

**10<sup>TH</sup> MEETING OF THE SPRFMO COMMISSION**

*Held virtually, 24-28 January 2022*

**COMM 10 – Prop 07.1**

**Continuation of Exploratory Toothfish Fishery by New Zealand Flagged Vessels in the  
SPRFMO Area**

*New Zealand*

South Pacific Regional Fisheries Management Organisation -  
10th Meeting of the Commission

A proposal for a continuation of fishing for  
toothfish by New Zealand-flagged vessels  
in the SPRFMO Convention Area

New Zealand

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## Purpose

The purpose of this paper is to accompany COMM10-Prop07, a draft CMM to provide for exploratory fishing for toothfish by New Zealand-flagged vessels in the SPRFMO Convention Area during 2022, 2023, and 2024, providing further background and rationale for the proposal.

## Rationale for a Conservation and Management Measure

New and exploratory fisheries within the SPRFMO Convention Area are governed by [CMM13-2021](#), which summarises the requirements for proposals, the consideration of proposals by Scientific Committee, Compliance & Technical Committee, and Commission, and review procedures. Each new or exploratory fishery requires a separate operational CMM.

The first exploratory research fishing for toothfish was successfully completed by New Zealand pursuant to [CMM-4-14](#) in the southern part of the SPRFMO area during 2016 and 2017. In 2018 New Zealand submitted a revised proposal to expand these exploratory fishing activities. In 2019, the SPRFMO Commission approved the continuation of the New Zealand exploratory fishing for toothfish under [CMM 14a-2019](#), with the research commencing in 2019 and ending in 2021. A full research report, covering the whole period of the exploratory fishery, was completed and submitted to the 9<sup>th</sup> Scientific Committee meeting in 2021. This supported concurrent submission of a proposal for a second extension of the fishery, including a revised Fisheries Operation Plan, a Data Collection Plan, and impact assessments. The Scientific Committee endorsed the proposal.

## Summary of the proposal

New Zealand proposes to continue the stepwise process of ground location, exploration of fishing feasibility, and structured fishing using the clustered design similar to that developed by CCAMLR for feature-based fisheries (CCAMLR document [WG-FSA-14/61](#)).

The proposal will continue New Zealand's previous exploratory fishing in research blocks L, M, N, and O and extend exploration into research blocks P, Q, R, and S of the stratification of SPRFMO areas adjacent to the CCAMLR boundary. This area is bound by longitudes 115 and 155 degrees west and latitudes 52 and 60 degrees south. Contingent on the approval of the SPRFMO Commission, fishing will take place in 2022, 2023 and 2024 with up to four trips each year. Up to two specified New Zealand fishing vessels will engage in this exploratory fishery.

This CMM will expire following the regular meeting of the Commission in 2025.

## Objectives of the proposal

This exploratory fishing for toothfish is designed to cover key gaps in the knowledge of the distribution and life cycle of Antarctic and Patagonian toothfish in the Southern Ocean to improve understanding and management of those stocks. This work complements the ongoing exploratory fishing for Antarctic toothfish in the northern region of CCAMLR Subareas 88.1 and 88.2.

The proposal is designed to provide for exploratory bottom longline fishing for toothfish in the SPRFMO Convention Area for the purpose of obtaining scientific data to support the following objectives:

- Continue mapping the bathymetry of the fishable area (shallower than about 2500 m) in the mid-Pacific to the north of the SPRFMO-CCAMLR boundary;

- Document the spatial distribution, catch rates, and relative abundance of Antarctic and Patagonian toothfish in likely suitable habitat to the north of the CAMLR Convention Area by latitude, area, and depth;
- Characterise the biology, life history and spawning dynamics of both species of toothfish in the area;
- Tag sufficient numbers of toothfish to inform stock linkage and life history studies and to support the multi-area CCAMLR stock assessment model;
- Collect information on distribution, relative abundance, and life history of bycatch and other associated or dependent species;
- Collect toothfish eggs using plankton net tows, if practical;
- As feasible given availability of equipment, conduct Continuous Plankton Recorder (CPR) tows for planktonic studies and potentially for fish eggs;
- Collect acoustic data using existing procedures as carried out within the CAMLR Convention Area.

### Information provided to the Scientific Committee

New Zealand drafted its proposal to conform to Article 22 of the [Convention](#) and the requirements of [CMM 13-2021](#) on the management of new and exploratory fisheries, [CMM 03-2021](#) on bottom fisheries, and the Bottom Fishery Impact Assessment Standard ([BFIAS](#)). In accordance with [CMM 13-2021](#), this proposal was provided for the consideration of the Scientific Committee meeting in September 2021 such that it could advise the Commission.

The proposal ([SC9-DW01\\_rev1](#)) included a detailed analysis of the results of fishing from 2016 to early 2021 under CMM-4.14 (now expired) and CMM14a-2019, a detailed Fisheries Operation Plan, a suite of impact assessments for the target species and bycatch, benthic impacts, and potential protected species interactions, and a Data Collection Plan for consideration and development by the committee.

### Review by the Scientific Committee

The Scientific Committee assessed New Zealand's updated proposal (SC9-DW01\_rev1) at its 9<sup>th</sup> meeting in September 2021. In its [report](#), the Scientific Committee:

- a) **noted** New Zealand's proposal and its Fisheries Operation Plan to extend its exploratory demersal longline fishery for toothfish (limited at 240 tonnes greenweight retained annually);
- b) **recognised** the cautious, exploratory nature of the proposal;
- c) **recognised** the scientific benefits of the proposed data collection, especially for understanding the distribution, movement, spawning dynamics, and stock structure of toothfishes and supporting the CCAMLR stock assessment models for Antarctic toothfish;
- d) **agreed** that data and analyses from New Zealand's exploratory fishing continue to be shared in a timely manner with CCAMLR;
- e) **agreed** that a spatial stratification consistent with CCAMLR's should be adopted by SPRFMO to facilitate the collection and sharing of data;
- f) **approved** the Data Collection Plan included in the proposal;

- g) **advised** the Commission that the proposal is acceptable in terms of Articles 2 and 22, CMM 13-2021 (exploratory fisheries), CMM 03-2021 (bottom fisheries), and the BFIAS.

### Conclusion

New Zealand's proposal to extend the successful exploratory fishery for toothfish is based on a full analysis of the information collected during the previous 5 years of this exploratory fishery, supported by comprehensive impact and risk assessments as envisioned by the Convention, relevant CMMs, and the BFIAS. The information collected will increase understanding of the distribution, life cycle, and spawning dynamics of Antarctic and Patagonian toothfish and feed directly into stock assessments and developing assessment models for the adjacent, probably straddling, stock(s) in CCAMLR SSRUs 88.1 and 88.2. Procedures have been developed to share data in a timely manner with CCAMLR to facilitate such work. A comprehensive Fisheries Operation Plan and a detailed Data Collection plan were provided to the Scientific Committee. Both Fisheries Operation and Data Collection plans have been fully endorsed by the Scientific Committee at its 9<sup>th</sup> meeting.