

11th MEETING OF THE SCIENTIFIC COMMITTEE

11 to 16 September 2023, Panama City, Panama

SC11 – WP05

Fisheries operational plan checklists for 3 new exploratory fisheries. (AU, CK, EU)

Deepwater Chairperson

As agreed during SC8 (2020), exploratory fisheries proposals should be accompanied by a checklist to assist both the SC and individual proponents when reviewing such proposals against the requirements of CMM 13 (Exploratory Fisheries).

This working paper contains the most up-to-date checklists for the three exploratory fisheries proposals that were submitted to SC 11 (2023) for its consideration.

For reference the 3 proposals are:

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| SC11-DW02_rev1 | Cook Islands proposal for a new exploratory fishery (Hapuka) |
| SC11-DW03_rev2 | Australian proposal for new exploratory fishery (Toothfish) |
| SC11-DW04 | European Union proposal for a new exploratory fishery (Toothfish) |

1. SUCCINCT DESCRIPTION – Australian proposal

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	Australia
Area	FAO Fishing area 81 The area proposed is from: the southern edge of the Macquarie Island EEZ where it intersects with 157°00'00 E, then heading directly south to 60°00'00 S, then east along that latitude to the intersection with 163°00'00 E, then due north to the intersection with the Macquarie Island EEZ, then a south west direction, following the EEZ back to the starting position.
Target Species	Patagonian Toothfish (<i>D. eleginoides</i>) and Antarctic Toothfish (<i>D. mawsoni</i>)
Proposed Methods of fishing	The <i>F.V. Antarctic Discovery</i> will target Patagonian toothfish (<i>Dissostichus eleginoides</i>) and Antarctic Toothfish (<i>D. mawsoni</i>) employing a Mustad Autoline System, demersal longlining using 12mm integrated weighted line (IWL), containing at least 50 grams of lead per meter of line.
Proposed maximum catch limit	40t
Expected operation period	March 2024 to March 2027. A period of 3 years.
Submission date	April 2023

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.

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]	The objectives are outlined in section 4.1 of the proposal. Please refer to this text.	Yes
b) reference points, including precautionary reference points as described in Annex II of the 1995 Agreement;	Proposed new areas are unexplored with no history of fishing. Catches of Patagonian toothfish in this SPRFMO research will be included in the current Macquarie Island Fishery which is managed through CCAMLR decision rules with target and limit reference points of B ₅₀ and B ₂₀ respectively.	Partial
c) an appropriate precautionary catch limit;	See section 4.1 of the proposal.	Yes
d) the cumulative impacts of all fishing activity in the area of the exploratory fishery;	The proposal has been prepared to comply with all requirements of Articles 2 and 22, CMM13-2021 (exploratory fisheries), CMM03-2023 (bottom fisheries), and the BFIAS.	Yes
e) the impact of the proposed fishing on the marine ecosystem;	See sections 4.5 and 4.5.7 of the proposal.	Yes
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;	See appendix 3 of the proposal.	Yes
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	This proposal is based on precautionary catch limits, mitigation measures, measures to limit local depletion and spread research effort. Data being collected is consistent with that at the nearby Macquarie Island Fisheries and exploratory fisheries conducted by New Zealand and the EU.	Yes

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.

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 .	See section 4.5 of the proposal.	Yes
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5.1 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;	A full fisheries operation plan is presented in section 4 of the proposal. This plan outlines data collection and analysis that is consistent with other Toothfish exploratory fisheries in the region.	Yes
b) the dates by which the data must be provided to the Commission;	Covered in the proposal in section 6. The timing of data submission will be conditional on the timing of fishing operations but will be within the calendar year of fishing operations.	Yes
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;	A full Fisheries Operational Plan is included in section 4 of the proposal.	Yes
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	A data collection plan is included in section 5 of the proposal.	Yes
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”]	Included in sections 5 and 6 of the proposal.	Yes

5.2 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*):

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.

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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

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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.

1. SUCCINCT DESCRIPTION – Cook Islands proposal.

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	Cook Islands
Area	Foundation Seamount Chain and Northern Seamount areas
Target Species	<i>Polyprion oxygeneios</i>
Proposed Methods of fishing	Drop line and jig
Proposed maximum catch limit	500t
Expected operation period	2024-2026 inclusive
Submission date	7 th July 2023 CKT

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.

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]	Outlined in section 5 : To explore the fishery potential of <i>Polyprion oxygeneios</i> to sustain a commercial fishing operation in the Foundation Seamount Chain and the Northern Seamounts.	Yes
b) reference points, including precautionary reference points as described in Annex II of the 1995 Agreement;	Outlined in section 5 : Interim target reference point of 40%B ₀ and an interim limit reference point of 20%B ₀	Yes
c) an appropriate precautionary catch limit;	500t But not more than 25t from any one seamount in a calendar year	Yes
d) the cumulative impacts of all fishing activity in the area of the exploratory fishery;	Risk assessment detail included non-target species limit of 100t	Yes

<p>e) the impact of the proposed fishing on the marine ecosystem;</p>	<p>Low impact on Species of Special Interest (SSI) and VMEs risk assessment and mitigation for both included in the FOP</p>	<p>Yes</p>
<p>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;</p>	<p>Section 5</p> <p>Conservative target and limit reference points proposed as well as methods to assess the stock against these. In addition, the proposal will spread the TAC over at least 20 seamounts.</p> <p>While we won't know what that level will be until we start the data collection and analysis, the data collection plan is detailed and will provide data for appropriate analytical work.</p>	<p>Yes</p>
<p>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 Convention¹; and</p>	<p>Section 5:</p> <p>This approach is sufficiently conservative, making it consistent with Article 2 of the convention. The monitoring of stock against reference points will allow the Ministry of Marine Resources, Cook Islands, and SPRFMO to make decisions annually as to how this exploratory fishery is performing against the objectives and the requirements of Article 2 of the convention. In addition, the approach provided provides for the use of edible bycatch but requires the release and protection of SSI as well as at risk species such as elasmobranchs that are required to be released.</p>	<p>Yes</p>
<p>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.</p>	<p>Risk assessment provided and some experience with another fishery in the area predicts low bycatch rates, but these will only be accurately estimated once the operation begins. We also estimate low SSI impact and low VME impact.</p> <p>We have proposed mitigation in place. No additional mitigation required at this stage but note that if the seabird risk of capture increases we will require mitigation in the form of bird bafflers to be deployed.</p>	<p>Yes</p>

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.

Data Collection Plan checklist

Data Collection Plan considerations	Rationale	Assessment
<i>a) a description of the catch, effort and related biological, ecological and environmental data required to undertake the evaluations described in paragraph 24;</i>	We will use the SPRFMO templates for dropline and jig fishing as the basis for our daily logs and observer data collection, however, we also anticipate that we will require the observers to collect additional information detailed in Appendix B.	Yes
<i>b) the dates by which the data must be provided to the Commission;</i>	As noted in the report all data will be submitted as required based on the SPRFMO data templates (https://www.sprfmo.int/fisheries/data-2/data-submission/) for dropline and squid jig fishing and will include all the minimum data fields required in CMM 02-2022 Annex 4, 7 and 9.	Yes
<i>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;</i>	Collection of the catch and effort biological data as well as restricting the catch on seamounts to ensure the fishery is spread around the area and not just focusing on one place. This includes an annual 25t limit per seamount, and a 15t trip limit per seamount.	Yes
<i>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</i>	The vessel will require two observers. The data collection is detailed in Appendix B as well as Sections 7.2 and 8	Yes
<i>e) an evaluation of the time scales involved in determining the responses of harvested, dependent and related populations to fishing activities</i> [Note that SC has previously interpreted this as to mean “when will data be analysed and available”]	Section 6 The analysis of catch and effort as well as biological material will be ongoing beginning at the end of the first trip. The intention would be that a detailed report on the catch, effort and biological analyses would be presented to the Scientific Committee annually beginning in 2024 at SC12. Noting that it is unlikely that we would detect a stock response to a small fishery from a relatively mobile species in a single year, and it is possible that we could have greater variability within a trip and between seamounts than between years.	Yes

5.1 Scientific Committee recommendations (SC to complete)

The SC discussed the Cook Islands 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*):

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~~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~~

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~~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 as required by the CMM.~~

1. SUCCINCT DESCRIPTION – European Union Proposal

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	EU (Spain)
Area	George V Fracture Zone Research Block, FAO area 57.4 (see attached map)
Target Species	<i>Dissostichus eleginoides</i> (Patagonian toothfish)
Proposed Methods of fishing	Longline, Spanish double line system
Proposed maximum catch limit	173 129t in Block A, and 33t in Block B (see attached map). Total TAC 206 162t
Expected operation period	Between 1 May and 15 November each calendar year 2024-2026
Submission date	12 May 11 September 2023

*Note: amendments to original succinct description to update to correct TAC values

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.

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]	Main objective of the FOP is detailed 4.1 of the proposal. Please refer to this text	Yes
b) reference points, including precautionary reference points as described in Annex II of the 1995 Agreement;	No reference points have been defined for the Patagonian Toothfish stock in this fishing region or close by regions. However, two years of exploratory fishing (2021-2022) facilitated biomass assessments using CUE-by-Seabed-Area estimates using information from Patagonian Toothfish of a CCAMLR assessment and Chapman Index methods. A precautionary TAC of 3% of the lowest mean biomass estimate is proposed, and preliminary stock assessments are re-run after each fishing period.	Yes
c) an appropriate precautionary catch limit;	Section 4.2 of the proposal for the target species <i>Dissostichus spp.</i> Calculated as per CCAMLR approach for research and exploratory fishing in data-poor areas.	Yes
d) the cumulative impacts of all fishing activity in the area of the exploratory fishery;	Detailed Risk Assessment conducted as per BFIAS (2019) inclusive of new data from 2021 and 2022 fishing campaign.	Yes
e) the impact of the proposed fishing on the marine ecosystem;	Marine mammals, seabirds, VMEs, Elasmobranchs and finfish, potential of lost gear estimated.	yes
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;	Detailed Risk Assessment using best available data is documented and appended to the proposal, and b) and c) are addressed in the proposal itself	Yes
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	The precautionary limits, spatial separations of lines, and mitigations put in place should ensure this from the onset. The data collection will continue to inform precautionary development throughout the 3 years of the proposal (2024-26) and beyond.	Yes

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.

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 .	Please refer to proposal	Yes
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5.1 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;	Please see proposal	Yes
b) the dates by which the data must be provided to the Commission;	Meet required deadlines by the flag state (Spain-EU) as well as SPRFMO	Yes
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;	Please see proposal section 7, Data Collection Plan	Yes
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	Please see proposal section 7, Data Collection Plan	Yes
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”]	Proponents will undertake analyses of each survey within six months of completion, and submit this to Spain-EU to report at next SC meeting	Yes

5.2 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*):

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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.

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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

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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 as required by the CMM.