to the SPRFMO Executive Secretary at least 14 days before such changes take effect. The SPRFMO Executive Secretary shall promptly notify Members and CNCPs of any such change.
6. The SPRFMO Executive Secretary shall establish and maintain a register of points of contact based on the lists submitted by the Members and CNCPs. The register and any subsequent changes shall be published promptly on the SPRFMO website.

Designated Ports

7. Each Member and CNCP shall designate its ports to which foreign fishing vessels may request entry pursuant to this CMM.
8. Each Member and CNCP shall, to the greatest extent possible, ensure that it has sufficient capacity to conduct inspections in every designated port pursuant to this CMM.
9. Each Member and CNCP shall provide to the SPRFMO Executive Secretary within 30 days from the date of entry into force of this CMM a list of designated ports. Any subsequent changes to this list shall be notified to the SPRFMO Executive Secretary at least 30 days before the change takes effect.
10. The SPRFMO Executive Secretary shall establish and maintain a register of designated ports based on the lists submitted by the port Members and CNCPs. The register and any subsequent



change shall be published promptly on the SPRFMO website.

Prior Notification

11. Each Member and CNCP, in its capacity as a port State shall, except as provided for under paragraph 12 of this CMM, require foreign fishing vessels seeking to use its ports for any purposes to submit as a minimum the information in the Port Call Request Template located in Annex 1 to its point of contact identified in paragraph 5, at least 48 hours before the estimated time of arrival at the port. Each Member and CNCP, in its capacity as a port State may also request additional information as it may require to determine whether the vessel has engaged in IUU fishing, or related activities. Members and CNCPs, in their capacity as port States, shall promptly inform the Secretariat of any request received to use their ports under this CMM.
12. Each Member and CNCP, in its capacity as a port State may prescribe a longer or shorter notification period than specified in paragraph 11, taking into account, *inter alia*, the type of fishery product, the distance between the fishing grounds and its ports. In such a case, the port State shall inform the SPRFMO Executive Secretary, who shall publish the information promptly on the SPRFMO website.
13. After receiving the relevant information pursuant to paragraph 11, as well as such other information as it may require to determine whether the foreign fishing vessel requesting entry into its port has engaged in IUU fishing, the Member or CNCP, in its capacity as a port State shall decide whether to authorise or deny the entry of the vessel into its port. In case the port State decides to authorise the entry of the vessel into its port, the following provisions on port inspection shall apply. Where a vessel has been denied entry, the port State shall report this to the Members and CNCPs.

Port Inspections

14. Inspections shall be carried out by the competent authority of the port Members and CNCPs.
15. Each year Members and CNCPs shall inspect at least 5% of landing and transshipment operations in their designated ports made by notified foreign fishing vessels.
16. Port Members and CNCPs shall, in accordance with their domestic law, inspect foreign fishing vessels when:
 - a) there is a request from other Members and CNCPs or relevant regional fisheries management organisations (RFMO's) that a particular vessel be inspected, particularly where such requests are supported by evidence of IUU fishing by the vessel in question, and there are clear grounds for suspecting that a vessel has engaged in IUU fishing;
 - b) a vessel has failed to provide complete information as required in paragraph 11;
 - c) the vessel has been denied entry or use of a port in accordance with this or other RFMO's provisions.



Use of Ports

17. Without prejudice to paragraph 16, when a Member or CNCP has sufficient proof that a vessel seeking entry into its port does not have a valid fishing authorisation, or there is clear evidence that the vessel has fished in contravention of the applicable SPRFMO obligations, or has engaged in IUU fishing or fishing related activities in support of such fishing, in particular the inclusion of a vessel on a list of vessels having engaged in such fishing or fishing related activities adopted by a relevant RFMO in accordance with the rules and procedures of such organisation and in conformity with international law, the Member or CNCP shall deny that vessel entry into its ports.
18. Notwithstanding paragraph 17 a Member or CNCP may allow entry into its ports of a fishing vessel referred to in that paragraph exclusively for the purpose of inspecting it and taking other appropriate actions in conformity with international law aimed at preventing, deterring and eliminating IUU fishing and fishing related activities in support of such fishing.
19. Where a vessel referred to in paragraphs 17 or 18 is in port for any reason, a Member or CNCP shall deny such vessel the use of its ports for landing, transshipping, packaging, and processing of fish and for other port services including, *inter alia*, bunkering, maintenance and dry-docking. Denial of such use of ports shall be in conformity with international law.

Inspection Procedure

20. Each Member and CNCP shall ensure that as a minimum standard its inspectors carry out the functions set forth in the Port State Inspection Standards in Annex 2.
21. Each port State inspector shall carry an approved identity card issued by the Member or CNCP that identifies the inspector as authorised to carry out the inspection. In accordance with domestic laws, port States inspectors may examine all relevant areas, decks and rooms of the fishing vessel, its license, gear, equipment, records (both physical and electronic), facilities, fish and fish products and any documents necessary to verify compliance with the Convention and Conservation and Management Measures in force. They may take copies (physical or electronic) of any documents considered relevant, and they may also question the master and any other person on the vessel being inspected.
22. Inspections shall involve the monitoring of the landing or transshipment and include a cross-check between the quantities by species notified in the prior notification message in paragraph 11 above and held on board the fishing vessel. Inspections shall be carried out in such a way that the fishing vessel suffers the minimum interference and inconvenience, and that degradation of the quality of the catch is avoided to the extent practicable.
23. On completion of the inspection, the port State inspector shall provide the master of the foreign fishing vessel a copy of the inspection report containing the findings of the inspection, to be signed by the inspector and the master. The master's signature shall serve only as acknowledgement of the receipt of a copy of the report. The master shall be given the opportunity to add any comments or objection to the report, and to contact the competent authority of the flag Member or CNCP.
24. The port Member or CNCP, in its capacity as a port State shall transmit a copy of the inspection report to the SPRFMO Executive Secretary no later than 15¹ working days following the date of completion of the inspection using the Format for Port Inspection Reports in Annex 3. If the inspection report cannot be transmitted within 15 working days, the port State shall notify the

¹ The time frames in paragraph 24 were amended at COMM-03 as recommended by CTC-02.



SPRFMO Executive Secretary within the 15 working day time period the reasons for the delay and when the report will be submitted. The Executive Secretary shall promptly convey the report to the authorities of the fishing vessel inspected.

25. Members and CNCPs shall take necessary action to ensure that masters facilitate safe access to the fishing vessel, cooperate with the competent authority of the port State, facilitate the inspection and communication and not obstruct, intimidate or interfere, or cause other persons to obstruct, intimidate or interfere with port State inspectors in the execution of their duties.

Procedure in the Event of Infringements

26. If the information collected during the inspection provides evidence that a foreign fishing vessel has committed a breach of the SPRFMO CMMs, the inspector shall:
 - a) record the breach in the inspection report;
 - b) transmit the inspection report and the evidence collected to the port State competent authorities, which shall forward a copy of the inspection report and evidence to the SPRFMO Executive Secretary and to the flag Member or CNCP point of contact as soon as possible and no later than 5 working days;
 - c) to the extent practicable, ensure safekeeping of the evidence pertaining to such alleged breach.
27. If the breach falls within the legal jurisdiction of the Member or CNCP, in its capacity as a port State, the port State may take action in accordance with its domestic laws. The port State shall promptly notify the action taken to the competent authority of the flag Member or CNCP and to the SPRFMO Executive Secretary, who shall promptly publish this information in a secured part of the SPRFMO website.
28. Other infringements shall be referred to the point of contact of flag Member or CNCP. Upon receiving the copy of the inspection report, the flag Member or CNCP shall promptly investigate the alleged infringement and notify the SPRFMO Executive Secretary of the status of the investigation and of any enforcement action that may have been taken within 90 days of such receipt. If the flag Member or CNCP cannot provide the SPRFMO Executive Secretary this status report within 90 days of such receipt, the flag Member or CNCP should notify the SPRFMO Executive Secretary within the 90-day time period the reasons for the delay and when the status report will be submitted. The SPRFMO Executive Secretary shall promptly publish this information in a secured part of the SPRFMO website.
29. The authorities of the fishing vessel subsequent to the process referred to in paragraph 28, can authorise the competent authority of the port State to undertake the investigation. The competent authority of the port State on accepting to undertake the investigation shall report the findings of the investigation to the authorities of the fishing vessel and the SPRFMO Executive Secretary within 90 days. Enforcement action will remain the responsibility of the authorities of the fishing vessel as applicable.
30. Should the inspection provide evidence that the inspected vessel has engaged in IUU activities as referred to in CMM 04-2020 (IUU Vessel List) the Member or CNCP, in its capacity as a port State shall promptly report the case to the flag Member or CNCP and notify as soon as possible the SPRFMO Executive Secretary, along with its supporting evidence, for the purpose of inclusion of the vessel in the draft IUU list.



Requirements of developing Members and CNCPs

31. Members and CNCPs shall give full recognition to the special requirements of developing Members and CNCPs in relation to a port inspection scheme consistent with this CMM. Members and CNCPs shall, either directly or through the SPRFMO, provide assistance to developing Members and CNCPs in order to, *inter alia*:
- a) Develop their capacity including by providing technical assistance and establishing an appropriate funding mechanism to support and strengthen the development and implementation of an effective system of port inspection at national, regional or international levels and to ensure that a disproportionate burden resulting from the implementation of this CMM is not unnecessarily transferred to them;
 - b) Facilitate their participation in meetings and/or training programmes of relevant regional and international organisations that promote the effective development and implementation of a system of port inspection, including monitoring, control and surveillance, enforcement and legal proceedings for infractions and dispute settlements pursuant to this CMM; and
 - c) Either directly or through the SPRFMO, assess the special requirements of developing Members and CNCPs concerning the implementation of this CMM.

General Provisions

32. Nothing in this CMM affects the entry of vessels to port in accordance with international law for reasons of *force majeure* or distress or prevents a port State from permitting entry into port to a vessel exclusively for the purpose of rendering assistance to persons, ships or aircraft in danger or distress.
33. Nothing in this CMM shall prejudice the rights, jurisdiction and duties of Members and CNCPs under international law. In particular, nothing in this CMM shall be construed to affect the exercise by Members and CNCPs of their authority over their ports in accordance with international law, including their right to deny entry thereto as well as to adopt more stringent measures than those provided for in this CMM.
34. This CMM shall be interpreted and applied in conformity with international law, taking into account applicable international rules and standards, including those established through the International Maritime Organization, as well as other international instruments.
35. Members and CNCPs shall fulfil in good faith the obligations assumed pursuant to this CMM and shall exercise the rights recognised herein in a manner that would not constitute an abuse of right.
36. Members and CNCPs, in their capacity as port States shall, to the greatest extent possible:
- a) Integrate or coordinate fisheries related port State measures with the broader system of port State controls;
 - b) Integrate port State measures with other measures to prevent, deter and eliminate IUU fishing and fishing related activities in support of such fishing, taking into account as appropriate the 2001 FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing; and
 - c) Take measures to exchange information among relevant national agencies and to coordinate the activities of such agencies in the implementation of this CMM.
37. In the implementation of this CMM and with due regard to appropriate confidentiality requirements, Members and CNCPs shall cooperate and exchange information with the SPRFMO Secretariat, relevant States, international organisations, RFMOs and other entities, including, as appropriate, by:



- a) Requesting information from, and providing information to, relevant information systems; and
 - b) Requesting and providing cooperation to promote the effective implementation of this recommendation.
38. In order to facilitate the implementation of this CMM, Members and CNCPs shall, to the extent possible, ensure that national information systems allow for the direct electronic exchange of information on port State measures between them and with the SPRFMO Secretariat, with due regard to appropriate confidentiality requirements.
39. Members and CNCPs, in their capacity as port States, are encouraged to enter into bilateral agreements/arrangements that allow for joint inspections and an inspector exchange programme designed to promote cooperation, share information, and educate each party's inspectors on inspection strategies and methodologies which promote compliance with SPRFMO CMMs. A description of such programmes should be provided to the SPRFMO Executive Secretary who should publish it on the SPRFMO website.
40. Each Member or CNCP, in its capacity as a port State may, in accordance with its domestic laws and regulations, invite officials from the flag Member or CNCP to observe or take part in the inspection of a vessel of that flag based on appropriate agreements or arrangements. Flag Members and CNCPs shall consider and act on reports of infringements from inspectors of a port State on a similar basis as the reports from their own inspectors, in accordance with their domestic laws. Members and CNCPs shall collaborate, in accordance with their domestic laws, in order to facilitate judicial or other proceedings arising from inspection reports as set out in this CMM.
41. The SPRFMO Commission shall review this CMM no later than 2023 and consider revisions to improve its effectiveness and take into account developments in other RFMOs and the FAO Port State Measures Agreement. The Secretariat will report annually on the implementation of this CMM.



ANNEX 1 Port Call Request Template

Port call information:

Port of call	Last port	Date of last port call

Vessel Identification:

Vessel Name	Vessel flag	IMO number	Call sign	External markings
Type of vessel	Vessel contact information	Vessel owner(s)	RFMO ID (if applicable)	Certificate of registry ID

VMS:

VMS operational?	VMS Reporting to National FMC?	VMS Reporting to SPRFMO?
Type		

Vessel dimensions:

Length	Beam	Draft (Moulded depth)

Vessel master name and nationality:

Vessel master name	Vessel master nationality

Relevant transhipment authorisation(s):

Identifier	Issued by	Valid dates



Transshipment information (concerning donor vessels):

Date	Location (Lat/Long)	Donor vessel name	Flag State of donor vessel	IMO number	Species	Product state	FAO Area of capture	Quantity (kilograms)

Port Call Details:

Intended port of call ¹	Port State	Purpose ² of port call	Estimated arrival date	Estimated arrival time	Current date

¹ Should be a designated port as listed on the SPRFMO port register

² E.g., landing, transshipment, refuelling



SPRFMO managed species held on-board:

Species	FAO area of capture	Product state	Total kilograms held on board	Amount to be transhipped / landed	Recipient of transhipped/landed amount

If no SPRFMO species and/or fish products originating from such species are held on board, then enter "nil"

Relevant fishing authorisation details:

Identifier	Issued by	Validity	Fishing area(s)	Species	Gear ³

³ If the authorisation is for transhipments enter "tranship" as the gear

Fishing authorisation indicates vessel catch limit per species (Y/N)	Species ⁴	Vessel Catch limit per species ⁴

⁴ If the authorization does not indicate vessel catch limit, enter N/A.

Is a copy of the crew list attached?

Yes	No

This form should be transmitted to the appropriate Point of Contact at least 48 hours prior to the estimated time of arrival at the port. Contact information can be found on the SPRFMO website: (<http://www.sprfmo.int/points-of-contact/>)



ANNEX 2

Port State Inspection Standards

Inspectors shall:

- a) verify, to the extent possible, that the vessel identification documentation onboard and information relating to the owner of the vessel is true, complete and correct, including through appropriate contacts with the flag State or international records of vessels if necessary;
- b) verify that the vessel's flag and markings (e.g. name, external registration number, International Maritime Organization (IMO) ship identification number, international radio call sign and other markings, main dimensions) are consistent with information contained in the documentation;
- c) verify, to the extent possible, that the authorisations for fishing and fishing related activities are true, complete, correct and consistent with the information provided in the port call request;
- d) review all other relevant documentation and records held onboard, including, to the extent possible, those in electronic format and vessel monitoring system (VMS) data from the flag State or SPRFMO Secretariat or other relevant regional fisheries management organisations (RFMOs). Relevant documentation may include logbooks, catch, transshipment and trade documents, crew lists, stowage plans and drawings, descriptions of fish holds, and documents required pursuant to the Convention on International Trade in Endangered Species of Wild Fauna and Flora;
- e) examine, to the extent possible, all relevant fishing gear on-board, including any gear stowed out of sight as well as related devices, and to the extent possible, verify that they are in conformity with the conditions of the authorisations. The fishing gear shall, to the extent possible, also be checked to ensure that features such as the mesh and twine size, devices and attachments, dimensions and configuration of nets, pots, dredges, hook sizes and numbers are in conformity with applicable regulations and that the markings correspond to those authorised for the vessel;
- f) determine, to the extent possible, whether the fish on board was harvested in accordance with the applicable authorisations;
- g) examine the fish, including by sampling, to determine its quantity and composition. In doing so, inspectors may open containers where the fish has been pre-packed and move the catch or containers to ascertain the integrity of fish holds. Such examination may include inspections of product type and determination of nominal weight;
- h) evaluate whether there is clear evidence for believing that a vessel has engaged in IUU fishing or fishing related activities in support of such fishing;
- i) provide the master of the vessel with the report containing the result of the inspection, including possible measures that could be taken, to be signed by the inspector and the master. The master's signature on the report shall serve only as acknowledgment of the receipt of a copy of the report. The master shall be given the opportunity to add any comments or objection to the report, and, as appropriate, to contact the relevant authorities of the flag State in particular where the master has serious difficulties in understanding the content of the report. A copy of the report shall be provided to the master; and
- j) arrange, where necessary and possible, for translation of relevant documentation.



ANNEX 3

Format for Port Inspection Reports

Inspection Details	
Inspection report number:	
Principal inspector's name:	
Port State:	Inspecting authority:
Port of inspection:	Purpose of call:
Inspection start date: YYYY-MON-DD	Inspection start time: hh:mm
Inspection end date: YYYY-MON-DD	Inspection end time: hh:mm
Prior notification received? Yes <input type="checkbox"/> No <input type="checkbox"/>	Prior notification details consistent with inspection? Yes <input type="checkbox"/> No <input type="checkbox"/>

Vessel Details	
Vessel name:	Vessel Flag:
Vessel type:	Call Sign:
External identification:	IMO number:
Vessel owner:	
Vessel beneficial owner(s): <i>(If known and different from vessel owner)</i>	
Vessel operator:	
Vessel master and nationality:	
Vessel agent:	
VMS present? Yes <input type="checkbox"/> No <input type="checkbox"/>	VMS type:

¹ If the authorisation is for transhipment enter "tranship" as the gear.



Relevant Fishing Authorisations	
Authorisation identifier:	Issued by:
Validity:	Fishing areas:
Species:	Gear ¹ :
Is the vessel on the SPRFMO authorised vessel list? Yes <input type="checkbox"/> No <input type="checkbox"/>	Currently authorised? Yes <input type="checkbox"/> No <input type="checkbox"/>

SPRFMO-Managed Species Off Loaded <i>(during this port call)</i>				
Species	FAO Area of Capture	Product state	Declared quantity off loaded (kg)	Quantity off loaded (kg)

SPRFMO-Managed Species Retained On-board				
Species	FAO Area of Capture	Product state	Declared quantity held on board (kg)	Quantity held on board (kg)



SPRFMO-Managed Species Received from Transhipment (<i>during this port call</i>)				
Species	FAO Area of Capture	Product state	Declared quantity received (kg)	Quantity received (kg)

Examinations and Findings	
Section:	Comments:
Examination of Logbooks and other documentation:	
Compliance with applicable catch documentation schemes(s):	
Compliance with applicable trade information schemes(s):	
Type of gear on board:	
Findings by inspector:	
Apparent Infringements (<i>include reference to relevant legal documents</i>):	
Master's comments:	
Actions taken:	
Master's signature:	Inspector's signature:

Upon completion, a copy of this form shall be provided to the vessel master. Subsequently, a copy should also be transmitted to the SPRFMO Executive Secretary within 15 days. If this cannot be achieved, then the reasons for the delay and an estimated submission date shall be transmitted to the SPRFMO Executive Secretary within 15 days of the completion of the inspection.

If the information collected provides evidence that a breach of any SPRFMO CMM has occurred, then this form should be transmitted to the competent port State authorities (who shall forward a copy to the SPRFMO Executive Secretary and to the relevant point of contact as soon as possible and no later than 5 working days).

CMM 08-2019

**Conservation and Management Measure for Gillnets in the
SPRFMO Convention Area**
(Supersedes CMM 08-2013)

The Commission of the South Pacific Regional Fisheries Management Organisation;

RECOGNISING that the Convention calls on the Commission, in giving effect to the objectives of the Convention, to adopt Conservation and Management Measures (CMMs) that take account of international best practices and protect the marine ecosystem, particularly ecosystems with long recovery times following disturbance, from significant adverse impact of unregulated and unmanaged fishing practices (Articles 3(1)(a)(i) and (vii) and 20(1)(d));

FURTHER RECOGNISING Article 3(1)(b) and (2) which calls on the Commission to apply the precautionary approach and ecosystem based approach to fisheries under the mandate of the Convention;

MINDFUL of Article 31(1) of the Convention that calls on the Commission to cooperate with other regional fisheries management organisations (RFMOs), the FAO and other specialised agencies of the United Nations and other relevant organisations on issues of mutual interest;

RECALLING that Parties to the 8th International Consultation on the establishment of the South Pacific RFMO (November 2009) adopted an interim measure for deepwater gillnet fishing in the Convention Area which came into effect on 1 February 2010;

NOTING Resolution 61/105, adopted by UNGA at the 61st Plenary Meeting on 8 December 2006 and subsequent resolutions of the United Nations General Assembly (UNGA) that call on states and regional fisheries management organisations to regulate bottom fisheries and implement measures in accordance with the precautionary approach and ecosystem approaches to fisheries management;

FURTHER NOTING Resolution 46/215 *Large-scale pelagic drift-net fishing and its impact on the living marine resources of the world's oceans and seas* adopted by the UNGA at the 79th Plenary Meeting in 1991;

CONCERNED by the possible impact of large-scale pelagic gillnets and deepwater gillnets on fishery resources, bycatch species and deep sea habitats, including the impact of lost and/or abandoned gillnets;

hereby *ADOPTS* the following CMM in accordance with Articles 8 and 20 of the Convention:



Gillnets

1. Members and CNCPs shall prohibit vessels flying their flag from using large-scale pelagic driftnets¹ and all deepwater gillnets² in the Convention Area.
2. Members and CNCPs whose flagged vessels seek to transit the Convention Area with gillnets onboard shall:
 - a) Give at least 36 hours advanced notice to the Secretariat prior to entering the Convention Area. In particular, Members shall report the expected entry and exit dates and length of gillnet carried onboard;
 - b) Ensure their vessels operate a vessel monitoring system polling once every two hours while in the Convention Area;
 - c) Submit VMS position reports to the Secretariat within 30 days of the vessel leaving the Convention Area; and
 - d) If gillnets are accidentally lost and/or abandoned overboard, report the date, time, position (using WGS84) and length (metres) of gillnets lost to the Executive Secretary as soon as possible and within 48 hours of the gear being lost.

¹ “Large-scale pelagic driftnets” are defined as a gillnet or other net or a combination of nets which is more than 2.5 kilometres in length the purpose of which is to enmesh, entrap or entangle fish by drifting on the surface or in the water.

² “Deepwater gillnets” (including trammel net, set nets, anchored nets, sink nets) are defined as strings of single, double or triple netting walls, held vertically, on or near the bottom, in which fish will gill, entangle or enmesh. Deepwater gillnets consist of single or, less commonly, double or triple netting mounted together on the same frame ropes. Several types of nets may be combined in one gear. These nets can be used either alone or, as is more usual, in large numbers placed in line (“fleets” of nets). The gear can be set, anchored to the bottom or left drifting, free or connected with the vessel.

CMM 09-2017

Conservation and Management Measure for minimising bycatch of seabirds in the SPRFMO Convention Area

(Supersedes CMM 4.09; 2016)

The Commission of the South Pacific Regional Fisheries Management Organisation;

CONCERNED that some species of albatrosses and petrels are threatened with global extinction;

RECOGNISING the need to strengthen mechanisms to protect seabirds in the Pacific Ocean;

NOTING the overlap in the distribution of albatrosses and petrels with fishing effort in the Convention Area as shown in SWG-11-INF-02 (rev 1) and SWG-11-INF-02a;

FURTHER RECOGNISING that Article 3 (1) of the Convention requires, in giving effect to its objective, that the conservation and management of fishery resources shall take into account best international practices, that fishing shall take into account the impacts on non-target and associated or dependent species, and shall apply the Precautionary Approach;

TAKING INTO ACCOUNT the United Nations Food and Agriculture Organization (FAO) International Plan of Action for Reducing the Incidental Catch of Seabirds in Longline Fisheries (IPOA-Seabirds);

FURTHER TAKING INTO ACCOUNT the FAO Technical Guidelines for Responsible Fisheries concerning best practices to reduce incidental catch of seabirds in capture fisheries;

NOTING the Agreement on the Conservation of Albatrosses and Petrels (ACAP) has established best practice seabird bycatch mitigation measures for trawl and demersal longline fisheries;

NOTING that best practice seabird mitigation is supported by ongoing research and improvements;

FURTHER NOTING that the Scientific Committee endorsed the ACAP best practice guidance;

ADOPTS in accordance with Article 8 and 20 of the Convention, the following Conservation and Management Measure (CMM):

General Provisions

1. Members and Cooperating non-Contracting Parties (CNCs) shall require vessels flying their flag and using demersal longlines, to implement seabird mitigation measures, as described in Annex 1.
2. Subject to paragraph 3, Members and CNCs shall require vessels flying their flag and using trawl gear to implement seabird mitigation measures, as described in Annex 2.
3. Vessels using trawl gear that discharge no biological material shall be exempt from applying the seabird mitigation measures described in Annex 2. This provision shall be subject to periodic review or review when new information is available.
4. Use of mitigation measures detailed in this CMM are subject to safety considerations for vessels and crew in accordance with international law.
5. Members and CNCs shall implement this CMM by July 31st 2015 unless decided otherwise by the Commission based on the results of the Scientific Committee's consideration of the issue at its 2014 meeting.
6. Members and CNCs are encouraged to adopt measures aimed at ensuring that seabirds captured or entangled alive during any fishing operations in the Convention Area are released alive and in as good condition as possible. Research into the survival of released seabirds is encouraged.



7. Members and CNCPs shall record data, in accordance with CMM 02-2021 (Data Standards) and through existing observer programmes, on all interactions with seabirds. In addition, Members and CNCPs are encouraged to record data on seabird observations.
8. Members and CNCPs shall report the information collected in paragraph 7 above annually to the Secretariat in accordance with both subparagraph 1(e) and its associated Annexes, and subparagraph 2(c) and Annex 7(H) of CMM 02-2021 (Data Standards). Members and CNCPs are also encouraged to report these data in their National Reports to the Scientific Committee.
9. In their annual national science reports to the Scientific Committee, Members and CNCPs shall report annually, on the seabird mitigation measures used by each vessel flying their flag and fishing in the Convention Area, as well as any observed seabird interaction data and the level of observer coverage focussed on recording seabird bycatch.
10. The Scientific Committee will report on the number and location of seabird interactions annually and provide advice and recommendations to the Commission on possible improvements to further mitigate seabird interactions, including *inter alia*, the potential use of trigger limits to manage the incidental catch of seabirds in the SPRFMO Convention Area. Further, the Scientific Committee shall consider any relevant advice from the ACAP Advisory Committee.
11. Nothing in this measure shall affect the rights of Members and CNCPs to apply additional or more stringent compatible measures to their flagged vessels conducting demersal longline or trawl fishing in the Convention Area.
12. Nothing in this measure shall affect the rights of Members and CNCPs to apply higher levels of observer coverage to monitor the effectiveness of mitigation measures or collect data on seabird interactions, including mortality rates.
13. The Scientific Committee will annually review any new information on new or existing mitigation measures and on seabird interactions from observer programmes or other research and provide advice to the Commission on the need to implement particular measures for specific gear types or fisheries, or make other amendments to this Measure.



ANNEX 1

Seabird Mitigation Specifications for Demersal Longline Fishing

1. To minimise incidental interactions with seabirds in demersal longlines, demersal longline vessels shall:
 - a) Prohibit discharge of any biological material during shooting and hauling, where possible¹, to avoid attracting seabirds to the vessel, and
 - b) Either:
 - i. Implement the combined use of the following measures:
 - a. a line weighting regime, as specified in paragraph 6. Noting the objective of this measure is to maximise hook sink rates close to vessel sterns to reduce the availability of baits to seabirds;
 - b. bird scaring lines, as specified in paragraph 7. Noting the objective of this measure is to actively deter birds from baited hooks;
 - c. setting at night, between the times of nautical dark and nautical dawn.
 - Or:
 - ii. Where a Member or CNCP has maintained spatially and temporally appropriate observer coverage for the previous 5 consecutive years at levels greater than 10% and recorded a seabird mortality rate less than 0.01 birds/ 1000 hooks, that Member may choose to:
 - a. require its vessels to apply only one of the three measures specified in paragraph 1; and
 - b. ensure a minimum of 10% observer coverage that is adequately representative of the spatial and temporal distribution of the fishing fleet.
2. Should a flagged vessel of Member or CNCP applying paragraph 1(b) exceed a seabird mortality rate of 0.01 birds/ 1000 hooks, they will be required to:
 - a) apply at least one additional measure detailed in paragraph 1 for at least one year from the time of the mortality;
 - b) report details of the event to the Secretariat within seven days; and
 - c) report details of the event in their national report.
3. Should any Member or CNCP applying paragraph 1(b) exceed a seabird mortality rate of 0.01 birds/ 1000 hooks on any of its vessels, the Scientific Committee should review all seabird bycatch observer data for that fishery and make recommendations on any necessary amendments to this measure.
4. Further measures that may be implemented include:
 - a) bird deterrent curtains at the hauling bay as specified in paragraph 8, responsible offal management, and avoiding peak areas and periods of seabird foraging activity; and
 - b) any other experimental measure to reduce seabird bycatch, provided the required measures in paragraph 1 are still implemented.

¹ Where it is necessary to discharge biological waste due to operational safety concerns, vessels should batch waste for two hours or longer.

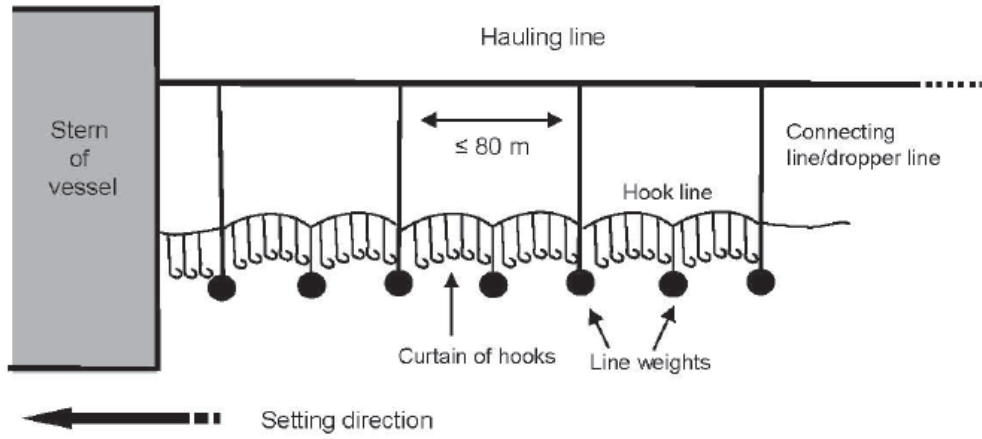


5. Where trot lines are used, the use of cachalotera nets is considered to be best practice mitigation, although global minimum standards are not yet developed. Members are encouraged to report details of gear configuration used to the Scientific Committee.
6. Line weighting regimes deployed in accordance with paragraph 1(b)(i)(a) of this Annex shall be in accordance with the following specifications: Line weighting must meet or exceed the minimum standards listed here for each type of bottom line gear. Vessels must use a longline weighting regime that achieves a demonstrable minimum longline sink rate of 0.3 metre/second to 15 metre depth for gear. Specifically:
 - a) External weighted lines in Spanish system and trot lines must use a minimum of 8.5 kg mass at intervals of no more than 40 m if rocks are used, 6kg mass at intervals of no more than 20 m for concrete weights, and 5 kg weights at intervals of no more than 40 m for solid metal weights.
 - b) External weighted lines in autoline must use a minimum 5 kg mass at intervals no more than 40 m, which must be released from vessels in a manner that avoids tension astern (tension astern may lift sections of the longline already deployed out of the water).
7. Bird scaring lines deployed in accordance with paragraph 1(b)(i)(b) of this Annex shall be in accordance with the following specifications:
 - a) One or more bird scaring lines must be carried at all times and must be deployed whenever fishing gear is being set from the vessel;
 - b) The bird scaring line must be attached to the vessel so that when deployed the baits are protected by the streamer line, even in cross winds;
 - c) The bird scaring line shall use brightly coloured streamers long enough to reach the sea-surface in calm conditions (“long streamers”) placed at intervals of no more than 5 m for at least the first 55 m of streamer line and shall be attached to the line with swivels that prevent streamers from wrapping around the line;
 - d) The bird scaring line may also use streamers a minimum of 1 m in length (“short streamers”) placed at intervals of no more than 1m.
 - e) If the bird scaring line that is in use breaks or is damaged, it must be repaired or replaced so that the vessel meets these specifications before any further hooks enter the water.
 - f) The bird scaring line shall be deployed so that:
 - i. it remains above the water surface to a distance where the hooks have sunk to a depth of 15 m, or
 - ii. be of a minimum length of 150 m extent and suspended from a point on the vessel at least 7 m above the water in the absence of swell.
8. Bird deterrent curtains deployed in accordance with paragraph 4(a) of this Annex shall be in accordance with the following specifications: these devices must be constructed in order to achieve the following operational characteristics:
 - a) deterrence of birds flying directly into the area where the line is being hauled;
 - b) prevention of birds that are sitting on the water surface from swimming into the hauling bay area.

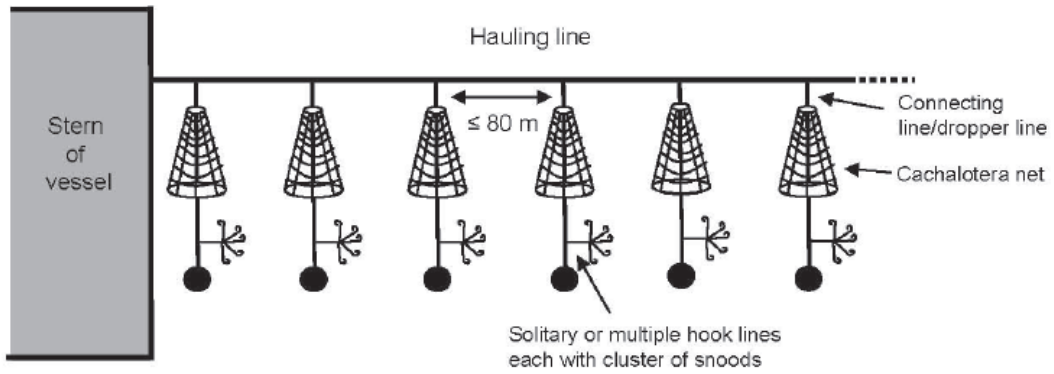


c) Internal weighted lines must have a lead core of at least 50 g/m.

Typical configuration of Spanish system



Typical configuration of trotline method





ANNEX 2

Seabird Mitigation Specifications for Trawl Fishing

1. To minimise the incidental mortality of seabirds associated with trawl fishing the following measures shall be used in combination:
 - a) Deploy, while fishing, bird scaring devices to deter birds away from warp cables and net monitoring cable as follows:
 - i. Two bird scaring lines, as specified in paragraph 3, or,
 - ii. where operational practices prevent the effective deployment of bird scaring lines, such as deep-water trawls targeting bathymetric features, a bird baffler, as specified in paragraph 4, may be used instead.
 - b) Use responsible discharge management to avoid attracting seabirds to the vessel:
 - i. Where possible, prohibit discharge of any biological material during shooting and hauling.
 - ii. Where possible and appropriate, convert offal into fish meal and retain all waste material with any discharge restricted to liquid discharge / sump water to reduce the number of birds attracted to a minimum. Where this is not feasible, vessels should batch waste for two hours or longer.

The use of the following measures is also encouraged where possible:

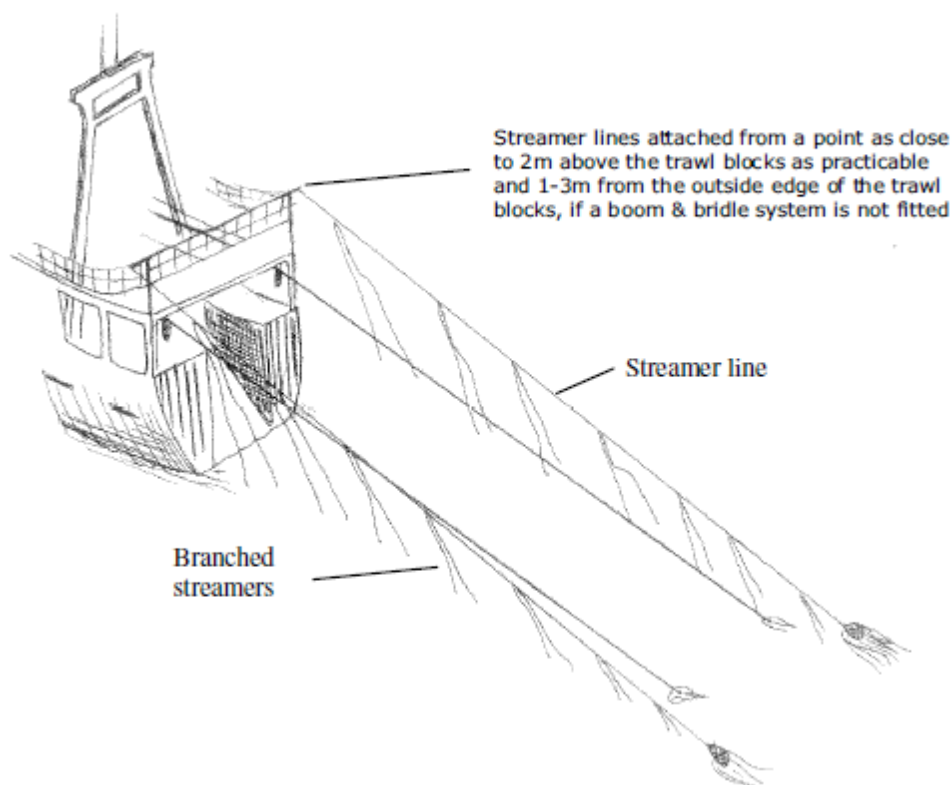
- c) Clean nets after every shot to remove entangled fish (“stickers”) and benthic material to discourage bird attendance during gear shooting.
 - d) Minimise the time the net is on the water surface during hauling through proper maintenance of winches and good deck practices.
2. Where a Member or CNCP has maintained 100% observer coverage of a fishery² for the previous 5 consecutive years with less than one recorded mortality per vessel per year, the measures detailed in paragraph 1 will not be required to be applied on its flagged trawl vessels in that fishery. Should a mortality event occur, the Member or CNCP will require the vessel that recorded the mortality to apply mitigation measures in accordance with paragraph 1 for at least one year from the recorded mortality.
 3. Bird scaring lines deployed in accordance with paragraph 1(a)(i) of this Annex shall be in accordance with the following specifications:
 - a) Two bird scaring lines must be carried at all times and must be deployed whenever the trawl net is in the water.
 - b) Bird scaring lines must be attached to both the port and starboard sides of a vessel, above and outside of the warp blocks.
 - c) To avoid deflection of bird scaring lines away from cables in strong cross winds, the bird scaring lines must tow a buoy or cone attached to the end of line to create tension and keep the line straight. It is recommended that for every metre of block height 1.2 kg of terminal object drag weight be used.

² Where a fishery is defined by gear type and geographical location.



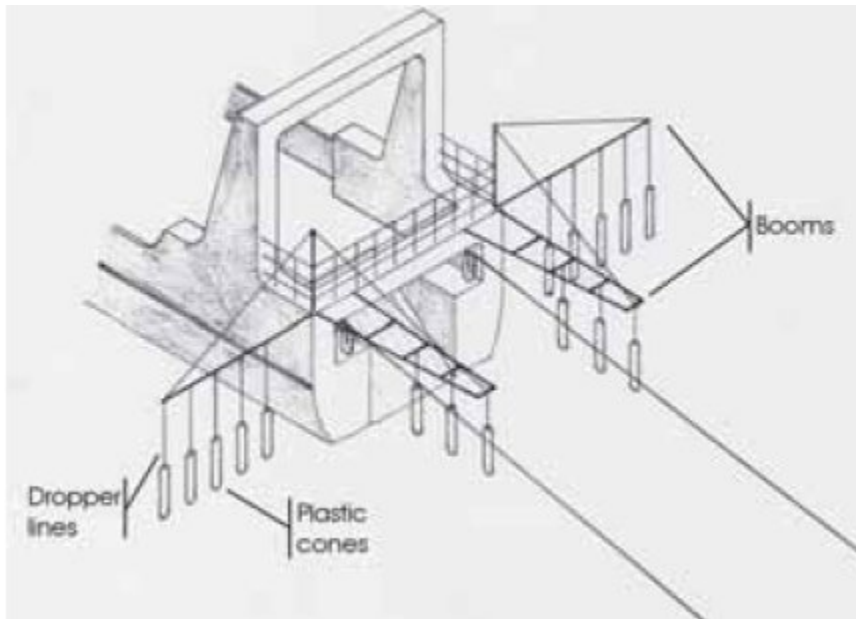
- d) The bird scaring line must be long enough to extend beyond the point at which warp and net monitoring cables reach the water surface. It is recommended that for every metre of block height 5 m of backbone be deployed.
 - e) The bird scaring line must have brightly coloured streamers long enough to reach the sea-surface in calm conditions. These must be placed at intervals of no more than 5 m apart, preferably at 3 m apart.
4. Bird bafflers deployed in accordance with paragraph 1(a)(ii) of this Annex shall be in accordance with the following specifications: A bird baffler consists of two or more booms attached to the stern quarter of the vessel, with at least one boom attached to the starboard stern quarter and at least one boom attached to the port stern quarter;
- a) Each boom shall extend outwards not less than four metres from the side or stern of the vessel;
 - b) Dropper lines, shall be attached to the booms no more than 2 metres apart;
 - c) Plastic cones, rods or other brightly coloured and durable material shall be attached to the ends of the dropper lines, so that the bottom of the cone, rod or material is not more than 500 millimetres above the water, in the absence of wind and swell; and
 - d) Lines or webbing may be attached between the dropper lines to prevent tangling.

“Bird scaring lines”





“Bird baffler”



CMM 10-2020

Conservation and Management Measure for the Establishment of a Compliance and Monitoring Scheme in the SPRFMO Convention Area

(Supersedes CMM 10-2019)

The Commission of the South Pacific Regional Fisheries Management Organisation;

RECALLING the relevant provisions of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean, in particular Articles 24, 25 and 26;

NOTING that Article 24 of the Convention requires each Member of the Commission to implement any Conservation and Management Measures (CMMs) adopted by the Commission;

MINDFUL of the rights and obligations of Members of the Commission in promoting the effective implementation of CMMs adopted by the Commission;

NOTING that in accordance with international law, Members have responsibilities to exercise effective control over their flagged vessels and their nationals;

RECOGNISING the importance of introducing a robust compliance review mechanism by which the compliance of each Member is examined in depth on a yearly basis;

ADOPTS the following CMM to establish a SPRFMO Compliance and Monitoring Scheme (CMS):

Purpose

1. The purpose of the SPRFMO CMS is to provide a mechanism to monitor and improve implementation of and compliance with obligations arising under the Convention and CMMs by Members and Cooperating non-Contracting Parties (CNCs). The CMS is designed to:
 - a) Assess compliance by Members and CNCs with their obligations under the Convention and CMMs;
 - b) Identify areas in which technical assistance or capacity building may be needed to assist Members and CNCs to achieve compliance;
 - c) Identify aspects of CMMs which may require improvement or amendment to facilitate or advance their implementation. These findings and subsequent actions shall not necessarily replace any review procedure established in accordance with Article 30 of the Convention;
 - d) Take action against non-compliance through preventive and remedial options that should include a range of possible responses that take into account the reasons for and degree of non-compliance, as assigned in accordance with paragraph 16(a).

Scope and Application

2. At each annual meeting, with the assistance of the Compliance and Technical Committee (CTC), the Commission shall evaluate Members' and CNCs' compliance with their obligations arising from the Convention, in particular Articles 24, 25 and 26, CMMs adopted by the Commission included in Annex 2 of this measure as well as, where appropriate, any other suitably documented information received during the assessment period consistent with paragraph 6 and, where applicable, the relevant CMMs. The



evaluation shall cover the period from 1 October till 30 September of the year preceding the annual meeting.

3. The Commission shall also review Compliance Action Plans and other recommendations on compliance adopted by the Commission, in accordance with this CMM, in previous years' Final Compliance Reports in order to assess how they have been implemented by the concerned Members and CNCPs.
4. Each year, the Commission shall consider and identify whether compliance with additional CMMs should be evaluated annually or on another basis.

Implementation Reports

5.
 - a) At least 90 days before the start of the CTC meeting, Members and CNCPs should provide the Secretariat with their Implementation Reports as required by Article 24 (2) of the Convention and any other relevant CMMs on the basis of the template at Annex 2.
 - b) Until the template referred to above is adopted, the provisional template in Annex 2 will be used. The Secretariat shall amend the template in Annex 2 as soon as practicable after the Commission meeting to incorporate obligations from new or amended CMMs adopted by the Commission.

Draft Compliance Report

6. Prior to the annual meeting of the CTC, the Secretariat shall compile information received from Members and CNCPs including their Implementation Reports, data collection programmes of the Commission and, where appropriate, any suitably documented information provided by other relevant sources, and shall prepare the Draft Compliance Report using the template in Annex 3.
7. The Secretariat shall provide to each Member and CNCP its respective section of the Initial Draft Compliance Report no later than 60 days before the annual CTC meeting.
8. Each Member and CNCP shall comment on the Draft Compliance Report providing any additional information it deems suitable to the Secretariat no later than 30 days before the annual CTC meeting. This information shall, as appropriate:
 - a) provide additional information, clarifications, amendments or corrections necessary to address the potential compliance issues identified or respond to any other request for additional information;
 - b) identify any particular causes of the potential compliance issues or difficulties with respect to implementation of the obligation in question, or circumstances which may mitigate the potential compliance issues;
 - c) identify technical assistance or capacity building needed to assist Members and CNCPs to address potential compliance issues.
9. The Secretariat shall compile a revised Draft Compliance Report which shall include all information, clarifications and comments provided by Members and CNCPs in response to the initial Draft Compliance Report, as described in paragraph 8 above.
10. The Secretariat shall circulate to Members and CNCPs the revised Draft Compliance Report no later than 14 days before the annual CTC meeting, by making it available on the non-public section of the Commission website. As soon as practicable after posting it, the Secretariat shall notify Members and CNCPs of its availability.



11. For those cases in the Draft Compliance Report where a reporting deadline or timeframe had not been met, and where it is not a repeated case of non-compliance with that specific obligation by that Member or CNCP, the CTC Chairperson, with the assistance of the Secretariat, shall assign a status of “non-compliant” and “no further action” required if the obligation has been met before the circulation of the Draft Compliance Report in accordance with paragraph 10.

Provisional Compliance Report

12. At its annual meeting, the CTC shall consider the Draft Compliance Report, and may take into account any additional information provided during the meeting of the CTC by Members, CNCPs and other observers, including non-governmental organisations and other organisations concerned with matters relevant to the implementation of the Convention. CTC shall identify any potential compliance issues for each Member and CNCP.
13. On the basis of the information provided, the CTC shall develop a Provisional Compliance Report, based on the issues identified in respect of that Member or CNCP and using the criteria and considerations for assessing compliance status set out in Annex 1. The Provisional Compliance Report shall include recommendations for the Commission for any follow-up corrective action needed and any preventive or remedial action taken, or proposed to be taken, by the Member or CNCP. Based on the status accorded, those recommendations may include the need for the Commission to undertake a Compliance Review, develop a Compliance Action Plan or identify a Compliance Remedy.
14. The Provisional Compliance Report will include an Executive Summary that includes recommendations regarding:
 - a) where appropriate, proposals to amend or improve existing CMMs;
 - b) identified obstacles to implementation including capacity building requirements;
 - c) provisions of CMMs and other Commission decisions that are a priority to be monitored and reviewed; and
 - d) other responsive action which may be considered by the Commission, as appropriate.
15. The Provisional Compliance Report shall be forwarded to the Commission for consideration at the annual meeting.

Final Compliance Report

16. The Commission shall consider the Provisional Compliance Report provided by the CTC, and adopt a Final Compliance Report at its annual meeting, which shall include:
 - a) a compliance status for each Member and CNCP with respect to the implementation of their obligations under the Convention and CMMs, and recommendations for any corrective action needed, based on compliance issues identified with respect to that Member or CNCP;
 - b) suggestions for possible amendments or improvements to existing CMMs to address implementation or compliance difficulties experienced by Members and CNCPs;
 - c) obstacles to implementation identified by Members and CNCPs including capacity building requirements;
 - d) additional obligations that should be reviewed under the CMS;



e) any other action the Commission shall deem appropriate to address non-compliance noted in the Final Compliance Report or to promote compliance with the Convention, CMMs and other obligations reviewed in the CMS.

17. The Final Compliance Report shall also contain an executive summary setting out any recommendations or observations from the Commission regarding the issues listed in paragraph 16 of this measure.

Other rules

18. All the relevant information arising from the SPRFMO CMS procedure shall be subjected to the relevant applicable SPRFMO rules and procedures regarding the use of information and transparency. Therefore, the Draft and Provisional Compliance Reports shall not constitute public domain data, but the Final Compliance Report and the executive summary shall be public domain data.

19. The Commission shall take a graduated response to non-compliance, taking into account the type, severity, degree and cause of the non-compliance in question. The Commission should develop, as a matter of priority, a process to complement the CMS that identifies a range of specific responses to non-compliance events that may be applied by the Commission through the implementation of the CMS. This shall include penalties and any other actions as may be necessary to promote compliance with the Convention, CMMs and other obligations included in the CMS.

20. This CMM shall be reviewed at the regular meeting of the Commission in 2023.



ANNEX 1 Status of Compliance

For the purposes of this CMM, “compliance status” refers to Members’ and CNCPs’ compliance with their obligations arising from the Convention, in particular Articles 24, 25 and 26 and the CMMs listed in Annex 2 of this measure and takes account of Members’ and CNCPs’ responses and corrective actions to address compliance issues identified.

Compliance Status	Criteria	Follow up
<i>Compliant</i>	No compliance issues identified with respect to the relevant obligations.	None
<i>Non-Compliant</i>	Non-compliance may be due to: a) actions or omissions which constitute a minor infringement of relevant obligations; b) insufficient, unclear or incorrect data or information;	<i>Undertake a Compliance Review</i> to identify non-compliance of a minor or technical nature or obligations with respect to which further information is required in order to identify implementation gaps and improve compliance.
<i>Priority Non-Compliant</i>	Non-compliance may be due to: a) action or omissions that constitute a serious infringement of relevant obligations; b) non-compliance that undermines the effectiveness of the Convention or CMM; c) failure to comply with previous CMS recommendations adopted by the Commission, after sufficient time and assistance has been provided.	<i>Develop a compliance action plan</i> to assist Members and CNCPs to actively take steps to respond to and rectify non-compliance or improve implementation of relevant obligations, including through the provision of technical assistance or capacity building, where appropriate.
<i>Seriously/Persistently Non-Compliant</i>	Non-compliance may be due to: a) action or omissions that constitute a repeated serious infringement of relevant obligations; b) repeated non-compliance that undermines the effectiveness of the Convention or CMMs; c) repeated failure to comply with previous Compliance Action Plans after sufficient time and assistance has been provided.	<i>Identify a Compliance Remedy</i> to address instances of persistent non-compliance which have not been resolved even after sufficient time and assistance have been provided through a Compliance Action Plan.
<i>Not Assessed</i>	Proven ambiguity of relevant obligations	<i>Commission to clarify obligation and if necessary, amend relevant provisions</i>



ANNEX 2

Template for the Implementation Report of the SPRFMO Conservation and Management Measures

Annex 2 is currently being amended by the Secretariat as per paragraph 5b.



ANNEX 3

Draft Compliance Report (2017/18 example)

Reporting Member/CNCP: XXXXX

Reporting Period to which this report refers: 2017/18 (being 1 October 2017 – 30 September 2018)

Date report prepared: XXXXX

The Conservation and Management Measures which have been assessed include:

- CMM 01-2018 (*T. murphyi*)
- CMM 02-2018 (Data Standards)
- CMM 03-2018 (Bottom Fishing)
- CMM 04-2017 (IUU List)
- CMM 05-2016 (Record of Vessels)
- CMM 06-2018 (Commission VMS)
- CMM 07-2017 (Port Inspection)
- CMM 08-2013 (Gillnetting)
- CMM 09-2017 (Seabirds)
- CMM 10-2018 (Compliance & Monitoring Scheme)
- CMM 11-2015 (Boarding and Inspection)
- CMM 12-2018 (Transshipment)
- CMM 13-2016 (Exploratory Fisheries)
- CMM 14b-2016 (Exploratory Potting)
- CMM 15-2016 (Stateless Vessels)
- CMM 16-2018 (Observer Programme)

Note, all figures are preliminary, and assessments of possible compliance issues are made using the best information available at this time. Members and CNPs are invited to provide comments and additional information they deem suitable on any possible compliance issue. This information shall, as appropriate:

- a) provide additional information, clarifications, amendments or corrections necessary to address the potential compliance issues identified or respond to any other request for additional information;
- b) identify any particular causes of the potential compliance issues or difficulties with respect to implementation of the obligation in question, or circumstances which may mitigate the potential compliance issues.
- c) identify technical assistance or capacity building needed to assist Members and CNPs to address potential compliance issues

Comments and/or additional information are due no later than XXXXX.



CMM 01-2018 *Trachurus murphyi* (2017/18 example to be followed for all CMMs)

Effort management

Paragraph 4

Relevant Members and CNCPs shall limit the total gross tonnage (GT) of vessels flying their flag and participating in the fishing activities described in Article 1, (1)(g)(i) and (ii) of the Convention in respect of the *Trachurus murphyi* fisheries in the Convention Area to the total tonnage of their flagged vessels that were engaged in such fishing activities in 2007 or 2008 or 2009 in the Convention Area and as set out in Table 1 of CMM 1.01 (*Trachurus murphyi*; 2013). Such Members and CNCPs may substitute their vessels as long as the total level of GT for each Member and CNCP does not exceed the level recorded in that Table.

Member/ CNCP	Assessed requirement(s)	CMM	Gross Tonnage limit	2018 Active fishing Vessels	2016/17 Compliance Status	2017/18 Possible compliance issues?
XXXXX	CMM 01-2018 Para 4		0	0	Compliant	No

Note: Tonnage is GT unless otherwise stated.

Secretariat Assessment of potential compliance issues

- No potential compliance issues.

Member or CNCPs comments on Potential Compliance Issues

Member	Comment
XXXXX:	<i>In this section Members or CNCPs can comment on the secretariat's provisional assessment of their compliance status in relation to the CMM. This section should only be completed by a Member or CNCPs if they have any comments on the provisional compliance assessment or if there is any further information they wish to add for the CTC to consider.</i>

Catch Management

Paragraph 7

In the event that a Member or CNCP reaches 70% of its catch limit set out in Table 1, the Executive Secretary shall inform that Member or CNCP of that fact, with a copy to all other Members and CNCPs. That Member or CNCP shall close the fishery for its flagged vessels when the total catch of its flagged vessels is equivalent to 100% of its catch limit. Such Member or CNCP shall notify promptly the Executive Secretary of the date of the closure.

Paragraph 9

By 31 December each year a Member or CNCP may transfer to another Member or CNCP all or part of its entitlement to catch up to the limit set out in Table 1, without prejudice to future agreements on the allocation of fishing opportunities, subject to the approval of the receiving Member or CNCP. When receiving fishing entitlement by transfer, a Member or CNCP may either allocate it on the basis of domestic legislation or endorse arrangements between owners participating in the transfer. Before the transferred fishing takes place, the transferring Member or CNCP shall notify the transfer to the Executive Secretary for circulation to Members and CNCPs without delay.



Member/ CNC P	Assessed CMM requirement(s)	2018 Catch Limit	Effect of Catch Transfers	Preliminary 2018 Catch Total*	2016/17 Compliance Status	2017/18 Possible Compliance issues?
XXXXX	CMM 01-2018 Para's 7 & 9 Table 1	0	0	0	Compliant	No

*Data only available up to and including [September 2018]

Secretariat Assessment of potential compliance issues

- No potential compliance issues.

Member or CNC P s comments on Potential Compliance Issues

Member	Comment
XXXXX:	<i>In this section Members or CNC P s can comment on the secretariat's provisional assessment of their compliance status in relation to the CMM. This section should only be completed by a Member or CNC P s if they have any comments on the provisional compliance assessment or if there is any further information they wish to add for the CTC to consider.</i>

Data Collection and Reporting

Paragraph 11

Members and CNC P s participating in the *Trachurus murphyi* fishery shall report in an electronic format the monthly catches of their flagged vessels to the Secretariat within 20 days of the end of the month, in accordance with CMM 02-2018 (Data Standards) and using templates prepared by the Secretariat and available on the SPRFMO website.

Paragraph 16

Each Member and CNC P participating in the *Trachurus murphyi* fishery shall provide the Executive Secretary a list of vessels (*Fishing vessels as defined in Article 1 (1)(h) of the Convention*) they have authorized to fish in the fishery in accordance with Article 25 of the Convention and CMM 05-2016 (Record of Vessels) and other relevant CMMs adopted by the Commission. They shall also notify the Executive Secretary of the vessels that are actively fishing or engaged in transshipment in the Convention Area within 20 days of the end of each month. The Executive Secretary shall maintain lists of the vessels so notified and will make them available on the SPRFMO website.

Member/ CNC P	Assessed CMM requirement(s)	Number of reports	% received on-time	Active and transshipping vessels notified?	2016/17 Compliance Assessment	2017/18 Possible compliance issues?
XXXXX	CMM 01-2018 Para 11, 16	0	n/a	n/a	Compliant	No

Secretariat Assessment of potential compliance issues

- No potential compliance issues.



Member or CNCPs comments on Potential Compliance Issues

Member	Comment
XXXXX:	<i>In this section Members or CNCPs can comment on the secretariat's provisional assessment of their compliance status in relation to the CMM. This section should only be completed by a Member or CNCPs if they have any comments on the provisional compliance assessment or if there is any further information they wish to add for the CTC to consider.</i>

Paragraph 13

Except as described in paragraph 11 above, each Member and CNCP participating in the *Trachurus murphyi* fishery shall collect, verify, and provide all required data to the Executive Secretary, in accordance with CMM 02-2018 (Data Standards) and the templates available on the SPRFMO website, including an annual catch report.

This paragraph is assessed below as part of the section on CMM 02-2018 (Data Standards).

Paragraph 15

Members and CNCPs participating in the *Trachurus murphyi* fisheries shall implement a vessel monitoring system (VMS) in accordance with CMM 06-2018 (VMS) and other relevant CMMs adopted by the Commission.

This paragraph is assessed below as part of the section on CMM 02-2018 (Data Standards).

Paragraph 18

In order to facilitate the work of the Scientific Committee, Members and CNCPs shall provide their annual national reports, in accordance with the existing guidelines for such reports, in advance of the 2018 Scientific Committee meeting. Members and CNCPs shall also provide observer data for the 2018 fishing season to the Scientific Committee to the maximum extent possible. The reports shall be submitted to the Executive Secretary at least one month before the 2018 Scientific Committee meeting in order to ensure that the Scientific Committee has an adequate opportunity to consider the reports in its deliberations.

Member/ CNCP	Assessed CMM requirement	2018 Annual report provided	Received 1 month prior to SC6	2018 observer data provided to SC6	2016/17 Compliance Assessment	2017/18 Possible compliance issues?
XXXXX	CMM 01- 2018 Para 18	Yes	Yes	n/a	Compliant	No

*Observer data being length frequencies

Secretariat Assessment of potential compliance issues

- No potential compliance issues.

Member or CNCPs comments on Potential Compliance Issues

Member	Comment
XXXXX:	<i>In this section Members or CNCPs can comment on the secretariat's provisional assessment of their compliance status in relation to the CMM. This section should only be completed by a Member or CNCPs if they have any comments on the provisional compliance assessment or if there is any further information they wish to add for the CTC to consider.</i>



Paragraph 19

In accordance with Article 24(2), all Members and CNCPs participating in the *Trachurus murphyi* fishery shall provide a report describing their implementation of this CMM in accordance with the timelines specified in CMM 10-2018 (Compliance Monitoring Scheme). On the basis of submissions received the CTC shall develop a template to facilitate future reporting. The implementation reports will be made available on the SPRFMO website.

This paragraph is assessed below as part of the section on CMM 10-2018 (Compliance Monitoring Scheme).

Paragraph 20

The information collected under paragraphs 11, 13 and 18, and any stock assessments and research in respect of *Trachurus murphyi* fisheries shall be submitted for review to the Scientific Committee. The Scientific Committee will conduct the necessary analysis and assessment, in accordance with its SC Multiannual workplan (2018) agreed by the Commission, in order to provide updated advice on stock status and recovery.

Member/ CNCP	Assessed CMM requirement	CJM stock assessment provided to SC6	CJM research provided to SC6	2016/17 Compliance Assessment	2017/18 Possible compliance issues?
XXXXX	CMM 01-2018 Para 20	No	No	Compliant	No

Secretariat Assessment of potential compliance issues

- No potential compliance issues.

Member or CNCPs comments on Potential Compliance Issues

Member	Comment
XXXXX:	<i>In this section Members or CNCPs can comment on the secretariat's provisional assessment of their compliance status in relation to the CMM. This section should only be completed by a Member or CNCPs if they have any comments on the provisional compliance assessment or if there is any further information they wish to add for the CTC to consider.</i>

Paragraph 21

Contracting Parties and CNCPs, as port States, shall, subject to their national laws, facilitate access to their ports on a case-by-case basis to reefer vessels, supply vessels and vessels fishing for *Trachurus murphyi* in accordance with this CMM. Contracting Parties and CNCPs shall implement measures to verify catches of *Trachurus murphyi* caught in the Convention Area that are landed or transhipped in its ports.

This paragraph is assessed below as part of the section on CMM 07-2017 (Port Inspections).

Paragraph 22

Until the Commission adopts an Observer Programme in accordance with Article 28 of the Convention, all Members and CNCPs participating in the *Trachurus murphyi* fishery shall ensure a minimum of 10 % scientific observer coverage of trips for vessels flying their flag and ensure that such observers collect and report data as described in CMM 02-2018 (Data standards). In the case of the flagged vessels of a Member or CNCP undertaking no more than 2 trips in total, the 10% observer coverage shall be calculated by reference to active fishing days for trawlers and sets for purse seine vessels.



Member/ CNC	Assessed requirement	CMM	Observer coverage %	2016/17 Compliance Assessment	2017/18 Possible compliance issues?
XXXXX	CMM Para 22	01-2018	n/a	Compliant	No

Secretariat Assessment of potential compliance issues

- No potential compliance issues

Member or CNCs comments on Potential Compliance Issues

Member	Comment
XXXXX:	<i>In this section Members or CNCs can comment on the secretariat's provisional assessment of their compliance status in relation to the CMM. This section should only be completed by a Member or CNCs if they have any comments on the provisional compliance assessment or if there is any further information they wish to add for the CTC to consider.</i>

CMM 11-2015

Conservation and Management Measure Relating to Boarding and Inspection Procedures in the SPRFMO Convention Area

(Supersedes CMM 3.04)

The Commission of the South Pacific Regional Fisheries Management Organisation;

MINDFUL of Article 27 of the Convention and the obligations therein to establish appropriate cooperative procedures to ensure compliance with the Convention and the Conservation and Management Measures (CMMs) adopted under the Convention;

NOTING that in accordance with Article 27(3) of the Convention, if the Commission has not adopted at sea inspection procedures Articles 21 and 22 of the 1995 Agreement (UN Fish Stocks Agreement) shall apply from 24 August 2015;

NOTING that it has not yet been possible for the Commission to adopt an at sea inspection measure specifically for the SPRFMO Convention Area;

CERTAIN that a procedure for inspection of vessels at sea will greatly assist in furthering the objective of the Convention, and committed to on-going work towards the adoption of a specific SPRFMO at sea inspection measure;

RECALLING the explicit commitments given by Cooperating non-Contracting Parties (CNCs) in accordance with the "Rules for Cooperating non-Contracting Parties" (Decision 1.02) paragraph 3(c);

ADOPTS the following interim CMM in accordance with Articles 8 and 27 of the Convention:

1. The Commission's procedures on at sea inspection in the SPRFMO Convention Area shall be those contained in Articles 21 and 22 of the 1995 Agreement.
2. Consistent with the commitments given by CNCs, Contracting Parties may conduct at sea inspections following the procedures contained in Articles 21 and 22 of the 1995 Agreement in respect of a vessel flying the flag of a Cooperating non-Contracting Party. This measure shall be effective from 24 August 2015 until such time as the Commission adopts a specific SPRFMO at-sea inspection regime.

CMM 12-2020

Conservation and Management Measure for the regulation of Transshipment and Other Transfer Activities

(Supersedes CMM 12-2018)

The Commission of the South Pacific Regional Fisheries Management Organisation;

RECALLING that Article 1(1)(o) of the Convention defines “transshipment” as the unloading of all or any of the fishery resources or fishery resource products derived from fishing in the Convention Area on board a fishing vessel to another fishing vessel either at sea or in port;

RECOGNISING that transshipment at sea is a common global practice, but that unregulated and unreported transshipment of catches of fishery resources, in particular on the high seas, contributes to distorted reporting of catches of such stocks and supports illegal, unreported and unregulated (IUU) fishing in the Convention Area;

RECOGNISING the importance of adequately regulating, monitoring and controlling transshipment at sea to contribute to combating IUU fishing activities, and that States should take all necessary measures to ensure that vessels flying their flag do not engage in transshipment of fish caught by fishing vessels engaged in IUU fishing through adequate regulation, monitoring and control of such transshipment of fish;

NOTING that Article 18 (3)(f) and (h) of the *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* requires flag States to adopt measures to regulate transshipment on the high seas to ensure that the effectiveness of conservation and management measures is not undermined, and port States to adopt regulations to prohibit landings and transshipments where the catch has been taken in a manner which undermines the effectiveness of regional conservation and management measures on the high seas;

RECALLING Articles 25(1)(d), 26(2)(a) and 27(1)(c) of the Convention, which prescribe, *inter alia*, that Members of the Commission shall take all necessary measures to ensure that fishing vessels flying its flag land or tranship fishery resources caught in the Convention Area in accordance with standards and procedures adopted by the Commission;

ADOPTS the following Conservation and Management Measure (CMM) in accordance with Article 8 of the Convention:

General Provisions for All Vessels Engaged in Fishing in the Convention Area

1. For the purposes of this CMM, “competent authorities” means the authorities of the Member or CNCP under whose flag the vessel is operating.
2. Transshipments at sea and in port shall only be undertaken between vessels included in the Commission Record of Vessels.
3. At sea transfer of fuel, crew, gear or any other supplies between two vessels in the Convention Area shall only be undertaken between vessels included in the Commission Record of Vessels.



Transshipments of Fishery Resources Caught in the Convention Area

4. The competent authorities of the receiving fishing vessel (carrier vessel) shall notify the Secretariat, at least 7 days in advance, of a 14-day period during which transshipments of fishery resources caught in the Convention Area, with the exception of jumbo flying squid, regardless of where the transshipment takes place, are scheduled to occur. The receiving vessel notification shall include the relevant information available regarding the transshipment operation, including the estimated date and time, anticipated location, fishery, and information about the vessels intending to tranship, in accordance with Annex 1 as much as practicable. The competent authorities of both the unloading and receiving vessels shall notify the Secretariat of an intention to tranship at least 12 hours before the estimated time of such activity. The notification shall include the estimated date and time, anticipated location, fishery, and information about the vessels intending to tranship, in accordance with Annex 1. The competent authorities may authorise the vessel operator to provide notification directly to the Secretariat. The Secretariat shall make this information available on the Members' section of the Commission website as soon as possible.
5. If, in accordance with the applicable CMMs, an observer is on board the unloading or receiving vessel, the observer shall monitor the transshipment activities.
6. An observer monitoring transshipment under paragraph 5 shall complete a transshipment logsheet, as set out in Annex 2, to verify the quantity and species of the fishery resources being transhipped, and shall provide a copy of the logsheet to the competent authorities of the observed vessel. The competent authorities of the observed vessel shall submit the observer data of the transshipment logsheet to the Secretariat, no later than 15 days from debarkation of the observer, or in the case of the Jumbo flying squid fishery no later than 30 days¹.
7. For the purpose of verifying the quantity and species of the fishery resources being transhipped, and in order to ensure that proper verification can occur, the observer on board shall have full access to the observed vessel, including crew, gear, equipment, records² and fish holds.
8. The competent authorities of the unloading fishing vessel and the receiving fishing vessel shall notify all the operational details to the Secretariat, as specified in Annex 3, no later than 7 days after the transshipment is carried out. For vessels engaged in the jumbo flying squid fishery, the competent authorities shall notify the operational details within 20 days of the end of each quarter using the simplified template to be developed by the Secretariat and submitted to the CTC and the Commission for consideration at the annual meeting in 2021.
9. The competent authorities may authorise the vessel operator to provide this information directly to the Secretariat by email; should the Secretariat require any clarification, those requests shall be directed to the competent authorities of the relevant vessel. The Secretariat shall make a summary of this information available on the Members' section of the Commission website.

Review

10. This CMM shall enter into force 30 days after the conclusion of the annual Commission meeting in 2020. It shall apply to the jumbo flying squid fishery 30 days after the conclusion of the annual Commission meeting in 2021.
11. This CMM shall be reviewed at the regular meeting of the Commission in 2022. Such review shall take into account, *inter alia*, the latest advice of the Compliance and Technical Committee with respect to the effectiveness of this CMM in providing the Commission with information about transshipments and other

¹ If due to exceptional circumstances, it is not possible to submit the Jumbo flying squid transshipment logsheet within the stipulated deadline, the competent authorities shall notify the Executive Secretary of the reasons and submit the logsheet as soon as it becomes available.

² This includes electronic records.



transfer activities and supporting monitoring, control, and surveillance activities; appropriate levels of observer coverage; and the scope of this CMM.



Annex 1 Transshipment Notification

Details of Unloading Vessel

- a) Name of vessel
- b) Registration number
- c) Radio call sign
- d) Vessel flag State
- e) IMO number/ IHS Fairplay number (if applicable)
- f) Name and nationality of vessel master

Details of Receiving Vessel

- a) Name of vessel
- b) Registration number
- c) Radio call sign
- d) Vessel flag State
- e) IMO number/ IHS Fairplay number (if applicable)
- f) Name and nationality of vessel master



Annex 2 Transshipment Logsheets

1. Details of the Unloading Fishing Vessel

Name of vessel	
Registration number	
Radio call sign	
Vessel flag State	
IMO number / IHS Fairplay number (if applicable)	
Master's name and nationality	

2. Details of the Receiving Fishing Vessel

Name of vessel	
Registration number	
Radio call sign	
Vessel flag State	
IMO number / IHS Fairplay number (if applicable)	
Master's name and nationality	



3. Transhipment Operation

Date and time of commencement of transhipment (UTC)					
Date and time of completion of transhipment (UTC)					
If transhipment in port: Name, country, and code ¹ of port					
If transhipment at sea: Position (nearest 1/10th degree) at commencement of transhipment					
If transhipment at sea: Position (nearest 1/10th degree) at completion of transhipment					
Description of product type by species (e.g. whole, frozen fish in 20 kg cartons)					
Species		Product type			
Species		Product type			
Species		Product type			
Species		Product type			
Species		Product type			
Species		Product type			
Number of cartons, net weight (kg) of product, by species.					
Species		Cartons		Net weight	
Species		Cartons		Net weight	
Species		Cartons		Net weight	
Species		Cartons		Net weight	
Species		Cartons		Net weight	
Species		Cartons		Net weight	
Total net weight of product transhipped (kg)					
Hold numbers in reefer vessel in which product is stowed					
Destination port and country of receiving fishing vessel					
Estimated arrival date					
Estimated landing date					

4. Observations (if applicable)

¹ United Nations Code for Trade and Transport Locations (UN/LOCODE).



5. Verification

Name of observer	
Authority	
Signature and Stamp	



Annex 3

Transshipment information to be reported

Details of Unloading Vessel

- a) Name of vessel
- b) Registration number
- c) Radio call sign
- d) Vessel flag State
- e) IMO number/ IHS Fairplay number (if applicable)
- f) Name and nationality of vessel master

Details of Receiving Vessel

- a) Name of vessel
- b) Registration number
- c) Radio call sign
- d) Vessel flag State
- e) IMO number/ IHS Fairplay number (if applicable)
- f) Name and nationality of vessel master

Details of Transshipment Operation

- a) Date and time of commencement of transshipment (UTC)
- b) Date and time of completion of transshipment (UTC)
- c) If transhipped in port:
 - i. Port State, name of port and port code
- d) If transhipped at sea:
 - i. Position (nearest 1/10th degree) at commencement of transshipment (decimal)
 - ii. Position (nearest 1/10th degree) at completion of transshipment (decimal)
- e) Hold numbers in receiving vessel in which product is stowed
- f) Destination port of receiving vessel
- g) Arrival date estimate
- h) Landing date estimate

Details of Fishery Resources Transhipped

- a) Species transhipped
 - i. Description of fish, by product type (e.g., whole, frozen fish)
 - ii. Number of cartons and net weight (kg) of product, by species
 - iii. Total net weight of product transhipped (kg)
- b) Fishing gear used¹

Verification (if Applicable)

- a) Name of observer
- b) Authority

¹ International Standard Classification of Fishing Gears (ISSCFG). This information only needs to be provided by the unloading vessel.

CMM 13-2021

Conservation and Management Measure for the Management of New and Exploratory Fisheries in the SPRFMO Convention Area

(Supersedes CMM 13-2020)

The Commission of the South Pacific Regional Fisheries Management Organisation;

RECALLING Article 22 of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean (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 as a fishery or opened to fishing with such gear type or technique only when the Commission has adopted cautious preliminary Conservation and Management Measures (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;

RECOGNISING Articles 3(1)(a)(i) and (ii) of the Convention which call on the Commission, in giving effect to the objectives of the Convention, to adopt CMMs that take account of international best practices and protect the marine ecosystem, particularly ecosystems with long recovery times following disturbance;

FURTHER RECOGNISING Articles 3(1)(b) and (2) of the Convention which call on the Commission to apply the precautionary approach and ecosystem based approach to fishery resources under the mandate of the Convention;

NOTING United Nations General Assembly (UNGA) Resolution 61/105 which calls upon Regional Fisheries Management Organisations (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, 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;

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 Guidelines for the Management of Deep-sea Fisheries in the High Seas (FAO, 2009; International Guidelines for the Management of Deep-sea Fisheries in the High Seas) in order to sustainably manage fish stocks and protect vulnerable marine ecosystems (VMEs);

NOTING the requirements in CMM 03-2021 on the Management of Bottom Fishing in the SPRFMO Convention Area which place a number of obligations on Members and CNCPs who intend to authorise their flagged vessels to engage in any bottom fishing in the Convention Area;

AGREEING that new and exploratory fisheries should not be permitted to expand faster than the acquisition of information necessary to ensure that the fishery can and will be developed in accordance with the principles set out in Article 2 of the Convention;

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



Objective

1. This CMM details the framework which will govern the management of new and exploratory fisheries in the SPRFMO Convention Area. This CMM is intended to ensure that sufficient information is available to evaluate the long term potential of new and exploratory fisheries, to assist the formulation of management advice, to evaluate the possible impacts on target stocks and non-target and associated and dependent species, to ensure new and exploratory fishery resources are developed on a precautionary and gradual basis and to promote the sustainable management of new and exploratory fisheries.

Application

2. Hereinafter, “new and exploratory fisheries” shall be referred to in this CMM as “exploratory fisheries”.
3. This CMM applies to all fishing activity in exploratory fisheries, as defined in this CMM, in the Convention Area.

Interpretation

4. For the purposes of this CMM, a fishery is an “exploratory fishery”:
 - a) if it has not been subject to fishing in the previous ten years; or
 - b) for the purposes of fishing with a particular gear type or technique, if it has not been subject to fishing by that particular gear type or technique in the previous ten years; or
 - c) if fishing in that fishery has been undertaken in the previous ten years pursuant to this CMM, and a decision has not yet been taken in accordance with paragraph 25 or 26 of this CMM to either close or manage the fishery as an established fishery; or
 - d) if it is of a kind listed in paragraph 15 of CMM 03-2021 (Bottom Fishing).

Requirements for Exploratory Fisheries

5. Any Member or CNCP seeking to permit a vessel that flies its flag to fish in an exploratory fishery, or to fish in an exploratory fishery with a gear type that has not been used in that fishery for the previous ten years; shall submit no less than 120 days prior to the next annual meeting of the Scientific Committee a succinct description of their intended Fisheries Operation Plan for information purposes, using the templates developed by the Scientific Committee. The Secretariat shall circulate the succinct description received to all Members and CNCPs, 115 days in advance of its next annual Scientific Committee meeting. A full Fisheries Operation Plan shall be submitted, taking into account paragraph 6 if relevant, not less than 60 days in advance of the next annual meeting of the Scientific Committee, according to the following:
 - a) submit an application to the Commission to permit a vessel or vessels that fly its flag to fish in that exploratory fishery. This application shall include information that satisfies paragraphs 2 and 3 of Annex 1 of CMM 05-2021 (Record of Vessels);
 - b) prepare and submit a Fisheries Operation Plan to the Scientific Committee. The Fisheries Operation Plan shall include the following information, to the extent it is available:
 - i. a description of the exploratory fishery, including area, target species, proposed methods of fishing, proposed maximum catch limits and any apportionment of that catch limit among areas or species;
 - ii. specification and full description of the types of fishing gear to be used, including any modifications made to gear intended to mitigate the effects of the proposed fishing on non-target and associated or dependent species or the marine ecosystem in which the fishery occurs;
 - iii. the time period the Fisheries Operation Plan covers (up to a maximum period of three years);



- iv. any biological information on the target species from comprehensive research and/or survey cruises, such as distribution, abundance, demographic data and information on stock identity;
 - v. details of non-target and associated or dependent species and the marine ecosystem in which the fishery occurs, the extent to which these would be likely to be affected by the proposed fishing activity and any measures that will be taken to mitigate these effects;
 - vi. the anticipated cumulative impact of all fishing activity in the area of the exploratory fishery if applicable;
 - vii. information from other fisheries in the region or similar fisheries elsewhere that may assist in the evaluation of the relevant exploratory fishery's potential yield, to the extent the Member or CNCP is able to provide this information;
 - viii. if the proposed fishing activity is bottom fishing, as defined in CMM 03-2021 (Bottom Fishing), the assessment of the impact of their flagged vessels' bottom fishing activities, prepared pursuant to paragraph 21(a) of CMM 03-2021 (Bottom Fishing); and
 - ix. where the target species is also managed by an adjacent Regional Fisheries Management Organisation or similar organisation, a description of that neighbouring fishery sufficient to allow the Scientific Committee to formulate its advice in accordance with paragraph 10.
- c) provide a commitment in its proposal to implement the Data Collection Plan for the exploratory fishery developed in accordance with paragraph 11, should the Commission approve fishing in accordance with the Fisheries Operation Plan.
6. Where two or more SPRFMO Members or CNCPs are seeking to participate in an exploratory fishery for the same or overlapping fishery, area and timeframe, all reasonable efforts shall be made by all the participants of the proposed fishery to jointly submit the Fisheries Operation Plan described in paragraph 5.
 7. Paragraph 6 shall not apply to Fisheries Operation Plans for the same or overlapping fishery, area and timeframe already approved by the Commission that have not expired¹, except with the agreement of all the participants in the fishery which recognise ongoing efforts by the current participant.
 8. The requirements in paragraphs 5 and 6 shall be considered as a proposal for the next annual meeting of the Commission and will be made available to all Members and CNCPs in accordance with the Rules of Procedure.

Scientific Committee Consideration

Fisheries Operation Plans

9. At its annual meeting, the Scientific Committee shall consider all Fisheries Operations Plans submitted pursuant to paragraph 5, all information provided in accordance with a Data Collection Plan and any other relevant information.
10. The Scientific Committee shall provide recommendations and advice to the Commission on each Fisheries Operation Plan on the following matters, as appropriate:
 - a) management strategies or plans for fishery resources;
 - b) reference points, including precautionary reference points as described in Annex II of the 1995 Agreement;
 - c) an appropriate precautionary catch limit;

¹ A Fisheries Operation Plan is considered to have expired after the time period covered by the Fisheries Operation Plan or when a Commission decision is necessary for its continuation.



- d) the cumulative impacts of all fishing activities in the area of the exploratory fishery;
- e) the impact of the proposed fishing on the marine ecosystem;
- f) the sufficiency of information available to inform the level of precaution required and the degree of certainty with which the Scientific Committee's advice is provided;
- g) the degree to which the approach outlined in the Fisheries Operation Plan is likely to ensure the exploratory fishery is developed consistently with its nature as an exploratory fishery, and consistently with the objectives of Article 2 of the Convention; and
- h) in respect of a Fisheries Operation Plan that proposes any bottom fishing activity, advice and recommendations in accordance with paragraph 21 (b) of CMM 03-2021 (Bottom Fishing).

Data Collection Plans

11. When considering a Fisheries Operation Plan submitted pursuant to paragraph 5 of this CMM in respect of an exploratory fishery that meets the definition of paragraph 4(a), (b), (c) or (d) of this CMM, the Scientific Committee shall develop a Data Collection Plan in respect of that exploratory fishery which should include research requirements, as appropriate. The Data Collection Plan shall identify and describe the data needed and any operational research actions necessary to obtain data from the exploratory fishery to enable an assessment of the stock, the feasibility of establishing a fishery and the impact of fishing activity on non-target, associated or dependent species and the marine ecosystem in which the fishery occurs. The Scientific Committee shall review and update the Data Collection Plan for each exploratory fishery annually as appropriate.
12. The Data Collection Plan shall require, as appropriate:
 - a) a description of the catch, effort and related biological, ecological and environmental data required to undertake the evaluations described in paragraph 26;
 - b) the dates by which the data must be provided to the Commission;
 - c) a plan for directing fishing effort in an exploratory fishery to allow for the acquisition of relevant data to evaluate the fishery potential and the ecological relationships among harvested, non-target and associated and dependent populations and the likelihood of adverse impact;
 - d) where appropriate, a plan for the acquisition of any other research data obtained by fishing vessels, including activities that may require the cooperative activities of scientific observers and the vessel, as may be required by the Scientific Committee to evaluate the fishery potential and the ecological relationships among harvested, non-target, associated and dependent populations and the likelihood of adverse impacts; and
 - e) an evaluation of the time scales involved in determining the responses of harvested, dependent and related populations to fishing activities.

Compliance and Technical Committee Consideration

13. The Compliance and Technical Committee shall consider any Fisheries Operation Plan submitted pursuant to paragraph 5 and any advice of the Scientific Committee thereon and provide advice and recommendations to the Commission on appropriate management arrangements, including in light of the obligations in CMM 03-2021 (Bottom Fishing), if applicable.



Commission Consideration

14. At its annual meeting, the Commission shall consider all Fisheries Operation Plans submitted pursuant to paragraph 5, any advice or recommendations provided by the Scientific Committee and Compliance and Technical Committee pursuant to paragraphs 10 and 13, and any applicable obligations under CMM 03-2021 (Bottom Fishing) in respect of the proposed fishing activity. On the basis of this consideration, the Commission shall take a decision as to whether to approve fishing in the exploratory fishery in accordance with the Fisheries Operation Plan and for what period of time, up to a maximum period of three years. If the Commission approves fishing in accordance with the Fisheries Operation Plan it shall adopt a CMM in respect of the exploratory fishery which shall include a precautionary catch limit and any other management measures the Commission considers appropriate.
15. The Commission may amend a Fisheries Operation Plan, as necessary, prior to approving fishing.
16. Exploratory fisheries shall only be open to those vessels that are equipped and configured to comply with all relevant CMMs.

Fishing Activity

17. Members and CNCPs shall not permit their flagged vessels to fish in an exploratory fishery without approval from the Commission.
18. Members and CNCPs shall ensure that any vessel that flies their flag only fishes in an exploratory fishery in accordance with the Fishery Operations Plan prepared and approved in respect of that vessel's proposed fishing activity.
19. Members and CNCPs shall ensure that where their flagged vessels fish in an exploratory fishery, the data required by the Data Collection Plan is provided to the Commission. That data shall be provided to the relevant standard prescribed in CMM 02-2021 (Data Standards). Members and CNCPs whose vessels participate in exploratory fisheries shall be prohibited from fishing in the relevant exploratory fishery if the data specified in the Data Collection Plan has not been submitted to the Commission for the most recent season in which the fishing occurred, until the relevant data has been submitted to the Commission and the Scientific Committee has had the opportunity to review that data.
20. Members and CNCPs whose vessels participate in exploratory fisheries shall ensure that each vessel that flies its flag carries one or more independent observers sufficient to collect data in accordance with the Data Collection Plan.
21. None of the obligations in this measure exempt a Member or CNCP from complying with any other obligations in the Convention or any CMM adopted by the Commission.
22. Any fishing activity undertaken pursuant to this CMM will not be considered to be a precedent for future allocation decisions.
23. Notwithstanding paragraph 18, Members and CNCPs shall be entitled to authorise fishing in an exploratory fishery by a flagged vessel not identified in the Fisheries Operation Plan if a vessel specified in the Fisheries Operation Plan is prevented from fishing on account of legitimate operational or force majeure reasons and a replacement vessel is proposed pursuant to this paragraph. In such circumstances the Member or CNCP concerned shall immediately inform the Secretariat and provide:
 - a) full details of the intended replacement vessel;
 - b) a comprehensive account of the reasons for the replacement and any relevant supporting evidence; and
 - c) specifications and a full description of the types of fishing gear to be used by the replacement vessel. The Secretariat shall circulate this information to all Members and CNCPs as soon as possible.



Review

24. Once a Fisheries Operation Plan expires, a Member or CNCP may prepare a new Fisheries Operation Plan in accordance with paragraph 5.
25. Once an exploratory fishery has been fished for 10 years pursuant to this CMM, any further fishing in that fishery shall be undertaken only in accordance with a CMM adopted by the Commission in accordance with paragraph 26 to manage that fishery as an established fishery.
26. At any time if the Commission is satisfied that sufficient information is available:
 - a) to evaluate the distribution, abundance and demography of the target species to inform an estimate of the exploratory fishery's potential yield; and
 - b) to review the exploratory fishery's potential impacts on non-target and associated or dependent species and the marine ecosystem in which the fishery occurs; and
 - c) to allow the Scientific Committee to formulate and provide advice to the Commission on appropriate management arrangements;

the Commission may take a decision, on the application of any Member, to manage the fishery as an established fishery.

27. This measure shall be reviewed at the annual meeting of the Commission in 2021. Such review shall take into account, *inter alia*, the most recent advice of the Scientific Committee on exploratory fisheries.

CMM 14a-2019

Conservation and Management Measure for Exploratory Fishing for Toothfish by New Zealand-Flagged Vessels in the SPRFMO Convention Area

(Supersedes CMM 4.14)

The Commission of the South Pacific Regional Fisheries Management Organisation;

RECALLING Article 22 of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean (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 as a fishery or opened to fishing with such gear type or technique only when the Commission has adopted cautious preliminary Conservation and Management Measures (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;

RECOGNISING Articles 3(1)(a)(i) and (ii) of the Convention, which call on the Commission, in giving effect to the objectives of the Convention, to adopt CMMs that take account of international best practices and protect the marine ecosystem, particularly ecosystems with long recovery times following disturbance;

FURTHER RECOGNISING Articles 3(1)(b) and (2) of the Convention which call on the Commission to apply the precautionary approach and an ecosystem based approach to fishery resources under the mandate of the Convention;

NOTING the conservation value of relevant SPRFMO CMMs which will apply to activities anticipated to be undertaken pursuant to this measure, including, *inter alia*, CMM 03-2020 (Bottom fishing) and CMM 09-2017 (Seabirds);

AGREEING that new and exploratory fisheries should not be permitted to expand faster than the acquisition of information necessary to ensure that the fishery can and will be developed in accordance with the principles set out in Article 3 of the Convention;

RECOGNISING Article 22(2) of the Convention, which calls on the Commission to adopt preliminary measures that ensure that any new fishery resource is developed on a precautionary and gradual basis until sufficient information is acquired to enable the Commission to adopt appropriately detailed CMMs;

NOTING that at its fourth meeting the SPRFMO Commission approved New Zealand's proposal (CTC-03-09) to conduct exploratory bottom longline fishing during 2016 and 2017 for toothfish, limited to 30 tonnes per year.

FURTHER NOTING that at its sixth meeting, the Scientific Committee assessed New Zealand's updated proposal (SC6-DW03_rev2) to conduct additional exploratory bottom longline fishing during 2019, 2020, and 2021 for toothfish, limited to 220 tonnes greenweight retained annually. In its report, the Scientific Committee:

1. *Noted* New Zealand's proposal and its Fisheries Operation Plan to extend its exploratory demersal longline fishery for toothfish (limited at 220 tonnes liveweight (= greenweight) retained annually);
2. *Recognised* the cautious, exploratory nature of the proposal;
3. *Recognised* the scientific benefits of the proposed data collection, especially for understanding the distribution, movement, spawning dynamics, and stock structure of toothfishes and can be used to support the CCAMLR stock assessment models for Antarctic toothfish;



4. *Agreed* that data and analyses from New Zealand's exploratory fishing continue to be shared in a timely manner with CCAMLR;
5. *Agreed* that a spatial stratification, consistent with CCAMLR's, should be accepted by SPRFMO for this exploratory fishery for toothfish to facilitate the collection and sharing of data and a similar approach be considered for any future exploratory fisheries for toothfish;
6. *Adopted* the Data Collection Plan included in the revised proposal;
7. *Advised* the Commission that the revised proposal is acceptable in terms of Articles 2 and 22, CMM13-2016 (Exploratory fisheries), CMM03-2018 (Bottom fishing), and the BFIAS.
8. *Advised* that the proposal adequately addressed 5 out of 5 relevant criteria contained in paragraph 10 of CMM 13-2016 (Exploratory fisheries).
9. *Recommended* that the assessment is adequate given relevant CMMs and that the revised proposal adequately addressed 8 out of 8 relevant criteria for paragraph 8 of CMM 13-2016 (Exploratory fisheries).
10. *Recommended* observer data be provided 30 days prior to the Scientific Committee meeting.

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

Objectives

1. To provide for exploratory bottom longline¹ fishing for toothfish in the Convention Area for the purpose of obtaining scientific data to support the following objectives:
 - a) Continue to map the bathymetry of the fishable area (shallower than about 2500 m) in mid-Pacific to the north of the SPRFMO-CCAMLR boundary;
 - b) Document the spatial distribution, catch rates, and relative abundance of Antarctic and Patagonian toothfish in apparently suitable habitat to the north of CCAMLR Areas 88.1 and 88.2 by latitude, area, and depth;
 - c) Characterise the biology, life history and spawning dynamics of toothfish in the area;
 - d) Tag substantial numbers of toothfish for stock linkage and life history studies, and, potentially, for use in a multi-area CCAMLR stock assessment model and for biomass estimation;
 - e) Collect information on distribution, relative abundance, and life history of bycatch and other associated or dependent species;
 - f) Collect toothfish eggs using plankton net tows if practical;
 - g) Conduct Continuous Plankton Recorder (CPR) tows for planktonic studies and potentially for fish eggs; and
 - h) Collect acoustic data using existing procedures as carried out within the CAMLR Convention Area.

¹ Also referred to as demersal longline.



Definitions

2. For the purposes of this measure:
 - a) “toothfish” means both Patagonian toothfish (*Dissostichus eleginoides*) and Antarctic toothfish (*Dissostichus mawsoni*);
 - b) “bottom longline” means standardised integrated weight bottom longline gear as specified in the CCAMLR Gear Library.

Application

3. This measure applies to exploratory fishing for toothfish as described in SC6-DW03_rev2 “Proposal for exploratory bottom longlining for toothfish by New Zealand vessels, 2019-2021: Fisheries Operation Plan, suggested Data Collection Plan, and impact assessments”.
4. None of the obligations in this measure exempt a Member or CNCP from complying with any Convention obligation or any other CMMs adopted by the Commission.

Details and Specification of Exploratory Fishing Activities

5. Fishing for toothfish, using the bottom longline method, may be conducted in the exploratory fishing strata identified in Table 1 below.

Table 1: Corner positions for the four exploratory fishing strata.

Exploratory fishing stratum	Latitude	Longitude
L	56° 00.0' S	155° 00.0' W
	56° 00.0' S	150° 00.0' W
	60° 00.0' S	150° 00.0' W
	60° 00.0' S	155° 00.0' W
M	56° 00.0' S	145° 00.0' W
	56° 00.0' S	150° 00.0' W
	60° 00.0' S	145° 00.0' W
	60° 00.0' S	150° 00.0' W
N	52° 00.0' S	140° 00.0' W
	52° 00.0' S	145° 00.0' W
	60° 00.0' S	140° 00.0' W
	60° 00.0' S	145° 00.0' W
O	52° 00.0' S	135° 00.0' W
	52° 00.0' S	140° 00.0' W
	60° 00.0' S	135° 00.0' W
	60° 00.0' S	140° 00.0' W

6. The first exploratory trip each year may occur any time in 2019, 2020, and 2021, with a maximum of four trips each year, with some of the trips between August and October each year to characterise post-spawning dynamics. The remainder of the trips between March and October will provide additional information on spawning dynamics, distribution, and movement patterns.
7. The Scientific Committee will review results each year at its annual meeting and advise the Commission on progress, including whether any stock indicators show sustainability concerns and what, if any, additional measures might be required to restrict the likely bycatch of deepwater sharks or other non-target species.



Total Allowable Catch

8. The annual toothfish total allowable catch shall not exceed 140 tonnes (greenweight) in each of 2019, 2020, and 2021 unless the Scientific Committee at its 2019 or 2020 meetings advises for a lower TAC. Fish that are tagged and returned alive to the sea shall not be counted against this limit. The annual catch limit of 140 tonnes will allow the collection of a significant amount of scientific information, will also allow for an adequate number of tagged fish to be returned to the sea and was calculated based on the same methodology used in nearby CCAMLR exploratory fisheries. This is a precautionary approach, and supports the need to understand other risks such as interactions with seabirds and marine mammals.
9. The catch limit was determined based on a design approach with the following considerations:
 - a) A minimum of three strata should be surveyed with a maximum catch limit of 40 t per stratum to ensure geographic spread if catch rates are high in one or more strata;
 - b) At least 10 sets, in at least 3 clusters, in each stratum fished, ice and operating conditions permitting;
 - c) Clusters of no more than 5 sets will be separated by at least 10 nm (calculated as the minimum distance between any part of any set in any two clusters);
 - d) Clusters of sets will not be within 10 nm of a cluster already set within a voyage or fishing season (pre- and post-spawning)
 - e) Some sets will be toward the deeper end of the expected depth range for toothfish (deeper than 2200 m), contingent on ice and other operating conditions and the risk of the backbone line snagging the bottom;
 - f) A maximum combined catch limit of 140 tonnes live weight;
 - g) No more than 70 t of toothfish catch to be taken by one vessel;
 - h) To the extent practical, similar locations to be fished pre- and post-spawning to facilitate separation of spatial and seasonal trends;
 - i) No more than 50% of a vessel's allocated catch over the three years of this CMM shall be taken outside the post-spawning period August to October.
10. Catch and effort shall be monitored on a shot-by-shot basis and fishing operations will cease in that year or stratum once any of the limits in paragraphs 8 and 9 have been caught.
11. Because the stock and stock status are not completely known, if, during the exploratory fishing, the stock indicators show sustainability concerns, the exploratory fishing should cease.
12. The companies and crews of the proposed vessels shall have experience working to restrictive catch limits and use intensive monitoring of catch retained. As the catch limit of 140 tonnes is approached, the following measures to constrain the retained catch within the relevant limit(s) shall be considered:
 - a) shorter lines will be set;
 - b) a seawater tank will be maintained on board such that live fish in good condition can be retained in case they need to be tagged and returned to meet the catch limit;
 - c) the tagging rate will be progressively increased.
13. Fishing activity undertaken pursuant to this measure will not be considered to be a precedent for future allocation decisions.



Authorised Vessels

14. The vessels *San Aspiring*, and *Janas* shall be authorised to undertake fishing pursuant to this measure. In the event that *San Aspiring* or *Janas* are unavailable, an alternate vessel of similar capability and capacity shall be authorised to undertake fishing pursuant to this measure only after the vessel has been notified by New Zealand to the Executive Secretary.
15. In determining the suitability of an alternate vessel New Zealand shall consider, *inter alia*:
- the vessel's ability to conduct the exploratory fishing proposed in paper SC6-DW03_rev2;
 - the master and crew's history and track record in comparable research or exploratory fishing;
 - the ability of the vessel to provide suitable accommodation, facilities, and operating support for a New Zealand observer;
 - the ability of the vessel to maintain rigorous mitigation of risks to seabirds and marine mammals;
 - any history of Illegal, Unreported or Unregulated (IUU) fishing by the vessel. A vessel on the SPRFMO IUU list or the IUU list of another competent regional fisheries management organisation shall not be accepted as an alternate vessel.

Management Measures

16. Fishing pursuant to this measure shall only take place in accordance with SC6-DW03_rev2 "Proposal for exploratory bottom longlining for toothfish by New Zealand vessels, 2019-2021: Fisheries Operation Plan, suggested Data Collection Plan, and impact assessments".
17. Because of the likelihood of shared stocks of toothfish, fishing pursuant to this measure shall, as far as possible, be conducted consistent with relevant measures in force in the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) Area, including the following:
- CCAMLR's protocol for research longline fishing on small, isolated features (see CM 41-10, 2014). For consistency with CCAMLR surveys in adjacent areas, the following rules shall apply:
 - clusters of IWL lines are allowed with no rules for minimum separation between lines;
 - no more than 6,900 hooks shall be set in a line;
 - no more than 17,250 hooks shall be set in a cluster;
 - clusters of lines shall be no closer together than 10 nautical miles (measured from the proximate lines of each individual cluster).
 - A minimum tagging rate of three fish of each *Dissostichus* species per greenweight (live weight) tonne shall be implemented. The rules applied by CCAMLR in the immediately adjacent 88.1 A&B North region, where tagged fish were released starting in early 2015, shall be applied (CM 41-01 Annex C). These rules require a minimum overlap statistic (a comparison between the observed length frequency from vessel biological information and the size composition of fish returned alive with tags, see CCAMLR's calculator) of at least 60% once 30 or more *Dissostichus* of a species have been successfully released with tags.
18. Standardised integrated weight bottom longline gear (IWL, see the CCAMLR gear library) shall be used for all fishing pursuant to this measure.
19. If 250 kg or more of deepwater sharks (all species in class Chondrichthyes combined on all lines within the cluster) are caught in a cluster of lines, then no further clusters will be set within 10 nm of the location of that cluster until the information from that voyage has been reviewed by the Scientific Committee.



Data Collection

20. In undertaking fishing pursuant to this measure the vessel shall, to the extent possible, collect all the data as set out in the paper submitted to the Scientific Committee (SC6-DW03_rev2) and any further data requested by the Scientific Committee for its annual evaluation and assessment.
21. Any vessel authorised to undertake fishing pursuant to this measure shall be fully capable of complying with SPRFMO data standards and reporting and CCAMLR CM 22-07 (2013) related to encounters with potential VMEs. New Zealand will submit all data at least to the standard required by CMM 02-2021 (Data Standards). In addition, the government observer aboard each vessel shall complete, in full, the CCAMLR fine-scale catch and effort data form C2 for longline fishing using standard FAO codes.

Marine Mammals, Seabirds, Turtles, and other Species of Concern

22. A vessel fishing pursuant to this measure shall use the following mitigation methods:
- the vessel shall use integrated weight line as described in the CCAMLR gear library with a weighting of 50 g of lead per metre of backbone line;
 - there shall be no dumping of offal while lines are being set or while lines being hauled;
 - any offal or discards shall be macerated by machine prior to discarding;
 - discarding shall take place only at the end of a haul or while steaming; and no biological material shall be discarded for at least 30 minutes before the start of any set or during any set;
 - discarding may only take place from the opposite side of the vessel from the hauling position;
 - a bird exclusion device (BED) shall be used to prevent birds entering the hauling area, to the extent allowed by prevailing weather;
 - other methods such as water spray, movement, et cetera, shall be used as appropriate to deter aggressive feeders from approaching the line.
23. The following information shall be collected for marine mammals, seabirds, turtles, and other species of concern:
- At least one standardised seabird and marine mammal abundance count shall be made at the rear of the vessel during the setting of each line and again during the hauling of each line;
 - Other opportunistic observations, photography and identification of marine mammals shall be undertaken in collaboration with crew;
 - the observer shall have a target of observing 10% of hooks hauled for marine mammal, seabird and turtle captures, and for comparison with a sample of recorded video observations;
 - at least 50% of hooks hauled shall be viewed on recorded video after the voyage;
 - all marine mammals, seabirds, turtles, and other species of concern captured shall be identified, and photographs taken of all live birds released and any birds colliding with the ship that can be recovered;
 - all dead birds shall be retained for formal identification and necropsy.
24. All information specified in CMM 03-2021 (Bottom Fishing) relating to bottom fisheries and all data necessary to assess encounters with VMEs shall be collected to enable assessment and monitoring of the distribution of marine ecosystem in the areas fished.



Monitoring

25. A vessel undertaking fishing pursuant to this measure shall carry a New Zealand Government observer, as well as a dedicated assistant experienced in at-sea scientific data collection to assist the observer with biological measurement and data collection. Observer data shall be collected in accordance with the SPRFMO Observer data standard and shall include gear deployment and retrieval data, catch and effort information, biological data collection, and information on marine mammals, seabirds, reptiles and other species of concern.
26. In addition to carrying an observer, a vessel undertaking fishing pursuant to this measure shall be equipped with a video monitoring and recording system to be located over the hauling position to ensure that all hauled lines and hooks are observed or recorded on video. All recorded footage must be provided to the New Zealand Ministry for Primary Industries at the end of the voyage for analysis and storage.
27. The vessel shall also be equipped with several tamperproof Automatic Location Communicators that meet SPRFMO standards for VMS reporting (as per CMM 06-2020 (Commission VMS), at least every 2 hours) and can respond to polling at any rate if required.

Review

28. This CMM shall expire following the regular meeting of the Commission in 2022.
29. The exploratory fishery to which this CMM applies may be extended through the development of a new CMM, pursuant to CMM 13-2021 (Exploratory Fisheries) or any other CMM that the Commission adopts that outlines a framework for the management of exploratory fisheries in the SPRFMO Area.

CMM 14b-2021

Conservation and Management Measure for Exploratory Potting Fishery in the SPRFMO Convention Area

(Supersedes CMM 14b-2020)

The Commission of the South Pacific Regional Fisheries Management Organisation;

RECALLING Article 22 of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean (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 as a fishery or opened to fishing with such gear type or technique only when the Commission has adopted cautious preliminary Conservation and Management Measures (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;

RECOGNISING Articles 3(1)(a)(i) and (ii) of the Convention, which call on the Commission, in giving effect to the objectives of the Convention, to adopt Conservation and Management Measures (CMMs) that take account of international best practices and protect the marine ecosystem, particularly ecosystems with long recovery times following disturbance;

FURTHER RECOGNISING Articles 3(1)(b) and (2) of the Convention which call on the Commission to apply the precautionary approach and an ecosystem based approach to fishery resources under the mandate of the Convention;

NOTING the conservation value of relevant SPRFMO CMMs which will apply to activities anticipated to be undertaken pursuant to this measure, including, *inter alia*, CMM 03-2021 (Bottom Fishing) on the Management of Bottom Fishing in the SPRFMO Convention Area and CMM 09-2017 (Seabirds) on Minimising Bycatch of Seabirds in the SPRFMO Convention Area;

AGREEING that new and exploratory fisheries should not be permitted to expand faster than the acquisition of information necessary to ensure that the fishery can and will be developed in accordance with the principles set out in Article 3 of the Convention;

RECOGNISING Article 22(2) of the Convention, which calls on the Commission to adopt preliminary measures that ensure that any new fishery resource is developed on a precautionary and gradual basis until sufficient information is acquired to enable the Commission to adopt appropriately detailed CMMs;

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



Objectives

1. To provide for exploratory bottom pot fishing for lobster and crab in the Convention Area for the purpose of obtaining scientific data: to allow the evaluation of the long term fishery potential for a lobster and crab fishery in the Convention Area; to evaluate the possible impacts on the target stocks, associated or dependent species, and marine ecosystems; to evaluate the effectiveness of mitigation measures; and to ensure that the bottom pot exploratory fishery is developed on a precautionary and gradual basis according to the best available science.

Definitions

2. For the purposes of this measure:
 - a) “lobster” means both “*Jasus spp*” lobster and “*Projasus spp*” lobster;
 - b) “crab” means “*Chaceon spp*” crab;
 - c) “bottom potting” means standardised strings of traps carefully designed and dedicated to capturing particular species of crustaceans and having minimal adverse impact on the environment as described in the Fisheries Operation Plan reviewed by the 8th meeting of the Scientific Committee;
 - d) “fishing year” means a year of 12 months, from July 1st to June 30th;
 - e) “spawning season” means the season in which it is believed the target species reproduce and spawn being July 1st to September 30th;
 - f) “FOP” means Fisheries Operation Plan;
 - g) “TAC” means Total Allowable Catch.

Application

3. This measure applies to exploratory fishing for lobster and crab as described in the Fisheries Operation Plan reviewed by the 8th meeting of the Scientific Committee (SC8-DW01_rev1).
4. None of the obligations in this measure exempt a Member or CNCP from complying with any Convention obligation or any other CMMs adopted by the Commission.

Details and Specification of Exploratory Fishing Activities

5. Fishing for lobster and crab, using the bottom potting method, may be conducted on seamounts or other features within the exploratory fishing boxed areas identified in Table 1 below.

Table 1: The coordinates of the two areas intended for exploratory fishing.

Exploratory area	Latitude	Longitude
Foundation Sea mount chain	31'00 S	100'00 W
	31'00 S	134'00 W
	40'00 S	134'00 W
	40'00 S	100'00 W
Northern seamount	21'00 S	101'00 W
	21'57S	101'00W
	23'55S	94'13W
	25'06S	92'50W
	27'00S	92'50W
	27'00S	84'00W
	21'00S	84'00W



6. The exploratory fishing conducted pursuant to this CMM shall apply for two fishing years, commencing July 1st 2021, and ending on June 30th 2023:
7. Each trip shall be limited to a total allowable effort (TAE) of 80 days per trip, setting and hauling no more than five lines of 100 traps per day, with a limit of 75% of the TAE on Kopernik Seamount per trip (60 days).
8. To facilitate experimental fishing for the planned effective fishing area of the gear, an additional five fishing days will be added to the TAE for one trip between October 2021-June 2022.
9. The vessel is authorised to test alternative trap designs to evaluate gear selectivity.
10. A CPUE limit of 4 kg per trap shall be applied for Kopernik Seamount, assessed weekly through a moving 30-day window starting on day 30, and assessed every 7 days thereafter. Should this CPUE limit be reached, the Cook Islands shall close Kopernik Seamount and it shall remain closed to fishing pending the SC's review of the Cook Island's planned ongoing response.
11. A 20t total allowable catch for *Jasus caveorum* on Kopernik Seamount per trip will apply.
12. Fishing shall be closed to the vessel during spawning season from July through to September each year.
13. The maximum lobster and crab (combined) total allowable catch (TAC) taken pursuant to this CMM shall not exceed the global TAC of 300 tonnes per fishing year for fishing years commencing in July 2021, and July 2022.
14. The Cook Islands shall ensure that any vessel authorised to conduct the exploratory fishing shall provide weekly reports on its fishing activities to the Cook Islands.
15. Any results will be used to develop proposals for the consideration of the Scientific Committee on the design of any subsequent fishing.
16. Catch and effort shall be monitored on a trap-by-trap basis and fishing operations shall cease in that year once either the effort or catch limit, whichever occurs first, specified in paragraphs 6, 7 and 11 has been reached.
 - a) Because the stock and stock status are not known, if at any time during the exploratory fishing the stock indicators show sustainability concerns the Cook Islands shall issue a directive to the authorised fishing vessel for exploratory fishing to cease and advise the Commission promptly thereafter.
17. The Cook Islands shall ensure that any fishing vessel authorised to undertake this exploratory fishing shall have experience working within catch limits and use intensive monitoring of all catch. As a catch limit is approached, fewer strings of traps will be set to constrain the retained catch within the limit.
18. Fishing activity undertaken pursuant to this measure shall not be considered a precedent for future allocation decisions.

Authorised vessels

19. Any Cook Islands vessel authorised to undertake fishing shall do so pursuant to this measure. In the event that the authorised vessel becomes unavailable, an alternate fishing vessel of similar capability and capacity may be authorised to undertake fishing pursuant to this measure only after the replacement fishing vessel has been notified by Cook Islands to the Executive Secretary who will notify all Members and CNCPs.
20. In determining the suitability of an alternate fishing vessel the Cook Islands shall consider, *inter alia*:
 - a) the vessel's ability to conduct the exploratory fishing set out in the Fisheries Operation Plan reviewed by the 8th meeting of the Scientific Committee (SC8-DW01_rev1) and any subsequent version reviewed and approved by the Scientific Committee;
 - b) the master and crew's history and experience in comparable research or exploratory fishing;



- c) the ability of the fishing vessel to provide suitable accommodation, facilities, and operating support for a Cook Islands Government observer;
 - d) the ability of the fishing vessel to maintain rigorous monitoring of the potential for Significant Adverse Impacts on Vulnerable Marine Ecosystems (VMEs).
21. any history of Illegal, Unreported or Unregulated (IUU) fishing by the vessel. A vessel on the SPRFMO IUU list or the IUU list of another competent regional fisheries management organisation shall not be accepted as an alternate vessel.

Management measures

22. Fishing pursuant to this measure shall take place in accordance with this measure or any amendment to the measure adopted by the regular meeting of the Commission.

Data collection

23. In undertaking fishing pursuant to this measure, any authorised fishing vessel shall collect all the data required by current CMMs and as set out in the Fisheries Operation Plan reviewed by the 8th meeting of the Scientific Committee, and, to the extent possible any further data requested by the Scientific Committee (SC) for its annual evaluation and assessment.
24. The vessel shall be fully capable of complying with SPRFMO data standards and reporting.

Marine Mammals, Seabirds, Turtles, and other Species of Concern

25. A vessel fishing pursuant to this measure shall use the following mitigation methods:
- a) there shall be no dumping of offal while lines are being set or while lines are being hauled;
 - b) any offal or discards shall be macerated by machine prior to discarding;
 - c) discarding shall take place only at the end of a haul or while steaming; and no biological material shall be discarded for at least 30 minutes before the start of any set or during any set;
 - d) discarding may only take place from the opposite side of the vessel from the hauling position.
26. The following information shall be collected for marine mammals, seabirds, turtles, and other species of concern:
- a) standardised seabird and marine mammal abundance counts shall be made at the rear of the vessel at the start, middle, end of each event (from set to haul);
 - b) the observer shall have a target of observing 10% of pots hauled for marine mammal, seabird and turtle captures, and for comparison with a sample of recorded video observations;
 - c) all marine mammals, seabirds, turtles, and other species of concern captured shall be identified, and photographs will be taken of as many seabird interactions as possible and all birds released alive;
 - d) all dead birds must be retained for formal identification and necropsy;
 - e) opportunistic observations, photography and identification of marine mammals may be undertaken in collaboration with the crew.
27. All information specified in CMM 03-2021 (Bottom fishing) and all data necessary to assess encounters with VMEs shall be collected to enable assessment and monitoring of the distribution of vulnerable marine ecosystems in the areas fished.



Monitoring & Data Collection

28. A vessel undertaking fishing pursuant to this measure shall carry a Cook Islands Government observer, as well as a dedicated assistant experienced in at-sea scientific data collection to assist the observer with biological measurement and data collection. Observer data shall be collected in accordance with the SPRFMO Observer data standard and shall include gear deployment and retrieval data, catch and effort information, biological data collection, and information on marine mammals, seabirds, reptiles and other species of concern.
29. In addition to carrying an observer, a vessel undertaking fishing pursuant to this measure shall be equipped with a video monitoring and recording system to be located over the hauling position to ensure that all hauled pots are observed or recorded on video. All recorded footage must be provided to the Cook Islands at the end of the voyage for analysis and storage.
30. The vessel shall also be equipped with tamper proof Automatic Location Communicators that meet SPRFMO standards for VMS reporting (every hour) and can respond to polling at any rate if required consistent with requirements under CMM 06-2020 (Commission VMS).
31. At the 9th meeting of the Scientific Committee the Cook Islands shall present a full and comprehensive amended exploratory fishing proposal which conforms, in full, with SPRFMO CMMs and the Convention, in particular CMM 13-2021 (Exploratory fisheries) and CMM 03-2021 (Bottom fishing) and take into account the Scientific Committee advice as described in the SC7 report. The proposal shall include the following:
 - a) A detailed and specific proposal and Fisheries Operation Plan that includes formal sampling designs and data collection plans for all phases of the proposed exploratory fishery that conform with CMM 13-2021 (Exploratory fisheries);
 - b) A description of how the proposed fishing meets the requirements of the Convention and relevant CMMs, including a bottom fishing impact assessment;
 - c) Propose measures to ensure the long-term viability of the target species, including reproduction;
 - d) A description of any fishing conducted to date, including effort, catch, and information on measures taken to protect VMEs.

Review

32. The 10th regular session of the Commission shall, taking into account the advice of the 9th Scientific Committee or inter-sessional Scientific Committee advice, determine the level of TAC for the fishing year July 1st 2022 to 30th June 2023, and whether the exploratory fishing programme may proceed.
33. This measure shall enter in to force on 1st July 2021, at which time this CMM shall supersede CMM 14b-2020
34. This CMM shall expire on September 30th 2023.

CMM 14d-2020

Conservation and Management Measure for Exploratory Fishing for Toothfish by Chilean-Flagged Vessels in the SPRFMO Convention Area

The Commission of the South Pacific Regional Fisheries Management Organisation;

RECALLING Article 22 of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean (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 as a fishery or opened to fishing with such gear type or technique only when the Commission has adopted cautious preliminary Conservation and Management Measures (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;

RECOGNISING Articles 3(1)(a)(i) and (ii) of the Convention, which call on the Commission, in giving effect to the objectives of the Convention, to adopt CMMs that take account of international best practices and protect the marine ecosystem, particularly ecosystems with long recovery times following disturbance;

FURTHER RECOGNISING Articles 3(1)(b) and (2) of the Convention which call on the Commission to apply the precautionary approach and an ecosystem-based approach to fishery resources under the mandate of the Convention;

NOTING the conservation value of relevant SPRFMO CMMs which will apply to activities anticipated to be undertaken pursuant to this measure, including, *inter alia*, CMM 13-2021 (Exploratory Fisheries) on the Management of New Exploratory Fisheries in the SPRFMO Convention Area; CMM 03-2021 (Bottom fishing) on the Management of Bottom Fishing in the SPRFMO Convention Area and CMM 09-2017 (Seabirds) on Minimising Bycatch of Seabirds in the SPRFMO Convention Area;

AGREEING that new and exploratory fisheries should not be permitted to expand faster than the acquisition of information necessary to ensure that the fishery can and will be developed in accordance with the principles set out in Article 3 of the Convention;

RECOGNISING Article 22(2) of the Convention, which calls on the Commission to adopt preliminary measures that ensure that any new fishery resource is developed on a precautionary and gradual basis until sufficient information is acquired to enable the Commission to adopt appropriately detailed CMMs;

NOTING that at its seventh meeting, the Scientific Committee assessed Chile's updated proposal (SC7-DW03_rev3) to conduct an exploratory bottom longline fishing during 2020, 2021, and 2022 for toothfish, limited to 54 tonnes greenweight retained during the first year.

FURTHER NOTING that the Scientific Committee agreed that the approach outlined in the revised Fisheries Operation Plan is likely to ensure that the exploratory fishery is developed consistently with its nature as an exploratory fishery, and consistently with the objectives of Article 2 of the Convention.

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



Objectives

1. To provide for exploratory bottom longline fishing for toothfish in the Convention Area for the purpose of obtaining scientific data to support the following objectives:
 - a) Map the bathymetry of the fishable area (shallower than about 2500 m) in the FAO Area 87.3 (Pacific South East excluding the coastal States EEZ), document the spatial distribution, catch rates, and relative abundance of Antarctic and Patagonian toothfish in apparently suitable habitat to the north of CCAMLR Area 88.3;
 - b) Characterise the biology, life history and spawning dynamics of toothfish in the area;
 - c) Tag substantial numbers of toothfish for stock linkage and life history studies, and, potentially, for use in a multi-area CCAMLR stock assessment model and for biomass estimation;
 - d) Take samples for further genetic studies to know if the same population is found in the South of Chile and on the Atlantic side;
 - e) Collect information on distribution, relative abundance, and life history of bycatch and other associated or dependent species;
 - f) Provide occurrence information on marine mammals, seabirds, turtles, sharks and other species of concern.

Definitions

2. For the purposes of this measure:
 - a) “toothfish” means both Patagonian toothfish (*Dissostichus eleginoides*) and Antarctic toothfish (*Dissostichus mawsoni*);
 - b) “bottom longline” means trotline gear as specified in the CCAMLR Gear Library, with the inclusion of “Cachaloteras” to reduce interaction with marine mammals and eliminate interaction with seabirds¹.

Application

3. This measure applies to exploratory fishing for toothfish as described in SC7-DW03_rev3 “Chile exploratory fishing for Patagonian toothfish within the SPRFMO Area”.
4. None of the obligations in this measure exempt a Member or CNCP from complying with any Convention obligation or any other CMMs adopted by the Commission.

Details and Specification of Exploratory Fishing Activities

5. Fishing for toothfish, using the bottom longline method, may be conducted in the exploratory fishing strata identified in Table 1 below.

¹ Description and diagram available in <https://www.ccamlr.org/en/node/105097> and https://www.ccamlr.org/en/system/files/gear_diagrams/105097-globalpesca-i-trotline.png.



Table 1: Corner positions for the four exploratory research boxes.

Block	1	2	3	4
NW	42°52'S; 98°28'W	58°21'S; 96° 00'W	59° 00'S; 75°00'W	54° 00'S; 95°00'W
NE	42°52'S; 96°00'W	58°21'S; 93°47.6'W	59° 00'S; 73°00'W	54° 00'S; 92°00'W
SE	43°30'S; 96°00'W	59° 00'S; 96° 00'W	60° 00'S; 70°00'W	55° 00'S; 92°00'W
SW	43°30'S; 98°28'W	59° 00'S; 96°60'W	60° 00'S; 75°00'W	55° 00'S; 95°00'W

6. The first trip of this exploratory fishing may occur anytime during 2020 with a maximum of two trips each year.
7. The Scientific Committee will review results each year at its annual meeting and advise the Commission on progress, including whether any stock indicators show sustainability concerns and what, if any, additional measures might be required to restrict the potential bycatch of deepwater sharks or other non-target species.

Total Allowable Catch

8. The annual toothfish total allowable catch (TAC) shall not exceed 54 tonnes (greenweight) in 2020. The TAC for 2021 and 2022 shall not exceed 54 tonnes unless the Commission sets a higher TAC, taking into account any advice from the Scientific Committee and the previous year's performance and data collected during the same period.
9. Fish that are tagged and returned alive to the sea shall not be counted against the limit set out in paragraph 8. The 2020 catch limit of 54 tonnes will allow the collection of a relevant amount of scientific information and will also allow an adequate number of tagged fish to be returned to the sea, which will be calculated based on the same methodology used in nearby CCAMLR exploratory fisheries.
10. The catch limit was determined based on a design approach with the following considerations:
 - a) A minimum of four research blocks should be surveyed each calendar year for a maximum of 3 fishing days (15 000 hooks per day) in each one, ice and weather permitting. A catch limit of 13.50 tonnes per block to ensure geographic spread if catch rates are high in one or more of them, meaning that if this catch is met in a shorter time the vessel will stop fishing and move to the next location.
 - b) A maximum of 9 sets of 5,000 hooks each, will be deployed in each research block fished;
 - c) A maximum combined catch limit of 54 tonnes live weight yearly.
11. Catch and effort shall be monitored on a shot-by-shot basis and fishing operations will cease once the limits in paragraph 8 have been caught.
12. The companies and crews of the proposed vessels shall have experience working to restrictive catch limits and use intensive monitoring of catch retained. As the catch limit of 54 tonnes is approached, the following measures to constrain the retained catch within the relevant limit(s) shall be considered:
 - a) shorter lines will be set;
 - b) a seawater tank will be maintained on board such that live fish in good condition can be retained in case they need to be tagged and returned to meet the catch limit.
13. Fishing activity undertaken pursuant to this measure will not be considered to be a precedent for future allocation decisions.



Authorised Vessel

14. The vessel *Globalpesca II* shall be authorised to undertake fishing pursuant to this measure. In the event that *Globalpesca II* is unavailable, an alternative vessel of similar capability and capacity shall be authorised by Chile to undertake fishing pursuant to this measure only after the replacement vessel has been formally notified to the Executive Secretary, in accordance with paragraph 23 of CMM 13-2021 (Exploratory Fisheries), who will forward that information to all Members and CNCPs.
15. In determining the suitability of an alternate vessel Chile shall consider, *inter alia*:
 - a) the vessel's ability to conduct the exploratory fishing proposed in paper SC7-DW03_rev3 "Chile exploratory fishing for Patagonian toothfish within the SPRFMO Area";
 - b) the master and crew's history and track record in comparable research or exploratory fishing;
 - c) the ability of the vessel to provide suitable accommodation, facilities, and operating support for observers;
 - d) the ability of the vessel to maintain rigorous mitigation of risks to seabirds, marine mammals and turtles;
 - e) any history of Illegal, Unreported or Unregulated (IUU) fishing by the vessel. A vessel on the SPRFMO IUU list or the IUU list of another competent regional fisheries management organisation shall not be accepted as an alternate vessel.

Management Measures

16. Fishing pursuant to this measure shall only take place in accordance with SC7-DW03_rev3 "Exploratory fishing for Patagonian toothfish within the SPRFMO Convention Area".
17. Because of the possibility of shared stocks of toothfish, fishing pursuant to this measure shall, as far as possible, be conducted consistent with relevant measures in force in the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) Area. In this regard, the following rules shall apply:
 - a) no more than 5,000 hooks shall be set in a line;
 - b) no more than 15,000 hooks shall be set in per fishing day;
 - c) A minimum tagging rate of three fish of each *Dissostichus* species per green weight (live weight) tonne shall be implemented. The length frequency of tagged toothfish shall reflect the length frequency of the catch. The minimum tag-overlap statistic shall achieve 60% once 30 or more *Dissostichus* of a species have been successfully released with tags, following the rules of CCAMLR CM 41-01/C (2019).
18. If 250 kg or more of deep-water sharks (all species in class *Chondrichthyes* combined on a line) are caught, then no further lines will be set within 10 nautical miles of the location of that line until the information from that voyage has been reviewed by the Scientific Committee.

Data Collection

19. In undertaking fishing pursuant to this measure the vessel shall, to the extent possible, collect all the data as set out in the document submitted to the Scientific Committee (SC7-DW03_rev3) and any further data requested by the Scientific Committee for its annual evaluation and assessment, including impacts on the benthic environment, if any.



20. Any vessel authorised to undertake fishing pursuant to this measure shall be fully capable of complying with SPRFMO data standards and reporting and to CCAMLR CM 22-07 (2013) related to encounters with potential vulnerable marine ecosystems (VMEs). Chile will submit all data at least to the standard required by CMM 02-2021 (Data Standards). In addition, the government designated observer aboard each vessel shall complete, in full, the CCAMLR fine-scale catch and effort data form C2 for longline fishing using standard FAO codes.

Marine Mammals, Seabirds, Turtles, and other Species of Concern

21. A vessel fishing pursuant to this measure shall use the following mitigation methods:

- a) the vessel shall use trotlines with “Cachalotera” with a maximum of 5,000 hooks per set;
- b) there shall be no dumping of offal while lines are being set or while lines are being hauled;
- c) discarding shall take place only at the end of a haul or while steaming; and no biological material shall be discarded for at least 30 minutes before the start of any set or during any set;
- d) discarding may only take place from the opposite side of the vessel from the hauling position;
- e) the Cachalotera system shall be used all the time to avoid incidental interactions with seabirds;
- f) promptly release of sea turtles, in a manner that causes the least harm to the extent practicable;
- g) at least one crew member will have training in techniques for handling and release of turtles to improve survival after release.

22. The following information shall be collected for marine mammals, seabirds, turtles, and other species of concern:

- a) at least one standardised seabird and marine mammal abundance count shall be made at the rear of the vessel during the setting of each line and again during the hauling of each line;
- b) other opportunistic observations, photography and identification of marine mammals shall be undertaken in collaboration with the crew;
- c) the observer shall have a target of observing 25% of hooks hauled for marine mammal, seabird and turtle captures, and for comparison with a sample of recorded video observations;
- d) at least 50% of hooks hauled shall be viewed on recorded video after the voyage;
- e) all marine mammals, seabirds, turtles, and other species of concern captured shall be identified, and photographs taken of all live birds released and any birds colliding with the ship that can be recovered;
- f) all dead birds shall be retained for formal identification and necropsy.

23. All information specified in CMM 03-2021 (Bottom Fishing) relating to bottom fisheries and all data necessary to assess encounters with VMEs shall be collected to enable assessment and monitoring of the distribution of marine ecosystem in the areas fished.

Monitoring

24. A vessel undertaking fishing pursuant to this measure shall carry an observer, as well as a dedicated assistant experienced in at-sea scientific data collection to assist the observer with biological measurement and data collection. Observer data shall be collected in accordance with the SPRFMO Observer data standard and shall include gear deployment and retrieval data, catch and effort information, biological data collection, and information on marine mammals, seabirds, reptiles and other species of concern.



25. In addition to carrying an observer, a vessel undertaking fishing pursuant to this measure shall be equipped with a video monitoring and recording system to be located over the hauling position to ensure that all hauled lines and hooks are observed or recorded on video. All recorded footage must be provided to the Chile Fisheries and Aquaculture National Service (Servicio Nacional de Pesca y Acuicultura, Sernapesca) at the end of the voyage for analysis and storage.
26. The vessel shall also be equipped with several tamperproof Automatic Location Communicators that meet SPRFMO standards for VMS reporting (as per CMM 06-2020 (Commission VMS), at least every 1 hour) and can respond to polling at any rate if required.

Review

27. This CMM shall expire following the regular meeting of the Commission in 2023. Notwithstanding, this CMM may be revised and updated by the Commission in 2021 and 2022 taking into account any advice or recommendation from the Scientific Committee.
28. The exploratory fishery to which this CMM applies may be extended through the development of a new CMM, pursuant to CMM 13-2021 (Exploratory Fisheries) or any other CMM that the Commission adopts that outlines a framework for the management of exploratory fisheries in the SPRFMO Area.

CMM 14e-2021

Conservation and Management Measure for Exploratory Fishing for Toothfish by the European Union in the SPRFMO Convention Area

The Commission of the South Pacific Regional Fisheries Management Organisation;

RECALLING Article 22 of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean (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 as a fishery or opened to fishing with such gear type or technique only when the Commission has adopted cautious preliminary Conservation and Management Measures (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;

RECOGNISING Articles 3(1)(a)(i) and (ii) of the Convention, which call on the Commission, in giving effect to the objectives of the Convention, to adopt CMMs that take account of international best practices and protect the marine ecosystem, particularly ecosystems with long recovery times following disturbance;

FURTHER RECOGNISING Articles 3(1)(b) and (2) of the Convention which call on the Commission to apply the precautionary approach and an ecosystem based approach to fishery resources under the mandate of the Convention;

NOTING the conservation value of relevant SPRFMO CMMs which will apply to activities anticipated to be undertaken pursuant to this measure, including, *inter alia*, CMM 13-2021 (Exploratory Fisheries) on the Management of New and Exploratory Fisheries in the SPRFMO Convention Area, CMM 03-2021 (Bottom Fishing) on the Management of Bottom Fishing in the SPRFMO Convention Area and CMM 09-2017 (Seabirds) on Minimising Bycatch of Seabirds in the SPRFMO Convention Area;

AGREEING that new and exploratory fisheries should not be permitted to expand faster than the acquisition of information necessary to ensure that the fishery can and will be developed in accordance with the principles set out in Article 3 of the Convention;

RECOGNISING Article 22(2) of the Convention, which calls on the Commission to adopt preliminary measures that ensure that any new fishery resource is developed on a precautionary and gradual basis until sufficient information is acquired to enable the Commission to adopt appropriately detailed CMMs;

NOTING the discussions held at the eighth meeting of the Scientific Committee on the proposal from the EU for an exploratory toothfish fishery (SC8-DW05_Rev 2);

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



Objectives

1. To allow for exploratory bottom longline¹ fishing for toothfish (*Dissostichus spp.*), in the Convention Area on a precautionary and gradual basis according to the best available science to meet the following objectives:
 - a) to further explore the presence and distribution of toothfish in the SPRFMO Convention Area;
 - b) to collect and provide information and data contributing towards the sustainable management of potential toothfish stocks in specific, data-poor zones of the Convention Area;
 - c) to assess the potential for a future sustainable toothfish fishery in specific zones of the Convention Area;
 - d) to provide occurrence information on marine mammals, seabirds, sharks, skates and rays and other species of concern;
 - e) to better understand patterns of seabirds and marine mammals and their potential for interactions with fishing vessels;
 - f) to evaluate the potential impacts of longlines on non-target associated or dependent species, and vulnerable marine ecosystems;
 - g) to undertake tagging activities on toothfish to enable future studies on the migration of toothfish as well as a preliminary stock assessment.

Definitions

2. For the purposes of this measure:
 - a) “toothfish” means Patagonian toothfish (*Dissostichus eleginoides*) and Antarctic toothfish (*Dissostichus mawsoni*);
 - b) “bottom longline” means Spanish long-line system as specified in the CCAMLR Gear Library: <https://www.ccamlr.org/en/publications/fishing-gear-library>

Application

3. This measure applies to exploratory fishing for toothfish as described in SC8-DW05_Rev2 “European Union proposal for exploratory fishing for Patagonian and Antarctic toothfish within the SPRFMO Convention area, 2021-2023”.
4. None of the obligations in this measure exempt a Member or CNCP from complying with any Convention obligation or any other CMMs adopted by the Commission.

Details and specification of exploratory fishing activities

5. Fishing for toothfish, using the bottom longline method, may be conducted in the exploratory fishing research block identified in Table 1.

¹ Also referred to as demersal longline.



Table 1: corner coordinates of the George V Fracture Zone Research Block (GVFZ RB), area ~222,142 km², total fishable area 600-2500 m ~17,415 km²

GVFZ RB	
NW	50° 30' S, 136° E
NE	50° 30' S, 140° 30' E
E-Indent	52° 45' S, 140° 30' E
E-corner	52° 45' S, 145° 30' E
SE	54° 50' S, 145° 30' E
SW	54° 50' S, 136° E

Duration, Catch and Effort Limits

- The exploratory fishing shall comprise three exploratory trips of a maximum duration of 60 consecutive days which may occur any time between 1 May and 31 October, one each in the years 2021, 2022 and 2023.
- The annual toothfish total allowable catch (TAC) shall not exceed 75 tonnes (greenweight), unless the Commission revises the TAC at its annual meeting based on advice of the Scientific Committee. The TAC was considered a precautionary limit by the SPRFMO SC and supports the need to understand other risks like interactions with seabirds, marine mammals or other organisms. Fish that are tagged and returned alive to the sea shall not be counted against this limit. The catch limit of 75 tonnes will allow the collection of a significant amount of scientific information in accordance with the objectives of paragraph 1.
- Fishing operations shall further be limited to a maximum of 5000 hooks per set, and with a maximum of 120 sets per annum. Lines shall be set at least 3 nm apart from each other, and not set at previous long-line locations within one calendar year. For this purpose, the date, shoot and haul position of each set shall be recorded by the vessel and imported into its plotter software. Fishing operations shall cease when either the TAC is reached, or if 120 sets have been set and hauled during the 60 consecutive days, whichever is sooner.
- As the catch limit of 75 tonnes is approached, shorter lines shall be set to ensure that the TAC is not overrun. The company and crew of the proposed vessel shall have experience working to catch limits of 75 tonnes or less and use intensive monitoring of catch retained.
- Fishing operations shall be limited to depths between 600 m and 2500 m to avoid any impact on benthic ecosystems in shallower waters.

Management Measures

- Fishing pursuant to this measure shall only take place in accordance with SC8-DW05_Rev2 "European Union proposal for exploratory fishing for Patagonian and Antarctic toothfish within the SPRFMO Convention area, 2021-2023".
- All hooks used will be uniquely marked indicating the vessel and notified to the Executive Secretary before the beginning of each trip.

Authorised Vessels

- The vessel *FV Tronio* shall be authorised to undertake fishing pursuant to this measure. In the event that the *FV Tronio* is unavailable, an alternative vessel of similar capability and capacity shall be authorised by the European Union to undertake fishing pursuant to this measure only after the replacement vessel has been formally notified to the Executive Secretary who will forward that information to all Members and CNCs.



14. In determining the suitability of an alternative vessel the European Union shall consider, *inter alia*:
- a) the vessel's ability to conduct the exploratory fishing proposed in paper SC8-DW05_Rev_2 "European Union proposal for exploratory fishing for Patagonian and Antarctic toothfish within the SPRFMO Convention area, 2021-2023";
 - b) the master and crew's history and track record in comparable research or exploratory fishing;
 - c) the ability of the vessel to provide suitable accommodation, facilities, and operating support for observers on-board;
 - d) the ability of the vessel to comply with the applicable mitigation measures to seabirds and marine mammals;
 - e) any history of Illegal, Unreported or Unregulated (IUU) fishing by the crew or vessel: consistent with CMM 04-2020 (IUU Vessel List) a vessel on the SPRFMO IUU list, or the IUU list of another competent organisation dealing with fisheries management, shall not be accepted as an alternate vessel.

Data Collection

15. In undertaking fishing pursuant to this measure, the vessel shall collect all the data required by current CMMs including CMM 02-2021 (Data Standards) and CMM 03-2021 (Bottom Fishing) and, to the extent possible, all the data as set out in the paper submitted to the Scientific Committee (SC8-DW05_Rev2). The vessel shall also collect, to the extent possible, any further data requested by the Scientific Committee for its annual evaluation.
16. The vessel shall tag and release *Dissostichus* spp., continuously while fishing, at a rate of 5 fish per tonne green weight. All released toothfish must be double-tagged, using tags sourced from the CCAMLR secretariat. All toothfish that are not tagged must be retained.
17. The length frequency of tagged toothfish shall reflect the length frequency of the catch. The vessel shall achieve a minimum tag-overlap statistic of 60% for each species of *Dissostichus*.
18. Recaptured tagged fish (i.e. fish caught that have a previously inserted tag) shall not be re-released, even if at liberty for only a short period.

Marine mammals, seabirds, and other species of concern

19. All marine mammals, seabirds, sharks, and skates shall be released alive where possible. Information about birds colliding with the vessel will be recorded and all birds released alive where possible. Sharks and skates released alive shall not be counted as retained catch.
20. A vessel fishing pursuant to this measure shall use the following mitigation methods:

Seabird mitigation measures, in addition to those set out in CMM 09-2017 (Seabirds):

- a) the vessel shall release weights before line tension occurs in line with paragraph 3 of CM 25-02 (2018) of CCAMLR;
- b) there shall be no dumping of offal or discards whilst fishing lines are being set or hauled;
- c) any offal or discards shall be macerated by machine prior to discarding;
- d) discarding shall take place only after hauling has been completed and whilst steaming at a speed of at least 4 knots, and no biological material shall be discarded for at least 30 minutes before the start of any set or during any set;
- e) discarding may only take place from the opposite side of the vessel from the hauling position;
- f) two bird scaring devices (tori lines) shall be deployed when setting lines and at least one bird exclusion device (BED) shall be used to prevent birds entering the hauling area, to the extent allowed by prevailing weather;



- g) in the instance of exceeding the trigger level of 0.01 birds/1000 hooks of CMM 09-2017 (Seabirds), an evaluation of mitigation measures will be made, including ensuring correct implementation of mitigation measures, and strengthening mitigation where possible (e.g. night-time setting).

Seal and cetacean bycatch mitigation measures:

- h) any seal or cetacean bycatch will trigger a re-evaluation of fishing strategy. In the event of a cetacean entanglement and possible mortality as a result, prior to all subsequent lines being hauled a one-hour observation period will be conducted to ensure no whales are present.

Shark, skate, and macrourid bycatch mitigation measures:

- i) If more than 4 individuals of any of the following families Somniosidae, Lamnidae, Cetorhinidae, Alopiidae are caught or if more than 2 individuals of any one of these families of sharks are caught in one haul or set, the vessel shall move on for the duration of the trip, and a next line shall not be set closer than 5 nm from the centre of the preceding line;
- j) If the retained skate by-catch exceeds 5% of the toothfish catch or reaches a maximum of 100 kg in any one haul or set, the vessel will move-on to another location at least 5 nm distant;
- k) Since *Macrourus* spp. can be a common by-catch species in other toothfish longline fisheries, as a precaution the vessel will move-on to another location at least 5 nm distant if the by-catch of *Macrourus* spp. reaches 150 kg and exceeds 16% of the catch of toothfish in any one haul or set.

Data collection for marine mammals, seabirds, and other species of concern

21. The following information shall be collected for encountered marine mammals, seabirds, and other species of concern:
- At least one standardised seabird and marine mammal abundance count shall be made at the rear of the vessel during the setting of each line and again at the hauling of each line;
 - the observer shall have a target of observing 25% of hooks hauled for marine mammal and seabird interactions. Where observations take place they will be recorded and stored for analyses and/or reference;
 - all marine mammals, seabirds, sharks, skates and other species of concern accidentally captured dead or moribund shall be identified, and photographs will be taken. Information about birds colliding with the vessel will be recorded and all birds released alive;
 - all dead birds will be retained for formal identification and necropsy;
 - opportunistic observations, photography and identification of marine mammals may be undertaken in collaboration with the crew.

VME

22. All information specified in CMM 03-2021 (Bottom Fishing) relating to bottom fisheries and all data necessary to assess encounters with VMEs shall be collected to enable assessment and monitoring of the distribution of marine ecosystem in the areas fished.



Monitoring

23. A vessel undertaking fishing pursuant to this measure shall carry a scientific observer on-board, as well as a dedicated assistant experienced in at-sea scientific data collection to assist the observer with biological measurement and data collection. Observer data shall be collected in accordance with the SPRFMO Observer data standard and shall include gear deployment and retrieval data, catch and effort information, biological data collection, and information on marine mammals, seabirds, and other species of concern.
24. The scientific observer shall record all relevant biological data as outlined in CMM 02-2021 (Data Standards) to enable the evaluation of existence of the target species in the research area and evaluate the possible impacts of the exploratory fishery on the target stock, associated or dependent species, and marine ecosystems, as well as record encounters with VMEs, and document the effectiveness of related mitigation measures and how the mitigation measures for marine mammals, seabirds, sharks, skates and other species of concern are followed as specified in paragraph 20.
25. The vessel shall also be equipped with several tamperproof Automatic Location Communicators that meet SPRFMO standards for VMS reporting (every hour) and can respond to polling at any rate if required.
26. Electronic Monitoring (CCTV) will be used to monitor all setting and hauling activities, including monitoring of target and by-catch in the hauling bay. The tamper-proof system shall record sensor and video data overlaid with accurate GPS and timeline stamp on the video record.

Environmental data collection

27. The vessel shall record additional environmental data including *in situ* imagery of seabed species and habitats, and CTD (conductivity, temperature, depth) sensors deployed on longlines.

Review

28. The first year's survey, currently scheduled for ~Sept/Oct 2021, will be reported on to the Scientific Committee for their review 30 days prior to their preparatory (web-) meeting in May/June 2022. If overall shark by-catch, for families not covered by the move-on rule described above, is deemed excessive and of concern to the Scientific Committee, mitigation measures such as a catch limited move-on rule may be added in the FOP for the subsequent 2nd and 3rd year surveys.
29. This CMM shall expire following the regular meeting of the Commission in 2024.
30. The exploratory fishery to which this CMM applies may be extended through the development of a new CMM pursuant to CMM 13-2021 (Exploratory Fishing) to be considered by the Commission.
31. Fishing activity undertaken pursuant to this measure will not be considered to be a precedent for future allocation decisions.

CMM 15-2016

Conservation and Management Measure on Vessels without Nationality in the SPRFMO Convention Area

(Supersedes CMM 4.15)

The Commission of the South Pacific Regional Fisheries Management Organisation;

RECALLING that the FAO Council has adopted an International Plan of Action to prevent, deter and eliminate illegal, unreported and unregulated fishing (IUU fishing) and has recommended that States take measures consistent with international law in relation to fishing vessels without nationality involved in IUU fishing on the high seas;

RECOGNISING that vessels without nationality operate without governance and oversight, and that there should be no legal lacuna governing vessels without nationality;

CONCERNED that fishing in the Convention Area by vessels without nationality undermines the objective of the Convention and the work of the Commission;

ADOPTS the following Conservation and Management Measure (CMM) in accordance with article 8 of the Convention:

1. Vessels determined under international law to be without nationality that are fishing in the SPRFMO Convention Area undermine the Convention and the Conservation and Management Measures adopted by the Commission and are engaged in IUU fishing;
2. Members, Cooperating Non-Contracting Parties (CNCs) and non-Parties are encouraged to take measures, including by sharing information about the activities of vessels without nationality and, where appropriate, by enacting domestic legislation, to prevent and deter vessels without nationality from engaging in fishing or fishing related activities in the Convention Area;
3. Members, CNCs and non-parties are encouraged to take action, in accordance with international law, against vessels referred to in paragraph 1 of this measure, including to prohibit the landing and transshipment of fish and fish products and access to port services by such vessels, except where such access is essential to the safety or health of the crew or the safety of the vessel.

CMM 16-2021

Conservation and Management Measure Establishing the SPRFMO Observer Programme (Supersedes CMM 16-2019)

The Commission of the South Pacific Regional Fisheries Management Organisation;

RECOGNISING United Nations General Assembly Sustainable Fisheries Resolutions 63/112 and 71/123 which encourage the development of observer programmes by regional fisheries management organisations (RFMOs) and arrangements to improve data collection;

RECALLING that, according to Article 28 of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean (the Convention), the Commission shall establish an observer programme, to be operated in accordance with standards, rules and procedures developed by the Commission;

NOTING that Article 28 of the Convention sets out the functions of the observer programme and that the observer programme shall be coordinated by the Secretariat of the Commission in a flexible manner to take account of the nature of the fisheries resources and other relevant factors;

NOTING that the primary function of observers on board fishing vessels is the collection of scientific information and that observers are not enforcement officials, but that Article 28 of the Convention specifies that the information collected by the observer programme shall, as appropriate, also be used to support the functions of the Commission and its subsidiary bodies, including the Compliance and Technical Committee (CTC);

NOTING the importance of the collection of robust scientific information, consideration should be given to *inter alia* cost-effectiveness and safety at sea;

NOTING that Article 19(2)(b) of the Convention stresses the need to avoid adverse impacts on, and ensure access to fisheries by, subsistence, small-scale and artisanal fishers and women fish workers when establishing CMMs for fishery resources covered by the Convention;

NOTING ALSO that one of the functions of the Commission is to promote the conduct of scientific research to improve knowledge of fishery resources and marine ecosystems in the Convention Area and of the same fishery resources in adjacent waters under national jurisdiction;

NOTING FURTHER that scientific research vessels performing fishing operations for research purposes will have on board scientific personnel whose primary function is the collection of scientific data and information;

ACKNOWLEDGING that high-quality data and information related to the fishing activity in the Convention Area, and its impacts on the marine environment occurring in the SPRFMO area are essential for the Commission to adopt and implement effective and timely Conservation and Management Measures (CMMs);

DETERMINED to ensure the collection of data and information that can be used for effective assessment and management of SPRFMO fisheries resources, including target species and bycatch, and interaction of fishing activities with the environment and species occurring in the Convention Area, to improve the certainty of future scientific advice while taking into account ecosystem considerations;

RECOGNISING the international nature of fishing activity and management of SPRFMO fisheries resources, and the consequent need to deploy well-trained and accredited observers;

RECOGNISING the nature of the observer's work at sea and that the collection of data and information needs



to be coupled with safe conditions for observers while on board fishing vessels;

ACKNOWLEDGING that electronic monitoring systems, study fleets and self-sampling have been successfully tested for certain types of data in some fisheries and that the Commission, with the advice of the Scientific Committee (SC), could explore minimum standards for their implementation, as practical and appropriate;

COMMITTED to ensure that the SPRFMO Observer Programme (SPRFMO OP) is developed under a robust and transparent governance framework;

RECOGNISING the need to establish clear procedures for attaining accreditation of national observer programmes and service providers under the SPRFMO OP;

ADOPTS the following CMM in accordance with Articles 8 and 28 of the Convention:

General Rules

1. This CMM establishes the standards, rules and procedures to establish the SPRFMO OP and to ensure it achieves the objectives specified in Article 28 of the Convention.
2. The purpose of the SPRFMO OP is to facilitate the collection of verified scientific data and additional information related to fishing activities in the Convention Area and its impacts on the ecosystem, and also to support the functions of the Commission and its subsidiary bodies, including the CTC.
3. The SPRFMO OP shall apply to all fishing vessels flying the flag of a Member or Cooperating non-Contracting Party (CNC P) fishing for fisheries resources in the Convention Area for which a minimum level of observer coverage applies in the relevant CMMs in force.
4. Notwithstanding paragraph 3 above, for artisanal fishing vessels less than 15 metres from coastal developing States fishing for jumbo flying squid, where extraordinary accommodation and safety concerns may exist that precludes deployment of an onboard observer in accordance with the SPRFMO Observer Programme, a coastal developing State will employ an alternative scientific monitoring approach that will collect data equivalent to that specified in this Observer Programme and in CMM 18-2020 (Squid), in a manner that ensures comparable coverage. In any such cases, the Member or CNC P wishing to avail itself of an alternative approach must present the details of the approach to the Scientific Committee for evaluation. The Scientific Committee will advise the Commission on the suitability of the alternative approach for carrying out the data collection obligations set forth in this Observer Programme and in CMM 18-2020 (Squid). Alternative approaches implemented pursuant to this provision shall be subject to the approval of the Commission at the annual meeting prior to implementation. Once the alternative approach has been approved, the coastal developing State will notify the Commission prior to the start of their fishing operations. This derogation does not extend to any other obligations contained in this or other CMMs in force. This exception will be revised by the Commission in 2026. Unless otherwise decided by the Commission, this derogation will expire on 1 January 2026.
5. Members and CNC Ps are encouraged to undertake their best efforts to have observers on board their fishing vessels¹ flying their flags and fishing for fisheries resources in the Convention Area for which there is no fishery-specific CMM in force. The Scientific Committee shall provide advice to the 8th meeting of the Commission in 2020 on the appropriate levels of observer coverage for these fisheries.
6. Observers shall have the rights and duties set out in Annex 1 of this CMM. Members and CNC Ps shall ensure that observers from their national observer programmes perform their duties.

¹ For the purposes of this paragraph, fishing vessels exclude reefer and supply vessels.



7. Members and CNCPs shall also ensure that owners and fishing operators, vessel captains, officers and crew of vessels flying their flag:
 - a) Respect the rights of observers set out in Annex 1 of this CMM, and
 - b) comply with the standards and duties set out in Annex 2 of this CMM.
8. Members and CNCPs shall ensure that their national observer programmes and service providers only deploy independent and impartial observers.
9. The Commission, based on the advice of the SC, should explore and, where feasible, complementary with other means of collecting scientific data and additional information in conjunction with human observers.

Deployment of Observers

10. To fulfil their obligations under the Convention and the relevant CMMs adopted by the Commission, Members and CNCPs shall only deploy observers sourced from a national observer programme or service provider accredited according to the provisions of this CMM.
11. Observers from an accredited national observer programme of a Member or CNCP shall only be deployed on board vessels flagged to another Member or CNCP with the consent of both Members or CNCPs.
12. Individual observers have the right to refuse a deployment on board a fishing vessel for justified reasons, including when safety issues have been identified on the vessel to be deployed or due to serious illness of the observer before boarding. The national observer programme or service provider shall ensure that the reasons for such refusal are documented and that a copy of such documentation is provided to the SPRFMO Secretariat, which will forward it to the relevant Member or CNCP.

Levels of Coverage

13. Members and CNCPs shall ensure that all fishing vessels flying their flag carry observers from a national observer programme or service provider accredited under the SPRFMO OP to meet the minimum levels of observer coverage required by the relevant applicable SPRFMO CMM(s) while operating in the Convention Area².
14. Scientific research vessels flying the flag of a Member or CNCP fishing for research purposes in the Convention Area shall be exempted from the obligation to carry accredited observers on board³. In these cases, Members and CNCPs shall comply with the data collection and reporting obligations of paragraphs 44, 45 and 46, and shall ensure that scientific personnel on board possess the capacity to perform in full all of the observation and reporting responsibilities contained in those paragraphs.
15. For fisheries where 100 percent of observer coverage is not required, Members and CNCPs shall ensure that the method of assigning observers on vessels flying their flag is representative for the fishery to be monitored and commensurate with the specific data needs of the fishery as a whole. This requirement is subject to practical constraints related to Members and CNCPs with a small number of fishing vessels or trips.
16. In relation to paragraph 15 of this CMM, Members and CNCPs shall document and provide information on the methods used to allocate observers on fishing vessels flying their flag to meet the observer coverage requirements, and shall also provide this information in their National Annual Report to the SC. The SC shall review the method used by each Member or CNCP and provide recommendations for improvement, when necessary.

² CMM 01-2020 (*Trachurus murphyi*), CMM 03-2020 (Bottom fishing) and CMM 13-2020 (Exploratory fisheries) specify observer coverage levels for these fisheries.

³ This paragraph does not apply to fishing under CMM 13-2021 (Exploratory Fisheries) - observer requirements for exploratory fishing are specified under paragraph 20 of that CMM.



Accreditation

Accreditation Evaluator

17. The SPRFMO OP Accreditation Evaluator is the public or private person or entity tasked by the Commission to assess and evaluate the applications for accreditation. The SPRFMO OP Accreditation Evaluator shall have addressed any potential or actual conflict of interest in the course of delivering its service.
18. Applications for the accreditation of national observer programmes may be submitted by Members or CNCPs while applications by service providers may be submitted directly by an external, non-governmental provider of observers, or a Member or CNCP under the SPRFMO OP. Subject to paragraphs 36 and 38 of this CMM, the evaluation of each national observer programme or service provider shall only be undertaken by the SPRFMO OP Accreditation Evaluator.
19. Subject to paragraphs 29, 30 and 31 of this CMM, the SPRFMO OP Accreditation Evaluator shall evaluate the national observer programmes and service providers against the minimum requirements and standards set by the Commission in Annex 3 of this CMM.
20. The Secretariat shall ensure that the SPRFMO OP Accreditation Evaluator is required, through its service contract, to maintain the confidentiality of any information received by a Member, CNCP or service provider pursuant to this accreditation process.
21. A Decision of the Commission will designate a SPRFMO OP Accreditation Evaluator no later than at its 8th annual meeting. The procedure for appointing the SPRFMO OP Accreditation Evaluator, as well as the terms and conditions of engagement, are outlined in COMM7-Report Annex 7i.
22. The SPRFMO OP Accreditation Evaluator shall be paid out of the Commission budget.

Evaluation of Observer Programmes of Members, CNCPs and Service Providers by the SPRFMO OP Accreditation Evaluator

23. Consistent with Article 28(1) of the Convention, the SPRFMO OP, including the accreditation process, shall be coordinated by the Secretariat and operated in accordance with the standards, rules and procedures detailed in this CMM.
24. Each Member, CNCP or service provider seeking to accredit its observer programme under the SPRFMO OP shall submit to the Secretariat and the Accreditation Evaluator, at any time, all the relevant information and documentation to fulfil the standards provided for in Annex 3, including manuals, guides and training materials. Where applications are submitted by service providers on behalf of a Member or CNCP, final responsibility for the completeness and accuracy of the information submitted shall rest with the Member or CNCP. All the information and documentation shall be provided in the official language of the Commission or with appropriate translations. The Secretariat may recommend that the Member, CNCP or service provider complete the application when there is clear evidence that substantive or essential information is missing.
25. Members and CNCPs are encouraged to inform the Secretariat and the Accreditation Evaluator a year in advance of their intention to pursue accreditation under the SPRFMO OP and to commence the accreditation process at least six months prior to the date fixed for the opening of the next Commission meeting.
26. The Secretariat shall promptly provide the information and documentation referred to in paragraph 24 to the SPRFMO OP Accreditation Evaluator.



27. The SPRFMO OP Accreditation Evaluator shall liaise with Members, CNCP and service providers, as appropriate. Members, CNCPs and service providers shall have the opportunity to provide additional information and corrections relevant to their evaluation to the Secretariat and the Accreditation Evaluator. This process will be conducted by the SPRFMO OP Accreditation Evaluator in a fair, equitable, transparent and non-discriminatory manner.
28. Following evaluation and bilateral consultation, the SPRFMO OP Accreditation Evaluator shall provide a Draft Preliminary Evaluation Report to the Member, CNCP or service provider pursuing accreditation within 30 days for comment prior to the report being provided to the Secretariat. The SPRFMO OP Accreditation Evaluator shall then incorporate any additional information and provide the Preliminary Evaluation Report simultaneously to both the Secretariat and the Member, CNCP or service provider indicating whether the nominated national observer programme or service provider has met the minimum standards for accreditation under the SPRFMO OP.
29. When preparing a Preliminary Evaluation Report, and in addition to assessing the fulfilment of the standards indicated in Annex 3, the SPRFMO OP Accreditation Evaluator shall also consider those national programmes and service providers currently accredited by other RFMOs.
30. The SPRFMO OP Accreditation Evaluator shall assess the consistency and compatibility between the SPRFMO Minimum standards for accreditation under Annex 3 and those required by other RFMOs, along with their practical implementation and functioning. The Member or CNCP shall provide to the Secretariat the name of the national observer programme or service provider accredited by other RFMOs, the RFMO that has accredited it, and any other supporting information requested by the Accreditation Evaluator.
31. If the Accreditation Evaluator finds that the observer programme has accreditation under another RFMO or arrangement that meets the SPRFMO Minimum standards for accreditation under Annex 3, along with its practical implementation and functioning, it will find the application favourable.
32. The Accreditation Evaluator shall submit the Final Evaluation Report to the Secretariat no later than 60 days in advance of the next Commission meeting. The Secretariat shall circulate the Final Evaluation Report as an annex to the SPRFMO Observer Programme Implementation Report prior to the next CTC meeting.
33. The CTC shall assess the Final Evaluation Report and make recommendations to the Commission regarding whether the observer programme has met the requirements of this CMM and, where relevant, whether a recommendation based on paragraphs 35 to 38 is appropriate.
34. The Commission shall decide whether to grant accreditation at its next meeting on the basis of the Final Evaluation Report and any recommendations from the CTC.
35. If the Final Evaluation Report by the SPRFMO OP Accreditation Evaluator is favourable, the Commission may decide to adopt the report and grant accreditation under the SPRFMO OP for 5 years from the date upon which accreditation is granted.
36. Should the Commission decide that, despite the favourable findings of the Final Evaluation Report by the SPRFMO OP Accreditation Evaluator, the application does not meet the minimum standard required for accreditation (Annex 3), it may decide not to grant accreditation. In that case it shall clearly outline the basis for its decision.
37. If the Final Report by the SPRFMO OP Accreditation Evaluator is not favourable, the Commission may decide to adopt the report and not grant accreditation.
38. Should the Commission decide that, despite the findings of the non-favourable Final Evaluation Report by the SPRFMO OP Accreditation Evaluator, the application meets the minimum standard required for accreditation (Annex 3), the Commission may decide to grant accreditation under any conditions as may be specified by the Commission. These conditions may include the accreditation of a national observer programme or a service provider on a temporary and conditional basis pending the fulfilment by that Member, CNCP or service provider of the deficiencies detected during the accreditation process.



39. In case an application for accreditation is not granted, nothing prevents a Member, CNCP or service provider from presenting a new application to seek accreditation. When reapplying for accreditation Members, CNCPs and service providers shall consider the findings and recommendations of the SPRFMO OP Accreditation Evaluator and the Commission.
40. Members, CNCPs and service providers shall be entitled to renew accreditation.
41. A Member may request that the Commission revoke, condition or suspend accreditation for a national observer programme or service provider at any time but not later than 30 days in advance of the next CTC meeting by providing evidence that the national observer programme or service provider is not meeting the minimum standards for accreditation. The Executive Secretary shall circulate the request for revocation, condition or suspension to Members as soon as possible but no later than 15 days after the request is received, and the SPRFMO OP Accreditation Evaluator shall be asked to advise the CTC on the matter no later than 20 days after the request was circulated.
42. The CTC shall assess the request to revoke, condition or suspend an accreditation and the information provided at its next annual meeting, as well as any information provided by other Members, and may provide recommendations to the Commission. The Commission shall consider the CTC's recommendations and the request to revoke suspend or condition accreditation at its next annual meeting.
43. The Secretariat shall publicise the name of all observer programmes accredited under the SPRFMO OP, together with relevant contact details, on the SPRFMO website and shall include a list of all national observer programmes or service providers accredited under the SPRFMO OP in the annual OP Implementation Report described in paragraph 47.

Data Collection

44. Members and CNCPs shall ensure that observers deployed on vessels flying their flag, and, where applicable, complementary means of collecting data and information, collect and provide the information specified in Annex 7 of CMM 02-2021 (Data Standards) in the manner set forth in that CMM and shall also provide relevant observer information required under any other CMM.
45. Nothing in this CMM shall prevent Members and CNCPs from taking additional actions related to data collection compatible with this measure.

Reporting

46. Members and CNCPs shall include a brief overview of the national observer programmes or service providers covering its fishing activity as a component of the Annual National Reports submitted by Members and CNCPs to the SC and developed in accordance with the "Guidelines for Annual National Reports to the SPRFMO Scientific Committee".
47. The Secretariat shall prepare a report on the implementation of the SPRFMO OP for presentation at each annual meeting of the CTC, using information from annual reports, observer data, and all other suitably documented and relevant information in its possession. The SPRFMO OP Implementation Report will address, *inter alia*: (1) information on problems that have been encountered; (2) recommendations for improving current standards and practices; (3) developments in observer programmes and observational methods; (4) constraints to accreditation and (5) in general any identifiable problem or obstacle in fulfilling the objectives and purpose of this CMM as outlined in paragraphs 1 and 2.
48. The SPRFMO OP Implementation Report shall be distributed to Members and CNCPs 30 days prior to each annual CTC meeting.
49. The CTC shall review the recommendations delivered by the SPRFMO OP Implementation Report and provide advice to the Commission thereon, including proposed actions to be taken.



50. The Secretariat shall make available observer data to the SC, at its request. Data confidentiality shall be maintained as set forth in procedures specified in Paragraph 6 of CMM 02-2021 (Data Standards) and in any other data procedures that may be adopted by the Commission.

Review

51. The CTC shall review the implementation and effectiveness of this CMM at least every five years, including the observer safety requirements, the applicability of the SPRFMO OP to other fishing vessels and any additional requirements as necessary to meet the objectives of both Article 28 of the Convention and this CMM.

52. The SC shall periodically review and provide advice on the appropriate level of observer coverage needed in each fishery to meet data needs.

53. Should the SC recommend that a change in coverage or research priorities for specific fisheries is needed, the revised coverage levels, if adopted by the Commission, will be specified in the relevant fishery CMMs.

Entry into Force

54. This CMM shall enter into force 120 days after the conclusion of the Commission's 2019 Annual Meeting.

55. Members and CNCPs may continue using their own non-accredited national observer programme or service provider to meet observer coverage requirements until 31 December 2023. From 1 January 2024 Members and CNCPs shall only deploy observers from national observer programmes or service providers accredited under the SPRFMO



ANNEX 1

Minimum Standards for Observers

Observer Rights

In fulfilling their tasks and duties, observers shall have the following rights:

- a) Freedom to carry out their duties without being assaulted, obstructed, delayed, intimidated or interfered with;
- b) Access to and use of all facilities and equipment of the vessel necessary to carry out the observer's duties, including but not limited to full access to the bridge, catch before being sorted, processed catch and any bycatch on board, as well as areas which may be used to hold, process, weigh, and store fish, as safety permits;
- c) Access to the vessel's records, including logbooks, vessel diagrams and documentation for reviewing records, assessment and copying, as well as access to navigational equipment, charts, and other information related to fishing activities;
- d) Access to and use of communications equipment and personnel, upon request, for entry, transmission, and reception of work-related data or information;
- e) Reasonable use of the communication equipment on board to communicate with the observer programme on land at any time including emergencies;
- f) Access to additional equipment, if present, to facilitate the work of the observer while on board the vessel, such as high-powered binoculars, electronic means of communication, freezer to store specimens, scales, et cetera;
- g) Safe access to the working deck or hauling station, during net or line retrieval and access to specimens on deck (alive or dead) in order to collect samples;
- h) Unrestricted access to food, accommodation and sanitary facilities of a standard equivalent to those normally available to an officer on board the vessel as well as medical facilities that meet international maritime standards;
- i) Access to verify safety equipment on board (through a safety orientation tour provided by officers or crew) before the vessel leaves the dock;
- j) Unrestrained permission to record any pertinent information relevant for scientific purposes and data collection;
- k) A designated contact or supervisor on land to communicate with at any time while at sea;
- l) To refuse deployment on board a fishing vessel for justified reasons, including where safety issues have been identified. The national observer programme or service provider shall ensure that the reasons for such refusal are documented and a copy of such document is provided to the SPRFMO Secretariat, which will forward it to the flag State of the vessel;
- m) The ability to communicate at any time the occurrence of safety issues to the vessel captain, national observer programme, service provider, the Secretariat, and flag State, as appropriate;
- n) Upon request by the observer, receiving reasonable assistance by the crew to perform their duties including, among others, sampling, handling large specimens, releasing incidental specimens and measurements;
- o) Privacy in the observer's personal areas;
- p) Not performing duties assigned to the crew, such as gear handling (for fishing purposes), offloading fish, et cetera;
- q) Observer data, records, documents, equipment and belongings will not be accessed, harmed, or destroyed.

Members and CNCPs shall ensure that operators, captains, officers and crew on board vessels flying their flag respect the rights of observers and that a copy of these rights are provided to the crew and/or prominently displayed.



Observer duties

The duties of observers include:

- a) Carrying complete and valid documents before boarding the vessel, including, when relevant, identification documents, passport, visas, and certificates of at sea security training;
- b) Submitting copies of the documents indicated above to the programme managers of the national observer programme or service provider, as required;
- c) Maintaining independence and impartiality at all times while on duty;
- d) Complying with the laws and regulations of the Member or CNCP whose flag the vessel is flying, as applicable;
- e) Respecting the hierarchy and general rules of behaviour that apply to the vessel personnel;
- f) Performing duties in a manner that does not unduly interfere with the operations of the vessel and while carrying out their functions giving due consideration to the operational requirements of the vessel and communicating regularly with the captain or master of the vessel;
- g) Being familiar with the emergency procedures aboard the vessel, including the locations of life rafts, fire extinguishers, and first aid kits, and participating regularly in emergency drills for which the observer has received training;
- h) Communicating regularly with the vessel captain on relevant observer issues and duties;
- i) Refraining from actions that could negatively affect the image of the SPRFMO OP;
- j) Adhering to any required codes of conduct for observers, including any applicable laws and procedures;
- k) Communicating as regularly as is required with the programme managers and/or national programme coordinator on land;
- l) Complying with any SPRFMO CMMs whose provisions are directly applicable to observers;
- m) Respect the privacy in the captain and crew areas.



ANNEX 2

Duties of Vessel Operators, Captain, Officers and Crew

Members and CNCPs shall ensure that vessel operators and captains, officers and crew, as applicable, comply with the following provisions regarding the SPRFMO OP:

Rights of Vessel Operators and Captains

Vessel operators and captains shall have the following rights:

- a) To agree to the timing and placement, when required to take on board one or more observers;
- b) To conduct operations of the vessel without undue interference due to the observer's presence and performance of the observer's duties;
- c) To assign, at his or her discretion, a vessel crew member to accompany the observer when the observer is carrying out duties in hazardous areas;
- d) To be timely notified by the observer provider on completion of the observer's trip of any comments regarding the vessel operations. The captain shall have the opportunity to review and comment on the observer's report and shall have the right to include additional information deemed relevant or a personal statement.

Duties of Vessel Operators and Captains

Vessel operators and captains shall have the following duties:

- a) Accept on board the vessel one or more persons identified as observers by the SPRFMO OP when required by the Member or CNCP to which the vessel is flagged;
- b) Ensure the vessel crew is properly briefed and does not assault, harass, obstruct, resist, intimidate, influence, or interfere with the SPRFMO OP observer or impede or delay the observer in the performance of duties;
- c) If required by a SPRFMO CMM, as a complementary monitoring tool, install and maintain functioning electronic monitoring systems or devices throughout the selected fishing trips;
- d) Ensure the observer has access to the catch before any sorting, grading or other separation of the components of the catch are made;
- e) Ensure that vessels operating in the Convention Area include adequate space for the observer to conduct bycatch sampling or other sampling as needed, in a safe manner that limits interference with vessel operations, with a dedicated sample station and other equipment such as scales;
- f) Maintain a safe and clean sampling station to be used by the observer;
- g) Not alter the sampling station during an observed trip without consultation with the observer and subsequent notification to the Member or CNCP in control of the vessel;
- h) Inform the crew regarding the timing and objectives of the SPRFMO OP and schedule for observer boarding, as well as their responsibilities when an observer from the SPRFMO OP boards the vessel;
- i) Assist the SPRFMO OP observer to safely embark and disembark the vessel at an agreed upon place and time;
- j) Allow and assist the SPRFMO OP observer to carry out all duties safely and ensure the observer is not unduly obstructed in the execution of duties unless there is a safety issue that requires intervention;
- k) Allow and assist the SPRFMO OP observer to remove and store samples from the catch and allow the observer access to stored specimens;
- l) Provide the observer, while on board the vessel, at no expense to the observer, national programme or service provider, with food, accommodation, adequate sanitary amenities and medical facilities of a standard equivalent to those normally available to an officer on board the vessel according to generally accepted international standards;



- m) Allow and assist full access to and use of all facilities and equipment of the vessel that is necessary for the observer to carry out his or her duties, including but not limited to full access to the bridge, catch before being sorted, processed catch and any bycatch on board, as well as areas which may be used to hold, process, weigh and store fish;
- n) Follow an established mechanism, if adopted by the Commission, for solving conflicts that would complement the established dispute settlement processes provided by observer programmes and providers;
- o) Cooperate with the observer when the observer is sampling the catch;
- p) Provide notice to the observer at least fifteen (15) minutes before fishing gear hauling or setting procedures, unless the observer specifically requests not to be notified;
- q) Provide adequate space to the observer in the bridge or other designated area for clerical work, as well as adequate space on deck or the factory to perform the observer's duties;
- r) Provide personal protective equipment, and, where appropriate, an immersion suit;
- s) Provide to the observer timely medical attention in case of physical or psychological illness or injury;
- t) Develop and maintain an emergency action plan (EAP) regarding observer safety.

Safety Orientation Briefing

Vessel captains or a crew member designated by the captain shall provide the observer with a safety orientation briefing at the time of boarding the vessel and before it leaves the dock. The orientation briefing shall include:

- a) Safety documentation of the vessel;
- b) Location of life rafts, raft capacities, observer's assignment, expiration, installation, and any other relevant safety related information;
- c) Location and instructions for use of emergency radio beacons indicating position in case of an emergency;
- d) Location of immersion suits and personal floating devices, their accessibility, and the quantities for everyone onboard;
- e) Location of flares, types, numbers, and expiration dates;
- f) Location and number of fire extinguishers, expiration dates, accessibility, et cetera;
- g) Location of life rings;
- h) Procedures in case of emergencies and essential actions of the observer during each type of emergency, such as a fire on board, recovering a person overboard, et cetera;
- i) Location of first aid materials and familiarity with crew members in charge of first aid;
- j) Location of radios, procedures for making an emergency call, and how to operate a radio during a call;
- k) Safety drills;
- l) Safe places to work on deck and safety equipment required;
- m) Procedures in case of illness or accident of the observer or any other crew member.

Procedure in the Event of an Emergency

If a SPRFMO observer dies, is missing or presumed fallen overboard, the Member whose flag the vessel is flying shall ensure that the fishing vessel:

- a) Immediately ceases all fishing operations;
- b) Immediately commences search and rescue if the observer is missing or presumed fallen overboard, and searches for at least 72 hours, unless the observer is found sooner, or unless instructed by the Member whose flag the vessel is flying to continue searching;
- c) Immediately notifies the Member whose flag the vessel is flying;
- d) Immediately notifies the Member or observer provider to whom the SPRFMO OP observer belongs, if



- applicable;
- e) Immediately alerts other vessels in the vicinity by using all available means of communication;
 - f) Cooperates fully in any search and rescue operation;
 - g) Whether or not the search is successful, return the vessels for further investigation to the nearest port, as agreed by the Member whose flag the vessel is flying and the national observer programme or service provider;
 - h) Provides the report to the observer providers and appropriate authorities on the incident; and
 - i) Cooperates fully in any and all official investigations, and preserves any potential evidence and the personal effects and quarters of the deceased or missing observers.

Flag States shall take and implement all steps, as a matter of due diligence, to prevent incidents causing serious harm or death to observers on board vessels flying their flag, and to sanction or punish those involved, including through criminal investigation and prosecution. The flag State and other Members and CNCPs shall cooperate to that end.



ANNEX 3

Minimum Standards for Accreditation Under the SPRFMO OP

This Annex contains the Commission's minimum standards for accreditation under the SPRFMO OP. In accordance with paragraphs 28 and 32 of this CMM, the OP Accreditation Evaluator shall assess and decide all applications against these standards.

Impartiality, Independence and Integrity

1. National observer programmes and service providers shall only deploy independent and impartial observers. This means that neither the national observer programme or service provider, as the case requires, nor the individual observers, have a direct financial interest, ownership or business links with vessels, processors, agents and retailers involved in the catching, taking, harvesting, transporting, processing or selling of fish or fish products.
2. The national programme or service provider, and the individual observers:
 - a) Shall not have a direct financial interest, other than the provision of observer services, in the fisheries under the purview of the Commission, including, but not limited to: i) any ownership, mortgage holder, or other secured interest in a vessel or processor involved in the catching, taking, harvesting or processing of fish; ii) any business selling supplies or services to any vessel or processor in the fishery; iii) any business purchasing raw or processed products from any vessel or processor in the fishery;
 - b) Shall not solicit or accept, directly or indirectly, any gratuity, gift, favour, entertainment, inordinate accommodation, loan or anything of monetary value from anyone who either conducts activities that are regulated by a Member or CNCP connected with its services or the Commission, or has interests that may be substantially affected by the performance or non-performance of the observer's official duties;
 - c) Shall not serve as an observer on any vessel or at any processors owned or operated by a person who previously employed the observer in another capacity within the last three years (e.g., as a crew member); and,
 - d) Shall not solicit or accept employment as a crew member or an employee of a vessel or processor while employed by a national observer programme or service provider.

Observer Qualifications

The qualification of individual observers is the responsibility of national observer programmes or service providers. The national observer programme or service provider shall demonstrate that observers that are recruited into their programme have relevant education or technical training and/or experience for the fleets concerned; ability to meet the observer duties described in this annex; no record of convictions calling into question the integrity of the observer or indicating a propensity towards violence; and the ability to obtain all necessary documentation, including passports and visas.

Observer Training

National observer programmes or service providers shall demonstrate that observers are adequately trained before their deployment. Training shall include the following:

1. The relationship between fisheries science and fisheries management and the importance of data collection in this context;
2. The relevant provisions of the Convention and SPRFMO CMMs relevant to the functions and duties of observers;
3. Importance of observer programmes, including understanding the duties, rights, authority and responsibilities of observers;
4. Safety at sea, including emergencies at sea, donning survival suits, use of safety equipment, use of radios, survival at sea, management of conflicts, and cold-water survival;



5. First aid training, appropriate to working at-sea or in remote situations;
6. Species identification and record of species encountered at sea, including target and non-target species, protected species, seabirds, marine mammals, sea turtles, invertebrates indicating vulnerable marine ecosystems, et cetera;
7. Knowledge of the different types and functioning of bycatch mitigation devices required by SPRFMO CMMs;
8. Safe handling protocols to rehabilitate and release seabirds, marine mammals and sea turtles;
9. Fishing vessel and fishing gear types relevant to SPRFMO;
10. Techniques and procedures for estimating catch and species composition;
11. Use and maintenance of sampling equipment including scales, callipers, et cetera;
12. Sampling methodologies at sea, i.e., fish sampling, fish sexing, measuring and weighing techniques, specimen collection and storage, and sampling methodologies;
13. Understand potential biases in sampling, how they arise and how they could be avoided;
14. Preservation of samples for analysis;
15. Data collection codes and data collection formats;
16. Familiarity with catch logbooks and recordkeeping requirements to aid observers' collection of data as required under SPRFMO CMMs;
17. Use of digital recorders or electronic notebooks;
18. Electronic equipment used for observer work and understanding their operation;
19. Use of electronic monitoring systems as a complement to their work, when applicable;
20. Verbal debriefing and report writing;
21. Training on relevant aspects of the International Convention for the Prevention of Pollution from Ships (MARPOL).

Refresher training should be ongoing dependent on the qualification requirements. Relevant updates to CMMs and observer requirements should be communicated to observers before each deployment as part of the briefing process, for example in an updated manual.

Observer Trainers

National programmes or service providers shall demonstrate that observer trainers have the appropriate skills and have been authorised by that national programme or service provider to train observers.

Briefing and Debriefing

National observer programmes or service providers shall demonstrate that there are systems for briefing and debriefing observers and communicating at any time with vessel captains. The briefing and debriefing process shall be conducted by properly trained personnel and shall ensure that observers and vessel captains clearly understand their respective roles and duties.

Data Validation Process

National observer programmes or service providers shall demonstrate that they have in place an observer data validation process in place. The data validation process shall be conducted by properly trained personnel and shall ensure that data and information collected by an observer are checked for discrepancies or inaccuracies that are corrected before the information is entered into a database or used for analysis. This includes ensuring that the national observer programme or service provider has in place a mechanism to receive data, reports and any other relevant information from an observer in such a way that prevents interference in that data from other sources. The data validation process shall ensure that the data meet the following standards:

- a) A mechanism that allows scientific data to be stored and transferred to the national observer programme (or service provider) in a secure and confidential manner.
- b) Vessel information uniquely identifies the actual vessel from which the fishing occurred;
- c) Dates and times of fishing effort are included and internally consistent (for example an end time should be after a start time);
- d) Location of fishing is included and valid (for example, logical latitude/longitude combinations), internally consistent and entered in the correct units;



- e) Effort data allows quantification of the amount of effort invested by the vessel, appropriate to the fishing method used, which is also identified;
- f) Catch information identifies the fishery resource (to the species level where possible) and the quantity of that species retained or discarded. If used, species codes are accurate;
- g) Where biological or length information is collected for a fish, it is directly linked to the effort in which it was caught – including date and time, location, and fishing method information, and includes the methodology of data collection;
- h) If the observer programme extends to transshipment and/or landings, then the amount and species of fishery resources transhipped/landed is quantified and recorded according to a standard methodology;
- i) Interaction data involving marine mammals, seabirds, reptiles and/or other species of concern identifies the individual species (where possible), the number of animals, fate (retained or released/discarded), life status if released (vigorous, alive, lethargic, dead), and the type of interaction (hook/line entanglement/warpstrike/net capture/other).

Observer Identification Cards

National observer programmes or service providers shall provide observers with identification cards that include the full name of the observer, date of issue and expiration, the name of the national observer programme or service provider, a unique identifying number (if issued by the national observer programme or service provider) a passport style photo of the observer, an emergency phone number.

Coordinating Observer Placements and Observer Deployments

National observer programmes or service providers shall demonstrate responsibility and capacity for the timely deployment of observers and will ensure that the selected observer receives all possible assistance during the entire length of their placements.

National observer programmes or service providers shall have in place a protocol to replace an observer if the observer becomes unable to perform their duties.

National observer programmes or service providers shall also seek, to the extent possible, to avoid deploying a single observer on multiple consecutive trips on the same vessel.

It is the responsibility of a national observer programme or service provider to administer observer placements, to maintain the independence and impartiality of observers as described in this measure and ensure that all placements are administratively finalised as soon as practicable after the observers return to port. The national observer programme or service provider is expected to communicate with the observer regarding upcoming deployments, coordinate observer travel, and provide the necessary supplies for observer duties.

Observer Safety Equipment

National observer programmes or service providers must demonstrate that observers are provided with appropriate equipment, including safety equipment, which is in good working order, routinely checked and renewed to carry out their duties on board a vessel. Essential equipment includes a lifejacket, independent two-way communication device capable of sending and receiving voice or text communications, personal locator beacons (PLBs), immersion suits, hard hat, proper deck working boots or shoes, gloves and protective glasses (including sunglasses).

Responding to Allegations of Observer Misconduct

National observer programmes or service providers must establish procedures for preventing, investigating, and reporting on the misconduct of observers, in coordination with observers, vessel captains, and relevant Members and CNCPs.



Dispute Settlement

National observer programmes or service providers shall demonstrate the existence of a dispute resolution process fair to all parties that provides a process to resolve issues through appropriate means including facilitation and mediation.

Observer Safety

National programmes or service providers must demonstrate that procedures are in place to support observers in their ability to carry out their duties unimpeded and in a safe working environment, including an established Emergency Action Plan (EAP). The EAP must provide instructions on sending reports to the provider's designated 24-hour point(s) of contact to report unsafe conditions, including instances of harassment, intimidation or assault.

National observer programmes or service providers must also provide a permanent delegate or supervisor on land to communicate with the observer at any time while at sea.

Insurance and Liability

National observer programmes or service providers must demonstrate that observers have health, safety and liability insurance commensurate with the national standards of the observer programme or service provider for such insurance for the duration of any deployment before placing the observer on a vessel.

CMM 17-2019

Conservation and Management Measure on Fishing Gear and Marine Plastic Pollution in the SPRFMO Convention Area

The Commission of the South Pacific Regional Fisheries Management Organisation;

RECOGNISING that the Convention calls on the Commission, in giving effect to the objectives of the Convention, to adopt Conservation and Management Measures (CMMs) that take account of international best practices and protect the marine ecosystem, particularly ecosystems with long recovery times following disturbance, from significant adverse impact of unregulated and unmanaged fishing practices (Articles 3(1)(a)(i) and (vii) and 20(1)(d));

FURTHER RECOGNISING Article 3(1)(b) and (2) which calls on the Commission to apply the precautionary approach and ecosystem based approach to fisheries under the mandate of the Convention;

MINDFUL of Article 31(1) of the Convention that calls on the Commission to cooperate with other regional fisheries management organisations (RFMOs), the FAO and other specialised agencies of the United Nations and other relevant organisations on issues of mutual interest;

NOTING Resolution 61/105, adopted by UNGA at the 61st Plenary Meeting on 8 December 2006 and subsequent resolutions of the United Nations General Assembly (UNGA) that call on states and regional fisheries management organisations to regulate bottom fisheries and implement measures in accordance with the precautionary approach and ecosystem approaches to fisheries management;

RECALLING that the need to prevent and significantly reduce marine pollution of all kinds was affirmed at the United Nations Conference to Support the Implementation of Sustainable Development Goal 14 through the adoption of paragraph 13(g) of the “Our ocean, our future: call for action” declaration;

MINDFUL of the Commitment made under Article 5 (f) of the 1995 *Agreement* to minimise pollution, waste, and catch by lost or abandoned gear;

CONCERNED about the impact of Abandoned, Lost or Otherwise Discarded Fishing Gear (ALDFG) and plastic residues in the ocean greatly affecting marine life and the need to facilitate the retrieval of such gear;

RECALLING that the International Convention for the Prevention of Pollution from Ships (MARPOL) seeks to eliminate and reduce the amount of garbage being discharged into the sea from ships and that its Annex V applies to all vessels;

RECALLING that the provisions of Annex I, Annex IV and Annex VI of MARPOL manage and restrict the discharge of oil, sewage and air pollutants from ships at sea;

NOTING that there is limited monitoring and implementation of MARPOL obligations on fishing vessels, and consequently little information exists about illegal pollution activities by fishing vessels at sea;

FURTHER NOTING that the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972 (London Convention) and the 1996 Protocol (London Protocol) manage or prohibit through regulation the dumping into the sea of wastes or other matter;

hereby *ADOPTS* the following CMM in accordance with Articles 8 and 20 of the Convention:



Retrieval of abandoned, lost or otherwise discarded fishing gear

1. Each Member and CNCP shall ensure that:
 - a) vessels flying its flag operating with any fishing gear on board shall make all reasonable efforts to combat, minimise and eliminate abandoned¹, lost² or otherwise discarded³ fishing gear (ALDFG linked to those vessels);
 - b) no vessels flying its flag deliberately discard or abandon fishing gear linked to those vessels, except for safety reasons, notably vessels in distress and/or life in danger;
 - c) vessels flying its flag that have lost fishing gear shall not abandon it without making every reasonable attempt to retrieve it as soon as possible;
 - d) any vessels flying its flag operating with any gear on board have equipment, where possible, on board to retrieve ALDFG linked to those vessels.
 - e) where a vessel flying its flag cannot retrieve ALDFG linked to that vessel, the vessel notifies its competent authority within 48 hours of the following information:
 - i. the name, IMO number and call sign of the vessel;
 - ii. the type/material of lost gear;
 - iii. the quantity of gear lost or abandoned;
 - iv. the time when the gear was lost or abandoned;
 - v. the position (longitude/latitude) where the gear was lost or abandoned;
 - vi. measures taken by the vessel to retrieve lost or abandoned gear, and
 - vii. report, if known, the circumstances that led to the gear being lost, or abandoned for safety reasons.
 - f) where a vessel flying its flag retrieves ALDFG not linked to that vessel, the vessel notifies its competent authority within 48 hours of the following:
 - i. the name, IMO number and call sign of the vessel that has retrieved the gear;
 - ii. the name, IMO number and call sign of the vessel that lost or abandoned the gear (if known);
 - iii. the type of gear retrieved;
 - iv. the quantity of gear retrieved;
 - v. the time when the gear was retrieved;
 - vi. the position (longitude/latitude) where the gear was retrieved and,
 - vii. if possible, photographs of the gear retrieved.
2. Each Member and CNCP shall compile the information received pursuant to subparagraphs e) and f) and include it in its annual national report.
3. The authorities of the flag state of the vessels referred to in subparagraphs 1e) and f) shall promptly transmit the information received to the Executive Secretary for its notification to all Members and CNCPs. The Executive Secretary shall develop the template for the notifications referred to in subparagraphs 1e) and f).

¹ "Abandoned fishing gear" means fishing gear deliberately left at sea by the vessel due to force majeure or other unforeseen reasons.

² "Lost fishing gear" means fishing gear over which the vessel has accidentally lost control and cannot be located and/or retrieved.

³ "Discarded fishing gear" means fishing gear released at sea without any attempt for further control or recovery by the vessel.



Marine plastic pollution

4. Each Member and CNCP shall prohibit vessels flying its flag from discharging into the sea all plastics⁴, including but not limited to synthetic ropes, synthetic fishing nets, plastic garbage bags and incinerator ashes from plastic products. All plastics on board shall be stored on board the vessel until they can be discharged at adequate port reception facilities.
5. Paragraph 4 shall not apply to the discharge of plastics from a vessel necessary for the purpose of securing the safety of a ship and those on board or saving life at sea or to the accidental loss of plastics, synthetic ropes and fishing nets from a vessel provided that all reasonable precautions have been taken to prevent such loss.

Other Marine pollution

6. Members and CNCPs are encouraged to implement appropriate onboard storage and to prohibit their fishing vessels operating within the SPRFMO Convention Area from discharging:
 - a) oil or fuel products or oily residues into the sea;
 - b) other garbage⁵, including fishing gear, food waste, domestic waste, incinerator ashes and cooking oil; and
 - c) sewage,except as would be permitted under applicable international instruments.
7. Members and CNCPs are encouraged to ensure that fishing vessels flying their flag and operating within the SPRFMO Convention Area inform their flag State of ports in countries that are Party to the annexes of MARPOL which do not have adequate port reception facilities for MARPOL wastes.
8. Members and CNCPs are encouraged to undertake research into marine pollution related to fisheries in the SPRFMO Convention Area to further develop and refine measures to reduce marine pollution and are encouraged to submit to the Scientific Committee and the Compliance and Technical Committee any information derived from such efforts.
9. Members and CNCPs are encouraged to conduct training and awareness programmes for the crew and master of fishing vessels flying their flag regarding the impacts of marine pollution and operational practices to eliminate marine pollution caused by fishing vessels.
10. This measure will be reviewed by the Commission in 2022 to consider expanding the scope of measure with respect to the elimination of marine pollution caused by fishing vessels.

⁴ Plastic means a solid material which contains as an essential ingredient one or more high molecular mass polymers and which is formed (shaped) during either manufacture of the polymer or the fabrication into a finished product by heat and /or pressure.

⁵ Other garbage, as defined under MARPOL Annex V, includes including fishing gear, food waste, domestic waste, incinerator ashes, clinkers, cooking oil, floating dunnage, lining and packing materials, paper, rags, glass, metal bottles, crockery and similar refuse.

CMM 18-2020

Conservation and Management Measure on the Management of the Jumbo Flying Squid Fishery

The Commission of the South Pacific Regional Fisheries Management Organisation;

NOTING that there has been a substantial increase in catches of and fishing effort for jumbo flying squid in the Convention Area since 1990;

CONCERNED that there is uncertainty concerning the stock status and exploitation rate of jumbo flying squid;

TAKING INTO ACCOUNT the discussions at the 2nd Squid Workshop on 5-6 October 2019 and the 7th meeting of the Scientific Committee from 7 to 12 October 2019;

BEARING IN MIND the commitment to apply the precautionary approach and take decisions based on the best scientific and technical information available as set out in Article 3 of the Convention;

RECOGNISING that a primary function of the Commission is to adopt Conservation and Management Measures (CMMs) to achieve the objective of the Convention, including, as appropriate, CMMs for particular fish stocks;

AFFIRMING its commitment to ensure the long-term conservation and sustainable management of jumbo flying squid stocks in accordance with the objective of the Convention;

RECOGNISING the need for effective monitoring and control and surveillance of fishing for jumbo flying squid in the implementation of this measure pending the establishment of monitoring, control and surveillance measures pursuant to Article 27 of the Convention;

RECALLING Articles 20(3) and 20(4) of the Convention;

FURTHER RECALLING the need set out in Article 4 of the Convention to ensure compatibility of CMMs established for the high seas and those adopted for areas under national jurisdiction, and the duty of Contracting Parties to cooperate to this end;

RECALLING also Article 21(1) of the Convention;

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

General Provisions

1. This CMM applies to all vessels flagged to Members and Cooperating Non-Contracting Parties (CNCs) engaged in or intending to engage in fishing for jumbo flying squid (*Dosidicus gigas*) in the Convention Area.
2. Only fishing vessels duly authorised pursuant to Article 25 of the Convention and in accordance with CMM 05-2021 (Record of Vessels) that are flagged to Members and CNCs shall participate in the fishery for jumbo flying squid in the Convention Area.

Data Collection and Reporting

3. Each Member and CNC participating in the jumbo flying squid fishery shall collect, verify, and provide all required data to the Executive Secretary, in accordance with CMM 02-2021 (Data Standards) and using the templates prepared by the Secretariat and available on the SPRFMO website, including an annual catch report detailing catches on a monthly basis. The template for the reporting of catch and effort data shall be developed by the Secretariat and submitted to the Scientific Committee and the Commission for



consideration at the annual meeting in 2021.

4. The Executive Secretary shall verify the annual catch reports submitted by Members and CNCPs against the submitted data. The Executive Secretary shall inform Members and CNCPs of the outcome of the verification exercise and any possible discrepancies encountered.

Monitoring and Control

5. Members and CNCPs participating in the jumbo flying squid fisheries shall implement a vessel monitoring system (VMS) in accordance with CMM 06-2020 (VMS) and other relevant CMMs adopted by the Commission.
6. Each Member and CNCP participating in the jumbo flying squid fishery shall provide the Executive Secretary a list of vessels¹ they have authorised to fish in the fishery in accordance with Article 25 of the Convention and CMM 05-2021 (Record of Vessels) and other relevant CMMs adopted by the Commission. They shall also notify the Executive Secretary of the vessels that have actively fished or engaged in transshipment in the Convention Area within 30 days of the end of each year. The Executive Secretary shall maintain lists of the vessels so notified and will make them available on the SPRFMO website.
7. The Executive Secretary shall report annually to the Commission on the list of vessels having actively fished or been engaged in transshipment in the Convention Area during the previous year using data provided under CMM 02-2021 (Data Standards).

Scientific Committee Reports

8. Members and CNCPs shall provide their annual reports, in accordance with the existing guidelines for such reports, in advance of the 2021 Scientific Committee meeting. Members and CNCPs shall also provide observer data for the 2021 fishing season to the Scientific Committee to the maximum extent possible. The reports shall be submitted to the Executive Secretary at least one month before the 2021 Scientific Committee meeting in order to ensure that the Scientific Committee has an adequate opportunity to consider the reports in its deliberations. Members and CNCPs should notify the Executive Secretary in the event they will not be submitting an annual report together with the reasons for not doing so.
9. The information collected under paragraphs 3 and 8, and any stock assessments and research in respect of the jumbo flying squid fishery shall be submitted for review to the Scientific Committee. The Scientific Committee will conduct the necessary analysis and assessment, in accordance with its SC Multi-annual workplan agreed by the Commission, in order to provide advice on stock status.

Observer Coverage

10. Members and CNCPs participating in the jumbo flying squid fishery shall ensure a minimum observer coverage of 5 full time at sea observers or 5% of fishing days for vessels flying their flag, and ensure that such observers collect and report data as described in CMM 02-2021 (Data Standards). The Scientific Committee shall review the minimum observer coverage, at the latest at its 2023 meeting and provide advice to the Commission, including in relation to the specificities of different fleet segments, including those up to 15 metres in length.

¹Fishing vessels as defined in Article 1 (1)(h) of the Convention.



Special Requirements of Developing States

11. In recognition of the special requirements of developing States, in particular small island developing States and territories and possessions in the region, Members and CNCs are urged to provide financial, scientific and technical assistance, where available, to enhance the ability of those developing States and territories and possessions to implement this CMM.

Review

12. This CMM shall enter into force on 1 January 2021.
13. This CMM shall be reviewed by the Commission in 2024. The review shall take into account the latest advice of the Scientific Committee and the Compliance and Technical Committee.

CMM 19-2021

Conservation and Management Measure for the Marking and Identification of Fishing Vessels

The Commission of the South Pacific Regional Fisheries Management Organisation;

MINDFUL of Article 27 (1)(a) of the Convention and the obligations therein to establish appropriate cooperative procedures to ensure compliance with the Convention and the Conservation and Management Measures (CMMs) adopted under the Convention, including the marking of vessels;

NOTING that the FAO Standard Specification for the Marking and Identification of Fishing Vessels¹ has been implemented by organisations with management authority over waters overlapping or adjacent to the Convention Area, such as the Western and Central Pacific Fisheries Commission and the Commission for the Conservation of Antarctic Marine Living Resources;

RECOGNISING the importance of proper marking and identification of fishing vessels for safety at sea and for addressing illegal, unreported, and unregulated fishing activities;

ADOPTS the following CMM in accordance with Articles 8 and 27 of the Convention:

1. Members and Cooperating non-Contracting Parties (CNCs) shall ensure that fishing vessels, as defined in Article 1(1)(h) of the Convention, that they authorise to fish in the Convention Area are marked in such a way that they can be readily identified, with markings prominently displayed at all times. Specifically:
 - a) the vessel's name and International Radio Call Sign (IRCS) shall be marked on the vessel's hull or superstructure, port and starboard;
 - b) in addition, the vessel's IRCS shall be marked on a deck, which is any horizontal plane including the top of the wheelhouse;
 - c) vessels to which an IRCS has not been assigned shall be marked, as specified in (a) and (b) above, with the characters allocated by the International Telecommunication Union (ITU) or vessel registration number assigned to the vessel by the member or CNCP. In such cases, a hyphen shall be placed between the nationality identification characters and the fishing authorisation or registration number identifying the vessel.
2. Members and CNCs shall ensure that marks:
 - a) be placed as high as possible above the waterline on both sides (such parts of the hull as the bow and the stern shall be avoided);
 - b) be so placed that they are not obscured in part or full by the fishing gear whether it is stowed or in use; not extend below the waterline, including at full load/displacement conditions.
3. Members and CNCs shall ensure that the markings for the IRCS or alternative meet the following technical specifications:
 - a) block lettering and numbering shall be used throughout;
 - b) the width of the letters and numbers shall be in proportion to the height as referred to in paragraph (c);

¹ The Standard Specifications and Guidelines approved by the FAO Committee on Fisheries (COFI) at its 18th Session, Rome, 10-14 April 1989.



c) for the hull, superstructure and/or inclined surfaces, the height (h) of the letters and numbers shall be:

Length of vessel overall (LOA) in metres (m)	Height of letters and numbers in metres (m) is not less than:
25 m and over	1.0 m
20 m but less than 25 m	0.8 m
15 m but less than 20 m	0.6 m
12 m but less than 15 m	0.4 m
5 m but less than 12 m	0.3 m
Under 5 m	0.1 m

d) for the deck, the height shall not be less than 0.3 m for all classes of vessels of 5 m and over;

e) the length of the hyphen shall be half the height of the letters and numbers;

f) the width of the stroke for all letters, numbers and the hyphen shall be $h/6$;

g) spacing: (i) the space between letters and/or numbers shall not exceed $h/4$ nor be less than $h/6$; (ii) the space between adjacent letters having sloping sides (e.g. A V) shall not exceed $h/8$ nor be less than $h/10$;

h) the marks shall be: (i) white on a black background; (ii) black on a white background; or (iii) any colour that contrasts with the background so that the markings are clearly visible;

i) the background shall extend to provide a border around the mark of not less than $h/6$;

j) good quality marine paints shall be used throughout;

k) the use of retro-reflective or heat-generating substances shall be accepted, provided that the mark meets the requirements of these technical specifications; and

l) the marks and the background shall be maintained in good condition at all times.

4. Members and CNCPs shall ensure that apart from the vessel's name and/or identification number and the port of registry as may be required by international practice or national legislation, the markings required under paragraph 1 shall be the only other vessel identification mark consisting of letters and numbers to be painted on the hull or superstructure. If allowed by national law, the name of the vessel owner may be painted on the hull or superstructure as long as it does not limit the visibility of the marking required by paragraph 1.

5. Members and CNCPs shall, to the extent practicable, provide the marking and identification information for fishing vessels entitled to fly its flag and fish in the Convention Area to the Executive Secretary as part of the information required for the Commission Record of Fishing Vessels under CMM 05-2021 (Record of Vessels).

6. This measure shall enter into force on January 1, 2023.