13th SPRFMO Scientific Committee Meeting (SC13)

8 to 13 September 2025

Wellington, New Zealand

MEETING REPORT

SPRFMO
South Pacific Regional Fisheries Management Organisation

Ministry for Primary Industries
Manatū Ahu Matua

In Memoriam

Dr Rodrigo Wiff (1976–2025)
A dedicated researcher and valued colleague whose work and spirit will continue to inspire the SPRFMO scientific community.

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Acknowledgements:

The 13th Scientific Committee meeting report was prepared under the overall direction of the SPRFMO Scientific Committee Chairperson, Dr Ricardo Oliveros Ramos. The intersessional meetings conducted by the Working Group Chairpersons (Dr Jim Ianelli, Dr Trent Timmis, Dr Gang Li, Mr Ignacio Paya, and Mr Sebastian Vasquez) greatly facilitated the outcomes presented in this report.

Brooke D'Alberto (AUS), José Zenteno (CHL), Jordi Tablada (NZL), Emily Reynolds (USA), Faviola Cabello (CHL), Karen Belmar (CHL), the Secretariat, and Working Group Chairpersons are acknowledged for their significant report writing contributions.

The publication also benefited from contributions by the SC13 invited experts Ms Lee Qi.

Report location: https://www.sprfmo.int/meetings/meeting-reports/

SPRFMO SC13-REPORT EXECUTIVE SUMMARY

The 13th meeting of the Scientific Committee (SC13) of the South Pacific Regional Fisheries Management Organisation (SPRFMO) was held in Wellington, New Zealand, from 8 to 13 September 2025, under the Chairpersonship of Dr Ricardo Oliveros Ramos. The meeting was attended by scientists and delegates from Members and Observers, as well as invited experts.

The SC reviewed 36 national annual reports, 60 working papers, and the Secretariat's intersessional activities, providing scientific advice to the Commission for its 14th annual meeting (COMM14). SC13's work reviewed the structure of the Multi-Annual Workplan 2024–2027, with progress and recommendations summarised below and contained in Annex 1 to this report.

Jack mackerel science continued to represent the largest component of the SC's work. SC13 reviewed the results of a series of Management Strategy Evaluation (MSE) meetings and a major technical workshop (Seattle, July 2025). The SC endorsed the progress of the MSE framework but noted that further work is required before recommending a final Management Procedure (MP).

Key outcomes and advice on an interim Management Procedure (Annex K) include that the SC13 recommended that the Commission continue applying the amended "Annex K" interim MP for 2026, pending completion of the MSE, and that two alternative TAC calculations were presented (1,642,000 t (15 % increase over 2025 SC advice) and 1,785,000 t (15 % increase over 2025 Commission TAC).

The SC noted that both scenarios are consistent with maintaining stock biomass above B_{MSY}.

In terms of future work, the SC13 recommended to hold a Jack Mackerel Benchmark Workshop in 2026 (Lima, Peru), to continue MSE development, including testing empirical rule candidates and incorporating climate variables, and to update the Jack Mackerel Working Group Terms of Reference.

The SC considered the reports of the Deepwater Working Group (DWWG) and provided advice on matters including Bottom Fishing Impact Assessment Standard (BFIAS), shark and bycatch mitigation, seabird mitigation and data standards, and stock-specific advice. The SC endorsed validation of the South Pacific VME Bioregionalisation, confirming it provides an ecologically meaningful spatial scale for assessing benthic management measures

The Squid Working Group (SQWG) reported notable progress on genetics, phenotypic analyses, and assessment simulation modelling (SQUIDSIM). The SC welcomed the genetic reference genome and population-structure studies confirming a single stock along the Chilean coast, supported development of the SQUIDSIM operating model as the foundation for future management procedures, to standardise biological sampling and data templates and to include in-season monitoring in the WG ToRs, and made a series of recommendations to the Commission, which include endorsing the squid research and data-sharing tasks in the Multi-Annual Workplan; voluntary coastal Member data contributions to strengthen stock assessments; and noting that a full management advice package for squid is expected by SC14 (2026).

The Ecosystem Working Group (EWG) and Climate Change Task Team (CCTT) advanced ecosystem-based management initiatives. SC13 endorsed developing an Ecosystem Status Report (ESR) for the SPRFMO Area and adjacent EEZs, approved updated EWG Terms of Reference, and developed recommendations for the Commission.

Additionally, the SC13 endorsed the CCTT Workplan and agreed to incorporate climate and environmental variables into jack mackerel and squid MSE frameworks, recommended inclusion of climate-change considerations in Exploratory Fishery templates and that the Secretariat update the template accordingly and requested funding to support the FAO-SPRFMO collaboration on climate-change capacity building.

Five exploratory fisheries were reviewed (Australia, Cook Islands, European Union, Korea, New Zealand). The SC endorsed holding a Workshop prior to SC14 to develop a framework for transitioning exploratory fisheries to established status (as per CMM 13-2024), approved the Terms of Reference for the workshop, and recommended that Ecuador's revised proposal for a toothfish exploratory fishery be further revised in consultation with existing proponents to address spatial overlap and catch-limit concerns.

The Data Working Group (DWG) reviewed Secretariat progress and recommended key updates. In this regard, the SC endorsed amendments to CMM 02 (Data Standards) to modernise statistical codes and harmonise reporting deadlines, approved in principle the Data Sharing Protocol to streamline authorisation for scientific data requests, endorsed the Secretariat's Data Management strategy recommended that SPRFMO join the Coordinating Working Party on Fishery Statistics (CWP) as a full member, reaffirmed the existing DWG Terms of Reference , welcomed the offer of Australia to appoint an interim Chairperson for the Data Working Group, and urged Members to nominate a permanent Chair.

The dedicated Salas y Gómez and Nazca Ridge Task Team progressed evaluation of this area using new Evaluation Criteria. The SC endorsed the Evaluation Criteria as the framework for assessing areas for enhanced protection, noted Chile's assessment and Peru's supporting studies but did not endorse specific closure measures, and recommended continued inter-sessional collaboration and submission of a final report with potential management options to SC14 (2026).

The SC updated all Working Group Terms of Reference, adopted the Multi-Annual Workplan 2025–2027, recommended increased Secretariat staff support for each SC annual meeting, accepted the Faroe Islands' offer to host SC14 (7–12 September 2026), noted China's intent to host SC15 (2027), and expressed appreciation to New Zealand for hosting.

Contents

List of Acronyms used in the Report of the SC13

The following list of acronyms and abbreviations is provided to facilitate understanding of this report for the 13th Meeting of the South Pacific Regional Fisheries Management Organisation (SPRFMO) Scientific Committee (SC13). Many of these terms are specific to fisheries science, ecosystem management, and regulatory processes within the SPRFMO Convention Area. The list is organised alphabetically and includes the full term for each abbreviation used throughout the document.

Acronym	Full form
ABNJ	Areas Beyond National Jurisdiction
ADMB	AD Model Builder
ALDFG	Abandoned, Lost or Otherwise Discarded Fishing Gear
ANJ	Area of National Jurisdiction
BBNJ	Biodiversity Beyond National Jurisdiction
Blim	Biomass Limit Reference Point (spawning biomass threshold)
BMSY	Biomass at Maximum Sustainable Yield
BRU	Southern rays bream
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
ChL	Chlorophyll
CJM, JM	Jack Mackerel (*Trachurus murphyi*)
CMM	Conservation and Management Measure
CNCP	Cooperating non-Contracting Parties to SPRFMO
CPPS	Comision Permanente del Pacifico Sur (Permanent Commission for the South Pacific)
CTC	Compliance and Technical Committee
CV	Coefficient of Variation
DEPM	Daily Egg Production Method
dRBS	dynamic Reference Benchmark Score
DSF Project	FAO Deep Sea Fisheries Project
DWG	Data Working Group
DWWG	Deepwater Working Group
EEZ	Exclusive Economic Zone
EM	Electronic Monitoring
EMS	Electronic Monitoring System(s)
EWG	Ecosystems Working Group
FAO	Food and Agriculture Organization of the United Nations
FLR	Fisheries Lab in R
FMA	Fisheries Management Area
FMSY	Fishing Mortality at Maximum Sustainable Yield
GAM	Generalised Additive Model
GIS	Geographic Information System

Acronym	Full form
GLM	Generalised Linear Model
HoD	Head of Delegation
IATTC	Inter-American Tropical Tuna Commission
ICES	International Council for the Exploration of the Sea
IFOP	Instituto de Fomento Pesquero (Institute of Fisheries Development Chile)
IGO	Intergovernmental Organisation
IMARPE	Instituto del Mar del Peru (Institute of the Sea of Peru)
INLA	Integrated Nested Laplace Approximation
JJM	Joint Jack Mackerel Model
JM	Jack Mackerel
JMWG	Jack Mackerel Working Group
MP	Management Procedure
MSE	Management Strategy Evaluation
MSY	Maximum Sustainable Yield
NGO	Non-Governmental Organisation
NPFC	North Pacific Fisheries Commission
OD	Oxycline Depth
OM	Operating model
PR2IWG	Intersessional Working Group on the recommendations of the 2nd SPRFMO Performance Review
R/V	Research Vessel
RFMO	Regional Fisheries Management Organization
SAI	Significant Adverse Impact
SC	SPRFMO Scientific Committee
SCW	Scientific Committee Workshop
SGNTT	Salas y Gomez and Nazca Task Team
SPRFMO	South Pacific Regional Fisheries Management Organisation
SQWG	Squid Working Group
SSB	Spawning Stock Biomass
SSBMSY	Spawning Stock Biomass at Maximum Sustainable Yield
SSS	Sea Surface Salinity
SST	Sea Surface Temperature
TAC	Total Allowable Catch
ToR	Terms of Reference
VME	Vulnerable Marine Ecosystem
VMS	Vessel Monitoring System
WG	Working Group
WGEMS	Working Group on Electronic Monitoring Standards
WM	Water Masses
WP	Working Paper

SPRFMO SC13-REPORT

Report of the 13th Meeting of the Scientific Committee

8 to 13 September 2025, Wellington, New Zealand

Adopted 13 September 2025, 18:02 hrs

1. Opening of the Meeting

a. Meeting arrangements and opening ceremony

1. Deputy Director General Fisheries New Zealand, Ministry for Primary Industries, Mr Dan Bolger, made an opening statement welcoming participants to Wellington and to the 13th meeting of the SPRFMO SC (SC13). New Zealand also offered a mihi, Karakia, and Waiata (New Zealand welcome cultural display).

2. The Executive Secretary, Mr James Brown, responded with a speech of thanks; the SC Chairperson, Dr. Ricardo Oliveros Ramos, also thanked New Zealand for their warm welcome and for hosting the SC meeting, acknowledging the challenges of hosting an international meeting.

3. The Chairperson opened the meeting and proceedings and invited Scientific Heads of Delegations (HoDs) to introduce themselves and their delegations. A list of participants is available in Annex 2 of this report.

4. The Executive Secretary detailed the meeting arrangements, the streaming service and the local facilities available to in-person delegates.

b. Adoption of the Agenda

5. The SC adopted the agenda without modification (SC13-Doc01; Annex 3) and the Chairperson presented the meeting schedule (SC13-Doc04, Annex 4).

c. Meeting Documents

6. The Chairperson presented the meeting documents (SC13-Doc03, Annex 5), location and access, and the annotated agenda (SC13-Doc02). The SC agreed to accept papers submitted late and include them into the discussions.

7. Minute taking and preparation of the draft report was supported by Emily Reynolds (USA), Jordi Tablada (NZL), Brooke D'Alberto (AUS), the Secretariat, and Working Group Chairpersons

2. Annual Reports Discussion

8. Annual reports were received from Australia, Belize, Chile, China, Cook Islands, Curaçao, Ecuador, European Union, Faroe Islands, Korea, New Zealand, Panama, Peru, Russian Federation, Chinese Taipei, United States of America and Vanuatu (SC13-Doc16 to SC13-Doc36). A working paper was created for questions and answers about the different annual reports. The Questions and Answers working paper is available as Annex 6 to this report.

Australia

9. Australia reported on its 2024 fishing activities in the SPRFMO Convention Area in document SC13-Doc16. Two Australian-flagged vessels operated using demersal longline gear, deploying approximately 568,000 hooks. No Australian vessels fished with trawl gear in 2024. The total retained catch was 136.2 t, mainly yellowtail kingfish (43%), jackass morwong (31%), morwong species (16%), blue-eye trevalla (4%), and minor quantities of other species. An additional Australian vessel conducted exploratory fishing for Patagonian toothfish in the Macquarie Ridge area in August 2024 under CMM 14f-2024; catches were dominated by Patagonian toothfish, with 28 fish tagged and released.

10. Observer coverage in 2024 reached 19.3% for longline operations, exceeding the minimum 10% requirement, with no trawl activity requiring 100% coverage. No interactions with marine mammals, reptiles, or other species of concern were observed. One seabird interaction was recorded (a dead short-tailed shearwater). Benthic bycatch totalled 106.5 kg, mainly non-living benthos. About 5,900 hooks were reported as lost.

11. Research and monitoring activities continued, including seabird electronic monitoring trials and cooperation with New Zealand on the cumulative Bottom Fishing Impact Assessment, accepted by the Commission in 2024. Australia reaffirmed compliance with relevant CMMs, including those for bottom fishing (CMM 03-2025), deepwater species (CMM 03a-2025), data collection (CMM 02-2025), and seabird mitigation (CMM 09-2017). Required annual data were submitted to the Secretariat in line with confidentiality provisions.

Belize

12. Document SC13-Doc17 presents the scientific annual report of Belize and provides an account of the activities carried out by its fishing fleet within the SPRFMO Convention Area from January 1st to December 31st, 2024. It was noted that there was no active fishing support vessel authorised to operate in the Convention Area in 2024 and no authorised fishing vessels within the Convention Area during this period.

Chile

13. The annual report of Chile for jack mackerel is presented in Document SC13-Doc18, which describes that since 2020, the fishing operations on Chilean Jack mackerel have been conducted exclusively within the Chilean EEZ. During the first half of 2025, the industrial fleet targeting this resource was made up of 39 fishing vessels using purse seines.

14. A progressive increase in the Jack mackerel catches has been observed in the 2020 - 2024 period, with a maximum reached in 2024. This trend is explained by the increase in the quota allocated to Chile plus quota transfers from other SPRFMO Members to Chile along with the completeness of its extraction. Thus, until June 2025, 748,383 t of Jack mackerel were caught in the Chilean EEZ, which corresponds to 73% of the national TAC.

15. Since 2020, size-structured Jack mackerel catches have shown a wide range of sizes, between 7 and 67 FL cm, with main modes fluctuating between 27 and 44 FL cm. Thus, during the first semester of 2025, the size range of includes specimens between 17 and 58 cm in FL, with a marked mode of 32 cm in FL.

16. Between 2020 and 2024, jack mackerel catches included a broad range of age groups, from I to XII, with age group V consistently representing the main mode across all years. While some variability was observed between years, the overall age structure remained stable, with contributions from multiple cohorts in most seasons.

17. Finally, it is important to reiterate that, as of January 2020, Image Recording Devices (DRI or EMS) have been implemented to monitor compliance with Bycatch Reduction Plans and fishery regulations across the entire industrial fleet. In addition, the mandatory use of Electronic Logbook Systems (SIBE) was also introduced in 2020 to report, on a set-by-set basis and in real time, total catches, bycatch and discards, and the spatial and operational characteristics of the fishing activity, in accordance with national legislation.

18. To date, the implementation of these Electronic Monitoring Systems (DRI and SIBE) in the Chilean industrial fleet has focused primarily on ensuring compliance with regulations related to discards and incidental catch of seabirds, marine mammals, sea turtles and chondrichthyans. However, the potential for using these technologies beyond compliance particularly as tools for scientific monitoring and the collection of fishery-dependent data is now being explored. This approach is expected to complement traditional human observer programs, supporting a more robust ecosystem-based fisheries management approach. In the specific case of the Jack mackerel fishery, observer data collected between 2015 and 2024 confirmed low levels of incidental mortality, with most cases including sea lions, seabirds and sea turtles being released alive using proper handling protocols. These outcomes reflect the ongoing commitment of Chile to strengthen sustainable practices and ecosystem considerations in the management of this key pelagic resource.

19. The annual report of Chile for squid is presented in Document SC13-Doc19, which notes that all catches of jumbo squid were performed within the Exclusive Economic Zone of Chile (EEZ).

20. In the jumbo squid fishery both artisanal and industrial vessels participated. In 2024, the artisanal fleet landed 139,145 metric tons, representing 99% of the total national landings of this resource (140,290 metric tons). The artisanal fleet targeting jumbo squid is made up of 2,138 operating vessels whose length is equal or less than 18 meters. However, most of the fishing operations were carried out by vessels of length equal or less than 12 meters (2,053), which represented 96% of the total number of artisanal vessels. This group of vessels (≤ 12m) altogether landed more 94.95% of the total landings for the artisanal sector.

21. On the other hand, during 2024, the catches of this resource by the industrial fleet, composed of vessels over 18 meters length, correspond to bycatch while targeting other resources due to a change in the legislation of this fishery, and totaled 1,146 metric tons, which represented 0.82% of the total landings for jumbo squid in Chile during 2024 (140,290 metric tons). Landings of jumbo squid by the industrial fleet involved 41 vessels, of which 1 was a factory vessel. Among these vessels, 23 operated with purse seine gear (57.5%), 16 with bottom trawl gear (40.00%), and 1 vessel with jigging gear (2.5%). Regarding the relation within total tons landed and the fishing gear used, during 2024, 59.76% corresponded to trawls, 40.19% % to purse seine and 0.13% % to jigging.

22. During 2024, bycatch of marine mammals, seabirds, or sea turtles was not observed for both fleets.

China

23. The annual report of China is presented in Document SC13-Doc20. The report notes that, in 2024, a total of 528 Chinese squid jigging vessels operated in the SPRFMO Convention Area, harvesting 273,900 tons of jumbo flying squid. The number of active vessels fluctuated monthly, ranging from a low of 273 in May to a peak of 484 in December, with total fishing efforts reaching 114,745 days and an average catch rate of 2.4 tons per day. During the 2023-2024 and 2024-2025 fishing seasons, an observer program was implemented, deploying 14 observers across 5 studying vessels. In 2024 alone, 14 observers served onboard, with 10 having completed their assignments and returned to port by July 2025, while the remaining 4 continued their work at sea. The returned observers monitored 1,308 fishing days, and 28 transshipment activities, measured over 100,000 squid specimens.

Cook Islands

24. The annual report of the Cook Islands is presented in Document SC13-Doc21. The Cook Islands vessel did not complete any fishing trips in 2024, due to a change in vessel and a required vessel refit. Initial plans aimed for the vessel to continue fishing for lobsters (*Jasus caveorum*) and crabs (*Chaceon* sp.) and to begin fishing for hapuka *(Polyprion oxygeneios)* in 2025. The vessel is currently undertaking a trip under both CMM 14d and CMM 14g, we have two observers onboard the vessel and the vessel is being monitored using VMS.

25. The observers collect size frequency data as well as sex, maturity and shell state data from all *J. caveorum* and *Chaceon* sp. For *P. oxygeneios* the observers are collecting otoliths, length and sex information. In addition, the Cook Islands has purchased genetic sampling kits and developed protocols to collect genetic samples from *J. caveorum* and *P. oxygeneios* for the evaluation of stock structure and to assess links between our two different fishing areas as well as between seamounts. The Cook Islands has recently built our own fish ageing laboratory and, as part of our capacity development work, we will be undertaking our own analysis in-house and not outsourcing the work. The observers also collect catch and effort information as well as monitor VME indicator taxa interactions. Cook Island vessels are not allowed to retain any elasmobranchs, which are required to be released as soon as possible upon landing. We also have protocols in place to minimising interactions with marine mammals, reptiles and seabirds.

Cuba

26. The annual report of Cuba is presented in Document SC13-Doc34, which confirms that Cuba currently has no vessels operating within the SPRFMO Convention Area and that its 2025 horse mackerel quota was transferred to Chile. As a result, Cuba did not provide information under the reporting sections on fisheries description, catches, effort, CPUE, biological sampling, ecosystem considerations, or observer implementation, given the absence of fishing activity over the last five years. Cuba reaffirmed its continued interest in SPRFMO-managed fisheries and indicated it may engage in fishing activities within the Convention Area in the future.

Ecuador

27. The annual report of Ecuador is presented in Document SC13-Doc36, which provides information on Jack Mackerel (*Trachurus murphyi*) catches within its Exclusive Economic Zone.

28. In 2024, the occurrence of Jack mackerel (*Trachurus murphyi*) in Ecuadorian waters was sporadic and limited. The industrial purse seine fleet reported only 55.65 tons of landings, without information on fishing areas. No biological data were collected during the year. Historically, catches have been variable, with a peak in 1995, but in recent decades the species has appeared only occasionally in Ecuadorian fisheries. Regarding jumbo flying squid (*Dosidicus gigas*), sporadic fishing activity occurred within Ecuadorian waters; however, no monitoring information was available in 2024 due to budgetary limitations. Ecuador will continue monitoring through the Small Pelagic Fish Monitoring Program (IPIAP) to provide updated information to the SPRFMO.

European Union

29. The annual report of the European Union is presented in Document SC13-Doc23.

30. This report presents the European Union (EU) fishing activity in 2024 in the South Pacific Regional Fisheries Management Organisation (SPRFMO) Convention Area and the observer program implementation in 2024. The data on catches of Jack mackerel (*Trachurus murphyi*) by two European Union trawlers in 2024 covers the period from April to December. Total catch in 2024 was 22 380 (16 571 CJM) tonnes. Three scientific observers were deployed on two European Union fishing vessels in the period from April till December 2024.

31. A short section on the Pelagic Freezer-trawler Association (PFA) self-sampling program has been included in the report, demonstrating the main results of the self-sampling activities that cover all trips by European Union vessels in the area. A PFA self-sampling report has been submitted to the SPRFMO SC, in which a description is presented of the fisheries carried out by vessels belonging to members of the PFA within the SPRFMO area from 2017 to 2024. In 2024 two European Union vessels have been active in the SPRFMO convention area. In the first half of 2024, two PFA vessels were present in the area but did not yield any catch despite extensive searching. In 2024, 8 PFA trips were self-sampled.

32. During the Jack mackerel Benchmark Working Group (SCW14) it was decided to develop a protocol for inclusion of self-sampling data for the European Union fleet for those quarters where no observer trips were carried out. This document describes that protocol and the selection of quarters for which the self-sampling data will be used. For SC12 It is proposed to only use the self-sampling data from 2021 and onwards and only for quarter for which no observer data is present. For 2024 there are only samples for the fourth quarter. It is therefore proposed to use the self-sampling data of the quarters 2 and 3 for 2024.

33. Exploratory fishing for toothfish had been undertaken by the Spanish vessel TRONIO in accordance with CMM 14e-2021. In both 2021 and 2022 the TAC of 75t was reached in 15 days and 17 days respectively. In 2023, logistic constraints on the vessel movements meant that only 8 days of fishing could be conducted, achieving just over half of the TAC. A detailed survey report is presented to the SC. In 2024 the second three-year Exploratory Fishery started under CMM 14e-2024. A detailed survey report of the first year's exploratory fishing is presented to the SC]

Faroe Islands

34. The annual report of the Faroe Islands is presented in Document SC13-Doc35.

35. The Faroe Islands reported that they had no vessels participating in fisheries within the SPRFMO Convention Area during the previous year, and therefore no data were submitted on fishing, research, or management activities. For 2025, the Faroe Islands transferred their quota of 15,853 tonnes of *Trachurus murphyi* to Chile, subject to Chile's approval and without prejudice to future arrangements under CMM 01-2025. The Faroe Islands reiterated their continuing interest in SPRFMO fisheries and expressed the intention to provide full data and comply with relevant measures should Faroese-flagged vessels resume fishing activities in the future.

Korea

36. The annual report of Korea is presented in Document SC13-Doc24.

37. In 2024, Korea resumed fishing operations in the SPRFMO Convention Area after several years of inactivity, with one pelagic trawl vessel targeting jack mackerel (*Trachurus murphyi*) and one jigging vessel targeting jumbo flying squid (*Dosidicus gigas*). The trawl fishery reported catch of 1,797 tonnes of jack mackerel, 519 tonnes of chub mackerel, and minor bycatch of other species, while the jigging vessel recorded a total catch of 128 tonnes, marking the lowest CPUE since 2015. No bottom trawl fishing was conducted, and exploratory fishing for toothfish commenced from May to June 2025 under CMM 14h-2025. Korea continues to implement an electronic reporting system for fisheries data collection and maintains a scientific observer programme, accredited by the SPRFMO in 2022. The observer coverage for trawl and jigging vessels resumed in 2024 was 100 % in aligned with CMM 01-2025 and CMM 18-2025 requirements.

Liberia

38. The annual report of Liberia is presented in Document SC13-Doc25. Liberia submitted a NIL report for the 2024 period, confirming that no Liberian-flagged fishing vessels or research activities operated within the SPRFMO Convention Area.

39. Liberia's status as a Cooperating Non-Contracting Party (CNCP) was renewed, with 13 Liberian-flagged carrier and support vessels authorised to conduct transhipment operations in the Area. Liberia reaffirmed its commitment to implement and comply with SPRFMO CMMs, including through vessel monitoring systems, transhipment authorisations, and its fisheries monitoring centre.

40. While no activities occurred in the Convention Area, Liberia reported on its broader fisheries sector, noting two purse seine tuna vessels flagged to Liberia that operated in the ICCAT Area, with an estimated catch of 8,721.87 tonnes (78% skipjack, 20% yellowfin, 3% bigeye). Additionally, 33 foreign vessels obtained licences to fish in Liberia's EEZ, and around 650 artisanal canoes target tuna and tuna-like species along the coast. Liberia highlighted the importance of fisheries for revenue, employment, and food security, and reiterated its commitment to responsible management and continued cooperation within SPRFMO.

New Zealand

41. The New Zealand (NZL) report is presented in Document SC13-Doc26.

42. New Zealand conducted no fishing for Trachurus species in the SPRFMO Convention Area in 2024. Squid: New Zealand conducted no pelagic fishing for *Dosidicus gigas* in the SPRFMO Convention Area in 2024.

43. New Zealand vessels have been bottom fishing in the now-SPRFMO Convention Area since before 1990. In recent years, the fisheries effort has decreased dramatically. In 2024-25, two vessels were involved in bottom trawling, catching 85 t of orange roughy in Tasman Sea, and 253 t of orange roughy in Westpac Bank. The total bycatch of other species during bottom trawling was 104 t including alfonsinos, cardinalfish and oreo.

44. Three trawls were performed by one midwater trawling vessel for bentho-pelagic species in 2024-25 in the SPRFMO Convention Area with total catch of 1.2 t (mainly alfonsino 0.4 t).

45. Bottom longlining took place in Challenger Plateau and West Norfolk Ridge by two vessels (8 trips) in 2024 with the total number of 152,000 hooks. Total catch of all species in 2024 attained 86 t comprising 22 t of bluenose, 32 t of wreckfish, 19 t of spiny dogfish and 13 t of other bycatch species.

46. A VME encounter was triggered in the 2024, within the Central Lord Howe Rise Fishery Management Area. The encounter related to the capture of a 33 kg of Gorgonacea which is above the encounter threshold of 15 kgs for a single tow (CMM 03-2023 – Annex 6A). As per CMM 03-2023, the vessel moved away from the encounter area, and it is closed to further fishing pending review. A review of this VME encounter is presented to the 13th meeting of the SPRFMO SC as SC13-DW09.

Panama

47. The annual report of Panama is presented in Document SC13-Doc27. Panama reaffirmed full compliance with all SPRFMO Conservation and Management Measures (CMMs) for the 2024 reporting period. No fishing activities targeting SPRFMO-regulated species were conducted in the Convention Area. Panama's participation was limited to authorised logistical operations, including transshipments, port landings, and the provision of fuel and supplies.

48. Historically, Panama participated as a CNCP from 2014 until July 2022, with limited conditional participation in the jumbo flying squid fishery in 2016–2017. Since becoming a Member in July 2022, Panama has not conducted catching activities within the SPRFMO Area.

49. For 2024, there were no catch or effort records, no data collection or research activities, and no biological sampling. No interactions with seabirds or other species of concern were reported, and Panama did not participate in the observer programme.

Peru

50. The annual report of Peru in regards of the SPRFMO Area is presented in Document SC13-Doc28

51. As of June 2025, there are 381 Peruvian vessels authorized and registered in the Commission record of vessels authorized to fish within the SPRFMO Convention area. No catches of *Trachurus murphyi* and *Scomber japonicus* were reported from January 2024 to June 2025. Regarding *Dosidicus gigas,* a total of 4.6 tonnes were reported for 2024, but there were no reported catches during the first half of 2025. The research activities in the SPRFMO area, monitored by a Peruvian onboard observer programme, provided reliable information on fishing effort, catch volumes, species composition of the catches, fishing areas, and distribution of the target species. No registers of top predators bycatch (seabirds, marine mammals, and sea turtles) were reported in any observation during the fishing activities from January 2024 to June 2025.

52. The annual report of Peru in regards of its Areas under National Jurisdiction (ANJ) is presented in Document SC13-Doc29.

53. The Peruvian marine environment is characterized by its high productivity and variability. It is particularly exposed to the effects of the opposed significantly warm (El Niño) and cold (La Niña) climatic patterns in the Pacific Ocean that alternate with relatively short periods of close to neutral conditions.

54. Between 2013 and the first part of 2018, these changing environmental conditions caused a more dispersed distribution, reduced availability, lower abundance indexes, and consequently lower catches of Jack mackerel (*Trachurus murphyi*). This has been followed by an expanded distribution in denser concentrations farther offshore, much higher abundance indexes, increased availability to the industrial and artisanal purse seine fleet, and higher catches of Jack mackerel from the second half of 2018 to 2022.

55. In 2023, a Coastal Niño event was registered along the Peruvian coast, which led to a concentration of Jack mackerel south of the Peruvian coast, making this resource more accessible. In 2024, the catches initially decreased for an initial dispersion of Jack mackerel schools; but when the environmental conditions cooled, Jack mackerel concentrated again south of the coast. This will be closely monitored throughout this year.

56. Between January 2024 and June 2025, the fishery targeted a wide range of sizes, with the highest proportions of juveniles in February 2024 (63%) and March 2024 (78%); during the first half of 2025, the highest proportion of juveniles in the fishery occurred in June (20%). The research surveys in 2024 and 2025 also found younger and smaller juveniles.

57. In late December 2024, IMARPE (Instituto del Mar del Perú) updated the available 2024 Jack mackerel assessment made for the Peruvian (far-north) stock with the JJM model using the configuration agreed during the 12th meeting of the SC (SC12). This resulted in a range of options for setting the 2025 TAC that was included in its advice to the Government, recommending three scenarios: (i) the catch corresponding to an F equal to applied in 2024 (TAC = 148 000 tons), (ii) the catch corresponding to an F equivalent to 1.5 that applied in 2024 (TAC = 212 000 tons) and, (iii) the catch corresponding to applying 80% of the FMSY (TAC = 218 000 tons). Based on this advice, in December 2024, PRODUCE established a regulatory measure for the Jack mackerel to be caught in Peruvian jurisdictional waters by the large-scale or industrial fleet during 2025 with a catch limit of 80 948 tons; on the artisanal fishing vessels and purse seine vessels with a hold capacity of less than 10 m3 and up to 20 m3, during the same period time (January-April 2025), the total limit was 54 584 tons for artisanal vessels. Also, the catch limits set for artisanal fishing vessels using passive fishing gear (curtains) was 1 329 tons. For the periods from 1 May to 30 June and from 1 July to 30 August 2025, for vessels using passive fishing gear and purse seine with a hold capacity of less than 32.6 m3, the total limit of 26 760 tons. An updated assessment with the JJM model has been made by IMARPE based on the most recent information and data available up to June 2025. The recent observations and assessments confirm the increasing trend in the biomass estimates observed from 2016, nevertheless, the model projection for 2025 shows a decrease in its trend. Despite this, the Peruvian Jack mackerel stock is in an overall healthy situation based on the reference points.

Russian Federation

58. The annual report of the Russian Federation (RF) is presented in Document SC13-Doc30 on the fishing operations of the Russian Federation fishing vessels in 2024 within the area regulated by the South Pacific Regional Fisheries Management Organization (SPRFMO), as well as data on the implementation of the scientific observer program aboard fishing vessels.

59. The jack mackerel (*Trachurus murphyi*) fishing was conducted by three Russian-flagged trawlers and covered the period from March to November 2024. The total catch of biological resources was 18,040.6 tons, including 12,110.1 tons of jack mackerel and 5,930.5 tons of chub mackerel (*Scomber japonicus*).

60. Scientific observers were deployed on board vessels during the period of fishing and the average scientific observer coverage in the fishery was 50%.

Chinese Taipei

61. The annual report of Chinese Taipei is presented in Document SC13-Doc31.

62. Jumbo flying squid is widely distributed in the eastern Pacific Ocean and was targeted by Chinese Taipei's squid-jigging fleet from 2002 to 2021. The fishery has been temporarily suspended since 2022. There was no fishing activity by Chinese Taipei's squid-jigging fleet in the SPRFMO Convention Area during the 2024 fishing season.

United States

63. The annual report of the United States is presented in Document SC13-Doc32.

64. The United States currently has no vessels participating in the fisheries managed by SPRFMO. As such, the United States has no data or information to provide regarding U.S. fisheries operating under SPRFMO jurisdiction in 2024 or 2025. Similarly, the United States has no information to provide regarding 1) catches, effort, and CPUE summaries; 2) fisheries data collection and research activities; 3) biological sampling and length/age composition of catches; 4) ecosystem approach considerations; and 5) observer implementation reports for fishing activities under SPRFMO jurisdiction.

Vanuatu

65. The annual report of Vanuatu is presented in Document SC13-Doc33, which provides that Vanuatu has had no vessels actively fishing in the SPRFMO Convention Area in 2024 and, therefore, has no catch or effort data to provide to the SC. Neither has Vanuatu undertaken any research activities relevant to SPRFMO fisheries in 2024.

3. Commission Guidance and Inter-Sessional Activities

a. Working Group on 2nd Performance Review Recommendations

66. Australia presented SC13-Doc14 on behalf of the Chairperson of the Intersessional Working Group tasked with assigning and prioritising the recommendations derived from the second SPRFMO performance review (PR2IWG).

67. The SC discussed the 16 recommendations assigned to the SC. The SC was requested to decide whether they agreed with each recommendation, what priority level should be assigned to each of them, and to make any comments or recommendations about their implementation.

68. The outcome of these discussions is recorded in Annex 8 to this report for consideration of the PR2IWG.

b. SC multi-annual workplan

69. A new version of the SC multiannual workplan was presented by the Chairperson in SC13-Doc05, which added more detail and organised the work further in terms of the activities, as well as widened the planning horizon to a 3-year plan, in line with recommendations from PR2IWG.

c. Secretariat SC related activities

70. The Executive Secretary presented SC13-Doc07 which summarises the science-related activities the Secretariat engaged in intersessionally.

71. The SC thanked the Executive Secretary for the report and noted the document.

72. The SC also noted document SC13-Doc06, which collates the report summaries of intersessional web meetings of the SC and its working groups and task teams.

d. Working group on Electronic Monitoring Standards (WGEMS)

73. The United States delegation presented SC13-Doc15 on behalf of the Co-Chairs of the Working Group on Electronic Monitoring Standards (WGEMS). The document contained a summary of the intersessional work to date as well as a request for the SC to consider several components of the draft EMS.

74. The SC **agreed** to focus the efforts of the WGEMS on the squid jigging activity in the short term, noting that the requirements for other gear types can be determined later as needed. The SC agreed that due to requirements for increased observer coverage in the jumbo flying squid fishery, as mandated in CMM 18-2025, the focus on EMS for this fishery is the primary need for Members at this stage. The squid jigging fishery is also the only fishery for which EM will be able to substitute for human observers at this time.

75. The SC also agreed that the draft data fields for squid jigging as drafted in SC13-Doc13 are generally acceptable, while Members are interested in continuing discussion about the details of these draft data fields in the upcoming intersessional working group meetings to be held before COMM14.

76. The SC discussed specific questions posed in SC13-Doc13, which were detailed in SC13-WP08 (see Annex 9). With regard to SC's priority data needs for the squid fishery, Members agreed the primary data priority is fishing activity data, including latitude/longitude, daily time, and amount of catch. Secondly, capturing species of concern interactions is important. Members noted EM can help monitor the fishery, provide scientific data, and address compliance issues related to bycatch. While biological data like length/weight and maturity stage are still developing in terms of EM technology, fishing activity data is currently the priority. Environmental data such as sea surface temperature (SST) was also suggested as potentially helpful to include, though it was noted that SST is typically collected as part of fishing activity data rather than directly from EM cameras.

77. Members noted that the data collected from EM systems on fishing activities that would contribute to the stock assessment cycle are not necessarily urgent or needed at a specific time of year to impact the analyses being conducted but rather the bycatch data collected from EMS would be considered more urgent. In addition, it was noted that Members hope the Commission will be in a place to adopt an EM program in 2027 and agreed with the pilot period approach of two years to submit EM system data, as noted in SC13-Doc13.

78. The SC acknowledged that while the data proposed to be collected via EM for the squid jigging fishery seem sufficient now, there is always a continuous need for different or additional data. Therefore, the SC noted that while these draft data fields should be sufficient for immediate needs, there may be revisions requested in the future.

79. The SC endorsed the draft EMS in principle, with the expectation that more refinement will occur intersessionally. The SC expressed gratitude to the Co-Chairs and the United States for their leadership on this work and looks forward to future meetings to continue progressing these EMS.

e. Cooperation with Other Organisations

80. The Food and Agriculture Organization of the United Nations (FAO) introduced document SC13-Obs07 providing an update on the FAO Deep Sea Fisheries Project (DSF Project) which is a component project of the FAO's Common Ocean's Programme, that is working with RFMOs including SPRFMO to promote the sustainable management of deep-sea fisheries in Areas Beyond National Jurisdiction. The FAO acknowledged the important role of SPRMO as a partner of the DSF Project and encouraged the continued engagement of SPRFMO scientists and Secretariat in different aspects of the project in particular through:

81. Updates and follow-up work arising from the Symposium on the Ecosystem Approach to Fisheries Management held in March 2025;

82. Publication of the review of the status of deep-sea fish stocks and ongoing work on the assessment of data-limited deep-sea fish stocks;

83. The impacts of deep-sea fisheries on deepwater sharks and the approaches to improving the taxonomic detail of data reporting of deepwater sharks to RFMOs;

84. Ongoing engagement of the deep-sea fisheries industry and the potential establishment of a global DSF industry group, including industry representatives involved in SPRFMO deep-sea fisheries;

85. A global review of approaches used by commercial fishing vessels for the identification of VMEs;

86. Regional reviews the existing and potential modalities for the incorporation of climate change effects into the work of RFMOs, including SPRFMO (SC13-Obs08);

87. Continued participation in DSF Project governance and activities.

88. The SC welcomed the update in SC13-Obs07 and thanked FAO for the opportunities for SPRFMO scientist to engage in a number of DSF Project workshops in the in the last year and encouraged the continued contribution of Members and the SPRFMO Secretariat to the FAO DSF Project.

89. ACAP presented SC13-Obs01. The SPRFMO Convention Area was highlighted as extremely important to seabirds, with 24 of the 31 ACAP-listed Albatross and Petrel species occurring in the area. The majority of these species are threatened with extinction and the latest data shows that the population trend of at least 14 species is in decline. Eight of the nine global High Priority Populations, that are declining at rates exceeding 3% annually primarily due to fisheries bycatch, breed or forage in SPRFMO waters. Due to the continued decline in population status of these species, a conservation crisis was declared by the ACAP Meeting of Parties in May 2025. Recent updates to ACAP's mitigation advice for demersal longline and trawl fisheries reaffirm the importance of integrated strategies, including line weighting, bird scaring lines, night setting, offal management, and temporary closures of key foraging areas. Complementary ACAP guidelines for observer programmes, electronic monitoring, and species identification are also available. ACAP welcomed the collaboration with New Zealand, Peru and Chile to review the SPRFMO seabird and data CMMs (CMM 09-2017 and CMM 02-2025) against ACAP advice (SC13-DW08). ACAP urged the SC to endorse the recommended changes.

90. The SC acknowledged the conservation crisis declared at the 8th Meeting of the Parties of ACAP and encouraged Members and CNCPs to continue to support research into assessing risk of fishing to seabirds in the SPRFMO Convention Area, as well as to report research to ACAP on the effectiveness of mitigation measures and monitoring tools to inform future best practice advice.

f. Observer Programme accreditation process and progress

91. The SC noted the Executive Secretary's oral update regarding the accreditation process being carried out this year by MRAG of the observer programmes of Cook Islands, Ecuador, and Panama, as well as the Russian Federation observer programme being undertaken by an alternate accreditation evaluator.

4. Jack Mackerel

a. Review of inter-sessional activities

92. The Jack Mackerel Management Strategy Evaluation (MSE) was the highest priority workstream for the SC in 2025, as directed by the Commission. Activities were coordinated by the Jack Mackerel Working Group (JMWG) and the dedicated Jack Mackerel MSE Task Team (JM-MSE TT).

93. Timeline of Key JM Activities in 2025:

- 28 Jan: JM-MSE TT Technical Session

Activity: Focused on the performance of selected Management Procedures (MPs). Discussed challenges of using a complex stock assessment model within an MSE loop and advocated for simpler, empirical "model-free" approaches. Planned a stakeholder workshop.

- 15 Feb: JM-MSE TT Pre-Commission Science-Manager Session 1

Activity: Reported progress and findings directly to the Commission.

- 1 Apr: JM-MSE TT Technical Session

Activity: Reviewed feedback from the Commission workshop. Discussed management objectives, including tuning MPs to a 60% probability of being in the Kobe "green zone." Addressed concerns about annual stock assessments and integrating climate change robustness into the MSE.

- 3 Jul: JM-MSE TT Science-Managers Session 2

Activity: A critical dialogue between scientists and managers. Reviewed MSE progress, discussed trade-offs of different Management Procedures (e.g., TAC stability vs. yield), and incorporated manager feedback on incorporating banking/borrowing rules and TAC stabilizers (±15-20%).

- 14-18 Jul: In-Person JM-MSE Technical Workshop (Seattle, USA)

Activity: The major technical workshop of the year. Scientists and experts consolidated the jmMSE software package, refined Operating Models (OMs) with climate (El Niño) and stock structure uncertainties, and evaluated empirical and shortcut Management Procedures. The workshop confirmed the framework's robustness but concluded that **further work was needed to deliver a final set of candidate MPs** for SC13.

- 28 Jul: JMWG Preparatory Session 1

Activity: Focused on logistics for SC13. Confirmed the postponement of the Age Reading Workshop and connectivity study to 2026 due to funding and leadership changes. Discussed ongoing CPUE standardization efforts to create a regional index for the MSE and stock assessment.

- 7 Aug: JMWG Preparatory Session 2

Activity: Focused on final preparations for the SC13 stock assessment. Discussed data submission timelines and expressed disappointment that the Seattle workshop did not yield final candidate MPs for committee review. High-priority items included finalizing the CPUE analysis and a risk table for F multipliers.

94. The primary Jack Mackerel activity in 2025 was the intensive development and testing of a Management Strategy Evaluation (MSE) framework. A series of technical meetings and a major week-long workshop in Seattle advanced the operating models and tested candidate management procedures. Key discussions centred on using empirical, index-based rules tuned to a 60% probability of the stock being in the Kobe "green zone," and incorporating climate variability and robustness testing. Despite significant progress, the process did not conclude with a finalized set of management procedures for the September SC meeting (SC13), indicating that further work would be required to meet the Commission's 2026 deadline. Parallel efforts on CPUE standardization continued, while other planned work (age reading, connectivity studies) was postponed to 2026.

b. Management Strategy Evaluation update

95. The Chairperson of the Jack Mackerel Working Group, Dr Jim Ianelli, reported on SC13-JM09 based on the SCW15 Jack Mackerel MSE Technical Workshop report. The primary outcome was the successful refinement of the Management Strategy Evaluation (MSE) framework, though it did not yield a finalized set of candidate management procedures (MPs) for the SC. The workshop advanced the `jmMSE` software, fine-tuned operating models to better represent stock dynamics and climate effects like El Niño, and evaluated empirical MPs tuned to a 60% probability of the stock being in the Kobe "green zone." Key discussions centred on trade-offs between catch stability and biological risk, particularly when implementing TAC constraints. While the framework was deemed robust and transparent, further work is needed to simplify MP options for managerial decision-making, with recommendations including continued use of the FLR software, rendering the software compatible with other platforms (e.g., openMSE), improved documentation, and the need for an additional meeting in 2026 to further progress candidates for Commission review. He presented arguments for advice based on an “Interim Management Procedure” similar to what has been used for advice to date.

96. The SC proposed results as noted in the past and noted that the Commission may choose to develop the CMM on the bases of characteristics presented from the MSE activities, even though they were incomplete.

97. The SC further **recommended:**

> that the Commission support continuation of the MSE work to best leverage all the technical work that has been done in the last year.

98. During the week, as the SC developed the assessment model, analysts presented how easily the operating model could be updated to be based on the 2025 version. This also worked for both stock structure hypotheses and provides improved fits to available data, including historical depletion and more recent survey and CPUE indices. The SC noted that this ability to update the operating models to the most recent observations provides an improve basis for testing MPs. The SC commended the efforts of the contractor developing the MSE.

c. Assessment data review and evaluation

99. The Chairperson of the Jack Mackerel Working Group, Dr Jim Ianelli, presented SC13-JM10. This study covers an updated, standardized Offshore CPUE index for jack mackerel, combining haul-by-haul data from China, the European Union, Korea, Vanuatu, and Russia for submission to SC13. Using the methodology established during the 2018 benchmark, European Union scientists applied a GAM model that includes the factors year, vessel, month, and El Niño effect, along with a smoothed spatial interaction between latitude and longitude. The resulting index, for which permission was granted by the respective Contracting Parties, covers the period from 2008 onward, the first year that complete haul-level data was available in the SPRFMO database.

100. The SC discussed these results extensively and asked to have a view of how the series has changed so much over time. The analyst (European Union) was asked to check if expected data were all available and this was updated as SC13-JM10-rev1.

101. The SC noted that the offshore CPUE update resulted in a large difference from recent years values for that index and for 2024 (the terminal year for that series) is the lowest on record. The group noted that this conflicts with other indices used in the model (e.g., the Chilean acoustic survey and the Peruvian CPUE). The analysts evaluated how the time series has changed in different years.

102. Despite the lack of finalised catch data for the current year, the European Union noted that that the offshore CPUE drop for the last year reflects the poor catches that their fleet have reported so far this year. The European Union noted the decreasing trend matches trends seen in previous years where environmental conditions (i.e., colder water) appeared to be correlated to the declining offshore CPUE. Chile raised some concerns due to the differences of the fleet's spatial coverage between years and the fact that it cannot be interpreted as a survey (parts of the ocean remain unchecked). Following discussion from Members, the Faroe Islands suggested providing a retrospective analysis of the CPUE index.

103. Chile presented SC13-JM04, the updated CPUE index for the south-central Chilean jack mackerel purse-seine fishery shows a stabilization from 2020 to 2025 after a recovery period, but it may be overestimating stock abundance due to a significant behavioural change: the fish have become highly concentrated near the coast in recent years. An alternative "catch model" index suggests a declining trend, but its residuals were problematic. To address the potential overestimation, a corrected CPUE index was created using a linear relationship with the distribution area from acoustic surveys; this correction reduces the recent index values by approximately two-thirds. Crucially, while acoustic biomass has decreased in the south-central zone, it has been offset by a strong and continuing increase in the northern zone, resulting in a relatively stable total biomass for the stock until 2023, with further growth in the north observed in 2024 and 2025. A precautionary approach is recommended when using the uncorrected south-central CPUE index in stock assessments.

104. Chile presented also that alternative CPUE indices, based on spatio-temporal models (sdmTMB and INLA), had similar trends to the trend of the current CPUE index (when they are normalized). The current CPUE index used in the assessment (SC13-JM04) was quite similar with the CPUE index based on Bayesian hierarchical spatio-temporal models with INLA (SC13-JM02). Nevertheless, there are some years with some differences that need to be investigated in the next abundance indices workshop.

105. Chile presented the document SC13-JM02. This study updates the standardized fishery-dependent CPUE series for Chilean jack mackerel in central-southern Chile from 1994–2025 using Bayesian hierarchical spatio-temporal models with INLA. Significant predictors included vessel capacity, effort (days at sea), quarter, year, spatio-temporal effects, and environmental factors such as SST and chlorophyll-a. Results show interannual shifts in biomass distribution, with coastal aggregations in 1995–2001 and 2012–2025, and offshore expansion in 2002–2011. In 2025, fishing trips were longer and farther from port, with abundance clusters shifting northward. Incorporating environmental variables improved model fit, highlighting habitat-driven aggregation. The standardized CPUE series peaked in 2006, declined gradually, and has stabilized since 2015 at relatively high levels near major ports.

106. The report (SC13-JM08) on the European Union self-sampling program for jack mackerel was taken as read. This program, running since 2015, provides extensive coverage that effectively supplements the scientific observer program. A comparison shows that while self-sampling collects fewer fish per trip, it covers more trips and a wider spatio-temporal range of the fishery, leading to a more representative length composition for stock assessment. The data's reliability is confirmed by its comparability to observer data in the 29 trips where both programs were present. To fill gaps in observer coverage, a protocol developed during the SCW14 benchmark recommends using self-sampling data for quarters without observers; specifically, it is proposed to incorporate self-sampling data from the second and third quarters of 2024 for the upcoming SC13 assessment.

107. The SC noted this program and appreciated how it may improve size-composition sampling for this fishery.

d. Jack mackerel assessment

108. The usual incremental analyses of adding each new data component were completed. This preliminary assessment was presented at the beginning of the 13th SC and Members were invited to review the assessment data. Given that the SCW14 benchmark was held recently (in 2022), it was agreed that limited sensitivity runs should be done.

109. The input data was scrutinised by SC scientists prior and during SC13. Updates to all the data were performed as usual. The first round of assessment bridging with new data introduced in 2025 was presented by the external expert, Lee Qi. She noted that the assessment code is located at github.com/SPRFMO/jjm and that an output file in the form of an html document can be found on the Teams page. Data updates resulted in similar biomass trend estimates but lower absolute scale. Updating the model to 2025 appeared to moderate the increase in biomass for the final year but with a lower total spawning biomass compared to 2024 estimates.

110. The 2025 acoustic north survey data encountered a large quantity of young fish again as they did in 2024. The SC noted that there was some concern on the sampling levels from this survey since the large number of 1-year olds estimated in 2024 were almost entirely absent as 2-year-olds in 2025.

111. A set of model sensitivities was requested and presented during the early part of the meeting. This entailed, for the four main indices, two types of analyses. One type we term “leave one out” (LOO), and the other “leave one in” (LOI). For the LOO, this is just running the base model four times but with each index omitted in turn. For the LOI runs, we removed three out of the four indices from the model and see the “what-ifs” of having only one index in the model. The SC reviewed these patterns and noted for both cases there were large impacts. It appeared that both the N Chile acoustic survey and the Peruvian CPUE had positive impacts on the assessment results and the opposite for the other indices.

112. The 1-stock and 2-stock models have some differences in the specifications of certain processes (e.g., on selectivity and recruitment). The assessment model fits the catch-at-age and catch-at-length data well although fits to the central-south and the offshore fleets are somewhat skewed towards older fish. The model furthermore fits the CPUE indices from Peru, Chile and offshore reasonably well. However, the model also over-predicts the Chilean CPUE, while it underestimates the Peruvian CPUE in 2023 and 2024. The Northern Chilean acoustic survey is fitted within its range of expectation, noting however a lack of 2-year-old fish in the survey in 2025. The selection pattern of especially the South-central Chilean fishery shows a continuous increase with age where in previous years selection flattened at around the age of 5. Both models were unable to fit to the plus group from the far north fleet, which dominated the length composition data from 2023-2025.

113. The SC discussed some issues related to the retrospective pattern from the offshore CPUE index (see Figure 1 offshore CPUE retrospective). In initial evaluations of these updated series, the SC noted that the pattern of change between years was counterintuitive. This highlighted a data issue (and a revision of SC13-JM10) that resolved the problem. The SC noted that examining such figures in future assessments can provide a useful diagnostic.

114. The SC **noted** that estimates of FMSY and associated reference points are highly sensitive to assumptions about selectivity. The SC **agreed** that reference points should be calculated using long-term average selectivity patterns, reflecting expectations about the fishery in the longer term rather than short-term fluctuations. In contrast, near-term stock projections should be conditioned on recent selectivity patterns, as these are more representative of current fishing practices and fleet dynamics. This distinction is important to avoid basing long-term reference points on potentially anomalous short-term patterns, while still ensuring that short-term management advice reflects the most recent fishing conditions. The SC further **noted** that issues of potential model misspecification in selectivity have already been identified for consideration in the upcoming benchmark review and recommended that this be addressed explicitly in that process.

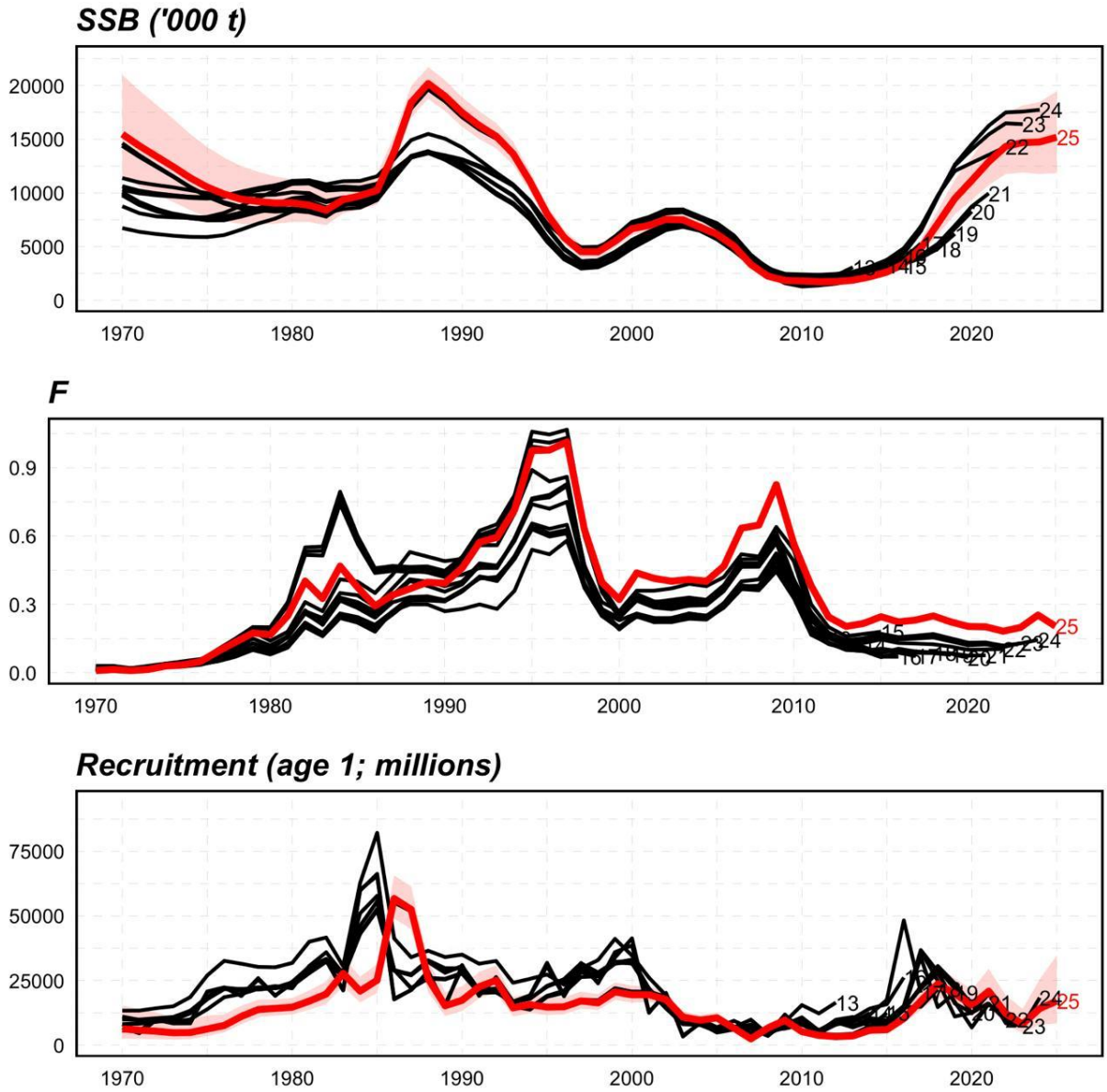

Figure 1. Historical retrospective of the 1-stock assessment outcomes for SSB, F and Recruitment. The large changes from 2021 to 2022 are due to changes made in the 2022 benchmark.

115. The SC welcomed Peru's offer to host the benchmark workshop in Lima at a date to be determined in consultation with Members.

116. The SC **agreed** to have a second in-person workshop on MSE during the intersessional period.

e. Jack Mackerel WG Terms of Reference

117. A working paper was developed on this topic. The Chairperson of the JMWG examined historical documents and noted that the call for a SWG for Jack mackerel occurred at the third SPRFMO consultative meeting. The working paper from this meeting was developed and is provided as Annex 13.

f. Advice to the Commission on jack mackerel

118. The SC encourages the Commission to support a jack mackerel assessment benchmark. High priority topics were identified which included:

- Acoustic biomass in the north area, with emphasis on age composition and biological sampling.
- CPUE index standardisation approaches (sdmTMB or INLA)
- Consider spatio-temporal models combining fleets. For example, tinyVAST (spatio temporal model) has capabilities to consider different data types so may provide a way to combine datasets from different fleets and regions.
- Comprehensive analysis of the different CPUE indices and acoustic biomass estimates including a review S-C and N Chile; this should include an evaluation of sampling levels and expansion protocols
- Consider impact of bycatch in jack mackerel fisheries
- Peruvian potentials? Vessels of opportunity?
- Projection year scenarios, namely
- Long- and shorter-term productivity periods
- Steepness value assumptions
- Selectivity aspects and assumptions
- F-scenarios (relative Fs, Fmsy, etc)
- Possibly converting the assessment into updated software (e.g., RTMB) or using an alternative platform

119. The SC noted that estimates of MSY are highly sensitive to assumptions about long-term selectivity. It was highlighted that the patterns and trends in selectivity over time was concerning. It could reflect model misspecification rather than a long-term shift in fishing dynamics. This issue should be explicitly considered in the upcoming benchmark review. The SC agreed that reference points should be based on long-term expectations and not be unduly influenced by annual fluctuations in selectivity estimates. The refinements developed during the week were considered more appropriate for formulating advice.

120. The SC recalled that the overarching goal is the adoption of a new management procedure (MP) for jack mackerel at COMM14 (2026), based on the results of the ongoing Management Strategy Evaluation (MSE). They proposed the presentation of results as in the past and note that the Commission may choose to develop the CMM on the bases of characteristics presented from the MSE activities, even though they were incomplete. Therefore, the SC agreed that the “Annex K” MP approach be adopted in the interim. The 15% catch stabilizer was shown to be reasonable from the preliminary evaluation of performance indicators. Other evaluations (including no TAC change constraints) also achieved the same conservation goals but resulted in higher inter-annual catch variability.

121. Given that the full MSE remains incomplete, the SC **recommended:**

> continuing with the adjusted "Annex K" as the interim management procedure (attached to this report with adjusted Annex K as Annex 12).

122. For advice, many SC Members noted that the 15% increase constraint should be applied to the 2025 SC catch advice. This would result in advice that the 2026 TAC be at or below 1,642.2 kt. These Members felt this was consistent with the interpretation of how Annex K was to be applied.

123. Chile agreed with applying this MP but differed in the interpretation. Namely, that this would be a 15% increase in the TAC established by the Commission for 2025. This results in catch advice of 1,785,375 t. They further noted that this matches the approach taken by the SC in 2024, when it recommended a 15% increase in the 2023 TAC, which was established by the Commission as a 20% increase over the 2022 TAC. They further noted that a TAC of 1,642,200 t corresponds to only a 5.78% increase over the 2025 TAC established by the Commission.

124. These TAC amounts apply throughout the range of jack mackerel. The SC **noted** that this level of catch was estimated to be about equal to the effort (F) estimated for 2025. This advice is also independent from alternative stock structure hypotheses.

125. Chile noted that the update of the information and the estimation model confirms that the stock is in a healthy condition with spawning biomass well above BMSY and in the green zone of the Kobe plot. Chile emphasized that precautionary assumptions were incorporated into this year's JJM model, including greater flexibility in selectivity, the explicit inclusion of a low productivity period (2000–2022) in the stock–recruitment relationship, corrections to the offshore fleet index, and the removal of early years of the northern Chile acoustic survey to reduce uncertainty. For projections, recent selectivity was replaced by a 15-year average, resulting in a lower MSY and more credible estimate than in the previous assessment. Chile also cautioned that sensitivity analyses of alternative indices should be interpreted carefully, as they reflect different type of sources (i.e. scientific surveys and commercial fleet operation), spatial coverage, time series, and age compositions, which could lead to misinterpretation of uncertainty.

126. The SC **noted** that under most catch scenarios evaluated at fishing mortality levels similar to those observed in recent years, catches are expected to show a continuous increase after 2025 (Table 1).

127. In summary,

> the **SC lacked consensus and provides the two aforementioned approaches**:
>
> - that the 2026 TAC be at or below 1,642.2 kt, (15% increase over the 2025 SC catch advice)
> - that the 2026 TAC be at or below 1,785.4 kt, (15% increase over 2025 TAC).

Table 1. Catch scenarios from the 1-stock assessment model.

Multiplier of F_{2025}	B_{2027}	$P(B_{2027} > B_{MSY})$ %	B_{2031}	$P(B_{2031} > B_{MSY})$ %	B_{2035}	$P(B_{2035} > B_{MSY})$ %	Catch 2026 (kt)	Catch 2027 (kt)
0	17086	100	18158	100	17829	98	0	0
0.75	14684	99	12489	87	11234	73	1292	1446
1	14056	99	11511	80	10272	64	1673	1766
1.25	13494	97	10733	72	9524	55	2032	2031
FMSY	12952	97	10048	64	8876	47	2395	2266
ADV2025	14439	99	11583	81	10318	65	1428	1679
ADV2025 x1.15	14083	99	10984	75	9741	58	1642	1874
TAC2025 x1.15	13851	98	10613	71	9388	54	1785	1997

128. The SC **recommended:**

> that the Commission may consider **limited banking and borrowing provisions (±10%) as part of the interim measure**, with the understanding that such provisions would be more fully reviewed in the development of a candidate MPs. This was also considered acceptable because the stock(s) appear(s) to be well above Bmsy.

g. Other advice to the Commission on jack mackerel

129. The SC noted proposals (SC13-DW08, co-authored by Peru, Chile and ACAP) to update the Seabird CMM and the Data Standards CMM (CMM 09 and CMM 02) in line with ACAP best practice. Recommendations for purse seine focus on research and potential mitigation development, while regulatory changes are proposed for trawl fisheries. The SC **agreed** to acknowledge these issues and cross-reference them under CMM 02.

5. Deepwater

a. Review of inter-sessional activities

130. The Chairperson of the DWWG reported that there were no formal inter-sessional activities of the DWWG during 2024-25, but, as usual, many of the papers for consideration under these agenda items were prepared through the New Zealand run South Pacific Working Group, which other SPRFMO Members were welcome to join.

131. The DWWG held one in-person meeting prior to SC13 to consider the papers as well as one exploratory fishing proposal (to be considered under agenda item 8b). The DWWG consideration of each of these papers were presented under the relevant agenda item.

b. Deepwater assessments (Orange roughy, stock structure, ecological risk, data)

Ecological risk assessment of teleost and deepwater chondrichthyans

132. Australia presented SC13-DW03 which provides an ecological risk assessment (ERA) for SPRFMO demersal teleost's and deepwater chondrichthyans in the SPRMFO Area evaluated for bottom fishing as outlined in the SC workplan. It describes the results of the current Sustainability Assessment for the Effects of Fishing (SAFE) assessments for demersal trawl, longline and midwater trawl gear types and makes recommendations to the SC.

133. The European Union enquired about the reasons behind the low species identification. The Chairperson of the DWWG noted that the ERA used logbook data from Australia and New Zealand and that deepwater sharks are often difficult to identify to species level.

134. FAO noted that many FAO species distribution maps are considered legacy maps and not currently being updated or maintained, which could explain the discrepancies between the FAO maps and other mapping sources.

135. The FAO noted that the use of uncertainty introduced into risk assessments through the use of higher taxonomic level FAO ASFIS codes for catch reporting of deepwater chondrichthyans. This issue had been highlighted in the DSF Project and work was underway to develop guidance to RFMOs on the most appropriate ASFIS codes to use in catch reporting, acknowledging the need for realistic expectations of species-level identification.

136. The SC **noted**:

- that 43 chondrichthyan species were considered to be at high or extreme vulnerability by the SAFE to at least one gear using at least one mapping source.
- that improvements to species identification and logbook reporting will assist future refinement of SAFE ERA species list(s) for teleosts and chondrichthyans.
- that many teleosts and chondrichthyan species are recorded at a higher taxonomic resolution (e.g. genus or family) in logbooks, which increases the uncertainty in developing the species list for SPRFMO demersal fisheries.
- that the SAFE ERA results are highly sensitive to the assumed predicted spatial distribution of the teleost and chondrichthyan species being assessed, which varied across mapping sources (FAO, AquaMaps and IUCN) for the same species. At this stage it is unclear why these differences occur.
- that commercially targeted species such as blue eye trevalla and hapuku are considered vulnerable to longlining.

137. The SC **recommended**:

- that identification protocols, logbook reporting and biological data collection for deepwater chondrichthyans and teleosts be reviewed and improved for SPRFMO demersal fisheries.
- that historical catch data be incorporated into existing spatial distribution maps in the SPRFMO area for species identified as highly or extremely vulnerable, where available, for predicting the distribution of these species, as well as to validate species distributions from available mapping sources.
- that Australia work with New Zealand to (i) refine the species list for chondrichthyans in the SPRFMO area based on known biological and life-history information and (ii) review the suitability of underlying distribution mapping data from FAO, AquaMaps and IUCN for chondrichthyans in the SPRFMO Area.
- that SC consider further assessment options for blue eye trevalla and hapuku, including investigating the feasibility of undertaking a standardized catch per unit effort (CPUE) for the longlining fishery for these species

138. The SC further **recommended**:

- that the SPRFMO Secretariat liaise with FAO, AquaMaps and IUCN to ensure that existing historical catch data of vulnerable chondrichthyans, teleosts and commercially important invertebrates are being included in their models to inform the predicted distribution of these species. The SC noted that the FAO maps are a legacy product that are no longer being updated.
- that the Commission give consideration to prohibiting the use of wire trace on longlines.
- that the Commission give consideration to encouraging or requiring that deepwater sharks brought to the boat alive, are returned to the water.
- that the Commission tasks the SC to develop a protocol for releasing sharks alive.

139. ECO-NZ and DSCC welcome the risk assessment for teleosts and chondrichthyan carried out by Australia and the risks identified for orange roughy, blue-eyed trevalla and hapuku, and the identified high or extreme vulnerability chondrichthyan species. The groups welcome the recommendation for assessments for hapuku and blue-eyed trevalla. The groups endorse the recommendation to ban wire traces in longlines to reduce shark captures.

c. Orange Roughy catch limits

140. The SC **noted** that CMM 03a-2025 (paragraph 6) currently contains TAC for orange roughy for 2023, 2024 and 2025 in the Tasman Sea and Louisville Ridge areas and the SPRFMO Commission will need to revise the CMM at COMM 14 with TACs for 2026 and beyond for these areas.

141. The SC **noted** there have been no updated orange roughy assessments for the Tasman Sea and Louisville Ridge areas since SC10 in 2022. The DWWG recommended therefore that the SC10 advice in relation to these areas (SC10 110-115) be maintained.

Table 1. **SC10 recommendations** on TACs for orange roughy stocks
(*Modified from Table 10 in SC10-DW01_rev1*)

Area	TAC Range (t)
Louisville Ridge Central	305-334
Louisville Ridge North	116
Louisville Ridge South	145-160
West Norfolk Ridge	44
Lord Howe Rise	160-174
NW Challenger	131-160

142. The SC **noted** that there had been no catches in the Louisville Ridge area since the last assessment and 85t in the Tasman Sea area (SC13-Doc27).

143. The SC **noted** that CMM 03a-2025 (paragraph 35) states that the 0 TAC for the South Tasman Rise FMA be reviewed at COMM14 in 2026. The DWWG noted there has been no new information about this stock and the SC recommended to maintain the current 0 TAC for the South Tasman Rise FMA.

144. The SC also **noted** that CMM 03a-2025 (paragraph 35) states that the Westpac Bank TAC should be reviewed at the SPRFMO Commission meeting in 2026 but that a TAC of 177t for 2026 has already been set. The SC also noted that SC had considered this issue in detail at SC12 (SC12-Report, 145-155). The SC also noted that COMM13 had added an item to the SC multiannual workplan to investigate the stock structure of orange roughy on the Westpac Bank and adjacent New Zealand EEZ during 2026.

145. The SC **recommended**:

> that no changes are made to the Westpac Bank TAC until the stock structure work is presented in 2026.

146. The SC **noted** there had been 253t of catch on Westpac Bank in 2024 (SC13-Doc27).

147. The SC **noted** that if the above advice is adopted, then no changes to the TACs currently outlined in CMM 03a-2025 would be required.

148. The DSCC and ECO-NZ expressed concern that given the absence of new stock assessments that the current orange roughy catch limits are not precautionary. They stated that orange roughy fisheries have a history of over-optimistic stock assessments that are over-turned as new information comes available which result in large reductions in catch limits. They pointed to recent assessments in New Zealand orange roughy fisheries as further underlining the vulnerability of orange roughy stocks to overfishing resulting in the loss of spawning aggregations including in the Southwest Challenger fishery. The groups recommended to the Commission that the Volcano seamount on the Westpac Bank in SPRFMO be closed to bottom fishing as the only observed spawning aggregation for the SW Challenger straddling stock. They recommended that the SC consider precautionary catch limit reductions to minimise the risk of over-fishing orange roughy until there are new stock assessments to inform precautionary catch limits.

149. The HSFG noted that the SPRFMO orange roughy fishery is very small and occasionally fished. They stated that it is known that this stock is data limited due to the small amount of fishing effort and consequently, catch limits were set with a high degree of caution. They pointed to the meeting report from the SC reviewing the assessment which noted the limits were "conservative". Over the last 5 years 10% of the TAC has been caught and the current settings are already highly precautionary.

150. New Zealand noted that a stock assessment for the Westpac Bank straddling stock had been presented to SC in 2024 (SC12-DW05 and SC12-DW06).

d. Benthic bycatch ID and catchability

151. The Chairperson of the DWWG noted that there were no new papers presented to the SC13 directly on the benthic bycatch ID and catchability.

152. In the discussion in relation to the encounter review (SC13-DW09), the DWWG discussed the need to improve identification of VME indicator taxa even when they are caught in events that do not meet the encounter threshold.

153. The SC **recommended:**

> that methodologies for collection and identification of benthic bycatch species should be updated and improved including further work on the VME taxa ID guide for benthic bycatch and sampling for further analyses.

154. New Zealand reminded the SC that they had presented a paper about encounter thresholds to the SPRFMO Commission meeting earlier in the year. In relation to this, the SC noted that given the lack of new relevant data since 2021, the advice contained in SC9-DW10 (Updated Candidate Encounter Thresholds for VME Indicator Taxa in the SPRFMO Area) remains the best available science to inform thresholds and levels of risk for VME indicator taxa.

155. The DSCC and ECO-NZ noted that the Convention requires a precautionary approach to be applied and any encounter limits should be based on the best scientific data. They urged that scientific work on VME indicator taxa catchability be progressed before any encounter threshold limits are reviewed.

e. Encounters with VMEs

156. New Zealand presented SC13-DW09 that provides a Member review of the vulnerable marine ecosystem (VME) encounter that occurred in 2024 on a New Zealand flagged vessel that was bottom trawling in the Central Lord Howe Rise Fishery Management Area. Following guidance in the SPRFMO Encounter Review Standard (ERS), the review provides a detailed description of the encounter and suggests management actions to prevent significant adverse impacts (SAIs) on VMEs to meet requirements of CMM 03-2025. Due to the lack of observational data from within the encounter area, New Zealand's review is based on an 'indirect approach' and makes use of the best available information, including information on the geomorphology and biogeography of the Lord Howe Rise, historical VME indicator taxa bycatch data, habitat suitability index models and abundance models for VME indicator taxa, historical benthic invertebrates records and a quantitative benthic impact assessment. The review suggests the presence of a VME in the encounter area and nearby areas, but this cannot be categorically stated as definite VME presence. However, direct assessment data has since become available, including high-resolution video and imagery footage collected by a remotely operated vehicle and tow/drop camera system within the encounter area, which was not accessible at the time New Zealand conducted its review.

157. Considering that new direct assessment data can be integrated with the indirect assessment data presented in this Member review to represent the best available scientific information, New Zealand deferred proposing management recommendations to the SC until direct observational data from within the encounter area is received, allowing for sufficient time for an independent analysis, Member review and for this to be presented to the SC in 2026. This will allow that management recommendations are based on the most accurate and comprehensive information available.

158. Before considering the recommendations contained in DC13-DW09, Greenpeace presented SC13-Obs02 to the DWWG which outlined an expedition that included taking video footage of the encounter area by vessel Seaworker, amongst other areas. Greenpeace noted that some of the footage from the encounter area had been reviewed and annotated by experts contracted by Greenpeace.

159. Greenpeace undertook to make the completed analysis available to SC14 and also stated that all the video footage would be available to SPRFMO Members on request by contacting voyage leader Ellie Hooper.

160. The DWWG thanked Greenpeace for the summary of the video footage and welcomed their offer to supply data and video footage to Members for analysis. The SC noted that there was insufficient information available at this meeting to incorporate the video footage into advice to the SPRFMO Commission at this time.

161. The Chairperson of the DWWG thanked New Zealand for their comprehensive work on the encounter review and the presentation.

162. The SC **noted**:

- that New Zealand provided a comprehensive Member review of its 2024 encounter using best available indirect assessment data at the time, which meets the SPRFMO ERS requirements as per paragraph 32 of the CMM 03- 2025.
- that the Member review is based on an indirect assessment rather than a direct assessment of potential VME presence and SAIs, and that direct assessments provide the most robust information for identifying VMEs and SAIs and are the preferred assessment approach.
- that direct assessment data has since become available, which was not accessible at the time New Zealand conducted its Member review.
- that New Zealand defers proposing management recommendations to the SC until direct observational data from within the encounter area is received, allowing for sufficient time for an independent analysis, Member review and for this to be presented to the SC in 2026, ensuring that management recommendations are based on the best available information.

163. The SC considered this Member review to develop its advice to Commission on management actions to prevent SAIs on VMEs, in accordance with the requirements of the SPRFMO ERS.

164. The SC **noted** that the area of the encounter is provided to Members but is not made available to the broader community which has the potential to restrict observations by non-Members. The SC felt there would be some utility in making VME encounter notifications available to SPRFMO Observers.

f. CMM 03 request regarding encounters with VMEs

165. The Chairperson of the DWWG noted that no additional papers were presented on this agenda item and all discussion in relation to this agenda item occurred under agenda item 5d.

g. Bottom Fishery Impact Assessment

BFIA

166. New Zealand presented a paper (SC13-DW11) that provides a review of the SPRFMO Bottom Fishery Impact Assessment Standard (BFIAS). The review considers the overarching objectives and intent of bottom fishery impact assessment and the BFIAS and how these relate to measures (e.g., CMMs) and other instruments (e.g. stock assessment framework, methods to assess cumulative impacts etc.) implemented in SPRFMO since the last revision of the standard was adopted in 2019.

167. The SC noted that the New Zealand review concluded that:

- The BFIAS has very little ecosystem-based fisheries management (EBFM) framing, including no specific requirement for undertaking analyses that promote understanding or assess impacts at an ecosystem level (e.g., trophic modelling). The BFIAS approach is indirect and focused on a few components of the ecosystem. The future revisions should ensure there is coverage of all components and include the linkages between components subject to sufficient data from the SPRFMO Convention Area, which would be more in line with an ecosystem approach.
- Assessment of cumulative impacts is included in the BFIAS, but the focus has been on serial assessment of impacts to different components of the affected system (e.g., fish, bird and shark bycatch, VMEs), and not all ecosystem components have been assessed. The BFIAS does not include any requirement for assessment of climate change impacts (e.g., warming, acidifications, deoxygenation), secondary impacts, interactions between cumulative impacts, or standardised methods to assess cumulative impacts. However, it was noted that currently there are limited data from the SPRFMO Convention Area to undertake studies of these important impacts, but some forms of useful analyses are possible with the available data.
- Definitions of VMEs, SAIs, and questions of scale were all unresolved issues in the 2019 BFIAS and remain so now. Future assessments under the standard should clearly state definitions and scales applied, using multiple options where possible.

168. The SC noted that based on these conclusions a number of changes to the BFIAS have been suggested and these have been included in a track change version of the existing BFIAS (SC13-DW11.1).

169. The Chairperson of the DWWG thanked New Zealand for the considerable amount of work into the review of the BIFA standard.

170. The SC **agreed** that a comprehensive and inclusive process of revising the 2019 version of BFIAS has been undertaken through the SPACWG and the current covering paper takes into account all feedback received from stakeholders.

171. The SC **noted** that there are unresolved issues regarding the definitions of SAIs and VMEs, and relevant questions of spatial scale left since the 2019 BFIAS revision.

172. The SC **agreed** that the revised BFIAS be used to inform the next revision of the cumulative BFIA to be undertaken by Australia and New Zealand by 2027.

173. The SC **recommended to the Commission**

> that the revised 2025 BFIAS with the current revisions and editions (SC13-DW11.1) be adopted for any relevant BFIA processes undertaken in accordance with CMM 03-2025 and CMM 13-2024.

174. The SC **noted** that the future revisions of BFIAS should take into account all ecological components and climate change impacts addressed subject to sufficient data from the SPRFMO Convention Area

175. The SC **noted** that the BFIAS may need to be updated in future to take into account obligations arising out of the soon to enter into force BBNJ Agreement.

176. DSCC and ECO-NZ encouraged Members to take into account ecological components and climate change in their SPRFMO BFIAs.

Bioregionalisation

177. The SC noted that New Zealand presented paper SC13-DW10 to the DWWG, which outlined the validation of the bioregionalisation for Vulnerable Marine Ecosystem (VME) indicator taxa previously reported to the SC (SC12-DW11_rev1). This work has been undertaken in response to the discussions held during the 12th Meeting of the SC in Lima, Peru. These discussions established a need to investigate whether bioregions for VMEs may provide an additional spatial scale appropriate for evaluating the performance of spatial measures. Thus, it was recommended that "until enough data are available to demonstrably improve the bioregionalisation, independent statistical validation of the bioregionalisation should be conducted to inform its utility for management" (SC12-Report 15Nov2024).

178. The paper outlined three approaches to the validation:

- Approach 1: Classification strength and compositional turnover-based validation of the bioregionalisation using independent data
- Approach 2: Connectivity-based validation of bioregionalisation using particle tracking models
- Approach 3: Comparative classification strength and characterising taxa-based validation of the bioregionlisation using independent data

179. New Zealand concluded that the results of the validation exercise conducted here have provided evidence sufficient to demonstrate the validity of the South Pacific VME Bioregionalisation. That is, the ecological meaningfulness of the bioregions has been supported by all three validation approaches, and as such the availability of the South Pacific VME Bioregionalisation provides an ecologically relevant spatial scale for assessing the efficacy of the current spatial management measures. For example, an assessment can be made to test if there is adequate representation of bioregions captured by the spatial management measures, something that is typically done to design or assess the effectiveness of marine protected areas (Grorud-Colvert et al. 2021).

180. There was discussion at the DWWG about how most of the data driving the bioregionalization was taken from video samples inside the New Zealand EEZ and concerns about the shortage of high seas data in the study. The authors acknowledged this weakness and noted that the results would be improved by analysing more video data especially from the high seas area. It was also pointed out that analysing more video data from areas of poor environmental coverage would also improve the results.

181. The SC **noted**:

- that three appropriate, complementary methodological approaches have been used for validating the South Pacific VME Bioregionalisation.
- that a particle tracking model has been developed for the study area, and that this model could be developed further for future bioregionalisation validations, or for specific investigations of larval dispersal or habitat connectivity of VME indicator taxa in the SPRFMO Evaluated Area.
- that the imagery data used for the validations in this study represents a valuable resource, and that additional collection of image data or analysis of unanalysed imagery could increase the value of this resource for further development and validation of abundance models for VME indicator taxa so that they can be used for future development of the bioregionalisation. Priority should be given to those sites in the SPRFMO area and those areas with poor environmental coverage in the existing data set.

182. The SC **agreed** that the bioregions as identified by the South Pacific VME Bioregionalisation represent an ecologically meaningful spatial scale for VME indicator taxa.

183. The SC **recommended**:

- that the bioregions be considered for inclusion in upcoming Bottom Fishery Impact Assessments as an additional spatial scale for benthic impact assessments, to complement, but not replace, management scales (i.e., FMAs) used as appropriate spatial scales for evaluating the performance of spatial management measures.
- that work is undertaken to improve the particle tracking model described in this study to fully operationalise it for various connectivity modelling investigations, including, but not limited to, further exploration of connectivity within and between bioregions and potential temporal signals resulting from El Niño–Southern Oscillation (ENSO) cycles.
- that further work be undertaken to investigate connectivity amongst geographically separated areas of the same bioregion.

h. CMM 03 request regarding marine mammals, seabirds, reptiles and other species of concern

184. The SC **noted** that CMM 03 requires these updates be provided every two years and an update was provided at SC12 (SC12:194-195).

185. New Zealand presented the aspects of SC13-DW08 that related to deepwater fishing methods. The paper reviews the SPRFMO conservation measures for seabird bycatch mitigation (CMM 09-2017) and data standards (CMM 02-2025) against best practice advice developed by the Agreement on the Conservation of Albatrosses and Petrels (ACAP). The paper proposed specific changes to CMM 09-2017 and CMM 02-2025 to strengthen alignment with ACAP advice. The proposed changes to conservation measures primarily affect SPRFMO's demersal longline and trawl fisheries, while the paper also suggested further work and research to support the development of seabird mitigation measures in other SPRFMO fisheries including purse seine and jig fisheries

186. The SC **noted**:

- that the proposed changes to CMM 09-2017 Minimising Bycatch of Seabirds in the SPRFMO Convention Area and CMM 02-2025 Data Standards presented here align with best practice as advised by the Agreement on the Conservation of Albatrosses and Petrels (ACAP);
- that work is proposed here to further develop seabird mitigation methods and specifications for demersal longline, trawl fisheries, purse seine and jig fisheries (see Table 1).

187. The SC **agreed**:

- to encourage SPRFMO Members and CNCPs to support research and reporting on related to seabird interactions, including the development of bycatch mitigation methods and specifications, as described in the work plan.
- to encourage SPRFMO Members and CNCPs to report seabird related data, including seabird abundance counts, to the Secretariat and to support research into assessing the risk to seabirds posed by fishing effort in the SPRFMO Convention Area.

188. The SC **recommended**

> that the Commission:
>
> - adopt of the changes proposed here to CMM 09-2017 Minimising Bycatch of Seabirds in the SPRFMO Convention Area and CMM 02-2025 Data Standards (see Annex 23).
> - task the Secretariat to summarise and characterise data related to seabird interactions, including bycatch, held by the Secretariat and to work with interested Members and ACAP to identify any future potential improvements to data collection and reporting processes.

189. The SC noted that SC13-DW08 made various suggestions related to research on seabird bycatch and mitigation for other fishing methods, which were addressed through inclusion of a number of new items in the Multiannual Workplan (Annex 7)

i. CMM 03 request regarding ongoing appropriateness

190. The SC noted that there were no papers on this item this year.

j. Deepwater WG Terms of Reference

191. The SC **adopted** the Deepwater Group terms of reference (SC13-WP04; ref Annex 14).

k. Advice to the Commission on Deepwater

192. In relation to Deepwater items the SC **recommended:**

> that the Commission:
>
> - give consideration to prohibiting the use of wire trace on longlines.
> - give consideration to encouraging or requiring that deepwater sharks brought to the boat alive, are returned to the water.
> - tasks the SC to develop a protocol for releasing sharks alive.
> - adopt the revised 2025 BFIAS, with the current revisions and editions (SC13-DW11.1) approved by the SC, for any relevant BFIA processes undertaken in accordance with CMM 03-2025 and CMM 13-2024.
> - adopt the changes proposed to CMM 09-2017 Minimising Bycatch of Seabirds in the SPRFMO Convention Area and CMM 02-2025 Data Standards (see Annex 23).
> - task the Secretariat to summarise and characterise data related to seabird interactions, including bycatch, held by the Secretariat and to work with interested Members and ACAP to identify any future potential improvements to data collection and reporting processes.

6. Squid

a. Review of inter-sessional activities

193. The list of intersessional activities carried out by the Squid Working Group were reviewed, and the relevant content of SC13-Doc06 was noted. This included two meetings where the following topics were discussed: updates on genetic studies, progress on biological sample collection, and the DNA sequencing protocol. Also mentioned were updates on stock assessment, fleet definition, and fishing seasonality.

b. Assessment Simulation Task Team (ASTT)

194. The Chairperson of the SC suggested that the ASTT's work should be extended, as it is expected to conclude next year. He emphasized the importance of the group and its work for the subsequent management of the fishery.

195. Chile made a presentation "Matrix Operating Models for Jumbo Squid Fisheries in FAO Region 87." The topic deals with the matrix of variables incorporated into SQUIDSIM, in this case the morphotype and fleet variables. This modelling study applies a matrix approach to explicitly incorporate the connections between phenotypes. The model is still under development, with ongoing work focusing on estimating larval survival probabilities by state and their relationship with environmental variables (e.g., sea surface temperature in the El Niño 1+2 region). Future developments will also include consideration of sex, the use of a Gompertz growth model, and implementation of a Shepherd stock–recruitment model. The presenter highlighted the importance of addressing observation errors, particularly in relation to data used in stock assessment models.

196. The Chairperson of the SC reaffirmed the importance of this modelling approach, which captures the complex nature of jumbo squid and provides tools to progress towards the implementation of management measures. The SC welcomed the expectation that an operational model could be available before the next SC meeting and noted the willingness of Peru and Ecuador to collaborate by contributing information to strengthen the parameterisation of this operating model.

c. Genetics and connectivity research

197. Chile presented document SC13-SQ03 on the new reference genome of jumbo flying squid (*Dosidicus gigas*), assembled using a hybrid sequencing strategy that achieved chromosome-scale resolution and high completeness. This resource provides a solid basis for low-coverage whole-genome sequencing (lcWGS), enabling population genomics studies to address questions of stock structure and connectivity across the species' range.

198. Chile presented document SC13-SQ05 on the genetic diversity and population structure of jumbo flying squid (*Dosidicus gigas*) along the Chilean coast, based on genome-wide SNPs. Results indicated no significant spatial differentiation, supporting the presence of a single population, while weak temporal differences were associated with environmental variation. These findings reinforce the hypothesis of one genetic stock on the coast of Chile, relevant for fishery management.

d. Standardise biological sampling

199. The SC noted ongoing work to develop a standardised form for collecting biological information, with data differentiated by phenotype and area. The form will include fields for size, sex, sexual maturity, number of samples, and geographic coordinates. It was further highlighted that the establishment of morph types and the corresponding measurement standards will be defined in advance to ensure consistency across datasets.

200. During the discussion, clarification was provided on sampling design and morphotype classification. It was explained that to minimise size overlap among phenotypes, samples were restricted to females in advanced maturity stages, with size classes defined on a centimetre scale following published work by Peruvian scientists. While the number of samples was relatively small, this was appropriate for the genetic analyses undertaken and considered sufficient per area.

e. Assessment progress and CMM development

201. Chile presented document SC13-SQ08 on the jumbo flying squid (*Dosidicus gigas*) fishing season in Chilean waters from January to July 2025. Detailed catch and size-structure data were provided by fleet type, week, month, and region. While the stock had been expected to remain in good condition based on 2024 models, catches declined in 2025, particularly in Region VIII, likely due to a spatial shift of the resource toward Region VII, where catches increased. The industrial fleet also reported lower bycatch in the hake fishery in Region VIII, although overall fishery distribution remained unchanged. No significant changes in size distribution were observed between 2024 and 2025. CPUE was generally similar to 2024, but a decrease was noted from week 15 onwards, with more variability in hake bycatch than in artisanal fisheries. The resource distribution was linked to environmental conditions, including El Niño, highlighting the importance of in-season assessments. Looking ahead, the SC noted that integration of Peruvian data by 2026 could improve monitoring of environmental influences and help explain movements and size-structure changes in the stock.

202. During the discussion, New Zealand supported the proposal for in-season monitoring and recommended that Members provide similar reports in future, including both catches and spatial size structure of jumbo flying squid, ideally in English and Spanish. CALAMASUR emphasised the importance of analysing the relationship between squid size and environmental conditions to understand changes in distribution. Chile noted that such reporting has been conducted in previous years and suggested that a more complete report could be produced for the next season.

203. The SC received a presentation (SC13-SQ06) from Chile on updates to the SPiCT model applied to jumbo flying squid (*Dosidicus gigas*) in FAO Area 87. The update incorporated six abundance indices and extended the use of data from two years prior to one year prior, addressing challenges with timely data. The model that best fits the data (model run 7) suggests that the stock was overfished in 2024, with declines in biomass consistent with reported decreases in catches: 50% in the SPRFMO area, 70% in Peru, and a 10% increase in Chile, indicating potential impacts on size composition in the following year. Recovery is projected within 1–3 years, although uncertainties remain due to multiple morphotypes. Chile acknowledged the contribution of the Chinese delegation, which provided a more comprehensive time series that improved the indices.

204. During the discussion, New Zealand suggested including squid age in future models, noting that only the large morphotype is present in Chile, while Peru has multiple phenotypes. Chile indicated that morphotypes are currently assumed to be mixed, but agreed that it would be helpful, particularly with more precise data from Peru and China. Peru confirmed its commitment to report on its fisheries and collaborate on assessment and monitoring tools, noting the importance of explicitly considering environmental impacts such as El Niño on resource availability. The European Union and CALAMASUR highlighted the need for standardised abundance indices and to consider information like CV to improve index utilisation, while China proposed combining indices and using different indices for artisanal and industrial fleets. Chile agreed that different indices for each fleet type and area would provide the best approach.

205. China presented (SC13-SQ07) on the assessment of jumbo flying squid in the Southeast Pacific Ocean using a state-space biomass dynamics model that incorporates environmental variables. Seven production models were presented, using different CPUE indices and including catches from Chile and Peru, as well as different size structures. The best-performing model explicitly parameterised carrying capacity and intrinsic growth rate based on environmental factors such as El Niño/La Niña indices, SST, SSS, Chla, latitude, and longitude. Results suggest that La Niña events are associated with higher carrying capacity and El Niño events with lower capacity. Fishing mortality in 2012 was estimated to be higher and close to FMSY by the environment dependant model, indicated that instaneous growth rate was highly sensitive to El Nino. The fishing mortality in 2024 was estimated to be decreased, contributing significiantly to the observed decline in catchability.

206. During the discussion, New Zealand asked which environmental parameters had been incorporated; and China confirmed the inclusion of El Niño and La Niña indices (1+2). The Chairperson suggested moving towards monthly parameterisation of environmental effects to improve estimates. Chile noted that adding environmental variables did not substantially change model outputs and queried the contribution of each parameter. China clarified that interacting parameters, such as El Niño with temperature, were excluded. Calamasur questioned why La Niña was associated with lower carrying capacity, and China explained that years with El Niño typically show lower carrying capacity than La Niña years, reflecting the relationship between carrying capacity and intrinsic growth rate.

207. CALAMASUR submitted SC13-Obs03 on the regional stock assessment of jumbo flying squid, applying multi-annual, multi-fleet generalized depletion models combined with an environmental surplus production model for the period 1990–2024. This approach incorporates time-varying production parameters linked to El Niño–La Niña variability and uses catch, effort, and mean weight in the catch from the Chilean, Peruvian, and Asian fleets operating in the high seas. Results from the depletion model show relatively high but stable exploitation rates of about 20–30%, remaining below unsustainable levels (F < M). The surplus production model indicates that the stock is more unstable during El Niño years and has recently experienced a substantial decline in biomass, leading to low Asian and Peruvian catches in 2024. CALAMASUR made a statement (Annex 27).

f. Squid WG Terms of Reference

208. The SC approved the Terms of Reference for the Squid Working Group (SC13-WP05), including the addition of in-season monitoring to the first objective.

g. Advice to the Commission on Squid

209. The Scientific Committee **noted**:

210. The availability of data for stock assessment is a major challenge, particularly in terms of timeliness, with the result that stock assessment and the provision of management advice lag behind the needs of the fishery;

211. That progress has been made in the development of an operating model (SQUIDSIM, Annex 24), and this seems particularly useful given the complexities presented by phenotypic variability;

212. That progress had been made in genetics studies for jumbo flying squid.

213. The SC **agreed**:

- to share data in support of the stock assessment of jumbo flying squid, including data that coastal Members would contribute voluntarily (Annex 26).
- to provide a single template for data collection to implement the stock assessment methods currently in use.
- to reinforce squid stock assessment–related research,
- to include new activities in the multiannual workplan and to allocate the Scientific Support Fund (SSF) surplus to these activities.
- on the need to reinforce research on jumbo flying squid.

214. The SC **recommended:**

that the Commission

- **Endorse** the squid tasks and activities in the multi-annual workplan
- **Note** the progress made in SC13 towards delivering future squid fisheries management advice
- **Note** the commitment of coastal Members to voluntarily contribute data for stock assessment

7. Ecosystems

a. Review of inter-sessional activities

215. The EWG's multiannual work plan was reviewed, with progress noted on several tasks as reflected in the documents submitted to SC13, although many could not be presented due to the absence of their authors. The SC recognised that challenges remain in advancing work on non-target species and in integrating databases to support collaborative efforts. The EWG Chairperson also reviewed and provided comments on upcoming activities related to the tasks in the multiannual work plan.

216. China presented document SC13-04, which examined the influence of mesoscale eddies on the habitat and abundance of jumbo flying squid (*Dosidicus gigas*) off Peru. Using eddy-centric analysis and a habitat suitability index model, the study found that anticyclonic eddies provided more favourable temperature conditions and supported higher squid abundance compared to cyclonic eddies, where suitable habitats were limited to the periphery. The results highlight the key role of mesoscale processes in shaping squid distribution in the Humboldt ecosystem.

217. Chile presented document SC13-SQ02, which reported results from the jumbo squid Biological Study Program in Chile, funded by UNDP and implemented by IFOP. The study used satellite tagging (MiniPAT-390-B) to investigate horizontal and vertical migratory patterns of *Dosidicus gigas*. Four individuals were tagged in the Coquimbo and Biobío regions, with data retention ranging from 4 to 8 days and maximum recorded depths of 422–704 m. The results showed diel vertical migrations, with squid occupying surface waters at night and deeper, cooler, low-oxygen waters during the day. These patterns are likely related to feeding, predator avoidance, and the search for favourable oceanographic conditions.

218. The SC discussed the results, noting progress in the study of jumbo squid habitat preferences and requesting clarification on the habitat products used, to enable comparison with those being developed by the Climate Change Task Team. The SC also emphasized the value of the tagging program for studying vertical and horizontal migrations, while recognizing that a larger sample size is required to obtain more conclusive results.

219. Chile presented document SC13-ECO02, which analysed habitat variability of Chilean jack mackerel in central-southern Chile from 2012 to 2025. The study found that fishing grounds remained relatively stable despite ENSO-driven anomalies in temperature, chlorophyll, and sea level, with long-term trends indicating cooler SST and higher productivity near upwelling centres. Size-specific patterns were observed, with smaller fish occurring further north in warmer, more productive waters, while larger fish concentrated in cooler southern areas, potentially associated with mesoscale oceanographic features.

220. These results were discussed extensively by the SC, noting that the study reflects the environmental conditions of fishing grounds based on fishing operations, but does not necessarily describe the full distribution of the jack mackerel population. The SC inquired about the size of the fleet operating in this fishery and was informed that 30 vessels are authorised, with approximately 10 active at a given time, providing temporal continuity in fishing operations. The SC highlighted the value of length-structured data collected onboard and emphasized that the findings may help explain the movement of fish from south-central to northern Chile, revealing complex spatial dynamics throughout the year.

221. Peru presented document SC13-Eco03, which provided an update on habitat changes for jack mackerel and chub mackerel during 2024–2025. The analysis highlighted atypical southern distributions of both species under shifting oceanographic conditions, including temperature anomalies, the coastal La Niña event, and subsequent neutral phases. While salinity remained stable, other variables such as chlorophyll and sea surface temperature anomalies displayed unusual patterns. The study emphasized the need for further research on early life stages and recruitment processes.

222. Peru presented document SC13-Eco05, which reported recent positive trends in the biomass of Jack mackerel and mackerel, reaching estimated peaks of 215,000 and 80,000 tons respectively in March 2024. Higher biomass levels were generally associated with improved fishing yields. The analysis also showed that while juvenile Jack mackerel were frequently observed in earlier years, their incidence has declined since 2024, with fewer new size classes entering the fishery between 2023 and 2025.

223. Chile presented document SC13-Eco08, which summarised the work of the Habitat Monitoring Working Group (HMWG) since 2018. Using authorised fishing vessels as observation platforms, the group—now the Ecosystem Working Group (EWG)—has identified available vessels and technologies for ecosystem observation, as well as alternative multidisciplinary approaches to study phytoplankton, zooplankton, fish, and invertebrates in key areas of the South Pacific. The document highlighted submissions from 2019 to 2024, including the 2023 Concepción symposium, and outlined plans for a synoptic ecosystem survey to support climate change scenario modelling.

b. Special Issue of the Habitat Monitoring Symposium

224. The EWG Chairperson announced the launch of a Special Issue of the Habitat Monitoring Symposium, held in Concepción, Chile, in November 2023, to be published in Deep Sea Research II: Topical Studies in Oceanography. This Special Issue will provide an opportunity for peer-reviewed publications on ecosystem research conducted in the context of the SPRFMO SC. An open invitation was extended for article submissions, noting that contributions are not limited to studies presented at the symposium but may include any work aligned with this line of research.

c. Proposal for the Development of an Ecosystem Status Report in the SPRFMO Area and Adjacent EEZs

225. The EWG Chairperson presented document SC13-ECO10, which proposes the development of an Ecosystem Status Profile (ESP) for the SPRFMO Area and adjacent exclusive economic zones. The purpose of the ESP is to synthesize the best available scientific information on the condition and dynamics of ecosystems within the SPRFMO Convention Area and the areas of national jurisdiction of coastal states. It was emphasized that the development of the ESP should be a participatory process, with all delegations invited to contribute to its review and refinement. SC13-ECO10 is available as a Working Paper for review and modification by SC Members. The SC acknowledged the importance of developing the ESP within a collaborative framework and noted similar contributions by other regional bodies (e.g., Alaska). The delegations of Chile, China, and Australia expressed support for the initiative, and no delegations raised objections.

d. Species Distribution Metadata Task Team

226. The EWG Chairperson, on behalf of the Species Distribution Metadata Task Team (SDMTT) Chairperson, Criscely Luján (PER), presented document SC13-ECO01, which summarizes the findings of the SDMTT. The task team was established to support future species distribution modelling initiatives within the Ecosystem Working Group and the SC. Over the course of three meetings, it conducted a data inventory and identified key areas for improvement in species information collection. The document outlined the main findings and proposes a work plan for related activities. Recommendations include enhancing spatial and temporal data coverage, increasing the availability of information, and promoting collaboration between the Data Working Group and the Ecosystem Working Group to develop protocols that facilitate access to existing datasets.

227. At two consecutive SC meetings, the need for a data compilation workshop on chub mackerel (catch, spatial distribution, life history, and independent survey estimates) was recognized but not yet carried out, noting the availability of a European Union grant. The EWG Chairperson proposed aligning this with the SDMTT workshop on Species Distribution Models to address both objectives.

228. The SC Chairperson noted that activities on chub mackerel should first focus on compiling and understanding information on spatial dynamics as a basis for future stock assessment, and the SC agreed to conduct a joint workshop to address both the SDMTT recommendations and the prioritized activities for chub mackerel.

229. The European Union supported reallocating funds for the workshop (subject to confirmation by the financial authorities), and, following consultation by the EWG Chairperson, the Chilean delegation offered to organize the event, an offer welcomed and accepted by the SC.

e. Ecosystems WG Terms of Reference

230. The SC approved updated EWG Terms of Reference (ToRs), which were those adopted at COMM12 and amended to align the format with those of the other working groups.

f. Advice to the Commission on Ecosystems topics

231. In relation to Ecosystems items the SC **recommended**:

that the Commission

- **Adopt** the proposal for the development of an Ecosystem Status Report, aimed at providing the SC with an overview of ecosystem status at seasonal to decadal scales.
- **Endorse** and fund a workshop to define practical requirements and considerations for sampling approaches supporting priority topics in jack mackerel connectivity studies (genetics, tagging methods, early life stages, and reproduction), including potential iterative or annual adjustments to the sampling design.

8. Exploratory Fisheries

a. Exploratory Fishery updates (AUS, COK, EU, KOR, NZL)

232. Australia presented the results of the exploratory fishery in 2024 as outlined in SC13-DW02. Australia noted that Australian Fishing Vessel Antarctic Discovery conducted exploratory fishing in the Macquarie Ridge Continuation Research Block (MR-CRB) from 16-23 August 2024. Seventeen lines of approximately 5,000 hook each were set. A total of 4.68 tonnes of toothfish were caught, and the majority of the catch was Patagonian Toothfish (*Dissostichus eleginoides*), with one Antarctic toothfish (*Dissostichus mawsoni*) caught. Twenty-eight Patagonian toothfish were tagged and released (6 tags per tonne). Otolith and length frequency data were collected. No tagged fish were caught.

233. With the exception of tagged toothfish, no other catch was discarded or released. The major other species caught were hake and grenadiers. There was 19.8 kg of vulnerable marine ecosystems (VME) indicator taxa caught. There were no interactions with marine mammals, marine reptiles, seabirds or other species of concern.

234. Fishing was conducted in full accordance with Conservation and Management Measure (CMM) for Exploratory Fishing for Toothfish by Australia in the SPRFMO Convention Area (CMM 14f-2024).

235. Korea presented the preliminary results of their exploratory fishing carried out in 2025 as outlined in SC13-DW05. Korea noted the F/V Greenstar commenced the exploratory fishing activities from 14 May to 22 June 2025, utilizing a trotline system in the designated Research Blocks. The objectives of the exploratory fishing are 1) to determine the distribution and abundance of toothfish; 2) to better understand the stock structure of toothfish; and 3) to collect data on the spatial and depth distribution of bycatch species. According to the preliminary results, seven of the eight research blocks were surveyed with a total of 42 sets deployed. The total number of 162,180 hooks were used, resulting in a total catch of 19.06 tonnes of toothfish.

236. The SC noted that the summary of the European Union's exploratory fishing in 2024 was contained in SC13-DW06. The Chairperson briefly summarised the key facts of the report. Only Patagonian toothfish (TOP) was caught; no Antarctic toothfish (TOA) were caught in 2024. The TAC (Block A – 129t; Block B - 33t) was not achieved after fishing for approximately 5 weeks.

237. New Zealand presented the final results of their exploratory fishery from 2022-24 (SC13-DW07). New Zealand noted Between 2022 and 2024, New Zealand conducted exploratory fishing research in the SPRFMO Convention Area to study Antarctic toothfish (*Dissostichus mawsoni*) and Patagonian toothfish (*Dissostichus eleginoides*). This research aimed to improve understanding of the distribution, movement, spawning dynamics, and stock structure of these species, while contributing to CCAMLR stock assessment models. The studies were conducted under the framework of CMM 14a-2022, with strict conservation measures ensuring sustainability and minimal environmental impact.

238. The findings from 2022–2024 continue to confirm the Southern SPRFMO area as a spawning ground for Antarctic toothfish, with consistent observations of adult fish in pre-spawning or spent conditions. Toothfish tagging continued, providing data to support stock connectivity and migration patterns. Bycatch levels remained minimal, and benthic interactions were well below SPRFMO thresholds, in compliance with environmental regulations.

239. Environmental conditions varied across the three years, influencing fish distribution and catch rates. In 2024, the only late winter sampling, fish shifted from southern slopes to hilltops, reflecting changes in sea temperatures and currents.

240. The research highlighted discrepancies between observer-recorded maturity indices and gonadosomatic index (GSI), recommending GSI as a more reliable measure of reproductive maturity.

241. As this was the final New Zealand research programme in this eastern SPRFMO area, data from all trips conducted since 2016 have been included in some sections to provide greater context.

242. The comprehensive dataset from these efforts over the eight years of exploratory fishing by New Zealand highlights the wider geographic extent of Antarctic toothfish spawning, extending north of the SPRFMO-CCAMLR boundary at 60°S and has significantly advanced scientific understanding of toothfish biology and stock dynamics, providing a basis for future management and exploratory fishing efforts in the region.

243. The Cook Islands noted that due to operational issues there had been no exploratory fishing in 2024, but they anticipated exploratory fishing would commence shortly.

b. New exploratory fishery proposals

244. Ecuador presented their exploratory fishing proposal for toothfish. The proposal outlined an exploratory fishery for both species of toothfish in the entire southern area of SPRFMO for up to 600t per year. The proposed vessel is the FV Altar 45 of Trasmarina S.A. and will using the autoline bottom or Spanish long line fishing method.

245. The main objective of the exploratory fishery proposed by Ecuador is to contribute in a robust manner with information on the spatial distribution of Patagonian Toothfish (*Dissostichus eleginoides*) and Antarctic Toothfish (*D. mawsoni*), both in the extension of the proposed area and in depth, therefore, fishing is proposed at a depth of between 500 to 2500m, which is the known habitat in the different research campaigns in the SPFMRO and CCAMLR area.

246. The presentation outlined details about the proposed gear, observer coverage and tagging rates. Ecuador clarified that CCAMLR seabird mitigation measures would be employed.

247. Several CCPs raised concerns about the overlap of this proposal with the four existing exploratory fisheries for toothfish in SPRFMO. Ecuador clarified that because fishing wasn't planned to be held at same time as other fishing operations in this area it was okay. Several Members disagreed with this interpretation and Ecuador undertook to undertake further consultation on this issue.

248. Concerns were also raised about the level of the catch limit and the fact there are no spatial restrictions on where the catch could be taken. There was concern this could lead to localized depletion. Some delegations suggested that incorporated line spacing requirements outlined in the current exploratory fisheries.

249. Ecuador presented its revised Fishery Operation Plan (SC13-DW01_rev2) which introduced several significant changes aimed at strengthening its scientific and management contributions. The geographical scope now expands to FAO Areas 57, 81, and 87, excluding the EEZs of Coastal States Members, with operations scheduled for 2026–2028 across three full seasons. Fishing methods are diversified by including both Spanish-style bottom longline and automatic longline systems, with updated technical specifications covering line length, hook spacing, weights, and sinking rates. The plan sets an annual catch limit of 600 tonnes (green weight), distributed across three zones—250 tonnes each in Areas 1 and 2, and 100 tonnes in Area 3—with flexibility for reallocation based on bathymetric results. Scientifically, there is a stronger emphasis on stock structure and connectivity of *Dissostichus* spp., using genetic sampling (SNPs), enhanced biological data collection, and a tagging program aligned with CCAMLR protocols to ensure robust overlap. Bycatch controls are reinforced with stricter thresholds, new mitigation measures for seabirds, sharks, and rays, and reporting standards harmonized with SPRFMO and CCAMLR. Protection of Vulnerable Marine Ecosystems (VMEs) is expanded through detailed monitoring, mandatory relocation in case of excess bycatch, and integration of environmental data into predictive models. Coordination mechanisms with other Members are explicitly included to avoid overlaps, requiring prior sharing of entry, exit, and gear deployment information. Finally, the data collection framework broadens to fully comply with CMM 02-2025 Annexes 3 and 7, covering CPUE, sex ratios, age structures, genetics, otoliths, and tagging, with annual reporting during the campaign and final results due in 2029. Ecuador wishes to highlight that the observations previously raised have been duly addressed in this revised plan and respectfully requests that the SC consider it for its recommendation.

250. Several Members thanked Ecuador for these revisions. However, many Members maintained their concerns about the 600t of proposed catch and the large overlap with existing exploratory fisheries. These Member noted the requirements of CMM13 to work with other proponents to produce a single Fishery Operations Plan. These Members regretted they were unable to support the Ecuadorian proposal at this time but encouraged Ecuador to work with others and provide a revised proposal to SC14.

251. The delegation of Ecuador expressed its appreciation for the constructive comments and concerns raised by Members in relation to its proposal and noted the observations made. Ecuador underlined its confidence in the scientific value of its contribution to advancing knowledge on toothfish in the SPRFMO Area. It emphasised that, as a developing State, it may not have the same means and resources as other Members, yet this does not reduce its determination to engage responsibly in exploratory fishing and to broaden its scientific efforts. The delegation highlighted that the proposal reflects Ecuador's legitimate right as a Member to participate in high seas research activities and to contribute to SPRFMO's collective knowledge. Ecuador reaffirmed its commitment to transparency, cooperation, and compliance with conservation measures, noting that its participation seeks to strengthen the science-based management of these resources. Finally, Ecuador recalled that the revised plan has addressed the observations raised and requested that it be duly considered by the SC for recommendation. A statement by Ecuador is included in Annex 27 of this report.

252. The Chairperson of the DWWG presented Australia's proposal to hold a workshop commencing a process to move toothfish management from exploratory fishing to an established fishery (SC13-DW04). It was explained that CMM 13 (2024) required that exploratory fisheries be moved to established fisheries after 10 years and that some toothfish exploratory fisheries had been ongoing since 2016.

c. Advice to the Commission on Exploratory Fisheries

253. In relation to exploratory fisheries, the SC **recommended**

that the Commission:

- **Endorse** holding a workshop immediately prior to SC14 to initiate the process of developing a framework that would assist with the transitioning of exploratory toothfish fisheries to established fisheries, once the 10-year limit has been reached.
- **Agree** the terms of reference (SC13-04 Attachment 1), with a additional terms of reference to produce a standardised data collection plan.

9. Climate Change

a. Review of inter-sessional activities

254. FAO (Ignacio Pita Vaca) presented SC13-Obs08 on integrating climate change into fisheries science and management within the SPRFMO Convention Area, as part of the FAO Deep-sea fishery project initiative to review the inclusion of climate change in the work of project partner RFMOs. The SC welcomed the presentation and request from FAO for feedback and collaboration, particularly with the SPRFMO Climate Change Task Team. In response to an inquiry from Peru on future FAO plans for capacity building, the FAO clarified that a workshop is planned to review the inclusion of climate change considerations in the work of RFMOs and undertook to include capacity building as a topic for that workshop

255. The Chairperson of the SC presented the document intercomparison of global ocean reanalysis products and the statistical downscaling of climate change scenarios for key environmental variables in the South Pacific Ocean (SC13-CC02), that evaluates the performance of reanalysis datasets (GLORYS, BRAN, HYCOM) and provides high-resolution, bias-corrected sea surface temperature projections using CMIP5 and CMIP6 models. The work supports climate-informed fisheries and ecosystem assessments within SPRFMO and outlines plans to extend the framework to additional variables such as salinity and primary productivity. The Chairperson of the SC sought opinions on standardizing and distributing the information.

b. Climate Change Task Team

256. The Coordinator of the Climate Change Task Team presented a progress report of the Task Team. The Chairperson of the SC inquired about progress in reviewing the Conservation and Management Measures (CMMs) for climate change readiness.

257. The Chairperson of the Jack Mackerel Working Group noted that a way to incorporate climate change is to specify how Jack mackerel recruitment and biology changes with ENSO events and their relative frequency, emphasizing the move towards simple, robust Management Procedures (MPs).

258. The DSCC highlighted the vulnerability of Orange Roughy and vulnerable marine ecosystems (VMEs) to climate change impacts like deoxygenation and acidification.

259. ECO-NZ and DSCC urged Members to prioritise mechanisms for climate-resilient ecosystems and to review CMMs for climate readiness.

c. Climate change research strategy

260. The Climate Change TT Coordinator reviewed the proposed activities for the Workplan, and discussed integrating climate change into fisheries management, particularly regarding Management Strategy Evaluation (MSE) and species distribution models (SDMs).

261. Incorporating climate change variables into the ongoing jack mackerel MSE and upcoming squid MSE were noted as important, and the Chairperson of the SC requested Members' help to compile a list of environmental variables that could be standardized and used in the MSE and through other modelling processes.

262. The Chairperson of the Squid WG noted that while climate change data is important to consider, the life span of jumbo flying squid is very short, compared to the long-term data series usually associated with climate related data. However, Members agreed that it was important to still consider short-term environmental impacts for these short-lived species. The Chairperson of the SC noted that these short-term environmental impacts can help the SC understand the impacts of events such as El Nino, which are occurring more frequently.

263. Members noted the importance of considering expanding these SDMs for species such as orange roughy and deepwater species in the future, noting that most information is available right now for jumbo flying squid and jack mackerel.

264. ECO-NZ suggested the SC review the CMMs that do not currently reference climate change impacts and consider adding language to them, notably the Exploratory Fisheries CMM and Fisheries Operating Plan (FOP). A Member suggested that ECO-NZ provide draft language that they recommend being included in the FOP so Members can better understand what is being requested.

265. The SC **agreed** to include climate change considerations in the Exploratory Fisheries FOP template, the template was updated (Annex 21) and the SC tasked the Secretariat to update the copy on the SPRFMO website accordingly.

d. Advice to the Commission on Climate Change

266. The SC **recommended**:

> that the Commission endorse the proposed workplan activities for Climate Change Research and provide funding for them.

10. Data Working Group

a. Review of inter-sessional activities

267. The SC reviewed the inter-sessional activities undertaken since its previous meeting, with a particular focus on data-related initiatives.

268. The Secretariat, through the Data Manager, Bernard Vigga, presented SC13-Doc11, which provided a comprehensive update on data management activities since SC12. The report highlighted progress made on data standardisation, system upgrades, and engagement with global data harmonisation initiatives.

269. The SC **commended** the Secretariat's work and acknowledged the significant improvements in data quality, accessibility, and acknowledged the growing complexity and centrality of data management to the Organisation's scientific processes.

270. In line with these discussions, the Secretariat introduced Working Paper SC13-WP10 (Annex 22), which proposed amendments to Conservation and Management Measure CMM 02 (Data Standards).

271. The SC **endorsed** the proposal and acknowledged the necessity to update several legacy components of the measure—specifically noting the need to replace the more than 40-year-old ISSCFG/ISSCFV codes currently referenced in CMM 02 with more contemporary and internationally aligned standards.

272. The SC further **endorsed** the Secretariat's recommendation for SPRFMO to join the Coordinating Working Party on Fishery Statistics (CWP), recognising that participation in this global inter-agency body would enhance the Organisation's alignment with international statistical standards and improve data interoperability with other RFMOs and international agencies.

273. Members agreed on the importance of appointing a Chairperson of the Data WG and reiterated its call for nominations.

b. Data WG Terms of Reference

274. The Terms of Reference (ToR) for the Data Working Group, as adopted at SC12 and transmitted to the Commission as part of the SC12 Report, remain in effect without amendment.

c. Prioritisation of data needs

275. The SC **endorsed** the Secretariat's draft data management strategy outlined in document SC13-Doc11, which set out the prioritisation of data needs, noting it would be updated for CTC consideration.

d. Data sharing protocol for SC activities and research

276. The Chairperson of the SC (Ricardo Oliveros Ramos) presented a proposed SC Data Sharing Protocol (SC13-WP16 – Annex 25), which seeks to address current challenges, where obtaining authorisation individually from each Member causes delays, creates planning uncertainty, and hampers timely stock assessments, ecosystem evaluations, and bycatch analyses.

277. The SC welcomed the proposal as a significant step towards enabling timely, transparent, and secure access to non-public domain data required for its work.

278. The Committee acknowledged the value of having a standardised and collaborative process for handling data request and ensuring compliance with the confidentiality provisions CMM 02-2025.

279. The SC endorsed the protocol in principle and recommended that it be forwarded to the Commission for further consideration and decision, including any necessary refinements to ensure alignment with existing SPRFMO data governance arrangements.

e. Review and update data standards (paragraph 8 of CMM 02-2025)

280. The SC reviewed CMM 02-2025 (Conservation and Management Measure on Standards for the Collection, Reporting, Verification and Exchange of Data) pursuant to its paragraph 8, which states that it shall be reviewed no later than the regular meeting of the Commission in 2025 based on advice from the 2024 meeting of the SC and CTC.

281. The SC **agreed on** revisions in SC13-WP10, which included:

- Updating the 40-year-old classification codes to ensure continued relevance and interoperability with modern global standards
- Aligning Member and CNCP data reporting deadlines so they are sufficiently in advance of SC meetings
- Modernising and simplifying reporting mechanisms
- Annexes B and D additions in relation to seabird bycatch mitigation

- Other minor technical edits.

f. Advice to the Commission on Data

282. The SC **recommended**

that the **CTC**:

- **Note** the Secretariat's update on inter-sessional data management activities (SC13-Doc11) and **endorse** the progress made in strengthening data systems to support the scientific work of the Organisation and the Secretariat's interim data management strategy.
- **Endorse** the proposals outlined in SC13-WP10 (Annex 23) to amend CMM 02 (Data Standards), in order to modernise and strengthen data reporting requirements.
- **Endorse** SPRFMO joining the Coordinating Working Party on Fishery Statistics (CWP) as a full member to enhance alignment with global fishery statistics standards.

283. The SC **recommended**

that the Commission:

- **Approve** the SC Data Sharing Protocol, as proposed in SC13-WP16 (Annex 25), to operationalise paragraph 6(c) of CMM 02-2025.

11. Research in the Salas y Gomez and Nazca Ridges Area

a. Review of inter-sessional activities

284. The coordinator (Jordi Tablada) reported that the Task Team had not been able to fulfil all the tasks that were initially planned for the current year due to unforeseen circumstances, including the resignation of the previous Coordinator, which unfortunately halted the progress of the Task Team for several months. During the last Commission meeting (2025), some progress was achieved, including the presentation of two documents with several criteria to help assess spatial management measures from different organisations, including other RFMOs. At the Commission it was agreed that Chile was to review and complete a template (provided by Cook Islands and currently used in SIOFA), as the proponent of the proposal. Subsequently, Chile completed the template, including the new criteria and information to define Evaluation Criteria and undertook an assessment of their own proposal (SC13-SGN02).

285. The Task Team concluded that the Evaluation Criteria (provided in Annex 3) provided an adequate basis for developing a framework to assess the Chilean proposal regarding the Salas y Gomez and Nazca Ridges area, as well as other spatial management proposals that may arise in the future. It was noted that the Evaluation Criteria shall serve as a basis and may incorporate additional information. While it was questioned whether a ranking or weighting system should be applied to the elements listed by the Evaluation Criteria, it was agreed that all elements are an important part of the criteria and have the potential to be applied to assess other areas. Focus was given on keeping the Evaluation Criteria as a live document for flexibility purposes while ensuring consistency in evaluations in future.

286. The Task Team confirmed that the Salas y Gomez and Nazca Ridges area is defined by the geographical overlap of the Ecologically or Biologically Significant Area (EBSA) "Dorsal de Nazca y de Salas y Gómez (Salas y Gómez and Nazca Ridges)" (CBD, 2017) and the SPRFMO Convention Area. A map of the area and a list of coordinates are provided in Annex 18.

287. With regards to the review of inter-sessional activities, the SC:

- **Endorsed** Annex 21 as the Evaluation Criteria as a basis for assessing areas proposed for enhanced levels of protection, noting that in some cases additional criteria may be relevant. The SC **noted** that the SC may update the Evaluation Criteria in the future as required.
- **Noted** that geographical details of the area being considered by the Task Team and referred to as the 'Salas y Gomez and Nazca ridges area', are provided in Annex 18.
- **Noted** that relevant spatial categorisation of the area may be required.

288. Peru suggested that there are at least two spatial zones in the area (SC13-SGN01) and that this has been taken into account in the Evaluation Criteria.

b. SGN Task Team

289. Peru presented SC13-SGN01, which explores the role of the propagation of anti-cyclonic eddies in facilitating offshore transport of particulate organic carbon, the substantial control of carbon export by hypoxia-tolerant zooplankton and by the historical (65 years) physical forcing. Furthermore, the paper noted that the system exhibits consistent oceanographic, geological and geomorphological differences between Easter Seamount Chain - Salas and Gomez Seamount Chain and the Nazca Ridge, Peru and Chile agreed to work together on including this information in the assessment provided by Chile.

290. DSCC and ECO-NZ thanked Peru for their presentation and provided a statement regarding the Salas y Gomez and Nazca ridges which can be found in Annex 27.

291. Chile presented an evaluation against the Evaluation Criteria for the Salas y Gomez and Nazca ridges area in SC13-SGN02 to assess the need for enhanced levels of protection/management. SC13-SGN02 includes a compilation of information regarding 1) biogeographic information, 2) geographic and geomorphological representation, 3) biodiversity, 4) uniqueness and rarity of species and habitats, 5) vulnerability, fragility and sensitivity of ecosystems and species, 6) threatened species, 7) vulnerable marine ecosystems, 8) cultural significance and 9) scientific interest. Chile included a number of recommendations in their paper, including the implementation of a closure to all fishing activities within the Salas y Gomez and Nazca ridges area to prevent ecosystem degradation.

292. Members identified gaps in SC13-SGN02. There were requests to provide data on the occurrence of endangered and threatened migratory species (e.g., turtles, seabirds), which could be obtained from the observer data of the pelagic fisheries (including but not limited to SPRFMO fisheries) that operate within the area and surrounding areas. The Task Team was interested to know the proportion of interactions with fishing activities, observer sightings and counts of such species within the area compared to adjacent areas, given the migratory nature and mobility of such species.

293. Regarding the inclusion of fishing data in SC13-SGN02, it was requested by some Members that fishing data as reported to the Secretariat was to be included, particularly for the most recent years that perhaps were not available at the time Chile compiled the information. Some Members noted that SC13-SGN02 did not include considerations regarding multi-zone management approaches for the SGN area, and that more work regarding assessment of risks and impacts of fishing activities would be desirable. One observer highlighted that if a multi-zone approach was to be explored, capacity for monitoring activities would need to be considered.

294. Following a request from Russia, Peru clarified that recent data collection efforts have been concentrated in their own waters, but that the collected data can inform analyses and modelling that is likely be relevant to the area. Members thanked Peru for their valuable contributions and the work they have planned for the near future regarding data collection in the adjacent area under national jurisdiction of Peru. Similarly, Members thanked Chile and the on-going work they are undertaking regarding processing and analysing data collected in recent expeditions.

295. The SC did not agree with or endorse the recommendations contained in SC13-SGN02, and following discussion the SC:

- **Recommended** that the impacts of different fishing methods should be taken into account for decision-making.
- **Noted** the value in collaborating with other intergovernmental bodies such as the Convention on Biological Diversity (CBD), other relevant international organisations and RFMOs, and in taking into account the BBNJ Agreement that will soon enter into force.
- **Reiterated** that while no measures to conserve and protect the area have been recommended, with the exception of the existing Cook Islands exploratory fisheries, including any possible renewals or the possibility to develop the fishery, any future new or exploratory fishery would need to take into account the unique values of the Salas y Gomez and Nazca ridges area as part of their risk assessment.
- **Recalled** the provision of Article 4.2 of the Convention and the importance of strengthening sustainable ocean governance by promoting compatibility between conservation and management measures established for the high seas and those adopted for areas under national jurisdiction, as appropriate.

296. Some Members highlighted the importance of the work being carried out and showed willingness to keep working together. Chile emphasised the need to continue working together after the meeting of the SC and proposed to organise an inter-sessional virtual meeting of the Task Team to discuss possible new recommendations. This was supported by the SC, but the organiser needs to be mindful of the limited capacity to engage due to other RFMO commitments by some Members.

c. Terms of reference for the Salas y Gomez and Nazca ridges Task Team

297. The workplan table included in the Terms of Reference for the Task Team was updated and the SC adopted the changes. The updated document is provided as Annex 17.

d. Advice to the Commission on the Salas y Gomez and Nazca area

298. The SC **recommended**

that the Commission:

- **Note** that the SC has **agreed** to receive a final report from the Task Team which will include measures to recommend at the 14th meeting of the SC in 2026, and subsequently to Commission in 2027.
- **Note** that the SC **endorsed** Annex 19 as the Evaluation Criteria as a basis for assessing areas proposed for enhanced levels of protection, noting that in some cases additional criteria may be relevant.
- **Note** that a map and a list of coordinates of the Salas y Gomez and Nazca ridges area being considered by the SC are provided in Annex 18.

12. Other Matters

a. Crosscutting issues (as necessary)

299. There were no crosscutting issues brought up at this time.

b. Planned activities and funding

300. All the planned activities and associated funding for the SC, its working groups and task teams are captured and recorded in the Multi-Annual Workplan (Annex 7).

c. Appointment of officers

301. The SC Chairperson announced the open Chairperson roles that need to be filled out at this meeting, notably, the Jack Mackerel Working Group, the Squid Working Group, and the Data Working Group.

302. Dr Jim Ianelli (USA), accepted to continue as interim Chairperson of the Jack Mackerel Working Group for another year. The SC acknowledged Dr Ianelli's commitment and thanked him for staying another year.

303. Dr Gang Li (CHN) and Mr Ignacio Paya have reached the end of their term as Chairpersons of the Squid Working Group. The SC thanked them for the work achieved over the past years. Dr Li accepted to stay on for one further term as Chairperson and the SC thanked him.

304. Trent Timmiss (AUS) has agreed to take on the role of interim Chairperson for the Data Working Group until the 2026 Commission meeting. The SC thanked Trent for the extra work he is taking on.

305. The SC encouraged Members to consider nominating Working Group Chairpersons in the near future as these roles are crucial to progressing scientific work in SPRFMO.

306. The SC **recommended** that the Chairperson and Vice Chairperson of the SC be reappointed for a second period.

d. Next meeting venue and timing

307. Faroe Islands confirmed their offer to host the 14th SC meeting. The dates were confirmed from 7 to 12 September 2026, with pre-SC activities to be held 5-6 September 2026. The Faroe Islands indicated that English-Spanish interpretation will not be offered but indicated their willingness to work with other Members and the Secretariat to find a solution should finances become available through the Spanish Interpretation Fund.

308. China indicated its intention to offer to host the 15th SC meeting in 2027, subject to confirmation at COMM14.

e. Other business

309. The SC kindly thanked New Zealand for hosting the SC13 annual meeting and for expediting Member participation by assisting with visa arrangements. MPI's organisation and hosting was particularly emphasised. Interpreters were also thanked for their patience and hard work.

310. The SC also thanked Dr Jorge Tam and Dr Criscely Lujan, coordinators of two task teams that have expired at this meeting --the Climate Change Task Team and the Species Distribution Metadata Task Team-- for progressing the work of these two task teams intersessionally.

311. Appreciation was expressed to the Secretariat for its work in supporting Members.

f. Advice to the Commission on cross cutting issues

312. The SC **recommended:**

that the Commission instruct that three Secretariat staff support annual SC meetings.

13. Report Adoption and Meeting Closure

313. The report of the 13th SPRFMO SC meeting was adopted at 18:02 hrs.

314. The meeting was closed at 18:02 hrs.

Annex 1: Collated SC Recommendations and Requests

(Items that the SC "noted" or "agreed" are in the main body of the report and not repeated here)

On Jack Mackerel Items

- The SC **recommended** that the Commission support continuation of the MSE work to best leverage all of the technical work that has been done in the last year. During the week, as the SC developed the assessment model, analysts presented how easily the operating model could be updated to be based on the 2025 version. This also worked for both stock structure hypotheses and provides improved fits to available data, including historical depletion and more recent survey and CPUE indices. The SC noted that this ability to update the operating models to the most recent observations provides an improve basis for testing MPs. The SC commended the efforts of the contractor developing the MSE.
- Given that the full MSE remains incomplete, the SC **recommended** continuing with the adjusted "Annex K" as the interim management procedure (attached to this report with adjusted Annex K as Annex 12).
- The **SC lacked consensus [regarding a jack mackerel TAC] and provides the [following] two approaches**:
    - that the 2026 TAC be at or below 1,642.2 kt, (15% increase over the 2025 SC catch advice)
    - that the 2026 TAC be at or below 1,785.4 kt, (15% increase over 2025 TAC).
- The SC **recommended** that the Commission may consider **limited banking and borrowing provisions (±10%) as part of the interim measure**, with the understanding that such provisions would be more fully reviewed in the development of a candidate MPs. This was also considered acceptable because the stock(s) appear(s) to be well above Bmsy.

On Deepwater Items

- The SC **recommended** that the SPRFMO Secretariat liaise with FAO, AquaMaps and IUCN to ensure that existing historical catch data of vulnerable chondrichthyans, teleosts and commercially important invertebrates are being included in their models to inform the predicted distribution of these species. The SC noted that the FAO maps are a legacy product that are no longer being updated.
- The SC **recommended** that the Commission give consideration to prohibiting the use of wire trace on longlines.
- The SC **recommended** that the Commission give consideration to encouraging or requiring that deepwater sharks brought to the boat alive, are returned to the water.
- The SC **recommended** that the Commission tasks the SC to develop a protocol for releasing sharks alive.
- The SC **recommended** that methodologies for collection and identification of benthic bycatch species should be updated and improved including further work on the VME taxa ID guide for benthic bycatch and sampling for further analyses.

- The SC **recommended** that the revised 2025 BFIAS with the current revisions and editions (SC13-DW11.1) be adopted for any relevant BFIA processes undertaken in accordance with CMM 03-2025 and CMM 13-2024.
- The SC **recommended** that the Commission:
  - adopt of the changes proposed here to CMM 09-2017 Minimising Bycatch of Seabirds in the SPRFMO Convention Area and CMM 02-2025 Data Standards (see Annex 23).
  - tasks the SC to develop a protocol for releasing sharks alive.
  - task the Secretariat to summarise and characterise data related to seabird interactions, including bycatch, held by the Secretariat and to work with interested Members and ACAP to identify any future potential improvements to data collection and reporting processes.

On Squid Items

The SC recommended that the Commission

- **Endorse** the squid tasks and activities in the multi-annual workplan
- **Note** the progress made in SC13 towards delivering future squid fisheries management advice
- **Note** the commitment of coastal Members to voluntarily contribute data for stock assessment

On Ecosystems Items

The SC **recommended** that the Commission

- **Adopt** the proposal for the development of an Ecosystem Status Report, aimed at providing the SC with an overview of ecosystem status at seasonal to decadal scales.
- **Endorse** and fund a workshop to define practical requirements and considerations for sampling approaches supporting priority topics in jack mackerel connectivity studies (genetics, tagging methods, early life stages, and reproduction), including potential iterative or annual adjustments to the sampling design.

On Exploratory Fisheries

The SC **recommended** that the Commission:

- **Endorse** holding a workshop immediately prior to SC14 to initiate the process of developing a framework that would assist with the transitioning of exploratory toothfish fisheries to established fisheries, once the 10-year limit has been reached.
- **Agree** the terms of reference (SC13-04 Attachment 1), with a additional terms of reference to produce a standardised data collection plan.

On Climate Change

The SC **recommended** that the Commission endorse the proposed workplan activities for Climate Change Research and provide funding for them.

On Data Items

The SC **recommended** that the Commission:

- **Approve** the SC Data Sharing Protocol, as proposed in SC13-WP16 (Annex 25), to operationalise paragraph 6(c) of CMM 02-2025.

The SC **recommended** that the CTC:

- **Note** the Secretariat's update on inter-sessional data management activities (SC13-Doc11) and **endorse** the progress made in strengthening data systems to support the scientific work of the Organisation and the Secretariat's interim data management strategy.
- **Endorse** the proposals outlined in SC13-WP10 (Annex 23) to amend CMM 02 (Data Standards), in order to modernise and strengthen data reporting requirements.
- **Endorse** SPRFMO joining the Coordinating Working Party on Fishery Statistics (CWP) as a full member to enhance alignment with global fishery statistics standards.

On the Salas y Gomez and Nazca ridge items

The SC that the Commission:

- **Note** that the SC has **agreed** to receive a final report from the Task Team which will include measures to recommend at the 14th meeting of the SC in 2026, and subsequently to Commission in 2027.
- **Note** that the SC **endorsed** Annex 19 as the Evaluation Criteria as a basis for assessing areas proposed for enhanced levels of protection, noting that in some cases additional criteria may be relevant.
- **Note** that a map and a list of coordinates of the Salas y Gomez and Nazca ridges area being considered by the SC are provided in Annex 18.

On Other matters

- The SC **recommended** that the Commission instruct that three Secretariat staff support annual SC meetings.

Annex 2: SC13 List of Participants

CHAIRPERSON OF THE SC

Ricardo Oliveros
ricardo.oliveros@ird.fr

AUSTRALIA

Trent Timmis
trent.timmiss@aff.gov.au

Brooke D'Alberto
brooke.dalberto@aff.gov.au

Lynda Goldsworthy
lynda.goldsworthy@utas.edu.au

BELIZE

Charles Coc
charles.coc@bhsfu.gov.bz

Ernie Howe
ernie.howe@bhsfu.gov.bz

CHILE

Lilian Troncoso
ltroncoso@subpesca.cl

Valentina Cordova
valentina.cordova@ug.uchile.cl

Nicole Mermoud
nmermoud@subpesca.cl

AQUILES SEPULVEDA
asepulveda@inpesca.cl

Carlos Vargas
carlos.vargas.m@uchile.cl

Salvador Vega
svega@minrelgob.cl

Jose Zenteno
jose.zenteno@ifop.cl

Cristian Araneda
craraned@uchile.cl

Karen Belmar
karen.belmar@ifop.cl

Cristian Canales
cristian.canales@ulagos.cl

Sandra Ferrada
sferrada@udec.cl

Carlos Gaymer
cgaymer@ucn.cl

Ignacio Paya
ignacio.paya@ifop.cl

Sebastián Vásquez
svasquez@inpesca.cl

Fabiola Cabell

fabiola.cabello@ifop.cl

Andres Couve
andrescouve@entelchile.net

Andres Daroch
adaroch@fcc.cl

Albert Arias Arthur
albarthur@gmail.com

CHINA

Gang Li
g-li@shou.edu.cn

Congcong Wang
ccwang@shou.edu.cn

Wei Yu
wyu@shou.edu.cn

Jiaxin Du
3390941982@qq.com

COOK ISLANDS

Stephen Brouwer
steve@saggitus.co.nz

ECUADOR

Rebeca Espinoza
respinoza@produccion.gob.ec

Jorge Costain
jcostain@transmarina.com

EUROPEAN UNION

Karolina Molla Gazi
karolina.mollagazi@wur.nl

Robert Banning
rba@pp-group.eu

FAROE ISLANDS (DENMARK)

Olavur Dalsgard
olavurd@fisk.fo

Jan Arge Jacobsen
janarge@hav.fo

KOREA

Jeongseok Park
jeongseokpark@korea.kr

Eunjung Kim
eunjungkim@korea.kr

Taebing Jung
tbjung@tnsind.co.kr

Hyunjoong Choi
hjchoi@swfishery.com

NEW ZEALAND

Alexander Arkhipkin
alexander.arkhipkin@mpi.govt.nz

Jordi Tablada
jtablada@doc.govt.nz

Tiffany Plencner
Tplencner@doc.govt.nz

Andrew Smith
andy@latsouth.co.nz

Karen Tunley
karenlisa.tunley@mpi.govt.nz

PERU

Ana Alegre
palegre@imarpe.gob.pe

Erich Diaz
ediaz@imarpe.gob.pe

Ursula Neira
umendoza@imarpe.gob.pe

Jorge Tam
jtam@imarpe.gob.pe

Josymar Torrejon
jtorrejon@imarpe.gob.pe

Jimena Mendoza
jimendoza@imarpe.gob.pe

Cussui Segura
csegura@sernanp.gob.pe

RUSSIAN FEDERATION

Alexander Glubokov
glubokovniro@gmail.com

CHINESE TAIPEI

Han-Ching Chuang
hanching@ms1.fa.gov.tw

UNITED STATES OF AMERICA
John Syslo
john.syslo@noaa.gov

Emily Reynolds
emily.reynolds@noaa.gov

James Ianelli
jim.ianelli@gmail.com

VANUATU
Gerald Geen
ggeen@bigpond.net.au

IGO - ACAP
Igor Debski
idebski@doc.govt.nz

IGO - FAO
Keith Reid
keith.reid@fao.org

Ignacio Pita-Vaca
ignacio.pita-vaca@umontpellier.fr

NGO - CALAMASUR
Rodrigo Wiff
rodrigo.wiff@gmail.com

NGO - Conservation International
Bruno Monteferri
bmonteferri@conservation.org

Vasco Chavez-Molina
vchavez-molina@conservation.org

NGO - DSCC
Bronwen Golder
bronwen@deep-sea-conservation.org

Duncan Currie
duncanc@globelaw.com

Karli Thomas
savethefush@gmail.com

NGO - ECO NZ
Barry Weeber
baz.weeber@gmail.com

Catherine WALLACE
Cath.Wallace@eco.org.nz

NGO - GFW
Krizia Matthews
krizia.matthews@globalfishingwatch.org

Fernando Cagua
fernando.cagua@globalfishingwatch.org

NGO - HSFG
Charles Heaphy
charles.heaphy@sealord.co.nz

NGO - Oceana
Felipe Paredes
fparedes@oceana.org

Liesbeth Van der Meer
lvandermeer@oceana.org

Sarah Bedolfe
sbedolfe@oceana.org

NGO - PEW
Glen Holmes
gholmes@pewtrusts.org

INVITED EXPERT
Qi Lee
leeqi@uw.edu

LOCAL SUPPORT
Scott McSorley
scott.mcsorley@mpi.govt.nz

Diny Kalidas
diny.kalidas@mpi.govt.nz

Ellie Nash
ellie.nash@mpi.govt.nz

Maya Micklefield
maya.micklefield@mpi.govt.nz

Duncan McDonald
duncan.mcdonald@mpi.govt.nz

SPRFMO Secretariat

James Brown
jbrown@sprfmo.int

Susana Delgado Suarez
sdelgado@sprfmo.int

Bernard Buga Vigga
bvigga@sprfmo.int

Randy Jenkins
rjenkins@sprfmo.int

Annex 3: SC13 Meeting Agenda

1) OPENING OF THE MEETING
   a) Meeting arrangements
   b) Adoption of Agenda
   c) Meeting Documents

2) ANNUAL REPORTS DISCUSSION

3) COMMISSION GUIDANCE AND INTER-SESSIONAL ACTIVITIES
   a) Working Group on 2nd Performance Review Recommendations
   b) SC multi-annual workplan
   c) Secretariat SC-related activities
   d) Working Group on Electronic Monitoring Standards
   e) Cooperation with other Organisations (ACAP, CPPS, FAO)
   f) Observer Programme accreditation process and progress

4) JACK MACKEREL
   a) Review of inter-sessional activities
   b) Management Strategy Evaluation update
   c) Assessment data review and evaluation
   d) Jack mackerel assessment
   e) Jack Mackerel WG Terms of Reference
   f) Advice to the Commission on new MPs for jack mackerel
   g) Other advice to the Commission on jack mackerel

5) DEEPWATER
   a) Review of inter-sessional activities
   b) Deepwater assessments (Orange roughy, stock structure, ecological risk, data)
   c) Benthic bycatch ID and catchability
   d) Encounters with VMEs
   e) CMM 03 request regarding encounters with VMEs
   f) Bottom Fishery Impact Assessment
   g) CMM 03 request regarding marine mammals, seabirds, reptiles and other species of concern
   h) CMM 03 request regarding ongoing appropriateness
   i) Deepwater WG Terms of Reference
   j) Advice to the Commission on Deepwater

6) SQUID
   a) Review of inter-sessional activities
   b) Assessment Simulation Task Team
   c) Genetics and connectivity research
   d) Standardise biological sampling
   e) Fishery and biological data from Members for stock assessment
   f) Assessment progress and CMM development
   g) Squid WG Terms of Reference
   h) Advice to the Commission on Squid

7) ECOSYSTEMS
   a) Review of inter-sessional activities
   b) Special Issue of the Habitat Monitoring Symposium
   c) Species Distribution Metadata Task Team
   d) Ecosystems WG Terms of Reference
   e) Advice to the Commission on Ecosystems topics

8) EXPLORATORY FISHERIES
   a) Exploratory Fishery updates (AUS, COK, EU, KOR, NZ)
   b) New exploratory fishery proposals
   c) Advice to the Commission on Exploratory Fisheries

9) CLIMATE CHANGE
   a) Review of inter-sessional activities
   b) Climate Change Task Team
   c) Climate change research strategy
   d) Advice to the Commission on Climate Change

10) DATA WORKING GROUP
   a) Review of inter-sessional activities
   b) Data WG Terms of Reference
   c) Prioritisation of data needs
   d) Data sharing protocol for SC activities and research
   e) Review and update data standards (paragraph 8 of CMM 02-2025)
   f) Advice to the Commission on Data

11) RESEARCH IN THE SALAS Y GOMEZ AND NAZCA RIDGES AREA
   a) Review of inter-sessional activities
   b) SGN Task Team
   c) Advice to the Commission on the Salas y Gomez and Nazca area

12) OTHER MATTERS
   a) Crosscutting issues (as necessary)
   b) Planned activities and funding
   c) Appointment of officers
   d) Next meeting venue and timing
   e) Other business
   f) Advice to the Commission on cross cutting issues

13) REPORT ADOPTION AND MEETING CLOSURE

Annex 4: SC13 Meeting Schedule

	Session 1 08:30 – 10:00	30-minute coffee break	Session 2 10:30 – 12:30	1-hour lunch	Session 3 13:30 – 15:30	30-minute coffee break	Session 4 16:00 – 18:00	Side events 18:00 – 20:00
Monday 8 Sep 25	Scientific Committee (opening ceremony 08:00)		Scientific Committee		Scientific Committee Climate Change		Scientific Committee Data WG	18:00 hrs NZL Welcome Event @ NZ Parliament
Tuesday 9 Sep 25	Deepwater WG		Jack Mackerel WG		Ecosystem WG		Jack Mackerel MSE	18:00 hrs DSCC Side Event @ The Wellington Club
Wednesday 10 Sep 25	Climate Change		Squid WG		Nazca and Salas y Gomez Scientific Committee		Jack Mackerel WG	
Thursday 11 Sep 25	Exploratory fisheries		Scientific Committee		Data WG		Jack Mackerel MSE	
Friday 12 Sep 25	Deepwater WG		Squid WG		Ecosystem WG		Jack Mackerel WG	
Saturday 13 Sep 25	Scientific Committee		Scientific Committee		Scientific Committee		Scientific Committee	

PO Box 3797, Wellington 6140, New Zealand
P: +64 4 499 9893 – E: secretariat@sprfmo.int - www.sprfmo.int

SC	Exploratory Fisheries	Squid	Ecosystems	Jack Mackerel	Deepwater	Climate Change

	Session 1 08:30 – 10:00	Session 2 10:30 – 12:30	Session 3 13:30 – 15:30	Session 4 16:00 – 18:00
Mon 8 Sep 25	Opening ceremony (08:00 hrs) Administration Arrangements Agenda Meeting documents	Item 2) Annual reports Item 3a) WG PR2 (intro) Item 3b) Workplan (intro)	Item 3c) Sec activities Item 3d) EM Item 3e) Cooperation Item 9b) Climate Change TT	Item 3f) Observer prog Item 10a) Inter-sessional activities Item 10d) Data sharing
Tue 9 Sep 25	Item 5a) Inter-sessional activities Item 5b) Assessments Item 5c) Benthic bycatch Item 5d) VME encounters Item 5f) BFIAs	Item 4a) Inter-sessional activities Item 4c) Data review	Item 7a) Inter-sessional activities Item 7b) Ecosystem Status Profile Item 7c) Species Distribution Metadata TT	Item 4b) Management Strategy Evaluation
Wed 10 Sep 25	Item 9a) inter-sessional activities Item 9c) Research strategy Item 9d) Climate Change Advice	Item 6a) Inter-sessional activities Item 6b) Assessment Simulation Item 6c) Genetics & Connectivity Item 6d) Sampling	Item 11a) Inter-sessional activities Item 11b) SGN Task Team Item 11c) Advice on SGN Item 12a) Cross cutting	Item 4c) Data review (cont.) Item 4d) JM Assessment
Thu 11 Sep 25	Item 8a) Updates Item 8b) New proposals Item 8c) Exploratory Fisheries Advice	Item 3a) WG PR2 (completion) Item 3b) Workplan (completion) Item 12f) Advice on cross cutting	Item 10b) Terms of Reference Item 10c) Prioritisation Item 10d) Data sharing (cont.) Item 10e) Data standards Item 10f) Advice on data	Item 4b) Management Strategy Evaluation Item 4f) Advice on new MP
Fri 12 Sep 25	Item 5e, g, h) CMM03 related Item 5i) Terms of Reference Item 5j) Deepwater Advice	Item 6e) Assessment data Item 6f) Assessment and CMM Item 6g) Terms of Reference Item 6h) Squid Advice	Item 7d) Special Issue HMS Item 7e) Terms of Reference Item 7f) Ecosystems Advice	Item 4e) Terms of Reference Item 4g) Other JM Advice
Sat 13 Sep 25	Item 12b) Planning and funding Item 12c) Officers Item 12d) Next meeting Item 12e) Other business	SC report preparation	SC report adoption	SC report adoption Meeting closure

Annex 5: SC13 List of Documents

The list of documents discussed by the SC13 are as follows:

Plenary Documents	
SC13-Doc01	Provisional SC13 Meeting Agenda
SC13-Doc02_rev1	Annotated SC13 Agenda *(rev1, 7 Sept)*
SC13-Doc03_rev4	SC13 List of Documents *(rev4, 7 Sep)*
SC13-Doc04_rev3	SC13 Meeting schedule *(rev3, 7 Sep)*
SC13-Doc05	2026 Multi Annual Work Plan
SC13-Doc06	2025 intersessional SC web meetings
SC13-Doc07	Secretariat's Science related activities
SC13-Doc08_rev1	Status of the SC (scientific support) fund (rev1, 5 Sept)
SC13-Doc09	Call for interest to organise forthcoming SC meetings
SC13-Doc10_rev1	A summary of current SPRFMO bycatch records (Including species of concern) *(rev1, 7 Sept)*
SC13-Doc11	Data Management Update and Data Working Group
SC13-Doc11.1	Secretariat Data Sets held at the Secretariat
SC13-Doc12	*withdrawn*
SC13-Doc13	Scientific Committee Proposed Protocol for Data Access under CMM 02
SC13-Doc14	PR2 Recommendations to SC
SC13-Doc15	WGEMS report to SC - Appendix 1 - Appendix 2
SC13-Doc16	Annual report - Australia
SC13-Doc17	Annual report - Belize
SC13-Doc18	Annual report - Chile (JM)
SC13-Doc19	Annual report - Chile (SQ)
SC13-Doc20	Annual report - China (SQ)
SC13-Doc21	Annual report - Cook Islands
SC13-Doc22	Annual report - Curaçao
SC13-Doc23	Annual report - European Union
SC13-Doc24	Annual report - Korea
SC13-Doc25	Annual report - Liberia
SC13-Doc26	Annual report - New Zealand
SC13-Doc27	Annual report - Panama
SC13-Doc28	Annual report - Peru (SPRFMO Area)
SC13-Doc29	Annual report - Peru (ANJ)
SC13-Doc30	Annual report - Russia
SC13-Doc31	Annual report - Chinese Taipei
SC13-Doc32	Annual report - USA
SC13-Doc33	Annual report – Vanuatu
SC13-Doc34	Annual report – Cuba
SC13-Doc35	Annual report – Faroe Islands
SC13-Doc36	Annual report – Ecuador

Jack mackerel documents	
SC13-JM01_rev2	CJM Catch history and predicted 2025 catches (incl. Annex 1) (SEC)
SC13-JM02	Update on CPUE standardization for the CJM fishery in central-southern Chile using spatio-temporal Bayesian models
SC13-JM03	Spatio-temporal dynamics of the JM fishery off south-central Chile in 2025
SC13-JM04	JM CPUE index and acoustic biomass in the south-central Chile up to 2025
SC13-JM05	Spatial distribution and biomass estimate of CJM off Chile based on acoustic records
SC13-JM06	Hydroacoustic Assessment of Jack Mackerel (*Trachurus murphyi*) off Northern and Central Chile
SC13-JM07	A genomic tool for monitoring genetic diversity in *Trachurus murphyi*
SC13-JM08	Comparison of EU self-sampling and observer data with the objective to supplement observer data for non-observed quarters
SC13-JM09	Report of the JMWG Management Strategy Evaluation Technical Workshop
SC13-JM10_rev1	CPUE standardization for the offshore fleet fishing for Jack mackerel in the SPRFMO Area

Deep Water documents	
SC13-DW01_rev2	Ecuador's Fisheries Operation Plan for a new toothfish fishery
SC13-DW02	Australia's report on its exploratory toothfish fishery CMM 14f-2024
SC13-DW03	Updated SPRFMO ecological risk assessment for deepwater species
SC13-DW04	Proposal to hold toothfish workshop at SC14
SC13-DW05	Korea's report on its exploratory toothfish fishery CMM 14h-2025
SC13-DW06	European Union's report on its exploratory toothfish fishery CMM 14e-2024
SC13-DW07	New Zealand's final report on its exploratory toothfish fishery CMM 14a-2022
SC13-DW08	Proposals to align CMM 09 Seabirds and CMM 02 Data Standards with ACAP Best Practice Advice
SC13-DW09	New Zealand 2024 VME Encounter Review
SC13-DW10	Validation of the South Pacific VME Bioregionalisation
SC13-DW11	Revision of SPRFMO Bottom Fishing Impact Assessment Standard
SC13-DW11.1	Revised BFIAS for SPRFMO

Squid documents	
SC13-SQ01	Update of Squid Datasets held by the Secretariat
SC13-SQ02	Satellite tagging of jumbo squid in Chile preliminary results in two sectors
SC13-SQ03	Reference genome of the jumbo squid as a tool for low-coverage genome sequencing (lcWGS)
SC13-SQ04	Genetic Diversity Analysis of Different Phenotypic Populations of jumbo squid
SC13-SQ05	Genetic diversity and population structure of jumbo flying squid with genomic SNPs in the Chilean coast
SC13-SQ06	Update of the Stochastic Production model in Continuous Time (SPiCT) applied to *Dosidicus gigas* in the FAO area 87
SC13-SQ07	Assessment of jumbo squid in Southeast Pacific Ocean based on state-space biomass dynamics model and impacts of ENSO
SC13-SQ08_rev1	January-July 2025 fishing season for squid (*Dosidicus gigas*) in Chilean waters (rev1, 6 Sept)

Ecosystems documents	
SC13-Eco01	Species Distribution Metadata Task Team Report
SC13-Eco02	Habitat conditions associated with the Chilean jack mackerel (*Trachurus murphyi*) fishery in central-southern Chile, 2012-2025
SC13-Eco03	Habitat of jack mackerel and other species of the Peruvian current in the Humboldt System
SC13-Eco04	Eddy impacts on abundance and habitat distribution of jumbo flying squid
SC13-Eco05	Abundance and biological aspects of Jack mackerel and other species of the Peru current in the Humboldt System
SC13-Eco06	Updated information on stomach contents of JM Nichols, 1920, on the Northern Humboldt Current System: biological condition and diet
SC13-Eco07	When hatching fails: A bioenergetic approach to the early life stages of jumbo flying squid (*Dosidicus gigas*)
SC13-Eco08	"Ecosystem synoptic survey across main areas of the South Pacific
SC13-Eco09	Spatio-temporal characterization of the habitat patterns of Jumbo flying Squid *Dosidicus gigas* in the Peruvian jurisdictional waters
SC13-Eco10	Proposal for an Ecosystem Status Profile Framework for the SPRFMO Scientific Committee

Climate Change documents	
SC13-CC01	Report of the Climate Change Task Team
SC13-CC02	Intercomparison of Global Reanalysis Products and Statistical Downscaling of Climate Change Scenarios for Key Environmental Variables in the South Pacific Ocean

Salas y Gomez and Nazca documents	
SC13-SGN01_rev1	Revealing the origin and transport mechanisms of organic carbon to the slope and the Nazca Ridge *(rev1, 7 Sept)*
SC13-SGN02	Proposed protocol for evaluating SGN Ridge area(s) for enhanced levels of protection-management

Observer documents	
SC13-Obs01	Addressing a conservation crisis: saving albatrosses and petrels through improved fisheries management
SC13-Obs02	Greenpeace Direct observations from within the Central Lord Howe 2024 temporary suspension of bottom fishing VME encounter area
SC13-Obs03	CALAMASUR Stock assessment of jumbo flying squid
SC13-Obs03.1	CALAMASUR letter
SC13-Obs04	Applications of Enhanced Data Transparency in SPRFMO: Vessel tracking, interoperability, and other transparency tools
SC13-Obs05	Orange roughy implications for SPRFMO
SC13-Obs06	Populating CMM 03-2025 Annex 9
SC13-Obs07	Update on the activities of the FAO Deep-sea Fisheries Under an Ecosystem Approach Project (2022–2027)
SC13-Obs08	Integrating Climate Change into Fisheries Science and Management in the SPRFMO Area
SC13-Obs09	VME Protection in other relevant Organisations
SC13-Obs10	CPPS-SPRFMO Cooperation for the Implementation of Decision 13-2023 on Climate Change (late)

Information documents	
SC13-Inf01	API-first Electronic Monitoring Data Reporting and Ingestion: Information paper on cost containment and implementation approach
SC13-Inf02_rev1	Schedule and agendas for the pre-SC13 activities *(rev1, 6 Sept)*

Working Papers	
SC13-WP00	Live progress of agenda discussions
SC13-WP01	Questions and Answers about Annual Reports
SC13-WP02	Revised Multiannual Workplan
SC13-WP03	ToR for the JMWG
SC13-WP04	ToR for the DWWG
SC13-WP05	ToR for the SQWG
SC13-WP06	ToR for the EWG
SC13-WP07	ToR for the DWG
SC13-WP08	Questions about the WGEMS
SC13-WP09	Rapporteur assignation per session
SC13-WP10	Proposed (tracked) changes to CMM 02 Data Standards
SC13-WP11	List of Acronyms to be annexed to the SC13 report
SC13-WP12	Proposal for an Ecosystem Status Profile Framework for the SPRFMO SC
SC13-WP13	Workplan of the Climate Change
SC13-WP14	Terms of Reference and Workplan - Salas y Gomez and Nazca Task Team
SC13-WP15	Table of recommendations from PR2IWG
SC13-WP16	Proposed SC Protocol Sharing
SC13-WP17	SQUIDSIM documents presented by Chile on PPT

Annex 6: Questions and Answers about Annual Reports

1. Regarding Chile's report on jack mackerel

Question 1 by the JMWG Chair: Thanks for the announcement of the FIPA project on MSE work. We understand this will help with the capacity building for Chilean Scientists. We wonder if there are venues or areas where SPRFMO could participate given the available funding. One approach could be to send interested scientists to learn more about OpenMSE framework. Another would be to leverage aspects developed by the FIPA project to merge with the work completed by SPRFMO funded projects.

Answer: We appreciate the interest in participating in Chile's jack mackerel MSE project. The project has an 18-month duration and is scheduled to conclude in March 2026. It is important for us to consolidate the results and complete the necessary validations before sharing information with the Organization. In the meantime, we are available to coordinate a virtual workshop to present the project's main results. This workshop could be scheduled for February, provided the project's implementation timeline remains on track. Given the national MSE project is completed and validated, we may plan collaborations with the SPRFMO Science Committee, Jack mackerel WG and MSE technical group. Collaborations may include sharing and expanding on the technical implementation being developed by Chile, using openMSE built capacity of chilean scientists, as well as consulting with the software developers, and participating in technical development workshops. Given the project completion date, additional funds would be required to extend the work.

Question 2 by USA: Thanks for the notification of the internal process for Jack mackerel assessments that occurs by the end of the calendar year. Is it possible to learn how or if the results differ or change from what is coming from the SPRFM SC report?

Answer: We appreciate the question from the United States. Substantively, the stock assessment results we use at the national level do not differ from those presented by the SPRFMO Scientific Committee. Chile adopts as the main input the JJM model and the assumptions agreed upon by the Committee for the corresponding annual cycle. It can also incorporate other national information inputs from research institutes, universities, and others. On that basis, the National Jack Mackerel Technical Scientific Committee (Chilean SC) determines the status of the resource in accordance with current regulations (General Fisheries Law) and is mandated to issue a recommendation on the range of Allowable Biological Catch (ABC) for the legal process of setting the quota.

Accordingly, to date, we do not apply an alternative approach. Any differences that might be observed are procedural or presentational in nature—for example, the translation of the Committee's results into the biological reference framework defined in Chilean legislation.

Annex 7: Scientific Committee Multiannual Workplan

Introduction

The SPRFMO Scientific Committee Multiannual Workplan contains the activities, timelines, and funding priorities for the short- and medium-term work of the Scientific Committee. It is an instrument of strategic coordination between the Scientific Committee and the Commission; it serves as a reference for the Scientific Committee's work throughout the intersessional period and provides the basis for Commission approval and support.

Following recommendations from the Performance Review Panel and subsequent discussions, the workplan has been reorganised on a **3-year planning cycle**. This allows the Commission to approve the Scientific Committee's activities and budget allocations over multiple years, providing greater predictability, stability, and autonomy of execution. While the cycle provides the long-term framework, activities may still be updated annually to reflect emerging priorities or new opportunities. If new activities arise during the course of a cycle, they may either be added to the current cycle when urgent, or scheduled for the following cycle when they can be planned more strategically. This approach provides a balance between predictability for the Commission and flexibility for the Scientific Committee.

A proposed multiannual workplan is prepared by the Scientific Committee during its meeting and included as an annex within the SC meeting report. It is then put forward as a meeting document to the Commission for consideration, relevant amendments, and ultimately adoption. The workplan adopted by the Commission is then published as a standalone Annex to the meeting report and guides the immediate intersessional and forward-looking work of the Scientific Committee.

The following tables associate each identified task with its execution years, coordinator, and funding source, noting that:

- For the purposes of the SC Workplan, a "year" corresponds to the *intersessional period* between two annual meetings of the Scientific Committee. For example, the year **2026** covers the period from **October 2025 to August 2026**, i.e. between **SC13** and **SC14.**
- Under the **Funding columns (2026, 2027, 2028)**, the budget requirements (if any) are indicated for each year of the cycle. A notation of "In-kind" signifies that the work will be carried out by Members without requiring additional financial resources.
- The column labelled **Coordinator** identifies the Member delegation(s) (in some cases the Secretariat or Chairperson) assigned to ensure that progress towards the task is made intersessionally. Where no delegation has been identified, the task is a responsibility of the SC as a whole.
- Multi-year activities are indicated by entries spanning more than one year in the table. At the end of each cycle, the workplan may be updated to include new tasks or extend ongoing ones into the following cycle.

1. Jack Mackerel Working Group

Code	Activity	Coordinator	Funding		
			2026	2027	2028
1.1 Jack mackerel assessment					
1.1.1	Review available input data and its quality for the JM assessment	CHL/EU	In-kind	In-kind	In-kind
1.1.2	Provide TAC advice according to Commission request	SC	In-kind	In-kind	In-kind
1.1.3	Experts support during SC assessment	SC Chair Secretariat	NZ$ 16K	NZ$ 16K	NZ$ 16K
1.1.4	Continue to update and compare standardizations of commercial tuning indices among different fleets and the impacts of increased efficiency in the fleets	CHL, PER, EU	In-kind	In-kind	In-kind
1.2 Jack Mackerel MSE					
1.2.1	Develop and carry out an MSE	USA, EU	N/A	N/A	N/A
1.2.2	MSE in-person workshop (after intersessional work 1.2.1)	USA	NZD 35k	N/A	N/A
1.2.3	Finalise a recommendation on Management Procedures (after 1.2.2)	SC	N/A	N/A	N/A
1.4 Jack Mackerel Ageing Techniques					
1.4.1	Workshop to evaluate methodologies for implementation in age readings in otoliths of jack mackerel (*T. murphyi*) among the age and growth laboratories of the SPRFMO.	CHL, PER	In-kind	N/A	N/A
1.5 Chub mackerel					

2. Deepwater Working Group

Code	Activity	Coordinator	Funding		
			2026	2027	2028
2.1 Orange roughy assessment					
2.1.2	Estimate stock status	NZL	In-kind	In-kind	In-kind
2.1.3	Provide advice on sustainable catch levels	NZL	In-kind	In-kind	In-kind
2.1.4	Coordinate and design acoustic surveys for relevant stocks (*intersessional consideration*)	NZL	In-kind	In-kind	In-kind
2.2 Deep water stock structure					
2.2.3	Investigate the stock structure of orange roughy on the Westpac Bank and adjacent New Zealand EEZ	NZL	In-kind	in kind	in kind
2.3 Other stock assessments, & ecological risk assessment					
2.3.1	Review the risk assessment of teleost and elasmobranch species considering new available information and methods	AUS (2030)	N/A	N/A	N/A
2.3.2	Assess other assessment options for hapuku and blue eye trevalla including standardised CPUE	AUS	In-kind	In-kind	N/A
2,3,3	Refine species list for chondrichtyans in SPRFMO area and review the suitability of distribution data	AUS/NZ	N/A	In-kind	In-kind
2.4 VME Encounters and benthic bycatch					
2.4.1	Develop VME taxa ID guide for benthic bycatch, following the steps proposed in SC9-DW12, and associated training videos	NZL	In-kind	In-kind	In-kind
2.4.2	Evaluate the performance of the spatial management measures	NZL	In-kind	N/A	N/A
2.4.3	To improve the particle tracking model used in the validation of the bioregionalization and investigate connectivity amongst geographically separated areas of the same bioregion	NZL	In-kind	N/A	N/A
2.4.4	Develop a standard to identify a VME eligible to be listed in Annex 9 of CMM03	NZL/AUS			In-kind
2.5 Bottom Fishery Impact Assessment					
2.5.1	The Scientific Committee shall review, and update if required, the SPRFMO BFIAS every 5 years, to ensure that it reflects, as appropriate, best practice. Standing item	DWWG (2030)	N/A	N/A	N/A
2.5.2	For VME taxa potentially at risk of SAI, improve and validate abundance models, using independent data	NZL	In-kind	N/A	N/A
2.5.3	With a focus on VME Indicator taxa currently estimated to be most impacted by fishing, work to reduce uncertainties in risk assessments for benthic habitats and VMEs by exploring the overlap between the spatial distribution of bottom trawling fishing impact (i.e., the 'naturalness layer') and abundance estimates of VME indicator taxa [potentially at multiple spatial scales, including Management Areas] Contingent on previous task	NZL	-	In-kind	In-kind
2.5.4	Complete Cumulative BFIA. Standing item	AUS/NZL	N/A	- In-kind	N/A
2.5.5	Derive an SAI threshold from an empirical study tailored to the dRBS approach	NZL	In-kind	In-kind	N/A

2.6 CMM 03 request regarding Encounters with VMEs					
2.6.1	Developing a multi-spatial scale risk-based approach to assess encounters with VME indicator taxa	NZL	N/A	N/A	In-kind
2.6.2	Review all reported VME encounters	NZL	In-kind	In-kind	In-kind
2.6.3	Conduct an independent analysis on observational data related to the 2024 NZ encounter	NZL	In-kind	N/A	N/A
2.7 CMM 03 request regarding ongoing appropriateness					
2.7.1	Review all available data and provide advice on the ongoing appropriateness of the management measures to ensure the CMM continues to achieve its objective and the objectives of the Convention	DWWG	In-kind	In-kind	In-kind
2.8 CMM 03 request regarding Marine mammals, seabirds, **reptiles** and other species of concern					
2.8.1	Direct and indirect interactions between bottom fishing and marine mammals, seabirds, reptiles and other species of concern;	AUS/NZL	In-kind	In-kind-	In-kind
2.8.2	Develop a protocol for safely releasing sharks alive	AUS/NZL	In-kind	in-kind	N/A
2.8.4	Report results/outcomes for mitigation technologies including bird deterrent curtain, cachalotera nets on trot lines, and bird bafflers	DWWG	In-kind	In-kind	In-kind

3. Squid Working Group

Code	Activity	Coordinator	Funding		
			2026	2027	2028
3.1 Squid assessment					
3.1.1	Form a task team to conduct simulation and model evaluations for squid stock assessments	SC Chair	In-kind	In-kind	N/A
3.1.3	Squid Workshop including potential assessment techniques, abundance indices and simulated assessment; to be held in person	SQWG/ Secretariat	25k NZD	N/A	N/A
3.1.4	Develop template for monthly data, including catch, effort and CPUE	SQ WG	In-kind	N/A	N/A
3.1.5	Develop a template for biological data, including time, location, length, weight and maturity stage	SQ WG	In-kind	N/A	N/A
3.1.6	Protocol for data submission and templates management	SQ WG	In-kind	N/A	N/A
	Review available input data and its quality to for stock assessment (report to SC14)	SQ WG	NZ$ 51k (SC 2025)	N/A	N/A
	Perform a stock assessment to evaluate the current status of the jumbo squid fishery.	SQ WG		N/A	N/A
	Develop an Operating Model to support MSE and other simulation work, including support for multiple phenotypes.	CHL/CHN/SQ WG		N/A	N/A
	Extend the Operating Model to explicitly incorporate environmental effects on population dynamics, enabling research on climate change impacts.	N/A		N/A	N/A
	Design climate-sensitive harvest control rules tailored to squid life history and the SPRFMO decision-making framework.	N/A		N/A	N/A
	Evaluate the performance of these harvest control rules through MSE to provide robust management advice under uncertainty.	SQ WG		N/A	N/A
3.2 Squid CMM development					
3.2.1	Develop a plan for more detailed within-season fishery Monitoring depending upon the uptake of EM, etc.	SQ WG	N/A	N/A	N/A
3.2.2	Explore and develop alternative approaches to provide management advice if a stock assessment cannot be completed or is not suitable for management purposes.	SQ WG	N/A	N/A	N/A
3.3 Observer Program					
3.3.1	Review the template for recording seabird interactions and seabird abundance	NZL/SQ WG	N/A	N/A	N/A
3.4 Squid Connectivity					
3.4.1	Collect samples for population genomic studies (Convention Area and adjacent National Jurisdiction Areas)	N/A	NZ$ 97K (CHN) +20k USD (CHN, TBD)	N/A	N/A
3.4.2	DNA Sequencing using IcWGS, for population genomics analysis	N/A	In-kind	In-kind	In-kind

	Review the DNA extraction protocols and analysis pipelines to lcWGC in an online workshop with all Members interested in March-April 2026. 10 September 2025 at 8:05 PM				
3.4.3	Provide a report with a phylogeographic analysis using the complete mitochondrial genome obtained from the lcWGS short reads, integrating data from all Members and include a review of the existing protocols.	N/A	In-kind	In-kind	In-kind

4. Ecosystems Working Group

Code	Activity	Coordinator	Funding		
			2026	2027	2028
4.1 Species distribution and preferences					
4.1.1	Analyse the habitat preferences of jack mackerel to identify environment-related changes in their distribution and abundance.	PER/CHL	In-kind	In-kind	In-kind
4.1.2	Workshop to review the main findings of the SDMTT data inventory and explore ways to enhance data availability for spatiotemporal distribution analysis of target species, while also compiling and synthesizing information on chub mackerel — including catch, distribution, life history characteristics, and independent survey estimates.	CHL	$45,000 NZD (EU ~24k EUR)	N/A	N/A
4.1.3	Implement species distribution models (SDMs) for jack mackerel and jumbo squid, using retrospective data and projecting distributions under climate change scenarios.	ECO-WG Chair	N/A	N/A	N/A
4.1.4	Explore the implications of potential spatial and temporal shifts in species distributions for management measures under climate change scenarios	EWG chair	N/A	N/A	N/A
4.1.5	[Analyse the habitat preferences of jumbo squid] to identify environment-related changes in their distribution and abundance.	PER/CHL	In-kind	In-kind	In-kind
4.1.6	Analyse behaviour, distribution, and abundance information about mesopelagic, euphausiids and other key species of the Humboldt Current System	PER/CHL	In-kind	In-kind	In-kind
4.2 Standardised oceanographic data products and modelling					
4.2.1	Integration of databases provided by different Members with linkage to a metadata repository	PER/CHL	In-kind	In-kind	In-kind
4.3 Ecosystem Assessment					
4.3.1	Provide ecosystem status overview for SC at seasonal to decadal scale	EWG Chair	In-kind	In-kind	In-kind
4.3.2	Publication of a Special Issue of Symposium on State of the Art of Habitat Monitoring	EWG Chair	NZ$ 15k (USA)	N/A	N/A
4.4 Data collection from fishing vessels					
4.4.1	Mapping spatial-temporal population density distribution of jack mackerel using a combination of	PER/CHL	In-kind	In-kind	In-kind

	the existing acoustic survey data and acoustic information as obtained from industry vessels				
4.4.2	To provide acoustic indices from fishing vessels for consideration in the data and stock assessment benchmarks of jack mackerel and chub mackerel	PER/CHL	In-kind	In-kind	In-kind
4.4.3	Assess the feasibility of developing regional integrated indices from acoustic surveys to support jack mackerel stock assessment	PER/CHL	In-kind	In-kind	In-kind
4.5 Jack Mackerel Connectivity					
4.5.1	Workshop to identify key practical requirements and considerations for sampling approaches for progressing work on the identified priority topics (Genetics, Tagging methods, Early stages & Reproduction) including outlining possible iterative/annual changes to sampling design.	CHL / PER	NZD 25k	N/A	N/A
4.5.2	Identify key hypotheses on connectivity and a description of how these hypotheses could be tested using the priority topics. Describe an approach for considering evidence.	CHL / PER	N/A	N/A	N/A
4.5.3	Design a sampling programme on the four identified priority topics to generate evidence on jack mackerel connectivity.	CHL / PER	N/A	N/A	N/A
4.5.4	Implement the designed sampling and research programme—including data analysis and reporting—on the four identified priority topics to generate evidence to support jack mackerel connectivity hypotheses.	CHL/PER	N/A	N/A	N/A

5. Data Working Group

Code	Activity	Coordinator	Funding		
			2026	2027	2028
5.1 Data Standards					
5.1.1	Review and update data standards to ensure appropriate scientific data are collected in SPRFMO fisheries (Paragraph 8 of CMM 02-2025)	N/A	N/A	N/A	N/A
5.1.2	Prioritise data needs of Members.	N/A	N/A	N/A	N/A
5.1.3	Provide input to the Secretariat in developing improved data management infrastructure including databases, data repositories and data processing tools	N/A	N/A	N/A	N/A

6. Other (Crosscutting issues)

Code	Activity	Coordinator	Funding		
			2026	2027	2028
6.1 Climate Change					
6.1.1	Identify management implications of climate change on habitat and fisheries in the SPRFMO area (Decision 13-2023)	USA	In-kind	In-kind	In-kind
6.2 Research in the Salas y Gomez and Nazca ridges area					
6.2.1	Provide an analysis of all fishing data within the Salas y Gomez and Nazca ridges area, including for 2024	N/A	In-kind	N/A	N/A
6.2.2	Provide an evaluation of fishing impacts for the Salas y Gomez and Nazca ridges area	N/A	In-kind	N/A	N/A
6.2.3	Undertake an analysis of observer data from all fisheries (not limited to SPRFMO if that data is available) regarding interactions with marine mammals, seabirds, reptiles and other species of concern within the Salas y Gomez and Nazca ridges area and adjacent areas	N/A	In-kind	N/A	N/A
6.2.4	Review and discuss all compiled data and information and present possible measures to SC14.	N/A	In-kind	N/A	N/A
6.3 Seabird bycatch					
6.3.1	Progress southern hemisphere quantitative risk assessment (SEFRA)	N/A	In-kind	In-kind	In-kind
6.3.2	Compile and characterise existing data relevant to seabird interactions with squid jig and recommend future data collection protocols	China/Chinese Taipei/Korea/ACAP	In-kind	N/A	N/A
	Conduct trials on purse seine mitigation technologies, taking into account those described in the ACAP toolbox, and report on the outcomes of these trials including seabird bycatch rates.	Chile	In-kind	In-kind	In-kind
	Summarise and characterise seabird bycatch-related data held by the Secretariat and to work with interested Members and ACAP to identify any future potential improvements to data collection and reporting processes.	Secretariat	In-kind	N/A	N/A
6.4 CMM 17 Marine pollution					
6.4.1	SC 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 SC and the CTC any information derived from such efforts	N/A	N/A	N/A	N/A
6.5 Cooperation					
6.5.1	FAO ABNJ Deep Sea Fisheries: coordinate activities over their next five-year plan that could involve Member scientists and a number of SPRFMO science projects	N/A	N/A	N/A	N/A
6.5.2	CPPS: Increase cooperation and collaboration between both organisations.	N/A	N/A	N/A	N/A

6.6 Secretariat Scientific Support					
6.6.1	Continue with analyses of catch composition and fishing activities; support CPUE analyses; and general scientific analyses, as capacity allows.	Secretariat	In-kind	In-kind	In-kind
6.7 Other crosscutting					
6.7.1	To update long version profiles (FAO species synopsis format) for jack mackerel, chub mackerel and jumbo flying squid	N/A	In-kind	In-kind	In-kind
6.7.2	Development of assessments for species in the SPRFMO Convention Area that are bycaught or subject to targeted fishing operations (in line with tier-based assessment approach)	N/A	In-kind	In-kind	In-kind

Annex 8: SC response to PR2IWG assignation of recommendations

Rec.	PR2 report section	Finding	Recommendation	Responsible Body/Bodies [agreed during PR2 IWG Meeting 1]	IWG Comments to SC [discussed in PR2 IWG Meeting 1]	SC Comments	PR2 IWG Meeting 1 Discussion Summary
1	3.1. Governance – Planning and Oversight	The Review Panel found that SPRFMO would benefit from building Member consensus on the long-term direction of the organisation, including how it intends to address emerging strategic issues such as climate change, BBNJ, and labour standards.	The Review Panel recommends facilitating an annual strategic discussion aimed at producing a Statement of Intent that outlines where the Commission wants to be in 5 to 10 years and signals how it intends to get there. This should include how the Commission plans to address emerging issues such as climate change and BBNJ, among others.	COMM	*To be discussed at a later stage*	*No action required from SC*	The IWG agreed to keep COMM as the responsible body.
2	3.1. Governance – Planning and Oversight	The Review Panel found that SPRFMO would benefit from implementing integrated, multi-year business planning).	The Review Panel recommends the development of a Business Plan with a three-year planning horizon and an associated budget. The first Business Plan should include a review and enhancement of the Headquarters Agreement with the New Zealand Government.	COMM; SC; FAC; CTC	**Feedback on assignment of recommendation:** A business plan is expected to be a formal document outlining a company's objectives, strategies, and financial forecasts, serving as a roadmap for growth and development. Therefore, although there is a financial component to it, there are also other matters to be solved for which FAC should not be the only one responsible for the implementation of this recommendation. Suggest that the rest of the SFPRFMO bodies are also considered as responsible bodies. **Agree? (In-full or in-part)?**	SC has started thinking about how its workplan can be translated into a three-year planning horizon including consideration of resources.	IWG agreed to the recommended bodies including the addition of COMM, SC and CTC. The IWG agreed to the recommendation in full. The IWG noted that the Commission will likely need to develop a larger framework and task the work to the subsidiary bodies to provide their input and undertake their respective responsibilities in implementing the business plan. The IWG noted that while the

Rec.	PR2 report section	Finding	Recommendation	Responsible Body/Bodies [agreed during PR2 IWG Meeting 1]	IWG Comments to SC [discussed in PR2 IWG Meeting 1]	SC Comments	PR2 IWG Meeting 1 Discussion Summary
					SC agreed to this recommendation **Priority (low, medium, high):** High		logical sequencing may suggest that the work needs to start with the Commission. Members raised concerns that this would mean discussions around this recommendation would be postponed till the next annual commission meeting. Some Members noted preparatory work can however be discussed by subsidiary bodies and requested clarity on what the SC can do at this stage of the process without a larger framework. The SC chair clarified that the SC currently plan their activities and budget over a one-year timeframe. Noted this is challenging when it comes to activities that will take longer than one year. The SC can start working with three-year horizon which will facilitate with the development of business plan. This can be discussed at the next SC meeting.
3	3.1. Governance – Planning and Oversight	The Review Panel found that SPRFMO could improve performance if the Commission provided greater direction and	The Review Panel recommends that the Commission improve its direction to subsidiary bodies, the Data Working Group, and the Secretariat by approving their work plans/programmes through	COMM; SC; FAC; CTC	**Feedback on assignment of recommendation:** N/A **Agree? (In-full or in-part)?** Agree	Flexibility is important within the 3 year workplan. SC would welcome prioritisation from Commission	The IWG noted the recommendation for the commission to give guidance to subsidiary bodies. The IWG agreed to include the

Rec.	PR2 report section	Finding	Recommendation	Responsible Body/Bodies [agreed during PR2 IWG Meeting 1]	IWG Comments to SC [discussed in PR2 IWG Meeting 1]	SC Comments	PR2 IWG Meeting 1 Discussion Summary
		oversight to its subsidiary bodies, including the Data Working Group, and the Secretariat.	the proposed integrated business plan, with a three-year planning horizon and associated budget/funding model. Commission oversight can be strengthened by assessing the performance of the subsidiary bodies and Secretariat against their components of the proposed Business Plan. This would involve developing a Workplan for the CTC and FAC, improving the approach to the SC Multiannual Work Plan, and developing an Operational Plan for the Secretariat, as well as an Information Management Strategy and associated Data Management Plan.		**Priority (low, medium, high):** High		subsidiary bodies at this stage. The IWG noted that the primary responsibility for this recommendation sits with the Commission and work related to this recommendation will eventually cascade down to the identified subsidiary bodies. A Member raised the need to not identify the first three recommendations, as separate tasks, but rather integrated tasks that should be developed over different time frames. They noted the need for consideration on how the subsidiary bodies could work cooperatively. To further clarify this, a Member suggested to include 2026 next to the timeframes against the subsidiary bodies to reflect that no further action will be required from them this year. IWG also agreed in-full with this recommendation.
4	3.2. Building a High Performing Secretariat	The SPRFMO Secretariat requires a comprehensive overhaul to address internal issues, workplace practices, and ensure its	Recruit a competent Executive Secretary with proven leadership, executive management, organisational development, and results-oriented skills that can drive the necessary internal reforms to improve the	COMM	*To be discussed at a later stage*	*No action required from SC*	The IWG agreed for Commission to be the responsible body.

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		resourcing aligns with the Commission's planned direction for the future. To succeed and thrive, the Secretariat needs a strong leader with proven managerial experience, strong communication skills, and a focus on continuous improvement. This will ensure the recruitment and retention of quality staff and help the Secretariat develop a strong track record for delivery.	Secretariat's operational performance and support the Commission's strategic objectives. An understanding of the strategic importance of information management systems would also be an advantage to the organisation. The Executive Secretary should be provided with a performance agreement linked to Key Performance Indicators (KPIs) in the approved Business Plan.				
5	3.2. Building a High Performing Secretariat	The Headquarters Agreement is affecting the Secretariat's operations in New Zealand.	Carry out an independent review of the Headquarters Agreement to ensure it is fit for purpose.	FAC; COMM	*To be discussed at a later stage*	*No action required from SC*	The IWG agreed for FAC and Commission to be responsible bodies.
6	3.2. Building a High Performing Secretariat	The Secretariat would benefit from clear strategic direction from the Commission. However, the draft Secretariat Staffing Strategies are not fit for purpose and will not provide the necessary direction in terms of operational deliverables, staffing	Develop a Secretariat Business Plan with a three-year planning horizon and an associated budget. The first Business Plan, with specific and measurable KPIs, should include: • A staffing plan and associated organisational arrangements • Cultural improvement plan • The development of systems and processes to implement the staffing and financial regulations to meet international best practice	FAC;	*To be discussed at a later stage*	*No action required from SC*	The IWG agreed for FAC to be responsible body.

Rec.	PR2 report section	Finding	Recommendation	Responsible Body/Bodies [agreed during PR2 IWG Meeting 1]	IWG Comments to SC [discussed in PR2 IWG Meeting 1]	SC Comments	PR2 IWG Meeting 1 Discussion Summary
		structure, service delivery or investment in organisational health.	and in a fair and consistent manner. • Support for the Information Management Strategy and Data Plan • Support for the Commission and it subsidiary bodies and the Data Working Group. • Support for the independent review of the Headquarters Agreement with the New Zealand Government				
7	3.3. Data Collection and Information Management Systems	Effective data collection and information management systems are critically important. The Commission has under-invested in information management through an ad hoc and poorly resourced approach.	The Commission should develop an Information Management Strategy and Data Management Plan, placing a high priority on improving its overall approach to information management. This could draw on the SC's existing progress through SC12-Doc12.	SC; CTC; FAC; COMM [Data Working Group (DWG)];	**Feedback on assignment of recommendation:** Expect discussions needed in Data Working Group (DWG) but may need guidance from COMM and subsidiary bodies. **Agree? (In-full or in-part)?** Agree **Priority (low, medium, high):** High		The IWG agreed with the responsible bodies noting DWG is a subsidiary body that sits with the Commission. The IWG agreed to this recommendation and recognised the need for an Information Management strategy. The IWG noted the limited capacity of the secretariat, and the possible activities already scheduled under their work plan. The IWG also noted the current challenges in identifying a chair for the Data Working Group, and the expected hurdles from that. The IWG were interested in seeking advice from the subsidiary bodies on how these recommendations could be prioritised considering capacity.

Rec.	PR2 report section	Finding	Recommendation	Responsible Body/Bodies [agreed during PR2 IWG Meeting 1]	IWG Comments to SC [discussed in PR2 IWG Meeting 1]	SC Comments	PR2 IWG Meeting 1 Discussion Summary
							The IWG identified action against this recommendation is a high priority. Noted that this recommendation is not limited to data collection and management but also standardisation of data, templates and tools to support stock assessments considering the number of species that require assessments is growing.
8	3.3. Data Collection and Information Management Systems	The Data Working Group is a positive step forward; however, its mandate is too limited to address the underlying issues associated with SPRFMO's information management system.	The Commission should elevate the Data Working Group to a standalone body reporting directly to the Commission and reconsider its title and mandate in light of the issues identified by the Review Panel.	COMM	*To be discussed at a later stage*	*No action required from SC*	The IWG agreed for Commission to be the responsible body.
9	3.3. Data Collection and Information Management Systems	The Commission needs to ensure that the provisions of CMM 02-2022 meet its future data and information requirements.	The Commission should work towards conducting a comprehensive review of CMM 02-2022, following the development of the Information Management Strategy and Data Management Plan, as part of the Business Plan.	SC – Data Working Group (DWG); CTC; COMM	**Feedback on assignment of recommendation:** Pending commencement of the DWG and noting recommendation 8. **Agree? (In-full or in-part)?** Agreed **Priority (low, medium, high):** Medium	SC13 partially addressed this with advice to COM14 on CMM02 changes. This could be further reviewed after development of a Strategy and Plan.	The IWG agreed on the recommended bodies noting the primary responsibility sits with the Commission. The IWG agreed in part with this recommendation but recognised that this should not be dependent on the IMS or the DMP. The SC Chair noted that CMM 02-2022 was amended last year

Rec.	PR2 report section	Finding	Recommendation	Responsible Body/Bodies [agreed during PR2 IWG Meeting 1]	IWG Comments to SC [discussed in PR2 IWG Meeting 1]	SC Comments	PR2 IWG Meeting 1 Discussion Summary
							to CMM 02-2025. The IWG agreed that this recommendation is a medium priority. The IWG noted the need for further clarify on how the SC can support this recommendation. The IWG agreed to defer this recommendation for further advice on this. The IWG noted the need to consider other recommendations related to fisheries management which rely on data management.
10	3.4. Fisheries management	Jack mackerel – Lack of cooperation regarding fisheries in adjacent areas under national jurisdiction risks undermining management effectiveness.	Continue discussions and actions toward full cooperation with the jack mackerel fishery occurring in adjacent national jurisdictions. The Commission should explore ways to incentivise improved cooperation and compatibility.	COMM; SC – Jack Mackerel Working Group (JMWG),	**Feedback on assignment of recommendation:** N/A **Agree? (In-full or in-part)?** SC agrees in part to the recommendation **Priority (low, medium, high):** High	It was noted that there is scientific cooperation in relation to high seas and adjacent national jurisdictions through data sharing and stock assessment. This could be enhanced for example through MSE processes.	The IWG agreed to the responsible body. The SC Chair noted the different components of this recommendation, science and management. The SC Chair supported the need for collaboration across the science and management and recognised the potential for integrating these two components. The SC Chair however noted that the management level for implementation is beyond the scope and duties of the SC. The SC Chair noted the need for

Rec.	PR2 report section	Finding	Recommendation	Responsible Body/Bodies [agreed during PR2 IWG Meeting 1]	IWG Comments to SC [discussed in PR2 IWG Meeting 1]	SC Comments	PR2 IWG Meeting 1 Discussion Summary
							the SC to consider their responsibilities to identify where there are opportunities for cooperation and what work the SC can do to support this recommendation. The IWG agreed with this recommendation.
11	3.4. Fisheries management	Jack mackerel – The impact of the jack mackerel fishery on other fish stocks and the broader ecosystem, including potential risks to protected species, remains insufficiently evaluated.	Undertake analysis of the jack mackerel fishery's impact on other fish stocks and the broader ecosystem. Provide scientific recommendations based on these reviews and adopt relevant management decisions as necessary, with particular attention to chub mackerel, protected species and species of concern.	SC – JMWG, Ecosystem Working Group (EWG); COMM	**Feedback on assignment of recommendation:** Proposal to add COMM, as the body responsible for the adoption of management measures **Agree? (In-full or in-part)?** Agreed **Priority (low, medium, high):** Medium – chub mackerel Low – other items	It was noted that there is work underway and planned on chub mackerel bycatch. The MSE could include chub mackerel bycatch as a performance indicator.	The IWG agreed to the responsible bodies. The IWG agreed in-part of this recommendation. The IWG noted the difficulty in identifying the priority levels between Jack mackerel and other species such as protected species and species of concern. The IWG noted that the SC will undertake the relevant technical advice and the scientific advice, and the Commission is responsible for the management.
12	3.4. Fisheries management	Squid – Ongoing gaps in stock assessments indicate that further action is needed to implement effective management of the fishery according to the provisions of the SPRFMO Convention.	To ensure effective and timely management of the squid fishery, it is essential to execute all tasks related to squid as outlined in the SC's Multiannual Workplan, which should be integrated into the broader Business Plan. This includes prioritising the development of management strategy evaluations (MSE) and	COMM; SC – Squid Working Group (SWG); FAC	**Feedback on assignment of recommendation:** Proposal to add: - FAC for consideration of resources needed to conduct this work and integration into Business Plan; and - COMM as body responsible for	The planning and timelines for these three elements are important and the subject of the SC multiannual workplan.	The IWG agreed to the recommended bodies, noting primary responsibility lies with the Commission. The IWG had differing views on this recommendation and did not reach consensus. The IWG deferred to the Commission to provide further advice.

Rec.	PR2 report section	Finding	Recommendation	Responsible Body/Bodies [agreed during PR2 IWG Meeting 1]	IWG Comments to SC [discussed in PR2 IWG Meeting 1]	SC Comments	PR2 IWG Meeting 1 Discussion Summary
			harvest control rules (HCR), ensuring that work is directed and resourced in a more thoughtful and strategic manner, as part of an overall effort to achieve SPRFMO's long-term objectives. The Commission shall also consider alternative options if the stock assessment cannot be completed or if it is not suitable for management purposes.		consideration and adoption of alternative options. **Agree? (In-full or in-part)?** SC agreed with the three elements noting that they are interrelated: 1. *that squid-related tasks in the SC workplan need to be implemented.* 2. *That SPRFMO explore alternative options to stock assessments.* 3. *That SPRFMO prioritise MSE and HCR work.* **Priority (low, medium, high):** To be discussed further. **IWG Comments to SC:** The IWG noted that the SC do not have a clear mandate on this recommendation until instructed by the Commission. It is important that the Commission provide clear direction on the three elements of this recommendation. The IWG also noted that the completion of the stock assessment is part of the implementation of the SC workplan. SC may wish to continue to explore alternative options until a stock assessment is put forward. The IWG invites SC to provide any preliminary views on the feasibility of the different elements of the proposal which can help the IWG and ultimately the Commission in their consideration of		The SC Chair noted the need for a clear mandate from the Commission even if the activities are relevant to the recommendations and supported by the SC. A Member noted the importance of completing the stock assessment and the need to complete this before launching into MSE work or finding alternative options. With this, the Member identified they could not support this recommendation in full. The IWG noted there is no stock assessment provided at the level of the SC. Two Members provided the stock assessment with different data sets because there is no commonly agreed data sets. The stock assessment provided different views on the status of the stocks. One Member raised the need for alternative options to be based on stock assessments. Noted the need to see how MSE and HCR work for Jack Mackerel. How does it benefit, what work is involved and how it looks like after implementation. Recognised the need to consider alternative options noting the challenges with the current approach to

Rec.	PR2 report section	Finding	Recommendation	Responsible Body/Bodies [agreed during PR2 IWG Meeting 1]	IWG Comments to SC [discussed in PR2 IWG Meeting 1]	SC Comments	PR2 IWG Meeting 1 Discussion Summary
					this recommendation.		stock assessments. Noted alternative options is another way to provide management measures based on the CPUE analysis and provide advice if the stock assessment is not completed. Pew noted that MSE work can be undertaken in conjunction with developing stock assessments, and the three elements of the recommendation can be undertaken at the same time. One Member noted the work of the Squid working group and the SC in trying to undertake a stock assessment. Noted the need for advice from the SC on whether it's feasible to provide a management strategy that doesn't require a full stock assessment.
13	3.4. Fisheries management	Squid – There are considerable uncertainties in the stock assessments, partly due to insufficient data.	Participants of the fishery, including Members with squid fisheries in areas under national jurisdiction, should fully cooperate with the Commission and the SC through data sharing to facilitate the assessment.	COMM; SC – SWG, DWG; CTC;	**Feedback on assignment of recommendation:** Note that pending discussion in the DWG, this may also need CTC consideration. Also proposal to add COMM, as the body ultimately for cooperation with relevant Members **Agree? (In-full or in-part)?** Agreed **Priority (low, medium, high):** High	Data sharing is a feature of the SC multiannual work plan, which would include meta data and analysis.	IWG agreed to responsible bodies including those suggestions. The IWG noted the need to be clearer on the duties of each of the recommended bodies. The IWG noted that this recommendation is more aligned to the responsibilities of the Commission and requested further clarity on the role of the

Rec.	PR2 report section	Finding	Recommendation	Responsible Body/Bodies [agreed during PR2 IWG Meeting 1]	IWG Comments to SC [discussed in PR2 IWG Meeting 1]	SC Comments	PR2 IWG Meeting 1 Discussion Summary
							SC outside of utilizing the data provided by the coastal states for relevant assessments. The IWG noted the main challenge for progressing stock assessments is data availability which is beyond the scope of the SC. Noted the duties of Members in data reporting, however following through with this is something that should be discussed at the Commission level. One Member raised the need to get advice and guidelines from SC on which data which will be shared by Members to support the SC work on stock assessments. The IWG agreed with this recommendation.
14	3.4. Fisheries management	Squid – Although there have been improvements in observer coverage since the introduction of CMM 18, current levels remain inadequate, hindering the collection of essential data for assessing both the squid fishery and its ecological impact.	Increase the observer coverage rate to generate relevant data that supports the SC's work, addressing both the targeted squid fishery and its potential impact on associated species.	COMM; SC – SWG;	**Feedback on assignment of recommendation:** N/A **Agree? (In-full or in-part)?** **Priority (low, medium, high):**	Members noted the recent increases in observer coverage and development of EM standards	The IWG agreed with the recommended bodies for this recommendation. One Member noted the Commission adopted CMM 18-2025 for squid, and the outcomes of this for the fisheries. With this did not agree fully to this recommendation. One Member noted the need for subsidiary bodies to further consider this recommendation

Rec.	PR2 report section	Finding	Recommendation	Responsible Body/Bodies [agreed during PR2 IWG Meeting 1]	IWG Comments to SC [discussed in PR2 IWG Meeting 1]	SC Comments	PR2 IWG Meeting 1 Discussion Summary
							and strongly supported the progression of this recommendation. One Member noted this measure isn't just about observer coverage and is relevant for associated species. Noted the need for more work and strongly supported the need for this recommendation to be considered further. Member noted the long-term work associated with this recommendation and noted this doesn't need to be given high priority.
15	3.4. Fisheries management	Squid – The uncertainties surrounding current fishing capacity highlight the need for precautionary measures. The existing effort limits are viewed as too high, and further strengthening of these limitations is crucial for safeguarding the long-term sustainability of the squid fishery.	Given the uncertainties regarding the current fishing capacity, consider further precautionary measures, including strengthening fishing effort limitations.	COMM - SC – SWG;	SC looks to Commission for guidance on this recommendation		The IWG agreed with the responsible bodies, noting the commission has primary responsibility for this recommendation. The IWG did not reach consensus on position for this recommendation. The IWG generally noted the recommendation and deferred to SC for further advice and consideration.
16	3.4. Fisheries	Squid – The progress	The Commission should ensure	SC – SWG;	**Feedback on assignment of**	**SC noted that funding and**	The IWG agreed to responsible

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	management	made in the squid fishery has largely relied on voluntary contributions from Members and Observers, underscoring the need for sustained funding and resources to engage scientists with the necessary expertise.	adequate funding and resources, including financial support, to involve scientists from academic institutions with relevant expertise. Additionally, Members and Observers should be encouraged to maintain their cooperation through both in-kind and financial contributions.	FAC; COMM	**recommendation:** Proposal to add FAC in view of consideration of funding and resources including sourcing of contributions **Agree? (In-full or in-part)?** Agree **Priority (low, medium, high):** High	**resourcing is reliant on FAC and Commission. It further noted the potential to increase financial contributions to balance with in-kind resourcing. This could be considered as part of the wider business planning.**	bodies, including SCAF. In line with previous recommendations, the IWG noted this recommendation and deferred to SC and Commission for further consideration.
17	3.4. Fisheries management	Deepwater – CMM 03 is not fit for purpose, considering its complexity and the unintended consequences on the relevant fishing industry. This measure could be constructed in alternative ways that meet the Convention's objectives.	Investigate alternative approaches to managing these fisheries to explore whether it is possible to maintain a viable fishery in a way that is consistent with the Convention's objective.	COMM	*To be discussed at a later stage*	*No action required from SC*	The IWG agreed with the responsible bodies.
18	3.4. Fisheries management	Deepwater – In terms of stocks, there is no urgency to prioritise catch limits for other deepwater species given effort is so low.	Deepwater - With respect to all other fish species captured by paragraph 11 of CMM 03a, implement an operational trigger which, if met, would activate the development of more specific fisheries management measures, for example, catch limits.	COMM; SC – Deepwater Working Group (DWWG);	**Feedback on assignment of recommendation:** Proposal to add COMM as the body responsible for development of fisheries management measures. **Agree? (In-full or in-part)?** Agree **Priority (low, medium, high):** Medium **IWG Comments to SC:**	Work for hapuku and blue eye trevella is on the workplan	IWG agreed with the body responsible, noting that the primary responsibility sits with the Commission. In line with previous recommendations, the IWG noted this recommendation and deferred to SC and Commission for further consideration.

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					The IWG noted Commission would have primary responsibility over this recommendation. SC may wish to provide comment on whether the current workplan for deepwater is commensurate with the level of fishing effort and there is no need to look into further actions unless guidance is given by Commission.		
19	3.4. Fisheries management	Exploratory Fisheries – There is no evidence of discussions or planning by the Commission or its subsidiary bodies regarding the application of Article 28 of CMM 13. This article specifies that exploratory fisheries fished for ten years must transition to established fisheries under an adopted conservation and management measure.	Exploratory - The Commission and its relevant subsidiary bodies should initiate discussions to clarify how to apply Article 28 of CMM 13. This includes identifying fisheries approaching the ten-year mark and establishing a framework for transitioning them into established fisheries.	SC – DWWG; COMM	**Feedback on assignment of recommendation:** Proposal to add COMM for development of a fisheries classification framework. **Agree? (In-full or in-part)?** Agree **Priority (low, medium, high):** High	Noted that the toothfish workshop for SC14 will begin to address this recommendation	The IWG agreed with the recommended bodies. In line with previous recommendations, the IWG noted this recommendation and deferred to SC and Commission for further consideration.
20	3.4. Fisheries management	Exploratory Fisheries – While the SC has focused on individual exploratory fisheries, there has been a limited assessment of the potential cumulative impacts on both target stocks and the broader	Exploratory fisheries - The SC should conduct review of the cumulative impacts of exploratory fisheries on both target stocks and the broader ecosystem.	SC – DWWG	**Feedback on assignment of recommendation:** N/A **Agree? (In-full or in-part)?** Agree in part **Priority (low, medium, high):** Medium	It was noted that the workshop described above will begin to address the accumulative impacts on toothfish	The IWG agreed to the recommended bodies. The IWG noted that it is too early to say whether this recommendation needs to happen, however agreed with the need for it to be considered. Not an immediate priority. Requested further advice from

Rec.	PR2 report section	Finding	Recommendation	Responsible Body/Bodies [agreed during PR2 IWG Meeting 1]	IWG Comments to SC [discussed in PR2 IWG Meeting 1]	SC Comments	PR2 IWG Meeting 1 Discussion Summary
		ecosystem, particularly concerning toothfish fisheries.					the SC.
21	3.4. Fisheries management	Exploratory Fisheries – There is a significant opportunity to enhance cooperation with relevant adjacent RFMOs to better inform the management of exploratory fisheries as they become established.	Exploratory fisheries - The Commission should work to strengthen cooperation with adjacent RFMOs, particularly regarding the management of toothfish fisheries. Engaging with CCAMLR can provide valuable insights and support for the effective management of these fisheries and the process to transition these into established fisheries.	COMM; SC	**Feedback on assignment of recommendation:** N/A **Agree? (In-full or in-part)?** Agree **Priority (low, medium, high):** Low	Noted that the workshop will begin the process to transition exploratory fisheries to established fisheries. It was noted that there is already a strong cooperative SPRFMO/CCAMLR relationship	The IWG noted the recommended bodies and identified the Commission as the body to hold primary responsibility. The IWG noted the role of the SC, and did not agree to include CTC as a recommended body. The IWG considered this recommendation and noted the need for further discussion.
22	3.4. Fisheries management	All fisheries - The absence of a uniform approach to harvest strategies across SPRFMO's fisheries hampers the consistent application of the precautionary principle.	All fisheries - To ensure the consistent application of the precautionary principle, the Commission should adopt a defined harvest strategy approach for all SPRFMO fisheries. This approach will provide a clear framework for decision-making, ensuring that measures are based on scientific advice, aligned with the Convention objectives, and adaptable to changing conditions.	COMM; SC;	**Feedback on assignment of recommendation:** N/A **Agree? (In-full or in-part)?** Agree **Priority (low, medium, high):** Low	SC noted that this would require Commission guidance including on how to approach this recommendation e.g. whether this might be done through an overarching framework that applies to all fisheries, or adopting individual harvest strategies for each of the fisheries. SPRFMO could draw from approaches taken in other RFMOs including SIOFA	The IWG agreed on the responsible bodies. The IWG noted this recommendation suggests the need for an overarching framework that applies to all fisheries, rather than adopting individual harvest strategies for each of the fisheries. The IWG agreed that further clarity is required from the commission on the work required for this recommendation and agreed to discuss this further at a later stage.
23	3.5. Improving Engagement	The exclusive use of English as a Working	The Commission should prioritise addressing barriers to participation by considering	FAC; COMM	*To be discussed at a later stage*	*No action required from SC*	The IWG agreed to the responsible bodies.

Rec.	PR2 report section	Finding	Recommendation	Responsible Body/Bodies [agreed during PR2 IWG Meeting 1]	IWG Comments to SC [discussed in PR2 IWG Meeting 1]	SC Comments	PR2 IWG Meeting 1 Discussion Summary
		Language is inhibiting some Members from fully contributing to the Commission's work, and this issue has been exacerbated over time.	elevating Spanish to the status of at least a Working Language. This implementation can be scalable in both time and scope. The Commission could explore various options to fund interpretation and translation, such as partnerships with other institutions, formalising interpretation as a condition of hosting meetings, utilising the Developing States fund, and identifying additional options through the FAC workplan.				
24	3.5. Improving Engagement	While measures exist to recognise the Special Requirements of Developing States, there is evidence suggesting that Article 19 is not being fulfilled as envisaged. This issue should be reconsidered and addressed in a manner different from previous attempts.	The Commission should maintain a continuous and diligent focus on fulfilling Article 19 of the Convention. This includes ensuring that the Developing States Fund is appropriately utilised, and that CMMs consider the special requirements of Developing States. To ensure full implementation of Article 19, the Commission should develop a comprehensive plan for Article 19 and ensure it is discussed annually. The first iteration of this plan could be informed by bilateral consultations led by the new Executive Secretary in 2025.	FAC; COMM	*To be discussed at a later stage*	*No action required from SC*	The IWG agreed to the responsible bodies.

Annex 9: SC response to the request from the WGEMS

The Co-Chairs of the Working Group on Electronic Monitoring Standards invited the Scientific Committee to:

- Note the WGEMS paper;
- Consider the approach the Working Group Co-Chairs suggest of only determining minimum data fields for squid jigging activity at this time, with requirements for other gear types to be determined later as needed;
- Consider whether the draft data fields for squid jigging would meet SC data needs with respect to the squid fishery;
- Consider endorsing the draft standards in principle, while providing feedback as appropriate to the WGEMS.

The Co-Chairs of the WGEMS asked the SC to consider several questions that will help it complete its work, and the SC provided the respective answers:

- What are SC priority data needs for the squid fishery, and how can EM help fulfill those needs?

The SC priority data needs for the squid fishery is the fishing activity data and bycatch/interaction data of seabirds, reptiles or other species of concern. Current EM can meet the requirements for fishing activity data and bycatch data collection through cameras and the integration of VMS and GPS. In the future, with the application of AI technology (AI image recognition) in EM, the scope can be expanded to the collection of biology-related data (such as the length and maturity of target species, and the identification for target and bycatch species)

- By what time does the SC need squid data from EM systems in order to be useful in contributing to the stock assessment cycle or to understanding interactions with species of concern? Is the current observer data deadline of September 30 for the previous January to December timely enough for these purposes?

For stock assessment, the current submission timeline for the fishing activity data (non-electronic monitoring) and the e-logbook system can meet the SC's requirements regarding data timeliness. Regarding the interaction with species of concern and fishing activity data obtained through EM, September 30 is a reasonable submission deadline, as sufficient time is required to process the videos and photographs. Additionally, based on practical experience, the on-board deployment and port return of human observers for squid fishery in the Convention area typically span across calendar years, rather than following a January-to-December cycle.

- Does the SC have confidence that the data proposed to be collected via EM for squid jigging activity, and interactions of that activity with species of concern, will be sufficient to meet its data needs?

Yes, the SC has confidence that the draft data fields proposed to be collected via EM for squid jigging activity, as well as the data on the interactions of that activity with species of concern, will be sufficient to meet its data needs.

- Is the SC comfortable deferring development of minimum data fields for EM systems to generate data related to VME encounters until a later time, with the understanding that jigging activity will be the only activity for which EM will be able to substitute for observers at this time?

Yes, the SC is comfortable deferring the development of minimum data fields for EM systems to generate data related to VME encounters until a later time, given the understanding that jigging activity will be the only activity for which EM will be able to substitute for human observers at this time.

Questions:

Annex 10: Jack Mackerel Summary of Advice

Stock status summary for Jack mackerel, September 2025

Stock: Jack Mackerel (*Trachurus murphyi*)
Region: Southeast Pacific

In conformity with the approach by the SC since 2012, a comparison was made between the 1-stock (H1) and 2-stock (H2) model configurations for Jack mackerel. Both models showed similar trends with an increasing overall biomass, high recruitments in recent years, and low fishing mortality.

Advice for 2026

Following the guidelines set out by the accepted rebuilding plan and given stock assessment results, the SC lacked consensus and provided the two aforementioned approaches:

· that the 2026 TAC be at or below 1,642.2 kt, (15% increase over the 2025 SC catch advice)

· that the 2026 TAC be at or below 1,785.4 kt, (15% increase over 2025 TAC).

Stock status

		2024	2025
Fishing mortality in relation to:	F_{MSY}	Below	Below
Spawning stock biomass in relation to:	B_{MSY}	Above 100%	Above 100%

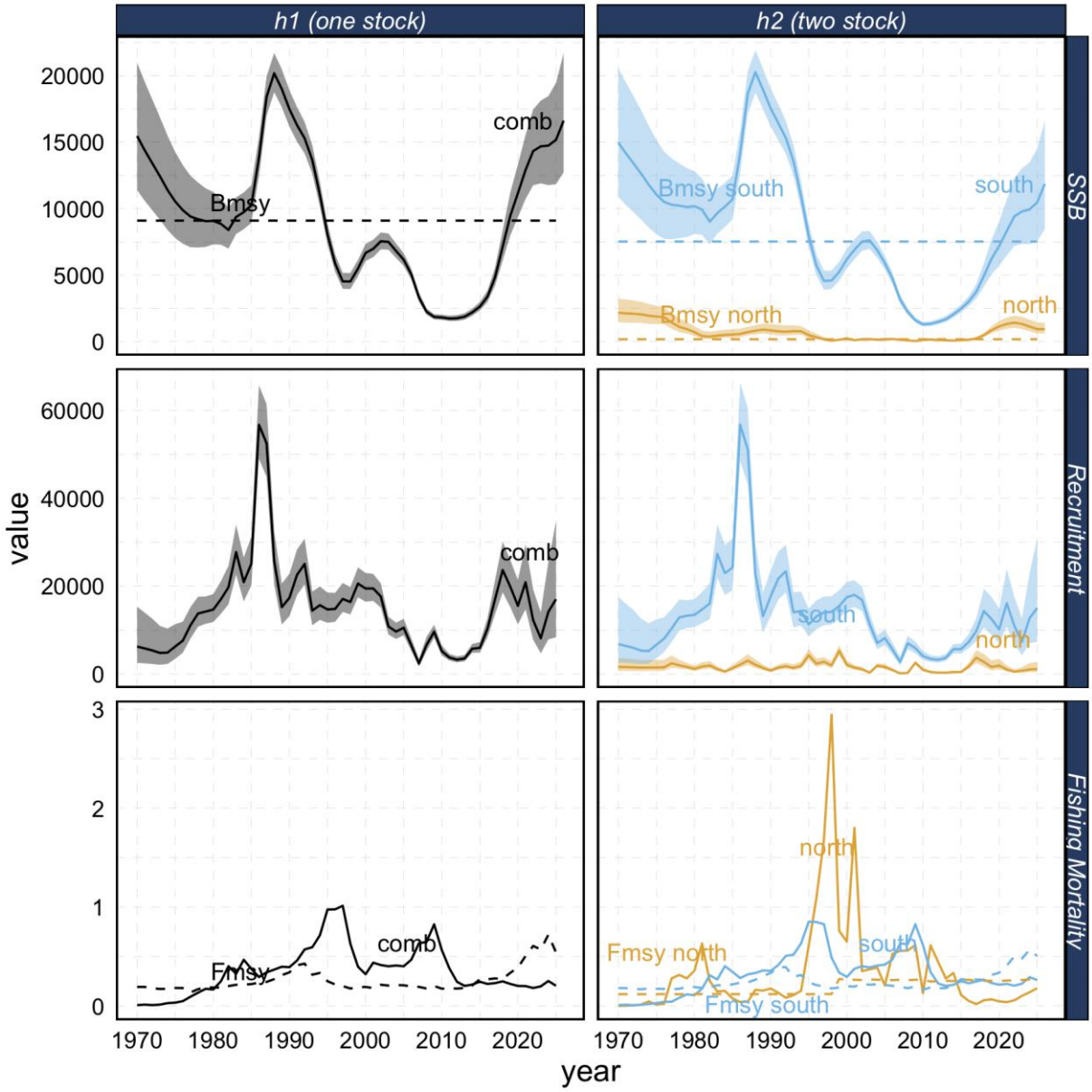

Figure 1. Jack mackerel in the southeast Pacific. Summary of stock assessment estimates over time showing spawning biomass (in thousands of tonnes; top), recruitment at age 1 (millions; middle), and total fishing mortality (as an instantaneous rate per year; middle). Columns show results for the one-stock hypothesis (H1, left) and two-stock hypothesis (H2, right, "north" stock in yellow and "south" stock in blue). Shaded areas refer to the estimated uncertainties.

Table 2: Advised catch, Catch Limits and reported catch of Jack Mackerel in the southeast Pacific.

Year	Advice	Recommended Maximum Catch	Catch Limit CMM area	Catch Limit throughout range	Catch throughout range
2013	Projection results under the assumption of recent average recruitment at the levels estimated for the recent period (2000–2012) indicate that fishing mortality should be maintained at or below 2012 levels to improve the likelihood of spawning biomass increasing. This results in catches for 2013 on the order of 441kt or lower.	441,000	360,000	438,000	355,540
2014	In sum, the advice to the Commission is to aim to maintain 2014 catches for the entire jack mackerel range in the southeast Pacific at or below 440 kt.	440,000	390,000	440,000	415,367
2015	The Commission should aim to maintain 2015 and 2016 catches for the entire jack mackerel range in the southeast Pacific at or below 460 kt.	460,000	410,000	460,000	395,210
2016	The SC agreed that the recommendation from 2014 for catches in 2016 is still appropriately precautionary. Namely, that the Commission should set 2016 catches limits for the entire jack mackerel range in the southeast Pacific at or below 460 kt, based on a status quo fishing mortality of 2014.	460,000	410,000	460,000	389,101
2017	On the application of the adjusted rebuilding plan adopted by the 2nd Meeting of the Commission as proposed from SC02, the Commission should aim to maintain 2017 catches for the entire jack mackerel range in the southeast Pacific at or below 493 kt.	493,000	443,000	493,000	406,125
2018	Given current stock status, the second tier of the Jack mackerel rebuilding plan could be applied, thereby substantially increasing the potential catch. Considering the uncertainties in the assessment however, the Scientific Committee adopts a precautionary approach and advises to maintain 2018 catches for the entire Jack mackerel range in the southeast Pacific at or below 576 kt.	576,000	517,582	576,000	527,538
2019	The SC recommended status quo fishing effort which gives 2019 catches throughout the range of the Jack mackerel stock(s) at or below 591 kt. Although the stock is estimated to be in the "second tier" of the harvest control rule (>80% of B_{MSY}), the retrospective analysis shows a tendency of overestimating the stock size. In addition, there is information that suggests that the growth of jack mackerel has been underestimated. These two factors warrant additional precaution and further investigation.	591,000	531,061	591,000	635,569
2020	In line with the accepted rebuilding plan ("Adjusted Annex K") and because the Jack mackerel biomass is estimated to be above B_{MSY}, the SC recommended a 15% increase in 2020 catches throughout the range of Jack mackerel resulting in a total catch limit at or below 680 thousand tonnes.	680,000	618,001	680,000	725,945
2021	In line with the accepted rebuilding plan ("Adjusted Annex K") and because the Jack mackerel biomass is estimated to be above B_{MSY}, the SC recommended a 15% increase in 2020 catches throughout the range of Jack mackerel resulting in a total catch limit at or below 782 thousand tonnes.	782,000	710,702	782,000	802,040
2022	In line with the accepted rebuilding plan (outlined in the SCW14 report) and because the Jack mackerel biomass is estimated to be above 100% of BMSY, the SC recommended: a precautionary 15% increase in 2022 catches throughout the range of Jack mackerel- at or below 900 kt.	900,000	817,943	900,000	961,598
2023	In line with the accepted rebuilding plan (outlined in the SCW14 report) and because the jack mackerel biomass is estimated to be above BMSY, the SC recommended a precautionary 15% increase in 2023 catches throughout the range of jack mackerel- at or below 1,035 kt. This advice for catch limits in 2023 does not depend on the stock structure hypothesis that is used.	1,035,000	981,832	1,080,000	1,113,4379
2024	In line with the accepted rebuilding plan (outlined in the SCW14 report) and because the jack mackerel biomass is estimated to	1,242,000	1,135,295	1,242,000	1,330,070*

Year	Advice	Recommended Maximum Catch	Catch Limit CMM area	Catch Limit throughout range	Catch throughout range
	be above BMSY, the SC recommended a precautionary 15% increase in 2024 catches throughout the range of jack mackerel- at or below 1,242 kt. This advice for catch limits in 2024 does not depend on the stock structure hypothesis that is used.				
2025	In line with the accepted rebuilding plan (outlined in the SCW14 report) and because the jack mackerel biomass is estimated to be above BMSY, the SC recommended a precautionary 15% increase in 2025 catches throughout the range of jack mackerel- at or below 1,428 kt. This advice for catch limits in 2025 does not depend on the stock structure hypothesis that is used.	1,428,000	1,419,119	1,552,500	1,384,404*
2026	The SC lacked consensus on the interpretation of the harvest control rule as outlined in the SCW14 report. As such, the SC provided two aforementioned approaches: · that the 2026 TAC be at or below 1,642.2 kt, (15% increase over the 2025 SC catch advice) · that the 2026 TAC be at or below 1,785.4 kt, (15% increase over 2025 TAC).	1,642,200 or 1,785,400			

2013 advice was given by the Science Working Group.

* Preliminary values estimated at SC13

Annex 11: Jack Mackerel Technical Advice

The jack mackerel technical advice annex will be linked here when it becomes available.

Annex 12: Jack Mackerel Harvest Control Rule (Adjusted Annex K)

Stock status	TAC calculation method
$B_{t+1} < B_{lim}$	Set TAC to zero; directed jack mackerel fishing prohibited
$B_{t+1} \leq$ 80% of B_{MSY} (or proxy)	1) Compute trial catch (C_{trial}) at estimated F_t or F_{MSY} (whichever is smaller) If $C_{trial} < C_{replacement}$ Set catch at or below C_{trial} (the stock will increase) Else if $C_{trial} > C_{replacement}$ Set catch at or below $C_{replacement}$ (the stock remains stable)
$B_{t+1} >$ 80% of B_{MSY} (or proxy) and $B_{t+1} \leq B_{MSY}$ (or proxy)	2) Compute trial catch (C_{trial}) at estimated F_{MSY} (or proxy) If $C_{trial} < C_{replacement}$ Set catch at or below C_{trial} Else if $C_{trial} > C_{replacement}$ Use method 1). The TAC will not be allowed to vary by more than 15% between years
$B_{t+1} > B_{MSY}$ (or proxy)	3) Set catch at or below value based on F_{MSY} The TAC will not be allowed to vary by more than 15% between years

Table 1: Proposed harvest control rule for jack mackerel, as adjusted during the 2022 benchmark workshop (SCW14).

Note that all instances of B refer to spawning stock biomass and not total biomass. B_t is the estimated spawning stock biomass in the current year, $C_{replacement}$ is the catch in a future year which would keep spawning stock biomass the same. For example, if the catch in 2022 resulted in B_{2022} being equal to subsequent B_{2023} then that catch is defined as the replacement yield.

Explanation [from SPRFMO SCW14-Report - JM Benchmark]

Since 2014, the Commission has used biological reference points as specified in Annex K of COMM02-Report. At the 2nd Scientific Committee meeting in 2014, Annex K was adjusted to include a rule to create more stability in total allowable catches (TACs); this subsequently became known as "adjusted Annex K". In 2022, SCW14 reviewed these biological reference points and introduced a limit reference point (B_{lim}; where B refers to spawning biomass). The proposed 2022 harvest control rule (HCR; based on Annex K of the COMM02-Report, the "adjusted Annex K" HCR defined in the SC2 Report, and discussions at SCW14) is thus as follows:

a) if the biomass in the coming year is estimated to be below B_{lim} then the TAC is set to zero and directed fishing for jack mackerel is prohibited. B_{lim} is to be computed from the ratio $\gamma_{lim} = \min(B_t/B_{0,t})$; that is, the lowest ratio of historical spawning biomass relative to unfished. So, for the 2022 stock assessment, $B_{lim} = \gamma_{lim} B_{0,2023}$.

b) If B is below 80% B_{MSY} (or a proxy), the trial catch for next year would be based on the minimum of the current F or F_{MSY}, which would mean that in theory B would not go down. If the trial catch is greater than the replacement yield (i.e., the catch level that would result in the same B for the subsequent year) then the TAC would be set at the replacement yield. This would mean that at a minimum the biomass would remain stable and would not decrease.

c) If B is above 80% B_{MSY} (or a proxy), the trial catch for the next year would be based on the estimated F_{MSY}. If the trial catch is less than the replacement yield, the TAC will be set at or below the trial catch. If the trial catch is above the replacement yield, the method outlined in the previous bullet point should be used. The TAC will not be allowed to vary by more than 15% between years.

d) If B is above B_{MSY} (or a proxy), then the TAC would be set based on F_{MSY}. The TAC will not be allowed to vary by more than 15% between years.

The workshop proposed setting B_{lim} as a function of the ratio γ_{lim} which is based on unfished biomass estimates. Here, unfished biomass is defined as the estimated spawning biomass that would have occurred had there been no fishing. That is, it is the biomass based on the estimated recruitment adjusted by the stock-recruit relationship under no fishing.

Annex 13: Terms of Reference for Jack Mackerel Working Group

1. Purpose

The Jack Mackerel Working Group (JMWG) operates under the Scientific Committee (SC) of the South Pacific Regional Fisheries Management Organisation (SPRFMO). Its purpose is to provide scientific advice, analyses, and recommendations on the status and management of jack mackerel (*Trachurus murphyi*) fisheries in the SPRFMO Convention Area, to support the SC in fulfilling its mandate to the Commission. The original transition from the interim science working group to the Commission's formal SC was drafted in 2006 (Figure 1). The JMWG within the SC has been tasked with all research and assessment activities related to Jack mackerel fishing.

2. Objectives

The JMWG will:

1. Review and analyse data on jack mackerel, including catch, effort, biological, and environmental information.
2. Oversee and refine the stock assessment framework for jack mackerel, ensuring it reflects best scientific practice.
3. Provide scientific input for the development, evaluation, and implementation of harvest strategies, including Management Strategy Evaluation (MSE).
4. Develop, review, and recommend biological reference points and limit/target levels for sustainable management of jack mackerel.
5. Identify research priorities, knowledge gaps, and data needs relevant to the stock.
6. Facilitate coordination among Members, CNCPs, and observers in contributing data, analyses, and expertise.
7. Report its findings, analyses, and recommendations to the Scientific Committee in a timely manner.
8. Evaluate related species (e.g., chub mackerel; *Scomber japonicus*) that is common as incidental catch in directed jack mackerel fisheries.

3. Membership

- Participation in the JMWG is open to all Members, CNCPs, and Observers of SPRFMO with an interest in jack mackerel science and management.
- Each Member or CNCP may nominate delegates/experts to participate.
- The JMWG may invite external experts to contribute, subject to SC approval.

4. Leadership

- The JMWG shall elect a **Chairperson** from among its participants, in accordance with the SPRFMO Rules of Procedure.
- The Chairperson will serve for a term of two years, renewable once, and will be responsible for guiding the work of the JMWG and liaising with the SC Chairperson and Secretariat.
- The Chairperson should be familiar with stock assessment and data collection practices.

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5. Working Arrangements

1. The JMWG will conduct its work through:
    - Intersessional correspondence and collaboration (e.g., Microsoft Teams, email).
    - Web meetings.
    - Dedicated workshops and technical meetings.
    - Sessions held immediately prior to or during the annual SC meeting.
2. The Secretariat will provide technical and administrative support, including document circulation, meeting logistics, and record-keeping.
3. All documents and analyses will be prepared in line with SC and Commission protocols, including data confidentiality and standards (e.g., CMM 02).

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6. Outputs

The JMWG shall produce:

- Annual or periodic stock assessment reports for jack mackerel.
- Recommendations on harvest strategies, reference points, and management measures.
- Technical papers and working documents on data collection, modelling approaches, and ecosystem considerations.
- A summary of activities, findings, and recommendations for inclusion in the SC annual report to the Commission.

7. Review

These Terms of Reference will be reviewed by the SC every three years, or as required, to ensure they remain fit for purpose and aligned with the evolving needs of the Commission.

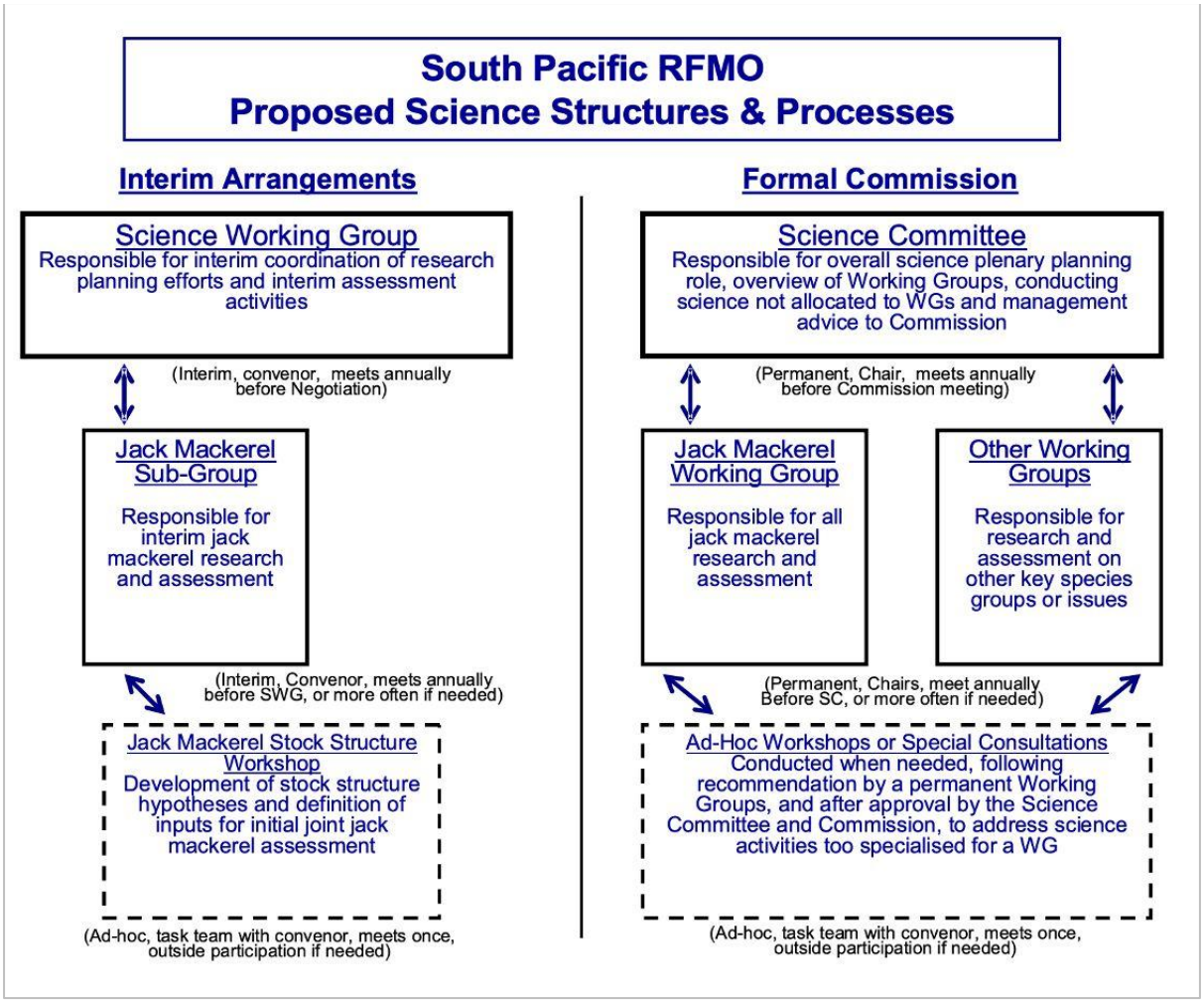


Figure 1. 2006 organigram for Science Working Group, including the JM Working Group

Annex 14: Terms of Reference for Deepwater Working Group

Common Provisions for All Working Groups

1. Purpose

The DWWG supports the SC in providing scientific advice on deepwater species (including orange roughy, alfonsino, and associated species) and benthic ecosystems impacted by deepwater fisheries, as well as exploratory fishing proposals related to bottom fishing.

2. Objectives

- Review and assess data on deepwater species and fisheries.
- Develop and refine assessment approaches for deepwater stocks.
- Review and provide advice on the identification and protection of Vulnerable Marine Ecosystems (VMEs).
- Recommend reference points and harvest control rules for deepwater species.
- Identify and prioritise research on deepwater ecosystems and fisheries impacts, including observed and projected climate change impacts.
- Promote consistency with international best practice for deepwater fisheries management.
- Periodically review Bottom Fishing Impact Assessments and the Bottom Fishing Impact Assessment Standard [and other standards/CMMs – chair/NZ to discuss]
- As needed review relevant proposals for exploratory fisheries

3. Membership

- Open to all Members, CNCPs, and Observers with interest and expertise.
- External experts may be invited with SC approval.

4. Leadership

- Each WG elects a Chairperson for a two-year term (renewable once).
- Chairpersons liaise with the SC Chairperson and Secretariat.

5. Working Arrangements

- Work is conducted intersessionally, through correspondence, online platforms, technical workshops, and sessions prior to/during SC meetings.
- The Secretariat provides administrative and technical support.
- All work follows SC and Commission protocols, including data confidentiality and standards (e.g., CMM 02).

6. Outputs

- Stock status reports for deepwater species.
- Advice on VME encounter protocols, impact assessments, and spatial management
- Advice on observed or projected impacts of climate change on deepwater species and habitats.

- Recommendations for deepwater research priorities.
- Contributions to the SC annual report to the Commission.
- Recommendations on Bottom Fishing Impact Assessments
- Recommendations on exploratory fishing proposals.

7. Review

The ToRs for each WG are reviewed by the SC every three years, or as required, to remain aligned with Commission needs and best scientific practice.

Annex 15: Terms of Reference for the Ecosystems Working Group

1. Purpose

The Ecosystems Working Group (EWG) operates under the Scientific Committee (SC) of the South Pacific Regional Fisheries Management Organisation (SPRFMO). Its purpose is to support the implementation of an ecosystem approach to fisheries management (EAFM) within the SPRFMO Convention Area. Building on the work of the former Habitat Monitoring Working Group and responding to Commission decisions, the EWG provides scientific advice on ecosystem dynamics, climate change, and habitat use to strengthen the evidence base for fisheries management. These Terms of Reference have been updated to align their format with those proposed at SC13.

2. Objectives

- The EWG will:
- Advance ecosystem-based scientific understanding in support of sustainable fisheries management under SPRFMO.
- Integrate environmental, ecological, and fisheries information into the SC's advice to the Commission.
- Identify and monitor indicators of environmental and ecosystem status relevant to SPRFMO fisheries and habitats.
- Assess ecosystem dynamics and species–habitat interactions, with a focus on key commercial and associated species.
- Evaluate the impacts of climate variability and change on fisheries resources and ecosystem structure.
- Review and promote research and monitoring approaches, including data collection, modelling, and collaborative projects among Members.
- Facilitate coordination with other Working Groups to ensure ecological considerations are integrated across SPRFMO's scientific advice.
- Report findings to the SC, including recommendations for future research, monitoring, and management support.
- Develop standardized tools and outputs to assess potential impacts of climate change on target species.
-

3. Membership

- Participation in the EWG is open to all Members, CNCPs, and Observers of SPRFMO with an interest in ecosystem science and management.
- Each Member or CNCP may nominate delegates/experts to participate.
- The EWG may invite external experts to contribute, subject to SC approval.

4. Leadership

- The EWG shall elect a Chairperson from among its participants, in accordance with the SPRFMO Rules of Procedure.
- The Chairperson will serve for a term of two years, renewable once, and will be responsible for guiding the work of the EWG and liaising with the SC Chairperson and Secretariat.
-

5. Working Arrangements

The EWG will conduct its work through:

- Intersessional correspondence and collaboration (e.g., email, online platforms).
- Web meetings and dedicated technical workshops.
- Sessions held immediately prior to or during the annual SC meeting.
- The Secretariat will provide technical and administrative support, including document circulation, meeting logistics, and record-keeping.
- All documents and analyses will be prepared in line with SC and Commission protocols, including data confidentiality and relevant standards.
-

6. Outputs

The EWG shall produce:

- Periodic reports on ecosystem indicators, climate change impacts, and habitat use.
- Recommendations on research priorities, monitoring strategies, and tools to support ecosystem-based management.
- Technical papers and working documents on data collection, modelling, and integration of ecological considerations into stock assessments.
- A summary of activities, findings, and recommendations for inclusion in the SC annual report to the Commission.

7. Review

These Terms of Reference will be reviewed by the SC every three years, or as required, to ensure they remain fit for purpose and aligned with the evolving needs of the Commission.

Annex 16: Terms of Reference for the Squid Working Group

1. Purpose

The SQWG provides scientific advice on jumbo flying squid (*Dosidicus gigas*) fisheries and associated ecosystems within the SPRFMO Convention Area.

2. Objectives

- Review and analyse catch, effort, biological, and ecosystem data for squid fisheries including within-seasons analysis.
- Advance stock assessment methodologies suitable for squid.
- Develop and recommend biological reference points, harvest strategies, and management procedures.
- Assess the impacts of squid fisheries on ecosystems, bycatch species, and trophic interactions.
- Identify research priorities to improve understanding of squid population dynamics and fishery impacts.
- Facilitate coordination among Members, CNCPs, and observer organisations contributing data and expertise.

3. Membership

- Open to all Members, CNCPs, and observers with interest and expertise.
- External experts may be invited with SC approval.

4. Leadership

- Each WG elects a Chairperson for a two-year term (renewable once).
- Chairpersons liaise with the SC Chairperson and Secretariat.

5. Working Arrangements

- Work is conducted intersessionally, through correspondence, online platforms, technical workshops, and sessions prior to/during SC meetings.
- The Secretariat provides administrative and technical support.
- All work follows SC and Commission protocols, including data confidentiality and standards (e.g., CMM 02).

6. Outputs

- Stock status and fishery performance reports for jumbo flying squid.
- Recommendations on harvest strategies and management procedures.
- Technical papers on squid biology, fishery monitoring, and modelling approaches.
- Contributions to the SC annual report to the Commission.

7. Review

The ToRs for each WG are reviewed by the SC every three years, or as required, to remain aligned with Commission needs and best scientific practice.

Annex 17: Terms of Reference for Salas y Gomez and Nazca Task Team

1. Summary

At its 2024 annual meeting, the Commission adopted Decision 17-2024 that tasked the Scientific Committee (SC) to include Salas y Gómez and Nazca Ridges as an agenda item for its meeting in 2024 and annually thereafter. Within this agenda item, the SC — taking into consideration its priorities and available resources during its first year — will compile and review all relevant scientific information and data about the area and recommend possible measures to the Commission at its following regular meeting , based on an ecosystem-based approach that aims at preserving its biodiversity and SPRFMO fishing resources as well as a sustainable use of marine resources.

For the consideration of the SC 12 Chile presented the SC12 Doc 36: Salas y Gómez and Nazca ridges: the need for protection, with a minimum impact on fisheries, which "recommends that the area located in ABNJ of the Salas y Gómez and Nazca EBSA should be permanently closed to fishing activities regulated by the SPRFMO as soon as possible", This recommendation was not agreed by the Scientific Committee.

Peru presented the SC12 - Doc 37 Nazca Ridge Report: Geology, Chemistry and Biophysical Coupling components, which states that the Easter-Salas y Gomez Seamount Chain (ESC) and Nazca Ridge are separate units or systems with important differences in their history, geology, oceanography, hydrodynamic features, structure and function; in that sense, the degree of dependence on matter and energy between the surface and the seabed (benthic-pelagic coupling) could be different between both systems. Finally, it recommends greater scientific research effort in order to achieve a better understanding of key processes, such as, the carbon export in relation to the pelagic fishery.

Finally, the creation of a Task Team for SGN was proposed and supported by some CNCPs. In this regard, the Salas y Gomez and Nazca Ridges Task Team will produce a report for presentation to SC13 in 2025 that

1) complements the information presented to the SC12 that reviews and summarizes relevant scientific information relating to the Salas y Gomez and Nazca Ridges (here after called "area").

2) includes the characterisation geological, oceanographic, biogeochemical (including carbon exportation), biodiversity, ecology, cultural, connectivity, bentho-pelagic coupling and conservation information of the area.

3) includes the current status of SPRFMO's benthic and pelagic resources fished within the area, as well as possible threats to those resources;

4) assesses the current level of fishing effort by gear including 2024 fishing activities and its possible impacts within the area;

5) considers the current possible level of impact of the other threats identified previously in the SC12-Doc 36;

6) Present to the SC possibles measures based on the ecosystem approach that aims at preserving the biodiversity in the Salas y Gomez and Nazca Ridges and SPRFMO fishing resources, as well as sustainable marine resources and provide possible actions for the SC to consider; and

7) propose a monitoring and evaluation scheme for future work.

2. Introduction

At its 2024 annual meeting, the Commission adopted Decision 17-2024 that tasked the Scientific Committee (SC) to include Salas y Gomez and Nazca Ridges as an agenda item for its meeting in 2024 and annually thereafter. Within this agenda item, the SC — taking into consideration its priorities and available resources during its first year — will compile and review all relevant scientific information and data about the area and recommend possible measures to the Commission at its following regular meeting, based on an ecosystem-based approach that aims at preserving its biodiversity and SPRFMO fishing resources as well as a sustainable use of marine resources.

In addition, the 2025 multiannual work plan of the SC considers the Salas y Gomez and Nazca Ridges as a cross-cutting task, defining the following subtasks; 1) research cruises aimed to know the biooceanographic and meteorologic characteristics of Salas y Gomez ridge; as well as biodiversity, current circulation, morphology and geology of sea bottom for 2023 – 2024; 2) Climate change impacts of fisheries in Salas y Gomez and Nazca Ridges for 2024 and, 3) expedition to Salas y Gomez and Nazca aboard oceanographic research vessel for 2024-2025.

In line with that tasking and to support the effective and efficient preparation of scientific advice for the Commission, the SC agrees to create a Salas y Gómez and Nazca Ridges Task Team with these terms of reference.

3. Terms of Reference

a. Objective

The objective of the Task Team, in line with Decision 17-2024, shall be to review relevant scientific information and data about the area (including the papers in References), as well as other relevant information provided by Members and Observers, and to provide advice to the SC possible measures based on the ecosystem approach that aims at preserving the biodiversity in the Salas y Gomez and Nazca Ridges and SPRFMO fishing resources, as well as sustainable marine resources

All activities carried out by the Task Team will refer to the Area of Application of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean, as specified in its Article 5.

b. Structure

The Task Team is open to all interested Members, CNCPs and observers who may nominate one or more suitably qualified representatives to the Secretariat before 15 November 2024.

Ideally, all meetings should allow the virtual participation so as not to unfairly discriminate against small delegations with limited ability to travel. In addition, the meeting calendar of this Task team shall consider the overlap with other RFMOs meeting dates to avoid clashes with SIOFA and WCPFC meetings, or any other relevant RFMOs.

c. Responsibilities

1) complements the information presented to the SC12 that reviews and summarizes relevant scientific information relating to the Salas y Gomez and Nazca Ridges (here after called “area”).
2) includes the characterisation geological, oceanographic, biogeochemical (including carbon exportation), biodiversity, ecology, cultural, connectivity, bentho-pelagic coupling and conservation information of the area.
3) includes the current status of SPRFMO’s benthic and pelagic resources fished within the area, as well as possible threats to those resources;
4) assesses the current level of fishing effort by gear including 2024 fishing activities and its possible impacts within the area;

5) considers the current possible level of impact of the other threats identified previously in the SC12- Doc 36;
6) Present to the SC possibles measures based on the ecosystem approach that aims at preserving the biodiversity in the Salas y Gomez and Nazca Ridges and SPRFMO fishing resources, as well as sustainable marine resources and provide possible actions for the SC to consider; and

7) propose a monitoring and evaluation scheme for future work.

- Produce a report for presentation to SC13 in 2025.
- Propose a monitoring and evaluation scheme for any actions listed.
- Submits a report to the Secretariat and the SC Chair to be discussed in the 2025 SC meeting.
- Creates an open repository of the documentation reviewed for the SC Members.

4. Workplan

The activities of the Task Team will require several meetings, but endeavours to meet in the margins of other meeting such as the SC and Commission meeting and possibly convene one meeting virtually in between.

Activity	Date	Objective
Virtual meeting	November 2025	1. Work on the inclusion of possible additional criteria in the Evaluation Criteria for the area. 2. Share new information for the criteria and identified gaps.
In person workshop (In the margins of the Commission meeting 14th in Panama)	February/March 2026	1. Share/Present the information from Members and Observers. 2. 2. Work on the inclusion of the new information in the assessment of the area using the Evaluation Criteria. 3. Identified possible measures for presentation to the Task Team.
Virtual meeting	June/ July 2026	Work on the results and recommendations. Discuss possible measures to recommend to the SC-14 meeting.
In person meeting	Sept/Oct. 2026 (in the margins of SC-14 meeting)	Agree on the final document which includes measures to recommend to the SC-14 meeting.

*Chile and the Center for Ecology and Sustainable Management of Oceanic Islands (ESMOI) are available to support the organisation of the in-person workshop in Panama.

Annex 18: Area of the Salas y Gomez and Nazca ridges

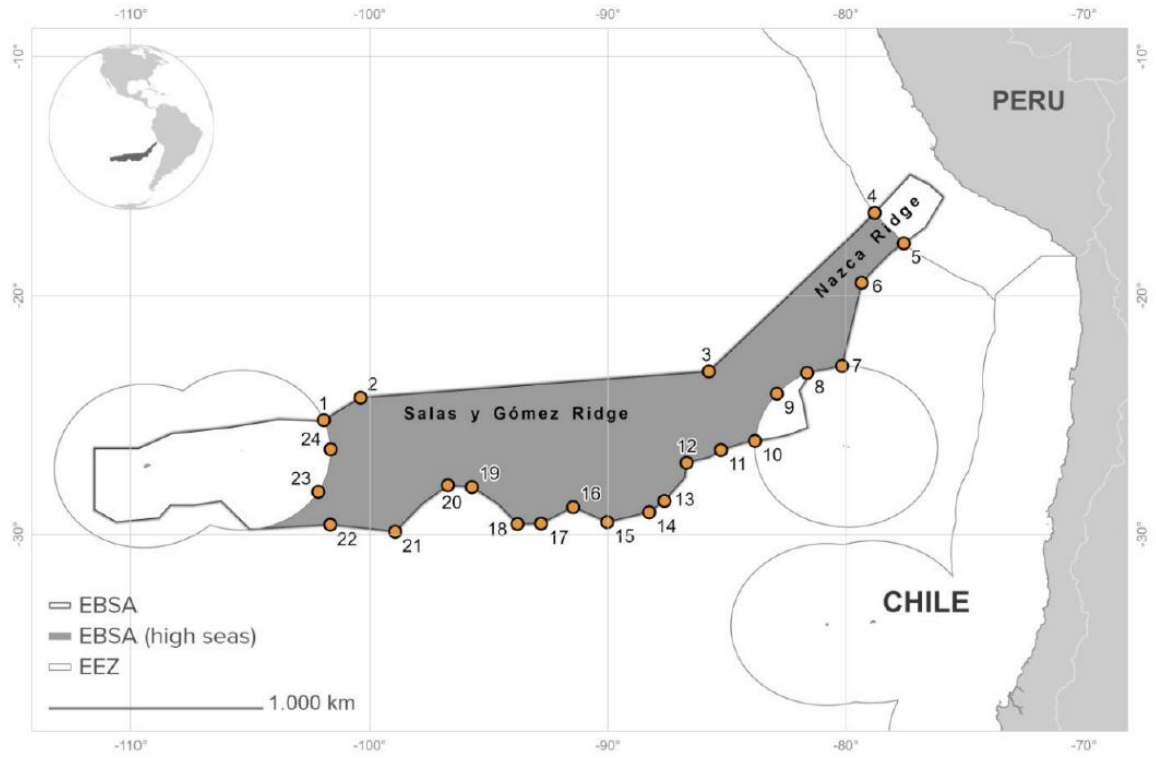
The Salas y Gomez and Nazca ridges area is clearly identified. It also is accurately defined with coordinates and accompanied by a detailed map, including a shapefile for GIS analysis. Any proposed subareas should be described, and if they differ significantly, each should have its own table (see below).

For the purposes of this proposed evaluation protocol, the Salas y Gómez and Nazca Ridges are defined as the high seas portion of the ecologically and biologically significant area (EBSA) designated by the Convention on Biological Diversity (CBD). This area extends within the following coordinates:

- Salas y Gómez Ridge: between 23°42’ S and 29°12’ S, and between 111°30’ W and 86°30’ W.

- Nazca Ridge: between 15°00’ S and 26°09’ S, and between 86°30’ W and 76°06’ W.

For the exact coordinates, please refer to the figure and table below (Appendix I, COMM 12 – Prop 20):



Point	Latitude	Longitude
1	-25.211512	-101.933915
2	-24.277359	-100.384911
3	-23.171855	-85.748889
4	-16.534979	-78.789679
5	-17.807870	-77.574806
6	-19.471695	-79.326597
7	-22.940783	-80.166460
8	-23.242129	-81.624576
9	-24.104733	-82.896111
10	-26.088117	-83.816938
11	-26.471023	-85.244218
12	-27.001524	-86.687409
13	-28.593028	-87.628621
14	-29.069173	-88.263112
15	-29.484802	-90.027482
16	-28.857328	-91.453560
17	-29.541845	-92.794074
18	-29.570367	-93.792329
19	-28.009486	-95.702721
20	-27.944638	-96.727198
21	-29.884104	-98.923359
22	-29.590651	-101.657308
23	-28.215516	-102.161216
24	-26.434649	-101.642708

Annex 19: Evaluation Criteria for assessing spatial management proposals

1. Objectives

The objective/s for the area must be clearly stated, and the proposal clearly demonstrates which of the criteria are met.

The proposal should state which of the evaluation criteria meet the objectives by completing the table below and noting that the evaluation criteria list has no particular ranking of importance.

2. Evaluation Criteria

1. Bioregional representation
    a. Area is known to contain unique, rare or distinct habitats or ecosystems that fishing operations will disturb.
    b. Areas with a comparatively higher degree of naturalness due to zero or a low level of human-induced disturbance or degradation from, for example, historical fishing activity.
2. Geographic and/or geomorphological representation
    a. The area provides for important or desirable geographic representation within the SPRFMO area.
    b. The area proposed is known to contain unique or unusual geomorphological features that fishing operations may damage.
3. Biodiversity representation
    a. The area is known to contain unique or rare (occurring in only a few locations) species, populations or communities.
    b. The area is known to contain a high diversity of ecosystems, habitats, communities, or species, or has higher genetic diversity.
    c. The area is known to contain a relatively high proportion of sensitive habitats, biotopes or species that are functionally fragile (highly susceptible to degradation or depletion by human activity or by natural events) or with slow recovery.
4. Uniqueness and rarity
    a. The area warrants conservation and preservation due to their unique features, resources, and/or characteristics.
5. Vulnerability, fragility, sensitivity, or slow recovery/resilience

a. Area contains either (i) unique ("the only one of its kind"), rare (occurs only in few locations) or endemic species, populations or communities, and/or (ii) unique, rare or distinct, habitats or ecosystems; and/or (iii) unique or unusual geomorphological or oceanographic features.

6. Area is of special significance for threatened or important species and/or ecosystem properties

   a. There is evidence that the area is of special importance for life history stages of species and/or threatened species.

   b. There is evidence that the area contains habitat for the survival and recovery of endangered, threatened, declining species or is an area with significant assemblages of such species.

7. VMEs are known to occur and/or triggering of VME indicator taxa thresholds reported for the area proposed

   a. Known or consistent triggering of VME indicator thresholds occurs.

   b. VMEs have been observed through non-fishing operations.

8. Cultural Significance

   a. The area has an exceptionally rich and long history and cultural significance

9. Scientific interest

   a. The area has scientific research interest associated with understanding ecosystem, biological, geological and biodiversity processes in the SPRFMO region.

Annex 20: Ecosystem Status Profile Framework for the SPRFMO SC

Background

The South Pacific Regional Fisheries Management Organisation (SPRFMO) is mandated to ensure the long-term conservation and sustainable use of fishery resources and to safeguard the ecosystems in which they occur. Meeting this mandate requires advancing towards an ecosystem-based fisheries management (EBFM) approach, in line with commitments under the United Nations Fish Stocks Agreement and the FAO Code of Conduct for Responsible Fisheries. This approach recognizes that the sustainability of fisheries is inseparable from the health of the ecosystems that support them.

The development of Ecosystem Status Profiles (ESPs) responds to this mandate by providing a structured synthesis of ecological, environmental, and human-use information across the SPRFMO Convention Area and adjacent exclusive economic zones. ESPs integrate the best available scientific evidence to describe ecosystem condition, drivers of change, and interactions among species, fisheries, and the environment. By compiling indicators across multiple ecological and socioeconomic dimensions, ESPs serve as a baseline for monitoring change, identifying risks, and evaluating cumulative impacts.

Climate variability, ocean warming, and human pressures are reshaping South Pacific species and habitats, creating uncertainties for management, especially where data are limited. An ESP offers a transparent, science-based foundation for adaptive, precautionary decision-making, while aligning scientific advice with SPRFMO's objectives of sustainable stocks, ecosystem integrity, and socio-economic benefits.

By documenting ecosystem status in a consistent and accessible format, ESPs are intended to become a practical tool for advancing ecosystem-based management within SPRFMO, strengthening the integration of ecological considerations into fisheries governance, and guiding coordinated monitoring and research efforts across Member states.

Purpose of Developing an Ecosystem Status Profile (ESP) for Ecosystem-Based Management in SPRFMO

The purpose of developing an Ecosystem Status Profile is to synthesize the best available scientific information on the condition and dynamics of ecosystems under SPRFMO's jurisdiction and the exclusive economic zones of the coastal countries. The ESP provides an essential foundation for ecosystem-based fisheries management by characterizing key ecosystem components and processes, identifying pressures and cumulative impacts, establishing baselines for monitoring, and supporting adaptive, precautionary management decisions. It is a practical tool to help the SPRFMO Scientific Committee and Commission integrate ecological considerations into the conservation and sustainable use of marine living resources.

I. Proposed Structure for the ESP

1. Executive Summary

- Concise synthesis of the current state of the ecosystem.
- Highlights of major trends (e.g., warming, species shifts).
- Key risks to ecosystem structure and fisheries.
- Management implications and recommended actions.
- Overall ecosystem condition and confidence level.

2. Introduction

- Purpose of the ESP (e.g., to support EBFM within SPRFMO).
- Geographic scope: description of the SPRFMO Convention Area.
- Overview of key species and fisheries.
- Alignment with SPRFMO's Ecosystem Approach to Fisheries Management (EAFM) objectives.

3. Environmental and Oceanographic Drivers

- Sea Surface Temperature (SST)

SST is a primary indicator of ocean warming and a key environmental variable influencing species distribution, spawning success, and larval development. Anomalies in SST, especially during events like El Niño, can shift suitable habitats for key species such as jack mackerel and jumbo squid.

- ENSO and other climate indices (e.g., PDO, SAM)

Large-scale climate modes such as the El Niño–Southern Oscillation (ENSO), Pacific Decadal Oscillation (PDO), and Southern Annular Mode (SAM) modulate ocean conditions (temperature, productivity, circulation) over seasonal to decadal timescales. These influence recruitment, migration patterns, and ecosystem productivity across the SPRFMO area.

- Upwelling indices and frontal zones

Coastal and offshore upwelling systems supply nutrient-rich waters that fuel primary productivity. Indices measuring upwelling strength, as well as the position and intensity of thermal fronts, help assess foraging habitat quality and early life-stage survival.

- Chlorophyll-a and productivity

Satellite-derived chlorophyll-a is a proxy for phytoplankton biomass and overall ocean productivity. Interannual fluctuations influence food availability for zooplankton and fish larvae, thereby affecting trophic energy transfer and recruitment success.

- Oxygen Minimum Zone (OMZ) dynamics

The vertical extent and intensity of OMZs shape the habitable volume for midwater and deep-sea species. OMZ shoaling can compress fish habitat, increase competition, and elevate vulnerability to fishing for species like jumbo squid and jack mackerel.

- Ocean circulation and eddy activity

Surface and subsurface currents, including the South Equatorial Current, Peru–Chile Countercurrent, and mesoscale eddies, influence larval dispersal, connectivity among stocks, and productivity hotspots. These features affect spatial overlap between predators and prey.

4. Lower Trophic Levels

• Phytoplankton biomass and composition

Phytoplankton form the base of the marine food web and drive primary production. Changes in total biomass and shifts in species composition can alter food quality and energy transfer efficiency to zooplankton and fish larvae.

• Zooplankton abundance and size structure

Zooplankton serve as the key intermediary between phytoplankton and higher trophic levels. Their abundance and size distribution determine prey availability for early life stages of small pelagic fish and squid. A dominance of smaller or less nutritious zooplankton can reduce growth and survival rates in larval fish.

• Spatial and temporal variability in productivity

Primary and secondary production fluctuate seasonally and interannually, particularly in response to oceanographic drivers (e.g., ENSO, upwelling). Understanding the timing and location of productivity peaks is essential for predicting match/mismatch dynamics with spawning and larval development of key species.

5. Status of Key Species

• Jack mackerel (*Trachurus murphyi*): Biomass trends, distribution, habitat.

A transboundary pelagic species central to the SPRFMO mandate, jack mackerel exhibits wide-ranging distribution across the South Pacific. Monitoring biomass trends and spatial shifts in habitat use is critical to assessing stock health, recruitment variability, and responses to environmental changes such as ocean warming or shifting productivity regimes.

- Jumbo squid (*Dosidicus gigas*): Abundance, migration, environmental sensitivity.

• Jumbo squid is a highly mobile, short-lived predator with strong responses to oceanographic variability (e.g., temperature, oxygen levels). Its abundance and migratory range can change rapidly, often expanding westward during El Niño events. Understanding its dynamics is important both ecologically and for evaluating ecosystem impacts.

- Orange roughy (*Hoplostethus atlanticus*): Age structure, habitat conditions, vulnerability.

• A long-lived deep-sea species with slow growth and late maturity, orange roughy is particularly vulnerable to overfishing and environmental change. Key indicators include age composition, biomass trends, and the stability of cold, low-oxygen habitat layers on seamounts and slopes where the species aggregates.

- Other species

- While the ESP focuses on the above, it may also track trends in other ecologically or economically relevant species such as **euphausiids** or **mesopelagic fishes**. Including these can help capture broader ecosystem patterns or emerging management concerns.

- Main source of uncertainty

6. Fisheries and Human Use

- Total catch and effort (by species and gear)

Tracking catch and fishing effort over time provides insights into fishery intensity and stock pressure. Disaggregating by species and gear type (e.g., purse seine, midwater trawl) helps assess selective pressure and supports gear-specific management strategies.

- Spatial footprint of fishing effort

Mapping the geographic distribution of fishing activity helps identify pressure hotspots, overlaps with sensitive habitats or species, and temporal shifts in fleet behavior (e.g., due to climate events or stock movements).

- Discards and bycatch (e.g., seabirds, sharks)

Non-target species interactions, including discards and incidental catch of vulnerable taxa (e.g., seabirds, sharks, deep-sea corals), are key indicators of ecosystem impact. Quantifying and minimizing bycatch supports ecosystem-based fisheries management and meets conservation mandates.

- Fleet dynamics and economic indicators

Changes in fleet composition, capacity, and technological advancement (e.g., range, gear efficiency) affect exploitation levels. Economic indicators such as landings value, fuel use, and employment provide context on the socioeconomic role of the fishery and its resilience to environmental or market shifts.

- Compliance and monitoring effort

Effective governance relies on observer coverage, logbook reporting, VMS (Vessel Monitoring Systems), and port inspections. Tracking these metrics supports assessments of rule compliance, data quality, and enforcement capability across SPRFMO Members.

7. Ecological Interactions and Trophic Dynamics

- Predator–prey relationships

Understanding trophic linkages, such as predation on fish larvae by zooplankton or cephalopods, and top-down control by large predators (e.g., tuna, marine mammals), is essential for assessing recruitment success, biomass variability, and ecosystem balance.

- Interspecific competition

Key species like jack mackerel, anchoveta, and sardine may compete for overlapping prey (e.g., zooplankton) or habitat, especially during environmentally constrained periods. Identifying the nature and intensity of this competition helps interpret alternating population trends.

- Role of key species in food web

Small and medium size pelagic fish and squid function as energy conduits from plankton to higher trophic levels (e.g., seabirds, marine mammals). Their central position makes their abundance and availability critical to ecosystem functioning and resilience.

- Results from multispecies models

Dynamic models, such as size-spectrum models, *Ecopath with Ecosim*, and end-to-end frameworks, simulate food web interactions, energy transfer, and the cascading effects of fishing and climate variability across trophic levels. Additionally, species distribution models (SDMs) provide spatially explicit insights into the environmental drivers of species presence and abundance, helping predict range shifts under changing ocean conditions. Together, these modeling approaches support ecosystem-based management by identifying keystone species, ecological thresholds, spatial overlap among species, and indirect effects of exploitation or environmental change.

8. Vulnerability and Risk Assessment

- Cumulative pressures

Marine ecosystems in the SPRFMO area are subject to multiple overlapping stressors, including fishing pressure, habitat disturbance, and environmental variability. Assessing cumulative impacts helps evaluate the compounded effects on species, habitats, and ecosystem functioning.

- Exposure to climate events

Recurring climate anomalies such as El Niño, La Niña, and long-term trends in ocean warming expose key species to shifts in temperature, oxygen, and productivity. Exposure metrics help identify which components of the system are most at risk under climate variability and change.

- Sensitivity of key stocks

The biological characteristics of key species, such as lifespan, reproductive rate, trophic level, and habitat specificity, determine their sensitivity to external pressures. Highly sensitive species (e.g., long-lived, slow-growing) require special attention in management strategies.

- Potential regime shifts

Ecosystems can experience abrupt and persistent changes in structure and function, known as regime shifts, driven by external forcing (e.g., overfishing, oceanographic change). Early detection of indicators (e.g., shifts in species dominance or trophic structure) is critical for anticipating transitions and implementing precautionary measures.

9. Ecosystem Services and Socioeconomic Importance

- Role in food security and trade

Key SPRFMO-managed species, such as **jack mackerel** and **jumbo squid**, contribute significantly to national and regional food security, either directly through human consumption or indirectly via fishmeal production for aquaculture and livestock. These species also support international trade, with several SPRFMO Members being major exporters, particularly to Asia , Africa and Europe.

- Employment and income from fisheries

Fisheries targeting SPRFMO species support thousands of jobs across harvesting, processing, logistics, and vessel servicing. These fisheries are often vital to coastal communities, and fluctuations in resource availability or market access can have substantial social and economic impacts.

- Resilience and adaptation

This section describes the capacity of fisheries-dependent communities, fleets, and supply chains to cope with and adapt to environmental, economic, and social changes affecting the SPRFMO-managed ecosystem. Understanding resilience helps identify vulnerabilities and opportunities for strengthening adaptive capacity in the face of climate variability, market fluctuations, and resource shifts.

- Ecosystem service valuation (optional)

Quantifying the economic value of ecosystem services, including provisioning (e.g., fish biomass), regulating (e.g., carbon cycling), and cultural (e.g., heritage fishing practices), can enhance recognition of the full benefits provided by marine ecosystems and inform trade-offs in policy decisions. While complex, such valuation can support arguments for ecosystem-based management and conservation investment.

10. Management Context and Responses

- Current management measures

This includes regulations and conservation measures adopted by SPRFMO, such as catch limits, spatial closures, gear restrictions, and bycatch mitigation rules. These measures form the foundation for sustainable resource use and help maintain ecosystem integrity.

- EBFM implementation status

Describes the extent to which EBFM principles have been integrated into SPRFMO's decision-making. This may include multispecies considerations, habitat protection, incorporation of environmental variability, and cross-sectoral coordination. Progress, gaps, and milestones toward EBFM can be summarized here.

- Monitoring programs

Outlines existing efforts to collect data on fisheries (e.g., logbooks, observer coverage), the environment (e.g., satellite and oceanographic observations), and biological indicators (e.g., stock assessments, ecosystem surveys). The effectiveness and scope of these programs are key to supporting evidence-based management.

- Adaptive management opportunities

Highlights areas where SPRFMO and Member states could improve responsiveness to change, such as updating reference points based on new science, integrating forecast tools, or piloting precautionary measures in data-limited contexts. Flexibility and learning are central to managing uncertainty under changing environmental conditions.

11. Knowledge Gaps and Recommendations

- Research and monitoring needs

Highlights key areas where additional scientific work is required, such as understanding species life histories, climate sensitivity, ecological interactions, or socioeconomic dynamics. Improved long-term and regionally coordinated monitoring of environmental and biological variables is essential for tracking change and informing decisions.

- Data and modeling gaps

Points to missing or fragmented data (e.g., on non-target species, deep-sea habitats, larval stages) and the need to expand or refine ecosystem models (e.g., end-to-end, size-spectrum, SDMs). Enhanced data-sharing and collaboration among SPRFMO Members can address spatial and taxonomic gaps.

- Indicator refinement and reporting

Recommends improving existing ecosystem indicators (e.g., distribution shifts, trophic indices, habitat quality) and developing protocols for their regular reporting. Well-defined, policy-relevant indicators support transparent status assessments and adaptive management under an ecosystem approach.

12. Annexes and References

- Methodologies and indicator definitions
- Maps, figures, and data sources
- References and contributors

Contributor Identification Table Template (example)

Element	Details
Section Title	Environmental and Oceanographic Drivers
Contributing Institution(s)	Instituto de Investigación Pesquera (INPESCA, Chile);
Lead Researcher(s)	Sebastián Vásquez
Contact Information	svasquez@inpesca.cl
Date of Contribution	June 2026
Data Sources and References	ERA5 reanalysis; Copernicus Marine Service datasets.

Annex 21: Exploratory Fisheries FOP template

Template for a SPRFMO Fisheries Operation Plan (Template version October 2021)

1. SUCCINCT DESCRIPTION

Paragraph 5 of CMM13 requires 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 to 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.

Member/CNCP	
Area	
Target Species	
Proposed Methods of fishing	
Proposed maximum catch limit	
Expected operation period	
Submission date	

2. FISHERIES OPERATION PLAN

Paragraph 5 of CMM13 requires a full Fisheries Operation Plan to be submitted not less than 60 days in advance of the next annual meeting of the Scientific Committee. The Fisheries Operation Plan should include the following information (to the extent it is available):

2.1 Description

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.

[Add your text here]

2.2 Fishing gear

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.

[Add your text here]

2.3 Time period

The time period the Fisheries Operation Plan covers (up to a maximum period of three years).

[Add your text here]

2.4 Biological information

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.

[Add your text here]

2.5 Non-target and associated or dependent species

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.

[Add your text here]

2.6 Cumulative impact of all fishing activity

The anticipated cumulative impact of all fishing activity in the area of the exploratory fishery if applicable.

[Add your text here]

2.7 Similar fisheries

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.

[Add your text here]

2.8 Overlapping fisheries

Information on any overlapping fisheries, current or planned, including information on any fisheries operating in the same area with the same gear in the previous 10 years. This should outline any agreed co-operation with other SPRFMO Members or CNCPs.

[Add your text here]

2.9 Bottom fishing (if applicable)

If the proposed fishing activity is bottom fishing, as defined in CMM 03 (Bottom Fishing), the assessment of the impact of their flagged vessels' bottom fishing activities, prepared pursuant to paragraph 21(a) of CMM 03 (Bottom Fishing).

[Add your text here]

2.10 Adjacent RFMO (or similar) fishery

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 of CMM 13.

[Add your text here]

3. INPUT INTO SCIENTIFIC COMMITTEE CONSIDERATIONS

Paragraphs 9 and 10 of CMM13 require the Scientific Committee to consider all Fisheries Operations Plans submitted, all information provided in accordance with a Data Collection Plan and any other relevant information, and to provide recommendations and advice to the Commission on each Fisheries Operation Plan on a number of matters. To assist the Scientific Committee in its work, the proponent is requested to indicate what they consider to be an appropriate assessment or recommendation from the Scientific Committee to address each of the Scientific Committee Considerations.

3.1 Management strategies or plans for fishery resources

The SC has previously interpreted this as a clear objective for the fishery.

[Add your text here]

3.2 Reference points

This should include precautionary reference points as described in Annex II of the 1995 agreement. SC6 suggested (Paragraph 236 of SC6-Report) that the assumptions underlying how biomass estimates are determined should be clearly described in the proposal.

[Add your text here]

3.3 An appropriate precautionary catch limit

SC5 suggested (Paragraph 56 of the SC5 Report) that a literature review of exploitation rates, stock assessment mechanisms and precautionary measures that are used in other similar fisheries would help to contextualise whether a potential catch limit was appropriate as a precautionary fishery.

[Add your text here]

3.4 The cumulative impacts of all fishing activities in the area of the exploratory fishery

The 2019 SPRFMO Bottom Fishing Impact Assessment Standard (BFIAS) includes "Cumulative impact" as one of the criteria for a risk assessment for benthic habitats, biodiversity and VMEs and notes that the frequency of the impact will influence the risk, with activities occurring repeatedly at a site likely to have a greater risk. This will depend on the amount of fishing effort and should be considered in relation to the recovery of the VMEs/taxa (Section 1.3.5 of the 2019 BFIAS).

[Add your text here]

3.5 The impact of the proposed fishing on the marine ecosystem

SC6 (Paragraph 228 of the SC6 Report) suggested that a risk assessment might be prepared to better allow the likelihood and consequences of bycatch interactions to be evaluated and the adequacy of proposed avoidance and mitigation measures in the proposal to be assessed.

[Add your text here]

3.6 Sufficiency of information available and degree of certainty

This is an assessment of whether there is enough information available to inform the level of precaution required and also an evaluation of the level of uncertainty in the provision of advice.

[Add your text here]

3.7 Consistency with nature as an exploratory fishery

This is 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.

SC5 suggested (Paragraph 59-60 of the SC5 Report) a phased approach to the development of an exploratory fishery, for example including:

Phase 1:

- *Wide area surveys to understand distribution, relative abundance and/or density estimates for features*
- *Biological information collection (length information, sex ratio, maturity information etc.)*
- *VME monitoring – potential use of cameras, identification of all benthic organisms, return to land of anything unidentifiable, possible bathymetric data collection*
- *Bycatch data collection - species identification, length data, otolith collection of main species*

Phase 2:

- *Design and implementation of depletion experiment(s) in identified area(s) (e.g. for a sedentary species)*

Phase 3:

- *Work towards stock differentiation and stock assessment (including longer term yield estimates)*

But noted that elements of each phase could occur simultaneously.

[Add your text here]

3.8 Consistency with Objective of the Convention

This is the degree to which the approach outlined in the Fisheries Operation Plan is likely to ensure that the exploratory fishery is developed consistently with the objectives of Article 2 of the Convention (the Objective). This should address the following elements from the Objective:

- *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.*

[Add your text here]

3.9 Bottom Fishing advice and recommendations

SC7 noted (Paragraph 342 of the SC7-Report) that it is a requirement of CMM 13 that if the proposed fishing activity is bottom fishing, then an assessment of the possible impact needs to be done. In respect of a Fisheries Operation Plan that proposes any bottom fishing activity, this section should include any advice and recommendations in accordance with paragraph 21 (b) of CMM 03 (Bottom Fishing), i.e. on 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 whether any proposed or additional mitigation measures would prevent such impacts.

The 2019 SPRFMO Bottom Fishing Impact Assessment Standard (BFIAS) provides a standard for a Bottom Fishing Impact Assessment in SPRFMO.

[Add your text here]

3.10 Climate Change

The climate change considerations included in the operational plan and scientific committee considerations included:

- A summary of relevant research on the existing and potential effects of climate change on the relevant stocks, bycatch, and the marine environment in which the exploratory fishery is proposed?
- Observed or projected climate change effects in the area which could influence the proposed exploratory fishery management consideration should be clearly described?
- Is the climate footprint of the exploratory fishery considered and proposed to be monitored?

[Add your text here]

4. DATA COLLECTION PLAN

Paragraph 11 of CMM13 also requires the Scientific Committee to develop a Data Collection Plan in respect of the exploratory fishery which should include research requirements, as appropriate. The Data Collection Plan should 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, and under Paragraph 12 require, as appropriate. To assist the Scientific Committee in its work, the proponent is requested to indicate what they consider to be an appropriate assessment or recommendation from the Scientific Committee to address each of the Scientific Committee Considerations with regards to the Data Collection Plan.

4.1 Data required

A description of the catch, effort and related biological, ecological and environmental data required to undertake the evaluations described in paragraph 26 of CMM 13, i.e. to allow the Commission to take a decision to manage the fishery as an established fishery.

[Add your text here]

4.2 Due dates

The dates by which this data must be provided to the Commission.

[Add your text here]

4.3 A plan for directing fishing effort

A plan for directing fishing effort in the 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.

[Add your text here]

4.4 Other research data (where appropriate)

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.

[Add your text here]

4.5 (4.4bis) Climate indicator and impact monitoring

Are climate related indicators including ENSO conditions proposed to be monitored?

Is the climate footprint of the fishery proposed to be monitored?

[Add your text here]

4.6 Time scales

An evaluation of the time scales involved in determining the responses of harvested, dependent and related populations to fishing activities.

SC5 (Paragraph 59-60 of the SC5 Report) suggested that this could include a plan for how the information collected will lead to assessment and eventual management of the stocks.

[Add your text here]

SCIENTIFIC COMMITTEE ASSESSMENT CHECKLIST AND RECOMMENDATIONS

This checklist is for the Scientific Committee to complete to ensure that all aspects of the Fisheries Operation Plan and the Data Collection Plan have been assessed. To assist the Scientific Committee with their deliberations, please pre-fill the Rationale column with a brief justification of how your Fisheries Operation Plan and Data Collection Plan address the Scientific Committee consideration. The Scientific Committee will complete the Assessment column.

5.1 Fisheries Operation Plan checklist

Fisheries Operation Plan Considerations	Rationale	Assessment
a) management strategies or plans for fishery resources; [**Note** that SC has previously interpreted this as to mean as having a clear objective for the fishery]		
b) reference points, including precautionary reference points as described in Annex II of the 1995 Agreement;		
c) an appropriate precautionary catch limit;		
d) the cumulative impacts of all fishing activity 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[1]; and		
h) in respect of a Fisheries Operation Plan that proposes any bottom fishing activity, advice and recommendations in accordance with paragraph 20 (b) of CMM 03-2020 (Bottom Fishing)[2].		
i) Does the Fisheries Operation Plan consider climate change.		

[1] The objective of this Convention is, through the application of the precautionary approach and an ecosystem approach to fisheries management, to ensure the long-term conservation and sustainable use of fishery resources and, in so doing, to safeguard the marine ecosystems in which these resources occur.

[2] 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.

5.2 Data Collection Plan checklist

Data Collection Plan considerations	Rationale	Assessment
a) a description of the catch, effort and related biological, ecological and environmental data required to undertake the evaluations described in paragraph 24;		
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 *[*Note that SC has previously interpreted this as to mean "when will data be analysed and available"*]*		
f) Are there any monitoring related to climate change indicators or impacts		

5.3 Scientific Committee recommendations (SC to complete)

The SC discussed the [insert Member/CNCP] Fisheries Operational Plan and Data Collection plan and Agreed that the approach outlined in the 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, with the following requested modifications (*to be added if necessary*):

-
-
-

Or:

The SC discussed the [insert Member/CNCP] Fisheries Operational Plan and Data Collection plan and recommended that a small working group [led by xxx and composed of xxx] meet post SC and to provide additional advice on the proposal, noting that the work is likely to extend intersessionally and would be expected to result in a revised proposal being provided to the next meeting of the Scientific Committee. Aspects of the proposal which are currently deficient include

-
-
-

Or:

The SC discussed the [insert Member/CNCP] Fisheries Operational Plan and Data Collection plan and agreed that the proposal was lacking critical information in several important areas and was not consistent with the SPRFMO objective. The SC noted that the Fisheries Operational Plan in its current form would require substantive modification to ensure that sufficient information would be available to enable the SC to evaluate the long-term potential and impacts, of the proposed exploratory fishery, and to ensure that the fishery resources would be developed on a precautionary and gradual basis a required by the CMM.

Annex 22: Proposed changes to CMM 02 Data Standards

PROPOSED CHANGES HAVE BEEN HIGHLIGHTED IN YELLOW

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

(Supersedes CMM 02-2022)

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[June], their previous year's (January to December) annual catch totals raised to "live" weight for all species/ species groups caught. *In exceptional cases, and only where a written request is submitted to the Secretariat by 30 June explaining the need for an extension, the deadline will be extended to 30 September*;

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 fishing activity data for alternative methods (CMM 16-2025 paragraph 4), Members and CNCPs are to collect the data described in Annex 4a;

   vi. for potting methods, Members and CNCPs are to collect the data described in Annex 5;

   vii. 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 transhipment 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 paragraph will be used for the assessment and monitoring of stocks. Members and CNCPs will provide by 30 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 CMM16-2025 (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, as well as those alternative programmes approved by virtue of CMM 16-2025 paragraph 4, through the relevant Member or CNCP, provide the information in Annex 7 (Parts A to P) 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 Q 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. Observer data shall be submitted in Microsoft Excel format, or in such other machine-readable format as the Secretariat may prescribe following consultation with the Scientific Committee. Members and CNCPs will provide by 30 June, their previous (January to December) year's data. *In exceptional cases, and only where a written request is submitted to the Secretariat by 30 June explaining the need for an extension, the deadline will be extended to 30 September*

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 (CMM16-2025 (Observer Programme));

c) vessel trip, landing and transhipment 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 fewer 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 05-2023 (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 management[3]. 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 the 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 46 of CMM16-2025 (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 Secretariat 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.

[3] https://www.iso.org/standard/50297.html

8. Review

This CMM shall be reviewed no later than the regular meeting of the Commission in 2025 based on advice from the 2024 meeting of the Scientific Committee and following review by the Compliance and Technical Committee.

9. This measure replaces CMM 02-2022 (Data Standards).

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) Net monitoring cable – Y/N:

n) Height of net opening;

o) Width of net opening;

p) Gear depth at start of fishing;

q) Bottom depth at start of fishing;

r) Incidental captures of species of concern (marine mammals, seabirds, reptiles or other species of concern[4]) 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 tow including target, bycatch and species of concern;

t) FAO species code and estimation of the amount[5] 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 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 concern[6)] 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 amount[7] 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.

6 Annex 14

7 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 concern[8]) 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 amount[9] 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 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 concern[10]) 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 amount[11] 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 4a
Standard for fishing activity data for alternative methods (CMM 16-2025 paragraph 4)

(Taking into account Annex 8)

1. Data shall be collected on a daily basis

2. For observers on board the following datafields shall be collected:

a) Vessel flag;

b) Vessel name;

c) Vessel registration number;

d) Date of fishing activity (UTC date);

e) Position at the start of each set or fishing operation, with resolution of 1/10th degree, decimal format, of latitude and longitude;

f) Position at the end of each set or fishing operation, with resolution of 1/10th degree, decimal format, of latitude and longitude;

g) Target species (FAO species code);

h) Number of crew;

i) Number of jigs and number of hand lines;

j) Total fishing hours per set or fishing operation;

k) Estimated total catch (kg) of jumbo flying squid per set or fishing operation;

l) Identification and estimated total catch (kg) of any other species caught, if any, per set or fishing operation;

m) Size-frequency sampling of squid caught in each set or fishing operation;

n) Biological sampling of squid specimens per set or fishing operation.

3. For observers in port the following datafields shall be collected:

a) Vessel flag;

b) Vessel name;

c) Vessel registration number;

d) Date of fishing activity (UTC date);

e) Referential position of the fishing area, with resolution of 1/10th degree, decimal format, of latitude and longitude, as declared by the skipper or master fisher;

f) Target species (FAO species code);

g) Number of crew;

h) Number of jigs and number of hand lines;

i) Total catch (kg);

j) In coordination with and subject to acceptance of the skipper or master fisher, samples of non-gutted squid specimens caught in the Convention properly selected and preserved will be

purchased for biological sampling in the laboratory.

4. For the use of electronic logbook the following datafields shall be collected:

a) Vessel flag;

b) Vessel name;

c) Vessel registration number;

d) Position at the start of each set or fishing operation, with resolution of 1/10th degree, decimal format, of latitude and longitude;

e) Position at the end of each set or fishing operation, with resolution of 1/10th degree, decimal format, of latitude and longitude;

f) Target species (FAO species code);

g) Number of crew;

h) Number of jigs and number of hand lines;

i) Total fishing hours per set or fishing operation;

j) Estimated total catch (kg) of jumbo flying squid per set or fishing operation.

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 concern[12]) 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 amount[13] 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 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 concern[14]) 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 amount[15] of all living marine resources discarded by species, to the extent practicable, including any marine mammals, seabirds, reptiles, species of concern, and benthic taxa.

[14] Annex 14

[15] 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;
Observer's organisation;
Date observer embarked (UTC date);
Port of embarkation;
Date observer disembarked (UTC date);
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) [haul back end date and time(the time net is fully onboard) - UTC];

d) Tow start position (Lat/Lon, nearest 1/100th degree for bottom fishing and 1/10th for pelagic trawl- decimal);

e) Tow end position (Lat/Lon, nearest 1/100th degree for bottom fishing and 1/10th for pelagic trawl - decimal);

f) Number of doors-up turns during tow;

g) Intended target species (FAO species code);

h) 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);

i) Type of trawl: single, double or triple (S, D or T);

j) Height of net opening;

k) Width of net opening;

l) Mesh size of the cod-end net (stretched mesh, mm);

m) Mesh type (diamond, square, etc);

n) Gear depth (of footrope) at start of fishing;

o) Bottom (seabed) depth at start of fishing;

p) 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;

q) Estimated catch of all species (FAO species code) retained on board, split by species, in live weight (to the nearest kg);

r) Estimated catch of all species (FAO species code) discarded, split by species, in live weight (to the nearest kg), including all benthic taxa;

s) If any marine mammals, seabirds, reptiles or other species of concern were caught, report as per requirements described in Section H;

t) If any benthic material, including VME Indicator Taxa[16], was caught record as per the requirements described in Section I.

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 ≥ 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 Taxa[17], was caught record as per the requirements described in Section I.

[16] VME Indicator Taxa are defined in Annex 5 of CMM 03-2025 (Bottom Fishing)

[17] VME Indicator Taxa are defined in Annex 5 of CMM 03-2025 (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/ bait management - record as per below:

i. No discharge during shooting and hauling;

ii. Discharge during shooting or hauling with batching of minimal interval of 2 hours;

iii. Discharge during shooting or hauling without batching of minimal interval of 2 hours.

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. Catch & Effort Data to be Collected for Fishing Activity for alternative methods (CMM 16-2025 paragraph 4)

(Taking into account Annex 8)

1. The type of information and data to be collected from each vessel and trip will depend on whether there is an observer in port and whether the skipper of the boat has access to a digital logbook.

2. Members using alternative data for their vessels under 15 meters of length overall registered in the SPRFMO Record of Vessels fishing for jumbo flying squid shall respect the following requirements:

a) The catch data, fishing areas and number of fishers by trip shall be collected at the arrival of the vessel to the port by the observer in port designated by the relevant Member.

b) The data obtained with the use of digital logbooks shall expand and complement the information and data obtained through the observers in port, allowing for detailed information to be collected on the duration, geographical position, catch and effort per set or fishing operation even when there are no observers in port.

c) Fishers and skippers of fishing vessels under 15 meters of length overall authorized to fish for jumbo flying squid in the Convention area shall be instructed that, whenever they have carried out fishing operations for jumbo flying squid in the aforementioned area, they shall proceed to report to the observer in port as soon as they arrive to port, in order to proceed with the data collection and sampling of the catch of said vessel as a matter of priority.

3. Data to be collected by observers in port

a) Vessel flag;

b) Vessel name;

c) Vessel registration number;

d) Date of fishing activity (UTC);

e) Referential position of the fishing area, with resolution of 1/10th degree, decimal format, of latitude and longitude, as declared by the skipper or master fisherman;

f) Target species (FAO species code);

g) Number of crew;

h) Number of jigs and number of hand lines;

i) Total catch (kg);

j) In coordination with and subject to acceptance of the skipper or master fisherman, samples of non-gutted squid specimens caught in the Convention properly selected and preserved will be purchased for biological sampling in the laboratory.

4. Data to be collected by observes on board or fishing master :

a) Vessel flag;

b) Vessel name;

c) Vessel registration number;

d) Position at the start of each set or fishing operation, with resolution of 1/10th degree, decimal format, of latitude and longitude;

e) Position at the end of each set or fishing operation, with resolution of 1/10th degree, decimal format, of latitude and longitude;

f) Target species (FAO species code);

g) Number of crew;

h) Number of jigs and number of hand lines;

i) Total fishing hours per set or fishing operation;

j) Estimated total catch (kg) of jumbo flying squid per set or fishing operation.

G. 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 R, to the nearest cm for fish which attain a maximum length greater than 40 cm;

ii. Fish length should be measured, consistent with Section R, to the nearest mm for fish which attain a maximum length less than 40 cm;

Squid:

i. Mantle length should be measured to the nearest cm;

Skates and rays:

i. maximum disk width should be measured;

Sharks

i. Appropriate length measurement to be used should be selected for each species (see Section R). As a default, total length should be measured;

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.

H. 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;

Length (mm or cm). Measurement precision and type should be determined on a species-by-species basis consistent with that defined in Section G above;

Type of length measurement used (i.e. total length, fork length, etc);

Sex (male, female, immature, unsexed);

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.

4. Members using an alternative data collection program for their vessels under 15 meters of length overall registered in the SPRFMO Record of Vessels fishing for jumbo flying squid shall respect the following requirements when undertaking biological samplings :

4.1 Sampling In Port

In ports, the Scientific entity designated by the relevant Member, in the extent possible, will ensure arrangements in order to buy part of the catch of those vessels that have caught jumbo flying squid in the Convention area, for the purpose of carrying out biological sampling in its laboratories. For this, the master fishers and/or crew fishers of the vessels participating in the program shall be instructed to differentiate the samples collected in the Convention area, in order to bring to port samples of complete specimens, selected and conserved under certain criteria, and a fair price shall be paid for that part of the catch.

4.1.1. Biometric sampling (of size frequency)

A simple random sample of maximum 120 squids shall be collected and measured per fishing day (distributed among the different sets or fishing operations of that day), measuring and recording the dorsal mantle lengths.

4.1.2. Biological sampling

To obtain biological data, from the large daily sample above, 10 female and 10 male squids shall be set aside by means of a stratified random sampling, so that the specimens cover the entire range of sizes in the large daily sample. Then, for each specimen, the following data will be determined and recorded:

b) Mantle length (mm);

c) Total weight (g);

d) Eviscerated weight (g);

e) Sex;

f) Maturity stage;

g) Evidence of copulation (females only).

I. 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;

Count of the number of each species caught per tow or set;

Fate of bycaught animal(s) (retained or released/discarded);

If released, life status (vigorous, alive, lethargic, dead) upon release;

If dead, then collect adequate information or samples[18] 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;

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).

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

J. 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);

An estimate of the quantity (to the nearest 0.1 kg) of each listed benthic taxon caught in the fishing event;

b) 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);

c) 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;

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 03-2025(Bottom Fishing):

a) An estimate of the quantity (to the nearest 0.1 kg) of each VME indicator taxon caught in the fishing event;

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;

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 03-2025 (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 CMM 03-2025 (Bottom Fishing);

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 03-2025 (Bottom Fishing).

K. 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 G 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.)

L. 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;

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;

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;

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 16-2025 (Observer Programme).

M. 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 codes[19];

   Fishing methods are to be described using the International Standard Classification of Fishing Gear (ISSCFG - 29 July 1980) codes (Annex 9);

   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;

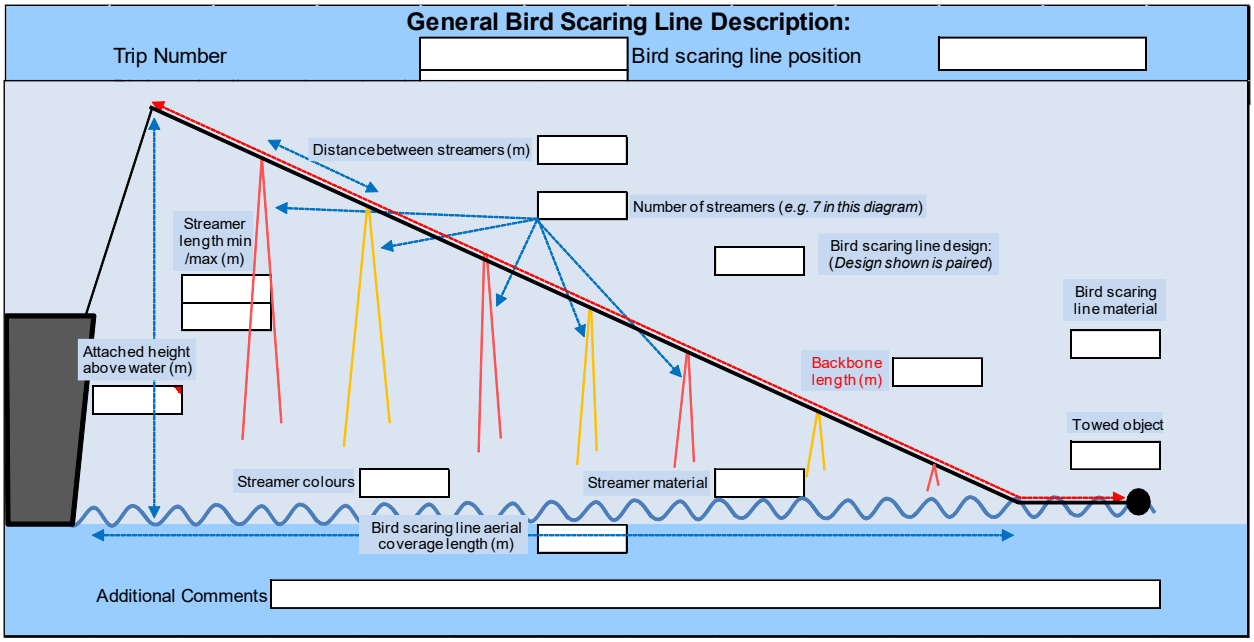
   b) Metres are to be used to describe height, width, depth, beam or length;

   c) Cubic metres are to be used to describe volume;

   d) Kilowatts are to be used to describe engine power.

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

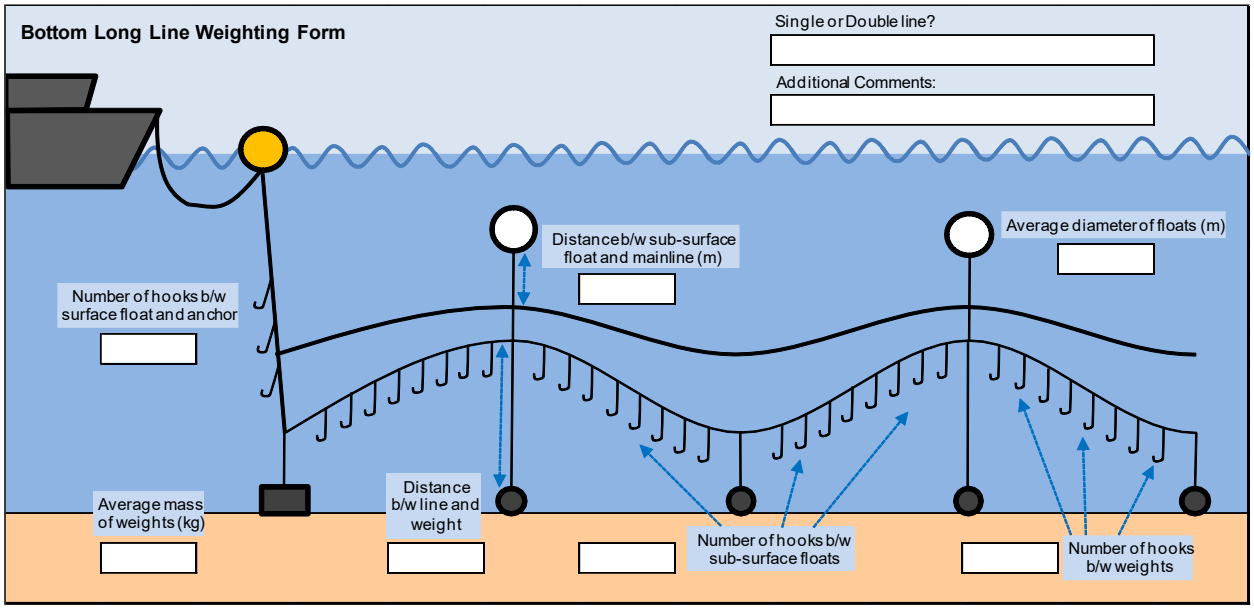
N. Bird scaring line description form



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	

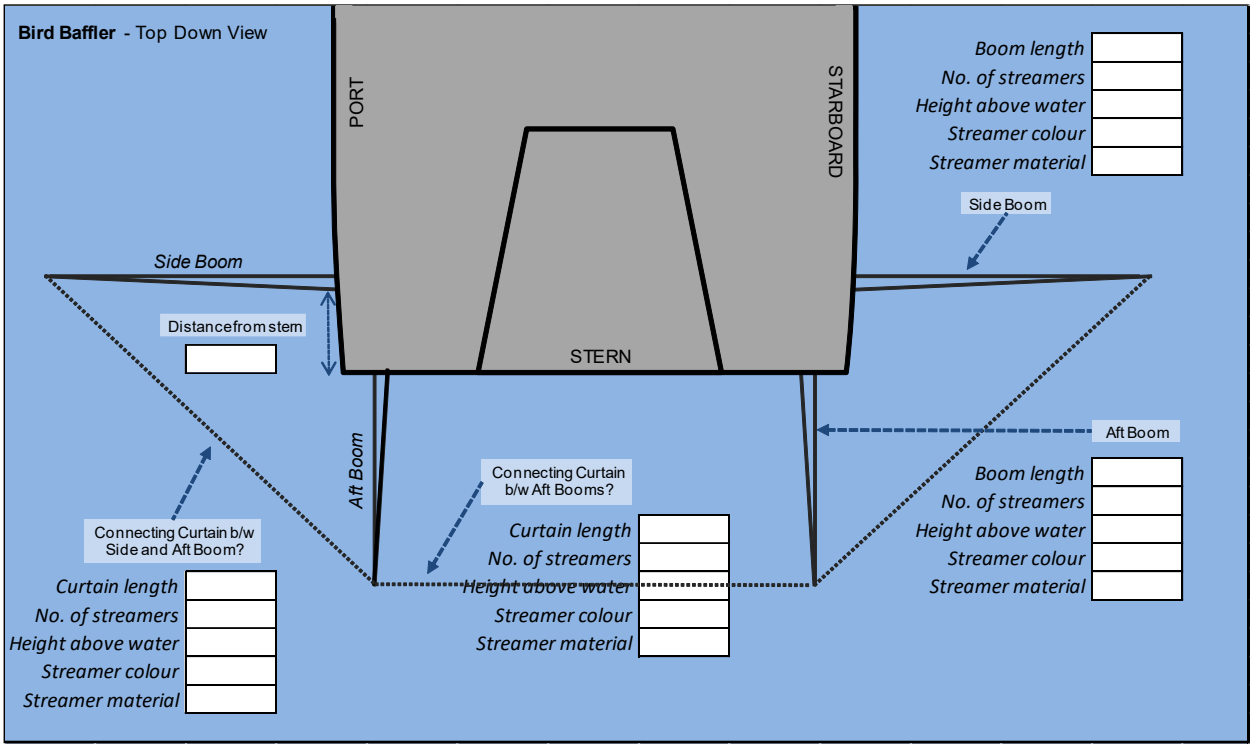
Bird Scaring Line Codes/ List Options:				
Position	**Design**	**Towed Object**	**Material**	**Colour**
Port Side Starboard Side Stern	Single Paired	F = Inverted funnel/plastic cone L = Length of thick line K = Knot or loop of thick line B = Buoy N = Netted buoy S = Sack or bag W = Weight Z = No towed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

O. External line weighting description form



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

P. Bird baffler description form



Summary of Inputted Values	
• Distance from stern	
Side Boom • Boom length • Number of streamers • Avg. distance b/w streamers • Height above water • Streamer colour • Streamer material	Aft Boom • Boom length • Number of streamers • Avg. distance b/w streamers • Height above water • Streamer colour • Streamer material
Side-Aft Curtain • Curtain length • Number of streamers • Avg. distance b/w streamers • Height above water • Streamer colour • Streamer material	Aft Curtain • Curtain length • Number of streamers • Avg. distance b/w streamers • Height above water • Streamer colour • Streamer material

Q. 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:

   Current vessel flag;

   Name of vessel;

   Fishing vessel registration number;

   International radio call sign (if any);

   Unique Vessel Identifier / IMO number;

   Type of vessel (use appropriate ISSCFV codes, Annex 10);

   Type of fishing method(s) (use appropriate ISSCFG codes, Annex 9).

2. The following observer data for each observed landing:

   a) Observer's name;

   Observer's organisation;

   Country of landing (standard ISO 3-alpha country codes);

   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);

   Main target species (FAO species code);

   Landed state by species (FAO species code);

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

R. Standard for length measurements

Total length should be used for the following fish species:

- Groupers, seabasses (Serranidae);
- Oreo dories (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 warehous (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	Degrees: represented as positive (unsigned) or negative numbers from 0 to 89.99 e.g. If value = 83.2, this means 83.2° **N** e.g. if value = -83.2, this means 83.2° **S**
Longitude	Degrees: represented as positive (unsigned) or negative numbers from 0 to 179.99 e.g. If value = 83.2, this means 83.2° **E** e.g. if value = -83.2, this means 83.2° **W**

3. The following coding schemes are to be used:

The Secretariat shall maintain and periodically update the FAO species code, ISSCFG gear codes

(Annex 9), ISSCFV vessel codes (Annex 10), and ASFIS species reference lists, in line with official updates published by FAO and CWP. Such updates will be automatically reflected in the SPRFMO data submission templates and communicated to Members and CNCPs at least three months in advance of their implementation. Where a code is deprecated or revised by FAO, the Secretariat will provide transitional guidance to ensure data consistency across reporting years

a) Species are to be described using the FAO species codes[20];

Fishing methods are to be described using the International Standard Classification of Fishing Gear (ISSCFG) codes[21] - Annex 9;

Types of fishing vessel are to be described using the International Standard Classification of Fishery Vessels (ISSCFV) codes[22] - 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.

[20] FAO species code means the 3-alpha code as described in www.fao.org/fi/statist/fisoft/asfis/asfis.asp
[21] http://www.fao.org/fishery/cwp/handbook/M - see "Annex MI"
[22] 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[23]	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
GILLNETS AND ENTANGLING NETS		07.0.0
Set gillnets (anchored)	GNS	07.1.0

[23] 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
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)[24]	LHP	09.1.0
Handlines and pole-lines (mechanized)[25]	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[26]	MIS	20.0.0
RECREATIONAL FISHING GEAR	RG	25.0.0
GEAR NOT KNOW OR NOT SPECIFIED	NK	99.0.0

[24] Including jigging lines
[25] Code LDV for dory-operated line gears will be maintained for historical data purposes
[26] 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
	Factory motherships	HSF	11.2.0

Vessel Type		Standard Abbreviation	Code
	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;
Name of vessel;
Registration number of vessel;
International radio call sign (if any);
Unique Vessel Identifier / IMO number;
Date entered Convention Area;
Date exited Convention Area;
Landing date;
Area catch taken (FAO area[27]);
Country of landing (standard ISO 3-alpha country codes);
Port/ point of landing;
Landed state[28] by species (FAO species code);
Landed (live) weight by species;
Containers –type by species (if applicable);
Containers –number by species (if applicable);
Containers –total content weight for all containers by species (if applicable);
Port of previous landing;
Date of arrival at previous port;
Verification (if applicable):

i. Name of observer;

ii. Authority.

[27] FAO statistical area codes
[28] 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 state[29];
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.

[29] 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 code[30], 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 code[31], e.g. GIS);
h) Catch Total (tonnes "live" weight- t)
i) Number of vessels
j) Number of days fished

[30] FAO species code means the 3-alpha code as described in www.fao.org/fi/statist/fisoft/asfis/asfis.asp
[31] 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[32]
Carcharhinus longimanus	Oceanic whitetip shark	OCS
Carcharodon carcharias	Great white shark	WSH
Cetorhinus maximus	Basking shark	BSK
Lamna nasus	Porbeagle shark	POR
Manta spp.	Manta rays	MNT
Mobula spp.	Mobula nei	RMV
Rhincodon typus	Whale shark	RHN

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

[32] ~~(2016)~~ ASFIS List of Species for Fishery Statistics Purposes

Annex 23: Seabird bycatch related changes to CMM 09-2017 and CMM 02-2025

Proposed CMM Changes: 09-2017		CMM Clause reference
1.2	Amend paragraph 6 of CMM 09-2017 to require vessel crew follow the latest ACAP seabird handling advice as relevant to the fishing method used.	Paragraph 6
1.3	Encourage Members and CNCPs operating fishing vessels in the Convention Area to explore light management procedures to reduce the risk of seabird bycatch, with consideration of relevant light mitigation guidelines (e.g., National Light Pollution Guidelines for Wildlife, including Marine Turtles, Seabirds and Migratory Shorebirds developed by Australia).	General Provisions
2.1	Amend Annex 1 Paragraph 1(a) to include requirement to remove all hooks from any biological waste before it is discharged.	Annex 1 Paragraph 1(a)
2.2	Amend the text of Footnote 1 of Annex 1 Paragraph 1(a) to include advice on which side biological waste should be discharged if this is necessary during fishing operations and include the text in the body of the text.	Annex 1 Paragraph 1(a)
2.3	Amend Annex 1 Paragraph 1(b)(i) of CMM 09-2017 to very clearly state that all three of the listed measures (line weighting, bird scaring lines, setting at night) should be used in combination to have the greatest chance of effectively mitigating seabird bycatch.	Annex 1 Paragraph 1(b)(i)

2.4	Revise Annex 1 Paragraph (b)(ii)(a) to increase alignment with ACAP Best Practice Advice by requiring vessels to use two of three measures (line weighting, bird scaring lines, setting at night) simultaneously, while maintaining a seabird mortality rate less than 0.01 birds/1000 hooks.	Annex 1 Paragraph 1(b)(ii)
2.5	Revise Annex 1 Paragraph (b)(ii)(b) to require a minimum of 30% observer coverage or electronic monitoring to ensure confidence in seabird mortality rates, at least 10% of which must be human observers.	Annex 1 Paragraph 1(b)(ii)
2.6	Revise Annex 1 Paragraph 1 to allow daytime setting at high latitudes during summer, when using BSLs and line weighting, with appropriate monitoring and limits on seabird bycatch.	Annex 1 Paragraph 1
2.7	Revise Annex 1 Paragraph 2(a) to require all three best practice measures (line weighting, bird scaring lines, setting at night) simultaneously, consistent with ACAP Best Practice Advice, should a vessel's seabird mortality rate exceed 0.01 birds/1000 hooks.	Annex 1 Paragraph 2(a)
2.8	Amend Annex 1 Paragraph 4 to encourage two (paired) BSLs to be used simultaneously for vessels ≥24m, whenever fishing gear is being set from the vessel, in line with ACAP Best Practice Advice.	Annex 1 Paragraph 4
3.1	Amend Annex 2 Paragraph 1 by adding a third additional measure ('net binding') which is also encouraged to be applied by pelagic trawlers.	Annex 2 Paragraph 1
3.2	Revoke Annex 2 Paragraph 2 to maintain consistency with ACAP Best Practice Advice which recommends the precautionary approach of	Annex 2 Paragraph 2

	always using mitigation measures which have proved effective at reducing incidental mortality of seabirds in trawl fisheries. As no one measure can reduce or avoid incidental mortality of seabirds, then the most effective approach is to use the measures listed in Annex 2 Paragraph 1 in combination.	
3.3	Amend the first sentence of Annex 2 Paragraph 3(c) to stipulate that BSLs must have an in-water section that creates sufficient drag to achieve the required aerial extent and placement in strong cross winds, such as by attaching a buoy or cone, or another ACAP-recommended device (e.g. the Tamini Tabla).	Annex 2 Paragraph 3(c)
3.4	Amend CMM 09-2017 Annex 2 Paragraph 1(a) and associated diagrams, to adequately define the need to deter birds from the net monitoring cables where their use cannot be avoided, in line with ACAP Best Practice Advice.	Annex 2 Paragraph 1(a)
Proposed CMM Change for CMM 02-2025		CMM Clause reference
5.1	Amend Annex 7, Sections B and D in CMM 02-2025 as relevant to include those variables listed in Section 4 of SC13-DW08 that are recommended by ACAP, with a priority focus on those variables listed in bold as critical for assessing seabird bycatch, where feasible given the capacity of observer programmes.	Annex 7, Sections B and D

Annex 24: SQUIDSIM Operating Model

Due to size restrictions, Working Paper SC13-WP17 cannot be inserted into this report but is linked below:

- SC13-WP17 SQUIDSIM Documents presented by Chile

Annex 25: Scientific Committee Protocol for Data Access under CMM 02-2025

1. Introduction

The effective functioning of the Scientific Committee (SC) relies on timely access to relevant data, including non-public domain data held by the Secretariat. These data are essential for advancing the SC's multi-annual workplan, including tasks such as stock assessments, ecosystem evaluations, and analysis of impacts on non-target species. However, current procedures under CMM 02-2025 often make timely access difficult, as obtaining authorisation from each Member individually can slow down the compilation of datasets, create uncertainty in planning, and delay analyses. This document proposes a standardised protocol for the SC to request, review, and coordinate access to non-public domain data held by the Secretariat in a transparent and collaborative manner, ensuring compliance with the Measure and supporting high-quality, cooperative scientific work.

The Scientific Committee is invited to review this proposal, provide comments and advice, and aim to adopt the protocol after considering any amendments it finds necessary.

2. Protocol for Scientific Committee Data Sharing

This section establishes a formal protocol for the Scientific Committee (SC) to request access to non-public domain data from the Secretariat under the framework of CMM 02-2025. The objective is to ensure that the SC have access to the data needed to execute its activities and such requests are transparent, and compliant with CMM 02, particularly paragraph 6(c):

> *…the Secretariat is to: …*
>
> *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.*

2.1 Scope

This protocol applies to any request for access to non-public domain data by the SC, for the purposes of executing specific tasks within the SC's multi-annual workplan, including but not limited to stock assessments, ecosystem evaluations, and bycatch analyses.

2.2 Data Request Process

SC Chairperson shall submit a request using the standard template (Annex 1) to the SC for consideration. The template must include:

a. A description of the data requested, including variables, temporal and spatial resolution, and any required granularity.
b. The specific tasks or activities in the SC multi-annual workplan that require the data.

c. The list of Members and CNCPs involved in the execution of the tasks.
d. Any additional data sources required for the work (e.g., public domain data, national data, environmental layers).
e. Any proposed confidentiality measures, where relevant.

2.3 Review by the Scientific Committee

The SC shall review submitted requests during its annual meeting based on:

a. Scientific relevance and alignment with the SC workplan.
b. Adequacy of the proposed confidentiality and data handling measures.
c. Clarity of responsibilities and participation among requesting parties.

The SC shall formally recommend to the Commission in their Annual Report that the Secretariat release the requested data to the listed Members and CNCPs for the stated purpose and agreed duration of the research tasks.

In cases where a request is submitted after the annual meeting, the Chairperson of the SC hall circulate the request electronically to Members and CNCPs for approval within 30 days for the data release. Data will be released once the approvals are received.

2.4 Secretariat Action

Following Commission authorisation (as per CMM 02-2025, paragraph 6(c)(i)), the Secretariat shall:

a. Prepare and release the requested dataset, in accordance with its internal standards and deadlines.
b. Notify the SC of the data release.
c. Maintain a record of data requests and releases for accountability and audit purposes.

2.5 Conditions of Use and Reporting Obligations

To ensure transparency, collaboration, and accountability in the use of non-public domain data accessed through this protocol, the following conditions apply to all Members and CNCPs receiving the data:

a. The data shall be used exclusively for the tasks described and approved in the request template (Annex 1). Any other use will require a separate request and authorisation.

b. Upon completion of the approved tasks, the receiving parties shall delete the data from their systems and confirm deletion to the Secretariat.

c. Each year, until completion of the tasks, the involved Members and CNCPs shall submit to the SC an annual progress report, detailing activities undertaken, preliminary results (if any), and expected timelines for completion.

2.6 Dissemination of results

Any output resulting from the approved tasks and based on the shared data shall be submitted in draft form to the Secretariat. Before circulation, the Secretariat shall review the draft to confirm that no figures, tables, or analyses breach the SPRFMO data dissemination standards. For dissemination of results purposes, outputs include working documents submitted to the SC, peer-reviewed publications, or any other type reports.

Once cleared by the Secretariat, the draft shall be circulated to the Scientific Committee for review and comment. Dissemination of results is considered part of the approved activity, but it is the responsibility of the SC to ensure that confidentiality measures are respected when reporting.

Use of the additional affiliation **"Scientific Committee, South Pacific Regional Fisheries Management Organisation (SPRFMO), Wellington, New Zealand"** by Members and CNCPs involved is encouraged to highlight the collaborative and multilateral nature of the work. This affiliation may only be used if the SC has been provided the opportunity to review the manuscript and has endorsed its use.

Upon official circulation of the draft manuscript by the Secretariat, Members and CNCPs shall have 30 days to provide comments. If no substantial objections are raised within that period, the manuscript will be considered endorsed and authorised to include the SC-SPRFMO affiliation. Authors should address SC comments to the extent possible in the final version.

In cases where significant disagreement remains and endorsement is not granted, Members and CNCPs may proceed with submission, but shall not use the SC-SPRFMO affiliation.

These conditions aim to promote cooperative scientific work, ensure confidentiality, and recognise joint efforts under the SPRFMO framework.

3. Relationship with other data requests

The purpose of this protocol is to support the implementation of CMM02 and the work of the SC by facilitating appropriate access to, and proper use of, non-public domain data related to the work of the SC in a transparent and collaborative manner. It is without prejudice to the Commission or Participant(s) that originally provided data authorising the release of other non-public domain data to Members and CNCPs or their designates. Examples include but are not limited to data in the areas of compliance or general fishing activity.

ANNEX 1
Data Request Template

Please complete the following fields to request access to non-public domain data for work under the Scientific Committee's multi-annual workplan.

Requesting Entities and Participants

Provide the name of the Member(s), CNCP(s), or Chairperson of the SC submitting the request. List all Members and CNCPs who will be directly involved in the execution of the work. Include institutional affiliations and primary contacts if known.

Purpose of the Request

Summarise the scientific objective(s) of the proposed work. Indicate which specific tasks or activities in the SC multi-annual workplan the data request supports, and describe the intended outcomes (e.g. stock assessment, impact analysis, model development, SC document).

Timeline

Provide an estimated start and end date for the work. If relevant, include intermediate milestones (e.g. working papers, presentation at next SC meeting, expected delivery of outputs).

Description of Data Requested

Specify the type of data required (e.g. observer data, fishing effort, biological samples). Detail the key variables, temporal coverage, geographic extent, and required spatial/temporal resolution or granularity (e.g., set-by-set, daily, 0.1° grid).

Additional Data Sources

List other data sources that will be used in the work, including:

- Public domain data (e.g. aggregated catch effort, environmental data)
- National or regional datasets (e.g. tagging, acoustics, port sampling)
- Any external or third-party sources

Confidentiality and Data Handling

Describe how the data will be stored, accessed, and used. Identify the person(s) responsible for data management. Indicate any data-sharing agreements or confidentiality measures to be implemented. Finally, describe how and when the data will be securely destroyed upon completion of the work.

Annex 26: Requests for Access to Data

Requesting Entities and Participants	
Title of request: Jumbo Squid Stock Assessment	
Date of request: 12-SEP-2025	
Purpose of the request	
Reference to Commission request for advice (SC workplan item): 3.1 Squid Assessment	
Objective of analysis: Stock assessment of jumbo flying squid in the Southeastern Pacific	
Start date for the work: 2026-01-01	**End date for the work:** 2026-12-31
Description of intended output (e.g., paper for Scientific Committee):	
Description of data requested	
Start date: 1970-01-01	**End date:** 2025-12-31
Description: Monthly catch data for jumbo flying squid, disaggregated by fleets (e.g. industrial and artisanal) and flags from all fleets that operate in the SPRFMO area. If this data cannot be provided, annual landings and descriptions of the months of operation of the fishery, disaggregated by fleets and flags to the extent of possible. Abundance index (CPUE) for all regions available, with metadata on the data coverage and methodology.	
Additional Data Sources	
Environmental indices: ONI, ITCP, etc.	
Intended recipients of data	
PERU, CHILE, CHINA.	
Confidentiality and Data Handling	

Data sharing will follow all SPRFMO protocols regarding confidentiality and data handling (ADD REFERENCES).

Chile, Ecuador and Peru agree to voluntarily share information on the jumbo flying squid fishery in their jurisdictional waters in use of their discretionary powers, for the purpose of task described in this request only for this purpose.

Member approval of the request	
Request is approved: (if no, please provide a reason)	Yes ☒ No ☐
Secretariat Assessment of the request	
Request is complete and clear:	Yes ☐ No ☐
Secretariat has the capability to meet the request:	Yes ☐ No ☐

Annex 27: Statements

Statement by Ecuador

Distinguished Chair, esteemed colleagues,

Ecuador appreciates the constructive comments and concerns expressed by Members regarding our proposal. While we take note of these views, we remain confident in the proposed Plan and its second revision and the value of our contribution to advancing the scientific understanding of toothfish in the SPRFMO Area.

As a developing State, Ecuador may not possess the same means and resources as other Members, yet this does not diminish our determination to engage responsibly in exploratory fishing and to expand our scientific horizons. Our proposal reflects Ecuador's legitimate right as a Member to participate in high seas research activities and to add to the collective knowledge of the Organization.

We respectfully reiterate Ecuador's commitment to transparency, cooperation, and adherence to conservation measures, while ensuring that our participation strengthens the science-based management of these valuable resources. We look forward to continuing constructive dialogue and building upon this proposal together with Members.

Thank you, Chair.

Statement of CALAMASUR on the Thirteenth Meeting of the SPRFMO Scientific Committee

Dear Heads of Delegations, Chairpersons, and SPRFMO Secretariat,

I greet you on behalf of CALAMASUR, which represents squid producers in Latin America. These individuals make significant efforts to present scientific work that contributes to the improvement of this fishery, which still faces important challenges.

Unfortunately, we believe that the productivity of this Scientific Committee in addressing the complex issues surrounding the squid is not optimal. Over the years, we have felt that the need for management that provides predictability to an activity that employs thousands of artisanal fishers in our countries is not understood.

On this occasion, we were not allowed to present our work, which makes us feel that there has been a deliberate effort to limit our participation despite the fact that the Rules of Procedure of the SPRFMO guarantee observers full participation. On August 7th, we submitted our stock assessment and a letter requesting to present our work during this meeting; however, we received no response.

Today, after several attempts to coordinate with the Secretariat and the Chair of the Scientific Committee, we were informed that the stock assessment of squid was not deemed a high priority this year. Therefore, due to agenda limitations, our participation was not scheduled. We believe that delaying the stock assessment signals a lack of clarity regarding the priorities of this organization, which could jeopardize the livelihoods of tens of thousands of artisanal fishers. In our eight years of participation in this body, it is the first time our right to participate has been restricted, and we wish to make this public to encourage better self-regulation in the future.

CALAMASUR is willing to move past this incident because our sole interest is to focus on contributing to the science-based management of the squid. We ask that any personal issues be handled privately to avoid interfering with the professional environment where we should all cooperate.

Additionally, I would like to mention that the Spanish translation provided has been insufficient, which has greatly affected the participation of several members from delegations of Spanish-speaking developing countries.

Finally, I reiterate what I mentioned yesterday in a communication to the heads of delegations: we recognize that the governance of the SPRFMO has a long-standing tradition of tolerance towards the diverse viewpoints expressed here, as well as openness and non-discriminatory treatment of observers, especially when they represent artisanal fishing sectors that unfortunately often remain marginalized in RMFO discussions. We hope that in future meetings our participation will be respected and that moderators will address any impasse in a mature, professional manner and through direct and friendly dialogue. We all seek the same outcomes and should not foster animosities.

Thank you.

DSCC and ECO NZ Statement regarding the Salas y Gomez and Nazca ridges area

This intervention is on behalf of DSCC and ECO NZ.

We thank Peru for its presentation.

Members of the Scientific Committee: The world is watching this issue very closely. Looking forward, we urge Members and CNCPs to be prepared to set aside short term economic interests and to take the necessary steps to protect this internationally recognised area high in endemism. The world is moving quickly - climate change is upon us, the biodiversity crisis is real and the overwhelming response by the world in the Global Program of Action is to protect the ocean to protect biodiversity. And the BBNJ agreement is expected to enter into force before the next SPRFMO Commission meets in Panama.

Less than 1% of the high seas are protected. We can and must do better.